

## STAFF REPORT ACTION REQUIRED

# **Breastfeeding in Toronto: Promoting Supportive Environments**

Date:	March 4, 2010
То:	Board of Health
From:	Medical Officer of Health
Wards:	All
Reference Number:	

## SUMMARY

The Baby-Friendly Initiative (BFI) is an international program to improve breastfeeding outcomes for mothers and babies by improving the quality of their care.<sup>(1)</sup> This initiative consists of a hospital and a community component and sets the standards that hospitals and community health services must achieve in order to obtain Baby-Friendly Designation.

In 2007, the Board of Health directed the Medical Officer of Health to develop a breastfeeding report card. To do so, Toronto Public Health (TPH) conducted a research study to determine rates of breastfeeding initiation, duration and exclusivity among first time mothers and to gain a better understanding of the factors which may influence these rates.

The purpose of this Board of Health report is to provide a summary of the components and key findings of the research study described in the attached report, *Breastfeeding in Toronto: Promoting Supportive Environments*; and to contextualize the findings in relation to TPH's mandate to protect, promote and support breastfeeding.

The research study found that almost all first-time Toronto mothers initiated breastfeeding and at six months postpartum almost three quarters of these mothers were still breastfeeding. However, fewer than one in five mothers who initiated breastfeeding continued to exclusively breastfeed their babies to six months. A number of factors including sociodemographic, sociocultural, birth-related, hospital policies and practices and community factors were found to be associated with any and/or exclusive breastfeeding at various points in time.

In response to these research findings, TPH will strive to achieve Baby-Friendly designation and continue to champion the Baby-Friendly Initiative with hospital and community partners. Toronto Public Health will continue to work collaboratively with hospital and community partners to develop and implement an action plan focused on promoting breastfeeding and creating supportive environments to enable women to exclusively breastfeed to six months.

## RECOMMENDATIONS

#### The Medical Officer of Health recommends that:

- 1. The Board of Health urge all Toronto birthing hospitals to achieve Baby-Friendly designation as soon as possible, giving priority to:
  - a. developing a written policy that covers all Ten Steps to Successful Breastfeeding, including a mechanism to evaluate the policy;
  - b. helping mothers initiate breastfeeding within a half hour of birth;
  - c. ensuring that newborn infants are not given food or drink other than breast milk unless medically indicated;
  - d. refraining from the practice of providing infant formula to mothers at hospital discharge.
- 2. The Medical Officer of Health work in collaboration with Toronto birthing hospitals to support their efforts to achieve Baby-Friendly designation and re-assess compliance with the Ten Steps to Successful Breastfeeding; providing a progress report to the Board of Health in two years;
- 3. The Medical Officer of Health ensure that Toronto Public Health achieve Baby-Friendly designation and provide a progress report to the Board of Health in two years;
- 4. The Medical Officer of Health continue to work with key stakeholders to promote exclusive breastfeeding to six months of age using population-wide and targeted strategies, paying particular attention to those women less likely to exclusively breastfeed to six months (i.e. younger women, recent immigrants, women with lower levels of income, women having a Caesarean birth);
- 5. The Medical Officer of Health continue to work with key stakeholders to develop and implement strategies to engage public facilities (e.g. malls, restaurants, recreational facilities, parks and the workplace) in breastfeeding friendly initiatives, thereby increasing the number of breastfeeding friendly places and supporting a women's right to breastfeed in public;

- 6. The Medical Officer of Health continue to work with key stakeholders to maintain high rates of breastfeeding intention and initiation, paying particular attention to those women who are less likely to plan to breastfeed or initiate breastfeeding (e.g. younger women, women with low levels of education and women with lower levels of family income);
- 7. The Medical Officer of Health forward this report to the Ontario Minister of Health and Long-Term Care and the Better Outcomes Registry & Network (BORN) Ontario, acknowledging the Ministry's progress toward the development of an integrated perinatal data collection system and requesting that the Minister ensure that the Niday Perinatal database is collecting:
  - a. accurate and complete infant feeding data to enable hospitals and community health services to monitor rates of initiation and any and exclusive breastfeeding;
  - b. key sociodemographic and sociocultural indicators to enable the identification of subpopulations at risk for low breastfeeding rates and adverse maternal/infant health outcomes.
- 8. This report be forwarded to the Ministry of Health Promotion, Ministry of Health and Long Term Care, Ministry of Children and Youth Services, Provincial Maternal Newborn Advisory Committee, Ontario Public Health Association, Ontario Breastfeeding Committee, Child Health Integration Network of the Greater Toronto Area, Local Health Integration Networks that are responsible for Toronto birthing hospitals and Toronto Best Start Network.

## **FINANCIAL IMPACT**

There are no financial implications arising from this report.

### **DECISION HISTORY**

At its meeting of January 15th, 2007, the Medical Officer of Health presented a report to the Board of Health entitled <u>Supporting Breastfeeding in Toronto</u>. This report recommended that the Medical Officer of Health develop a breastfeeding report card for Toronto based on a survey of hospitals and the breastfeeding experience of new mothers. <u>http://www.toronto.ca/legdocs/mmis/2007/hl/bgrd/backgroundfile-901.pdf</u>

## **ISSUE BACKGROUND**

The benefits of breastfeeding for mothers and babies are numerous and well documented. Full-term infants who are breastfed have a reduced risk of Sudden Infant Death Syndrome, middle ear infections, gastro-enteritis, childhood type 1 diabetes, childhood leukemia and a reduced risk of being overweight/obese in adolescence and adulthood.<sup>(2&3)</sup> Exclusive breastfeeding in full-term infants is associated with reduced risk of respiratory infections and dermatitis. <sup>(3)</sup> A recent study in Belarus suggests that prolonged exclusive breastfeeding appears to have a positive impact on IQ and later

academic performance.<sup>(4)</sup> There is also some evidence that women who breastfeed have a reduced risk of type 2 diabetes, breast cancer and ovarian cancer.<sup>(3)</sup>

The growing evidence for the benefits of breastfeeding resulted in the endorsement of exclusive breastfeeding to six months at multiple levels. The World Health Organization, Health Canada, the Ontario Ministry of Health and Long-Term Care, and Toronto Public Health all recommend exclusive breastfeeding to six months, the introduction of complementary foods at six months, and continued breastfeeding for two years of life and beyond.

Both hospital and community health services are essential in encouraging and supporting optimal breastfeeding practices. The Baby-Friendly designation is a globally recognized standard of best practices for infant feeding. Best practice is represented by The *Ten Steps to Successful Breastfeeding* (the Ten Steps) for birthing hospitals and *The Seven Point Plan for the Protection, Promotion and Support Of Breastfeeding In Community Health Services* (the Seven Point Plan) for community health services. Hospitals and community health services must also adhere to *WHO/UNICEF International Code of Marketing of Breast milk Substitutes* (the Code). In order to influence exclusive breastfeeding rates, it is important for both hospital and community health services to work concurrently and collaboratively toward Baby-Friendly designation.

Toronto Public Health is also mandated to promote breastfeeding through the Ontario Public Health Standards (2008) with the goal of increasing the rate of exclusive breastfeeding until six months.<sup>(5)</sup>

#### COMMENTS

TPH conducted a breastfeeding research study between 2007 and 2009. This study consisted of a self-report survey of Toronto birthing hospital breastfeeding policies and practices and telephone surveys of first-time Toronto mothers at two weeks and six months postpartum, about their breastfeeding experience. In addition, TPH assessed its breastfeeding policies and practices using a self-report survey. The components of the research study and its key findings are presented in the attached report, *Breastfeeding in Toronto: Promoting Supportive Environments* 

Of the mothers surveyed, 62.3% were born outside of Canada. Of the mothers born outside of Canada, 54% were recent immigrants (lived in Canada five years or less), representing 33.6% of all mothers surveyed. The vast majority of the mothers born outside of Canada were born in Asia (63.1%) (e.g. China, India, Sri Lanka, the Philippines), followed by the Americas (15.7%), Europe (13.6%), and Africa (7.3%). Just over 14% of mothers completed the survey in a language other than English.

Women's breastfeeding experiences are influenced by a variety of interconnected factors, including sociodemographic, and sociocultural factors. Immigrant women's experiences of migration as well as their degree of acculturation may also be influential. Although breastfeeding may be dominant in their country of origin, the breastfeeding practices of immigrant women may be influenced by barriers such as difficulties accessing

breastfeeding services in a language other than English, social isolation, and separation from extended family.

This report provides an overview of breastfeeding intention, initiation, duration and exclusivity rates in Toronto among first time mothers. It identifies factors independently associated with any breastfeeding to six months and exclusive breastfeeding in the early postpartum period and to six months postpartum. The report also highlights Toronto birthing hospitals and TPH adherence to policies and practices internationally recognized as supportive of breastfeeding.

#### **BREASTFEEDING INITIATION, DURATION AND EXCLUSIVITY**

#### **Breastfeeding Intention and Initiation**

The vast majority of first time mothers in this study planned to breastfeed (93.4%) and initiated breastfeeding in hospital (95.7%). This study found that mothers who planned to breastfeed were more likely to initiate breastfeeding than mothers who did not plan to breastfeed. Mothers who made their infant feeding decision before pregnancy were more likely to initiate breastfeeding than mothers who made this decision during or after pregnancy.

Because studies show that most women make their infant feeding decision prior to or early in pregnancy and because the timing of this decision influences both breastfeeding initiation and duration,<sup>(6)</sup> it is important to continue to implement strategies that promote breastfeeding to women in the preconception and prenatal periods. Efforts should be focused on women less likely to plan to breastfeed (i.e. younger women, women with lower levels of education, women with lower levels of family income and women who are not married/living common law) and women less likely to initiate breastfeeding (i.e. younger women, women with lower levels of education, women who are unemployed, women who are not married and women having caesarean births).

#### **Duration of "Any" Breastfeeding**

Almost three quarters (73.3%) of first-time Toronto mothers who initiated breastfeeding reported continuing to breastfeed their babies to six months postpartum. This rate is considerably higher than the recently reported Ontario rate (54%) of any breastfeeding to six months.<sup>(7)</sup> Nevertheless, Toronto's duration rate is of concern as it is well below the current recommendation for breastfeeding duration.

Recent immigrant mothers (those who have lived in Canada five years or less) were more likely than both Canadian-born mothers and immigrant mothers who lived in Canada six or more years to continue breastfeeding to six months. There is some evidence of an association between the degree of maternal acculturation (the process of adaptation to a new social environment) and breastfeeding behaviour.<sup>(6)</sup> Further investigation is required to understand the reasons for this.

#### **Duration of Exclusive Breastfeeding**

Despite high levels of breastfeeding initiation (95.7%), only 62.6 % of mothers who initiated breastfeeding reported breastfeeding exclusively at hospital discharge and only 17.5 % of mothers exclusively breastfeed their babies to six months postpartum. Toronto's exclusive breastfeeding rate at six months is only slightly higher than the 15.6% six month exclusive breastfeeding rate for Ontario.<sup>(7)</sup> Although the drop in exclusive breastfeeding is consistent with other local jurisdictions,<sup>(8)</sup> Toronto's current rates of exclusive breastfeeding to six months are considerably lower than national and provincial recommendations.

This research study found that a number of sociodemographic, sociocultural and birthrelated factors were independently associated with exclusive breastfeeding. Younger women, recent immigrants, women with lower levels of family income and women having a Caesarean birth were identified through the study as less likely to exclusively breastfeed. Therefore, it is important for TPH to work collaboratively with hospital and community partners to promote exclusive breastfeeding, paying particular attention to these subpopulations.

The most frequently reported reason mothers gave for not exclusively breastfeeding was the perception of "not having enough milk". The concern about milk supply is commonly cited in survey literature as a reason for early introduction of infant formula.<sup>(9)</sup> As a frequently identified source of professional breastfeeding support by Toronto mothers, TPH, in collaboration with hospital and community partners, is well positioned to develop population wide and targeted strategies to address concerns about milk supply and other barriers to sustained and exclusive breastfeeding.

#### SUPPORTIVE ENVIRONMENTS

#### **Hospital Policies and Practices**

The Baby-Friendly Hospital Initiative (BFHI) recognizes hospitals that implement the requirements of the Ten Steps and comply with The Code. Toronto East General is the only Toronto birthing hospital that met all the requirements of the Ten Steps and is officially designated as Baby-Friendly. The remaining Toronto birthing hospitals varied considerably in the degree to which they met the requirements of the Ten Steps.

This study found a number of hospital policies and practices related to the Ten Steps were independently associated with exclusive breastfeeding during the early postpartum period. This demonstrates the vital role that hospital policies and practices play in supporting breastfeeding mothers. It is clear that in order to support and further improve exclusive breastfeeding rates in the early postpartum period, Toronto birthing hospitals should actively pursue Baby-Friendly designation. Particular attention should be paid to policies and practices that were both independently associated with exclusive breastfeeding and had relatively low levels of implementation in most Toronto hospitals. These polices and practices are: having a written breastfeeding policy that covers the Ten Steps, helping mothers initiate breastfeeding within a half-hour of birth, giving newborns no fluids other than breast milk unless medically indicated, and adhering to the Code.

#### **TPH Policies and Practices**

The Seven Point Plan for the Protection, Promotion and Support of Breastfeeding In Community Health Services is an adaptation of the Ten Steps and includes compliance with The Code. It constitutes best practice for community health services and recognizes that supportive breastfeeding environments extend from the hospital to the community setting.

The Ontario Public Health Standards (OPHS) mandates health units to promote and support breastfeeding. TPH has a long history of promoting and supporting breastfeeding. TPH provides education to staff in accordance with Baby-Friendly Initiative (BFI) standards. Several policies supportive of exclusive and sustained breastfeeding have been developed to guide breastfeeding practice, including an "Exclusive Breastfeeding Duration Policy" and "Age of Introduction of Complementary Foods Policy".

TPH provides skilled, evidenced-based counselling and support to pregnant women and new parents. Services include:

- education and support for breastfeeding through the Canadian Prenatal Nutrition Program, prenatal and parenting programs;
- telephone calls and home visits for women who identify breastfeeding challenges;
- breastfeeding clinic services in partnership with hospital and community agencies;
- access to breastfeeding literature; and,
- web-based breastfeeding information.

More work needs to be done to strengthen current policies and practices in order to be fully compliant with the Seven Point Plan. TPH is committed to achieving Baby-Friendly designation and will develop an action plan to ensure compliance with all seven points. Particular attention should be paid to policies and practices which TPH identified as having low compliance, including having a written breastfeeding policy that covers all of the seven points, supporting mothers to establish and maintain exclusive breastfeeding to six months and promoting collaboration between health care providers, breastfeeding groups and the local community.

#### **Community Breastfeeding Supports**

The Ontario Human Rights Commission "Policy on Discrimination because of Pregnancy and Breastfeeding" clearly support the right of women to breastfeed in public.<sup>(10)</sup> The study found that mothers who felt comfortable breastfeeding in public locations and/or in the presence of friends were 2.9 times more likely to continue to breastfeed to six months than mothers who were not comfortable or did not breastfeed in public.

TPH has initiated work to support mothers to breastfeed in public. In 2007, TPH developed a Breastfeeding in Public policy. This was followed by several initiatives to engage City of Toronto restaurants, malls and movie theatres in becoming "breastfeeding friendly". It is important to explore further strategies to engage public facilities in

breastfeeding friendly activities and to promote and support a woman's right to breastfeed in public.

In addition to breastfeeding friendly places, a broad range of community based peer and professional supports are important in creating a supportive environment to breastfeed. The vast majority of mothers in this study reported receiving breastfeeding support following hospital discharge. The most frequently mentioned sources of professional support were public health nurses and hospital staff, followed by breastfeeding clinics. However, 10% or fewer mentioned receiving support from doctors, lactation consultants, midwives/doulas, the LaLeche League, and/or community health centres. Consequently, it is important to continue efforts to increase awareness of and access to community based breastfeeding supports.

#### Data Gaps

In addition to breastfeeding policies and practices, Toronto birthing hospitals were asked to provide infant feeding data using the Niday Perinatal Database (Niday), currently part of the Better Outcomes Registry Network (BORN) Ontario. Niday is a real time surveillance system that collects information on variables related to maternal, newborn and perinatal care characteristics. Several hospitals identified challenges in providing accurate and complete infant feeding data. As a result, TPH utilized mother reports of breastfeeding initiation, duration and exclusivity to determine breastfeeding rates in this study.

In order for hospitals and community health services to achieve the Baby-Friendly Designation, accurate and complete infant feeding data is required to monitor rates of initiation and exclusive breastfeeding and to assess progress in meeting the requirements related to the Ten Steps and the Seven Point Plan. Niday has the potential to meet this need.

It would also be beneficial to collect key sociodemographic and sociocultural indicators in Niday. This would enable the identification of subpopulations in Toronto at risk for low breastfeeding rates and adverse maternal/infant health outcomes and could be used for service planning.

#### Next Steps

This research study provides us with critical information needed to more effectively address rates of initiation, duration and exclusive breastfeeding in Toronto and identifies key areas in which to focus efforts.

Recognizing that collaboration with key stakeholders is essential to improving breastfeeding rates, this research study highlighted the need for TPH to: (a) continue efforts to support those women less likely to plan to breastfeed or initiate breastfeeding; (b) enhance breastfeeding programs and services to those women less likely to exclusively breastfeed to six months (b) support Toronto birthing hospitals to achieve Baby-Friendly Designation; (c) achieve Baby-Friendly designation for Toronto Public Health, (d) advocate for gaps in data to be addressed to enable identification of subpopulations in Toronto at risk for low breastfeeding rates, and e) work with key

stakeholders to promote and advance community support for breastfeeding mothers and breastfeeding in public.

## CONTACT

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## SIGNATURE

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## ATTACHMENTS

Breastfeeding in Toronto - Promoting Supportive Environments Report

#### REFERENCES

- Breastfeeding Committee for Canada. Practice Outcome Indicators for: Baby-Friendly Hospitals (The Ten Steps) Baby-Friendly Community Health Services (The Seven Points), 2004. Retrieved March 2010 from: <u>http://www.breastfeedingcanada.ca/pdf/BFI%20Ind%20Prologue%20(1)%20Mar</u> <u>ch%2024%2004.pdf</u>
- Horta, B. L., Bahl, R., Martines, J. C., Victora, C. G. Evidence on the long-term effects of breastfeeding Systemic Reviews and Meta-Analyses, World Health Organization, Geneva, Switzerland, 2007. Retrieved March 2010 from: <u>http://whqlibdoc.who.int/publications/2007/9789241595230\_eng.pdf</u>
- 3) Ip, S., Chung, M., Raman, G., Chew, P., Magula, N., DeVine, D., Trikalinos, T., Lau, J. Breastfeeding and Maternal and Infant Health Outcomes in Developed Countries. Evidence Report/Technology Assessment No. 153 (Prepared by Tufts-New England Medical Center Evidence-based Practice Centre, under Contract No. 290-02-0022). AHRQ Publication No. 07-E007, Agency for Healthcare Research and Quality, Rockville, MD, 2007. Retrieved March 2010 from:

http://www.ahrq.gov/downloads/pub/evidence/pdf/brfout/brfout.pdf

- 4) Kramer, M. S., Aboud, F., Mironova, E., Vanilovich, I., Platt, R.W., Matush, L., Igumnov, S., Fombonne, E., Bogdanovich, N., Ducruet, T., Collet, J-P., Chalmers, B., Hodnett, E., Davidovsky, S., Skugarevsky, O., Trofimovich, O., Kozlova, L., Shapiro, S., for the Promotion of Breastfeeding Intervention Trial (PROBIT) Study Group. Breastfeeding and Child Cognitive Development: New Evidence From a Large Randomized Trial, Arch Gen Psychiatry, Vol 65 (5): 578 – 584, 2008.
- 5) Ontario. Ministry of Health and Long-Term Care. Ontario Public Health Standards, Ministry of Health and Long-Term Care, Ottawa, ON, 2008. Retrieved March 2010 from: <u>http://www.health.gov.on.ca/english/providers/program/pubhealth/oph\_standards/ ophs/progstds/pdfs/ophs\_2008.pdf</u>
- 6) Dennis, C-L. Breastfeeding Initiation and Duration: A 1990-2000 Literature Review, JOGNN, Vol 31 (1): 12- 32, 2002.
- 7) Public Health Agency of Canada. What Mothers Say: The Canadian Maternity Experiences Survey, Ottawa, ON, 2009. Retrieved March 2010 from: http://www.phac-aspc.gc.ca/rhs-ssg/pdf/survey-eng.pdf
- 8) Ontario Breastfeeding Committee. Ontario Progress Report Action to increase Sustained Breastfeeding Rates Through the Baby Friendly Initiative, 2009.
- 9) Health Canada. Breastfeeding in Canada: A Review and Update, Minister of Public works and Government Services Canada, Ottawa, ON, 1999.

 10) Ontario Human Rights Commission. Policy On Discrimination Because of Pregnancy and Breastfeeding, 2008.
Retrieved March 2010 from: <u>http://www.ohrc.on.ca/en/resources/Policies/PolicyPregBreastfeedEN/pdf#6</u>