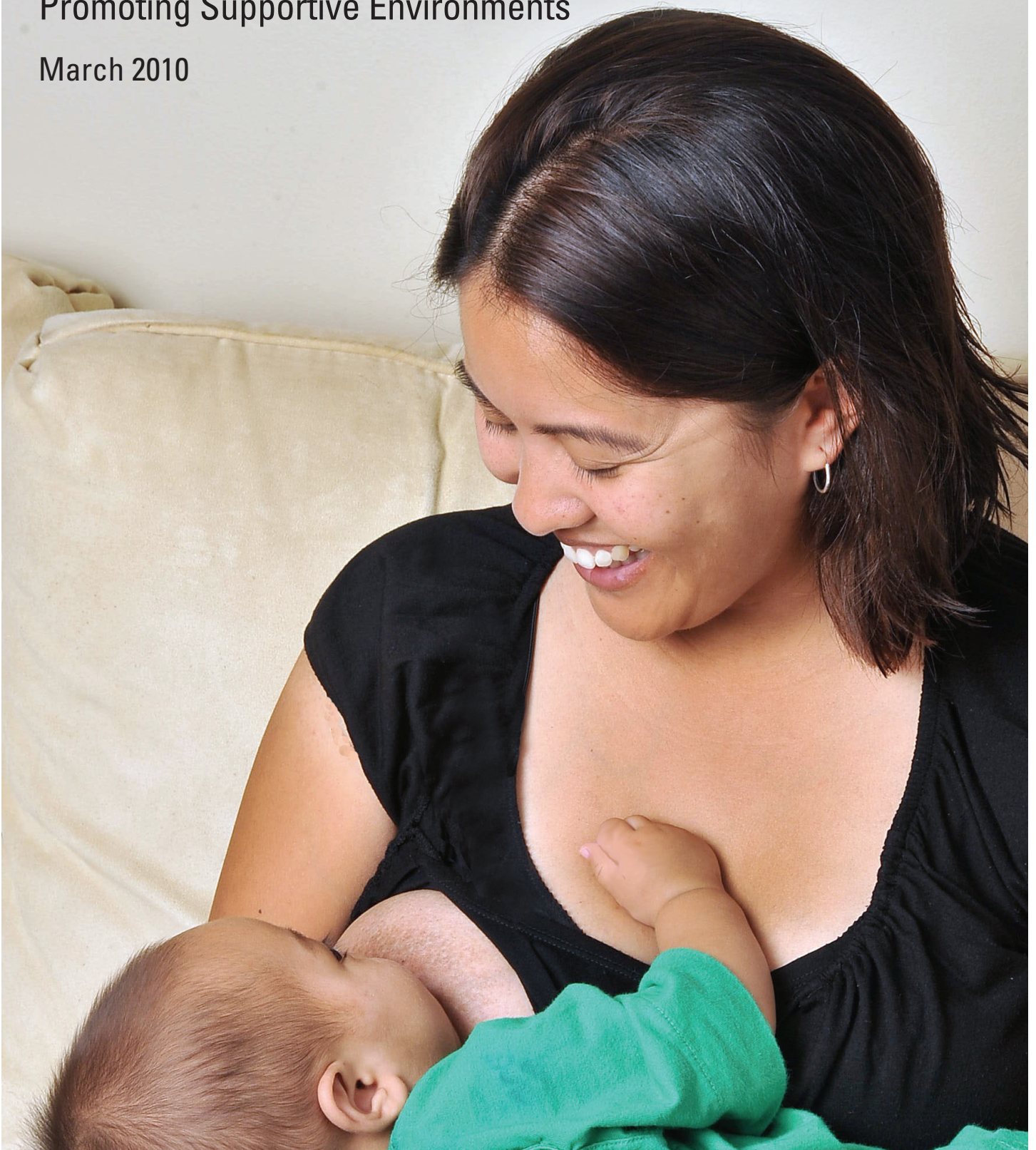


Breastfeeding in Toronto

Promoting Supportive Environments

March 2010



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 **TORONTO** Public Health

Introduction

Breastmilk supplies the best nutrition for the first six months of life. Breastfeeding also has a variety of well-documented short and longer term health benefits for both mother and baby. For example, breastfeeding reduces the risk of: sudden infant death syndrome; gastrointestinal, ear, and respiratory infections during infancy and childhood; and diabetes and being overweight or obese during adolescence and adulthood. There is some evidence in the scientific literature that women who breastfeed have a reduced risk of diabetes, breast cancer and ovarian cancer.

The World Health Organization (WHO), Health Canada, the Ontario Ministry of Health and Long-Term Care, and Toronto Public Health (TPH) all support exclusive breastfeeding to six months of age, the introduction of complementary foods at six months, and continued breastfeeding for the first two years of life and beyond.

TPH recently conducted a research study to identify rates of breastfeeding initiation and duration among first-time mothers. The study was also designed to gain a better understanding of factors associated with breastfeeding, including hospital and community-related factors.

The study consisted of:

- A self-report survey of Toronto birthing hospitals (conducted in 2007/08). Hospitals assessed their breastfeeding policies and practices using the Baby-Friendly Hospital Initiative (BFHI) Self-Appraisal Tool created by

the Breastfeeding Committee for Canada. The tool is based on the WHO/UNICEF Ten Steps to Successful Breastfeeding (see page 6). Hospitals reported on a total of 48 requirements related to the Ten Steps.¹

- A telephone survey, at two weeks postpartum, of 1,518 first-time Toronto mothers who gave birth in a Toronto hospital to a (single) full-term baby weighing 2,500 grams or more (conducted in 2007/08). The survey asked mothers about their breastfeeding experience, including their perceptions of hospital breastfeeding policies and practices.
- A telephone survey, at six months postpartum, of 910 mothers who participated in the initial survey (conducted in 2008/09). The survey asked mothers about their breastfeeding experience, including their comfort breastfeeding in public, community breastfeeding supports, and their perceptions of TPH breastfeeding policies and practices.

The full technical report is available on the TPH website at: toronto.ca/health.

TPH also assessed its breastfeeding policies and practices (as of 2008) using the Self-Appraisal Questionnaire for Community Health Services created by the Breastfeeding Committee for Canada. This questionnaire is based on the UNICEF U.K. Seven Point Plan for Community Health Care Settings. TPH reported on a total of 51 requirements related to the Seven Points.¹

Toronto birthing hospitals surveyed

- Humber River Regional Hospital – Church and Finch Sites (HRRH)²
- Mount Sinai Hospital (MSH)
- North York General Hospital (NYGH)
- Rouge Valley Health System – Centenary Site (RVHS)
- St. Joseph’s Health Centre (SJHC)
- St. Michael’s Hospital (SMH)
- Sunnybrook Health Sciences Centre (SHSC)
- The Scarborough Hospital – General and Grace Campuses (TSH)²
- Toronto East General Hospital (TEGH)
- William Osler Health System – Etobicoke General Hospital (WOHS)

Characteristics of mothers surveyed

- 62.3% of the mothers surveyed were born outside of Canada; 33.6% were recent immigrants (lived in Canada five years or less)
- 14.1% completed the survey in one of 23 languages other than English
- 90.6% were legally married or living common-law
- 81.6% were between 25 and 40 years of age
- 37.9% reported an annual family income of \$80,000 or more; 13.2% reported an annual family income of less than \$20,000
- 69.9% reported at least a post-secondary degree, certificate or diploma; 6.0% reported less than high school

Breastfeeding Initiation and Duration

Of the mothers surveyed, 93.4% reported planning to breastfeed their babies. Younger mothers, mothers who were not married or living common-law, mothers with lower levels of education, and mothers with lower levels of family income were less likely to plan to breastfeed.

Almost all first-time mothers initiated breastfeeding in hospital; at six months postpartum 73% of these mothers were still breastfeeding.

Of the mothers surveyed, 95.7% reported initiating breastfeeding in hospital (i.e., putting the baby to the breast even if the baby did not latch successfully). At six months postpartum, 73.3% of mothers who initiated breastfeeding continued to breastfeed their babies (i.e., fed

their babies breastmilk only, or fed their babies breastmilk and other fluids or food – referred to as “any breastfeeding” in this report). See Figure 1.

Factors associated with any breastfeeding to six months postpartum

A number of factors were significantly associated with breastfeeding to six months postpartum (controlling for all other factors).³

Sociodemographic factors

There was a general trend of increased likelihood of breastfeeding to six months with increasing maternal age. For example, mothers over 30 years of age were 7.9 times more likely to continue breastfeeding to six months, than mothers under 20 years of age.



Recent immigrants (lived in Canada five years or less) were 1.6 times more likely than Canadian-born mothers to continue breastfeeding to six months. They were also 1.9 times more likely than immigrants who lived in Canada six or more years to continue breastfeeding to six months.

Hospital policies and practices

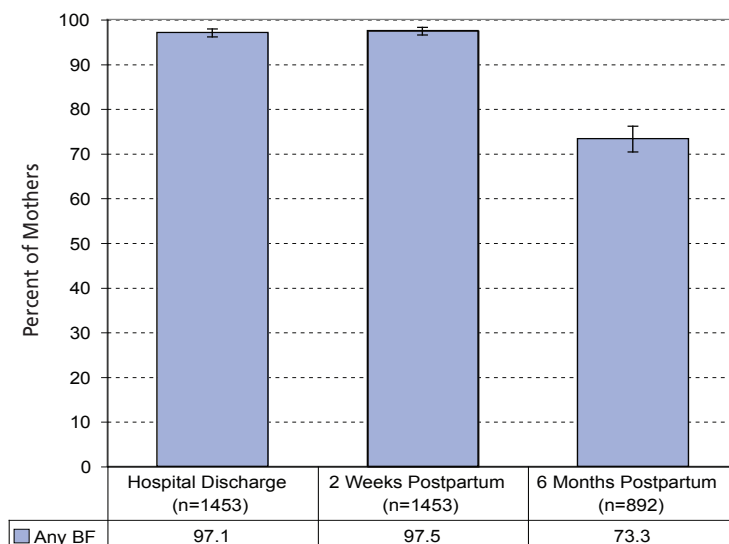
Mothers who reported that the hospital did not give their baby fluids other than breastmilk were 1.7 times more likely to continue breastfeeding to six months. (Step 6)

Mothers who gave birth in a hospital that reported following all requirements related to breastfeeding on demand were 3.5 times more likely to continue breastfeeding to six months than mothers who gave birth in a hospital that placed restrictions on the frequency or length of breastfeeding. (Step 8)

Community factors

Mothers who felt comfortable breastfeeding in public locations (malls, restaurants, recreational facilities, parks, and/or workplaces) and/or in the presence of friends were 2.9 times more likely to continue breastfeeding to six months than mothers who were not comfortable breastfeeding (or did not breastfeed) in these locations.

Figure 1: Mothers’ reports of any breastfeeding at hospital discharge, two weeks postpartum, and six months postpartum, Toronto, 2007/08, 2008/09¹



¹Rates are based on mothers who initiated breastfeeding in hospital.

Error bars (I) denote 95% confidence intervals.

Sources: Toronto Public Health New Mother Breastfeeding Survey, Time 1, 2007/08; Toronto Public Health New Mother Breastfeeding Survey, Time 2, 2008/09

Exclusive Breastfeeding

“Exclusive breastfeeding” refers to feeding breastmilk only, including expressed breast milk or donor human milk, and undiluted drops or syrups consisting of vitamins, mineral supplements or medicine.

Of mothers who initiated breastfeeding, 63% reported exclusively breastfeeding at hospital discharge; this rate declined to 17.5% by six months postpartum.

Of the mothers who initiated breastfeeding, 62.6% reported breastfeeding exclusively at hospital discharge (Figure 2).

The rates of exclusive breastfeeding at hospital discharge varied from 27.0% at Rouge Valley Health System – Centenary Site to 79.1% at Toronto East General Hospital (Figure 3).

When mothers were asked about why they were not feeding their baby breastmilk exclusively when they left the hospital, the most frequently reported reason was “not having enough milk”. A variety of reasons may contribute to mothers’ perceptions of not having enough milk.

Rates of exclusive breastfeeding continue to decline to six months postpartum. By six months postpartum, only 17.5% of mothers continued to exclusively breastfeed their babies (Figure 2).

Factors associated with exclusive breastfeeding

A number of factors were significantly associated with exclusive breastfeeding (compared with feeding breastmilk and other fluids or food) during the early

postpartum period and to six months postpartum (controlling for all other factors).

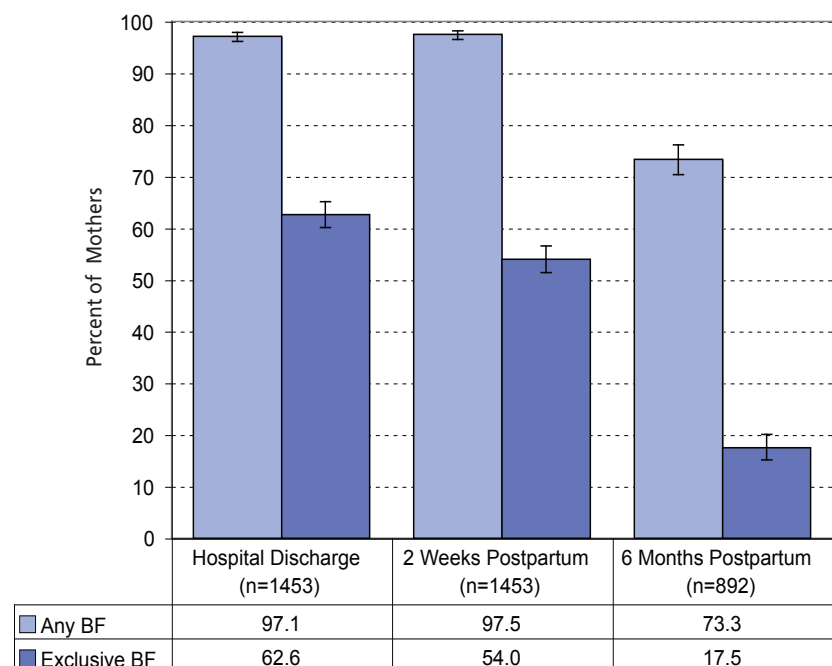
Early postpartum period

Sociodemographic factors, birth-related factors and hospital policies and practices were independently associated with exclusive breastfeeding during the early postpartum period (i.e., at hospital discharge, and/or to two weeks postpartum). These factors contribute to the variation

and 1.8 times more likely to exclusively breastfeed to two weeks postpartum, than recent immigrants (lived in Canada five years or less). Mothers who immigrated to Canada six or more years ago were 1.5 times more likely to exclusively breastfeed at hospital discharge, than recent immigrants.

There was a general trend of increasing likelihood of exclusive breastfeeding to two weeks postpartum with increasing

Figure 2: Mothers’ reports of any and exclusive breastfeeding at hospital discharge, two weeks postpartum, and six months postpartum, Toronto, 2007/08, 2008/09¹



¹Rates are based on mothers who initiated breastfeeding in hospital.

Error bars (I) denote 95% confidence intervals.

Sources: Toronto Public Health New Mother Breastfeeding Survey, Time 1, 2007/08; Toronto Public Health New Mother Breastfeeding Survey, Time 2, 2008/09

in rates of exclusive breastfeeding at hospital discharge across Toronto hospitals.

Sociodemographic factors

Canadian-born mothers were 1.9 times more likely to exclusively breastfeed at hospital discharge,

family income. For example, mothers who reported a family income of \$80,000 or more were 1.3 times more likely to exclusively breastfeed to two weeks postpartum, compared with mothers who reported a family income of less than \$20,000.

Exclusive Breastfeeding

Birth-related factors

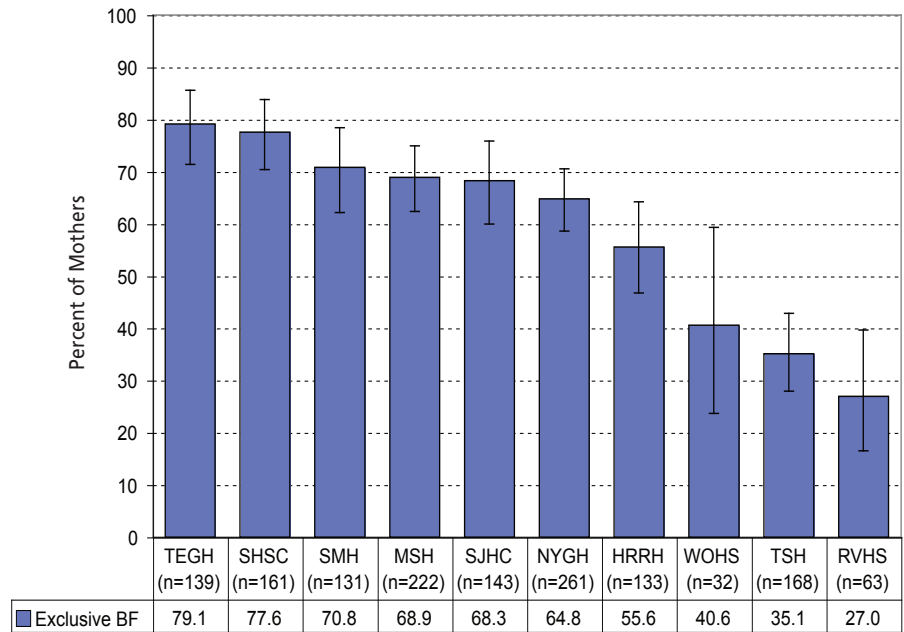
Mothers who gave birth vaginally were 2.5 times more likely to exclusively breastfeed at hospital discharge and 1.6 times more likely to exclusively breastfeed to two weeks postpartum, than mothers who had a caesarean birth.

Hospital policies and practices

A number of hospital policies and practices were significantly associated with exclusive breastfeeding during the early postpartum period (controlling for all other factors). These policies and practices are related to the WHO/UNICEF Ten Steps to Successful Breastfeeding (see page 6) and the WHO International Code of Marketing of Breastmilk Substitutes.¹ (the Code)

- Mothers who gave birth in a hospital that reported following all five written breastfeeding policy requirements were 3.9 times more likely to exclusively breastfeed at hospital discharge than mothers who gave birth in a hospital that reported following two of these requirements. (Step 1)
- Mothers who reported attempting to breastfeed their baby within one hour of birth were twice as likely to exclusively breastfeed to two weeks postpartum. (Step 4)
- Mothers who reported that the hospital did not give their baby fluids other than breastmilk were 4.3 times more likely to exclusively breastfeed at hospital discharge and 2.4 times more likely to exclusively breastfeed to two weeks. (Step 6)
- Mothers who gave birth in a hospital that reported following all requirements related to

Figure 3: Mothers' reports of exclusive breastfeeding at hospital discharge, by hospital of delivery, Toronto, 2007/08¹



¹Rates are based on mothers who initiated breastfeeding in hospital.

Error bars (I) denote 95% confidence intervals. Wide confidence intervals, particularly for hospitals with small sample sizes, indicate the estimate may not be reliable due to high variability. These estimates should be interpreted with caution.

Source: Toronto Public Health New Mother Breastfeeding Survey, Time 1, 2007/08

breastfeeding on demand were three times more likely to exclusively breastfeed at hospital discharge, and four times more likely to exclusively breastfeed to two weeks, than mothers who gave birth in a hospital that placed restrictions on the frequency or length of breastfeeding. (Step 8)

- Mothers who reported they did not receive infant formula at hospital discharge were 3.5 times more likely to exclusively breastfeed to two weeks. (the Code)
- Mothers who felt overall that they were supported by the hospital were 1.8 times more likely to exclusively breastfeed at hospital discharge.

Six months postpartum

Two factors were significantly associated with exclusive breastfeeding to six months postpartum (controlling for all other factors).³

- Older mothers (i.e., more than 30 years old) were 2.5 times more likely to exclusively breastfeed to six months than younger mothers (i.e., less than 25 years old).
- Mothers who reported being informed about breastfeeding during the hospital's pre-admission visit were 1.5 times more likely to exclusively breastfeed to six months. (Step 3)

Hospital Policies and Practices

In a one-year period from April 1, 2007 to March 31, 2008, there were a total of 40,680 births in Toronto's twelve birthing hospitals.⁴ Of these births, 29,751 were to Toronto residents.⁵

There was variation in the number of births across hospitals, from 2,184 births at Rouge Valley Health System – Centenary Site to 6,808 births at Mount Sinai Hospital.⁴

Toronto birthing hospitals provide a range of prenatal and postnatal breastfeeding services, including: inpatient and outpatient breastfeeding consultation by registered nurses and/or lactation consultants; telephone information and help-lines for breastfeeding clients, families



and professionals; breastfeeding classes and support groups; and breastfeeding clinic services. These services vary across hospitals.

WHO/UNICEF Baby-Friendly Hospital Initiative

The WHO/UNICEF Baby-Friendly Hospital Initiative protects, promotes, and supports

breastfeeding through the Ten Steps to Successful Breastfeeding and the WHO International Code of Marketing of Breastmilk Substitutes.

The Code ensures that breastmilk substitutes, feeding bottles and teats are marketed in an ethical manner. To be eligible to receive a Baby-Friendly designation, hospitals must implement the Ten Steps and comply with the Code and all subsequent World Health Assembly resolutions.

The WHO/UNICEF Ten Steps to Successful Breastfeeding

1. Have a written breastfeeding policy that is routinely communicated to all health care staff and volunteers.
2. Train all health care providers in the knowledge and skills necessary to implement the breastfeeding policy.
3. Inform pregnant women and their families about the benefits and management of breastfeeding.
4. Help mothers initiate breastfeeding within a half-hour of birth.
5. Show mothers how to breastfeed and how to maintain lactation, even if separated from their infants.
6. Give newborn infants no food or drink other than breastmilk, unless medically indicated.
7. Practice rooming in – mothers and infants remain together – 24 hours a day.
8. Encourage breastfeeding on demand.
9. Give no artificial teats or

pacifiers (also called dummies or soothers) to breastfeeding infants.

10. Foster the establishment of breastfeeding support groups and refer mothers to them on discharge from the hospital or clinic.

How are Toronto hospitals doing in supporting breastfeeding?

Hospitals assessed their own breastfeeding policies and practices using the Baby-Friendly Hospital Initiative Self-Appraisal Tool created by the Breastfeeding Committee for Canada. The tool has 48 requirements based on the WHO/UNICEF Ten Steps to Successful Breastfeeding. Mothers also reported on hospital breastfeeding policies and practices.

Hospitals varied in the degree to which they met the requirements related to the WHO/UNICEF Ten Steps to Successful Breastfeeding.

Toronto hospitals varied in the degree to which they met the requirements related to the Ten Steps (Figure 4). Toronto East General Hospital, which met 100% of the requirements, is the only designated Baby-Friendly Hospital in Toronto.

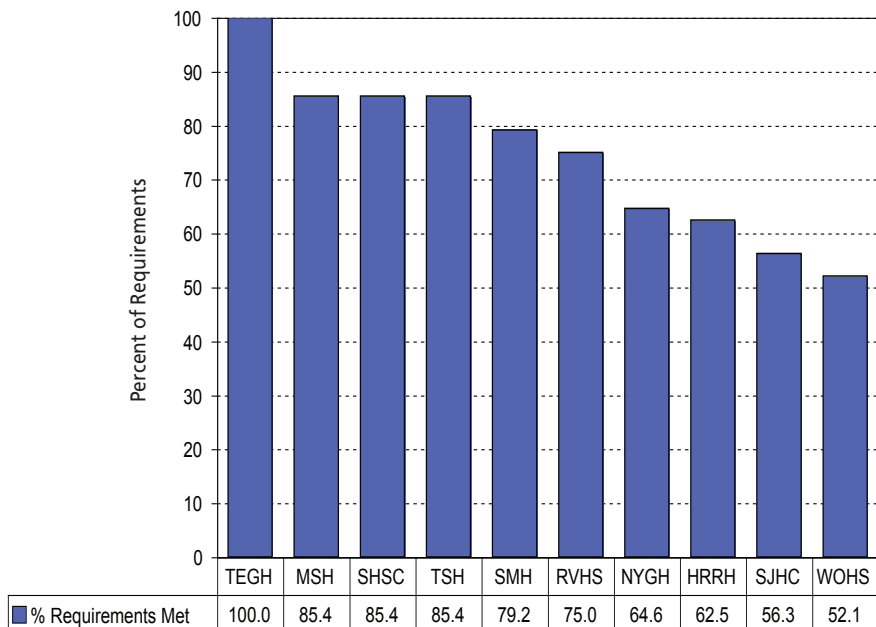
There is room for improvement in the following areas:

- Most hospitals reported meeting 60% or fewer of the requirements related to having a written breastfeeding policy routinely communicated to staff. (Step 1)

Hospital Policies and Practices

- Only 41% of mothers reported being informed about breastfeeding at the hospital's pre-admission visit, with substantial variation by hospital. (Step 3)
- Only 71% of mothers reported initiating breastfeeding immediately after birth, with substantial variation by hospital. (Step 4)
- Most hospitals reported meeting 40% or fewer of the requirements related to giving newborn infants no food or drink other than breastmilk unless medically indicated. (Step 6)
- Most hospitals reported meeting 75% or fewer of the requirements related to giving breastfeeding infants no artificial teats or pacifiers. (Step 9)
- 39% of mothers reported being given infant formula or breastmilk substitutes upon leaving the hospital, with substantial variation by hospital. (the Code)

Figure 4: Hospitals' reports of requirements related to the WHO/UNICEF Ten Steps to Successful Breastfeeding, by hospital, Toronto, 2007/08



Source: Toronto Public Health Hospital Survey of Breastfeeding Policies and Practices, 2007/08

Community Breastfeeding Supports

The WHO/UNICEF Baby-Friendly Hospital Initiative recognizes the importance of a supportive community in promoting and maintaining breastfeeding.

Creating a community which supports breastfeeding requires the involvement of a broad range of stakeholders, including: hospitals, breastfeeding clinics, public health units, community health centres, lactation consultants, physicians,

midwives, the La Leche League, employers, and family members, friends, and other breastfeeding mothers. The existence of breastfeeding-friendly public places plays a key role in supporting breastfeeding.

The majority of mothers surveyed (93.6%) reported receiving breastfeeding support following hospital discharge. Most mothers felt the support they received was helpful.

Mothers were asked to identify the type of support they received. The most frequently mentioned sources of professional support were public health nurses and hospital staff, followed by breastfeeding clinics.

Ten percent or fewer mothers mentioned receiving support from doctors, lactation consultants, midwives/doulas, the La Leche League, and/or community health centres.

Community Breastfeeding Supports

The most frequently mentioned source of social support was family members, including spouses and partners, followed by friends and/or co-workers.

68.6% of mothers reported breastfeeding their babies in public locations. The most frequently mentioned public locations were malls and restaurants followed by recreational/cultural facilities, places of worship, parks, workplaces, and/or public transit.

The Seven Point Plan for Community Health Care Settings

The Seven Point Plan for Community Health Care Settings was developed by the UNICEF U.K. Baby-Friendly Initiative. This adaptation of the WHO/UNICEF Ten Steps to Successful Breastfeeding represents best practice standards for community health services (i.e., public health units, community health centres, and Ontario Family Health Networks).

The Seven Points are:

1. Have a written breastfeeding policy that is routinely communicated to all staff and volunteers.
2. Train all health care providers in the knowledge and skills necessary to implement the

breastfeeding policy.

3. Inform pregnant women and their families about the benefits and management of breastfeeding.
4. Support mothers to establish and maintain exclusive breastfeeding to six months.
5. Encourage sustained breastfeeding beyond six months with appropriate introduction of complementary foods.
6. Provide a welcoming atmosphere for breastfeeding families.
7. Promote collaboration between health care providers, breastfeeding support groups and the local community.

How is Toronto Public Health doing in supporting breastfeeding?

TPH assessed its own breastfeeding policies and practices using the Breastfeeding Committee for Canada Self-Appraisal Questionnaire for Community Health Services. This questionnaire has 51 requirements based on the Seven Point Plan. Mothers who used the services of TPH for breastfeeding support following hospital discharge also provided their perspective of TPH breastfeeding policies and practices.

Overall, TPH reported meeting 58.8% of the requirements related to the Seven Point Plan.

Toronto Public Health has room for improvement in several key areas.

There is room for improvement in several key areas.

- TPH reported meeting only 11% of the requirements regarding a written breastfeeding policy. (Point 1)
- TPH reported meeting 78% of the requirements regarding informing pregnant women and their families about breastfeeding. (Point 3)
- TPH reported meeting 46% of the requirements regarding supporting mothers to establish and maintain exclusive breastfeeding to six months. (Point 4)
- 74% of mothers reported that TPH encouraged sustained breastfeeding with complementary foods beyond six months. (Point 5)
- TPH reported meeting 40% of the requirements regarding collaboration between health care providers, breastfeeding support groups and the local community. (Point 7)

Footnotes

¹ See the Breastfeeding Committee for Canada website at: breastfeedingcanada.ca/html/bfi.html

² Results were combined for HRRH – Church and Finch Sites and TSH – General and Grace Campuses.

³ TPH breastfeeding policies and practices were not included in this analysis as the sample size would be too small.

⁴ Niday Perinatal Database for the GTA: Fifth Annual Statistical Report 2007/2008. 2008. Toronto, Ontario.

⁵ Better Outcomes Registry & Network (BORN) Ontario (Niday Perinatal Database), 2007/08. Extracted February 2010.