

Toronto Breastfeeding Rates



This issue of the Health Status News provides the most recent information on rates of breastfeeding initiation, breastfeeding duration, and exclusive breastfeeding in Toronto. Two sources provided data on breastfeeding rates. They are the Toronto Perinatal and Child Health Survey (PCHS), 2003

and the Canadian Community Health Survey (CCHS), Cycle 1.1, 2001. Table 1 identifies the survey questions as well as the methods used to calculate breastfeeding rates.

Research shows that breastfeeding has nutritional and immunological benefits for the infant, and health-related benefits for both the infant and the mother. Human breast milk contains the perfect balance of nutrients for the infant. There is strong evidence that breastfeeding decreases the occurrence or severity of infectious diseases such as gastrointestinal illnesses, respiratory illnesses, and ear infections. There is some evidence of an association between breastfeeding and reduced risk of Sudden Infant Death Syndrome, asthma, childhood leukemia, childhood obesity, and malalignment of the teeth. Breastfeeding is also associated with slightly improved scores on tests of cognitive development. Health benefits for the mother include earlier return to prepregnancy weight, reduced postpartum bleeding and reduced risk of premenopausal breast cancer and ovarian cancer.^{1,2} Increased duration of breastfeeding and/or exclusive breastfeeding have been shown to maximize these benefits.²

Approximately 9 out of 10 Toronto Parents with Young Children Initiate Breastfeeding...

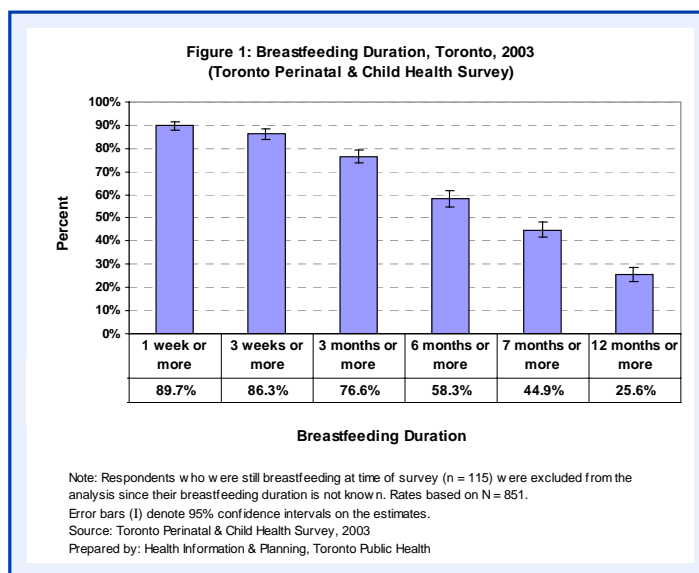
Data from the Toronto PCHS estimates that the **breastfeeding initiation rate in Toronto in 2003 was 94%** (CI_{95%} = 92.9%, 95.8%). **The CCHS estimate for Toronto in 2001 was 87%** (CI_{95%} = 80.2%, 94.2%).

The lower CCHS estimate may be a result of the differences between the two surveys. The CCHS respondents for this question were younger and had lower levels of education and household income than the PCHS respondents. Studies have shown that younger mothers, mothers with lower levels of education and income are less likely to breastfeed than older, more educated mothers and mothers with higher income,

which help explain the lower CCHS breastfeeding initiation rate.³ In addition, initiation rates may have increased in the two year period between the administration of the two surveys.

... But Many Parents Stop Breastfeeding by Six Months

Both surveys show that **breastfeeding duration decreased over the 12 months** from initiation (**Figure 1 - PCHS and Figure 2 - CCHS**).



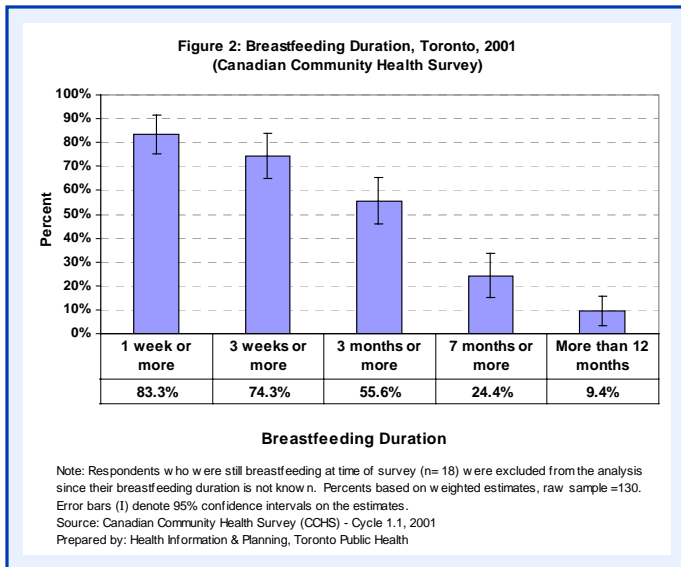
Based on respondents with known duration rates, the PCHS results (Figure 1) show that:

- almost 90% of parents reported breastfeeding their baby for at least one week
- approximately three-quarters of parents reported breastfeeding for 3 months or more
- 58% reported breastfeeding for 6 months or more
- less than half (45%) reported breastfeeding for 7 months or more
- approximately one-quarter reported breastfeeding for 12 months or more

Thus, according to the PCHS, a substantial proportion of parents who started breastfeeding stopped after 6 months. The majority had stopped by 1 year.

Less Than One in Five Toronto Parents with Young Children Exclusively Breastfeed their Child Until 6 Months

The World Health Organization (WHO, 2001) has recommended exclusive breastfeeding for six months and the provision of safe and appropriate complementary foods, with continued breastfeeding for up to two years of age or beyond.⁴ Subsequently, the Breastfeeding Committee for Canada (2002) and Health Canada (2004) recommended exclusive breastfeeding for the first six months of life for healthy term infants. These organizations also recommended the introduction of complementary food at six months with continued breastfeeding for up to two years and beyond.^{5, 6} Exclusive breastfeeding means that no food or drink other than breast milk, including water, are included in the diet. Medical drops or syrups may be given if indicated.⁷ The PCHS provides the only data on exclusive breastfeeding rates for Toronto. Rates were calculated for healthy term infants as supplementation may be required for medical reasons, for babies born with a very low birthweight (<1500 grams), babies born 32 weeks gestation or less, and/or babies who are severely ill or in need of surgery.⁴ Rates for exclusive breastfeeding duration, based on all healthy term babies, are shown in Figure 3.



Based on respondents with known duration rates, the CCHS results (Figure 2) show that:

- 83% of parents reported breastfeeding their baby for at least one week
- 56% of parents reported breastfeeding for 3 months or more
- 24% reported breastfeeding for 7 months or more
- approximately one-tenth reported breastfeeding for 12 months or more

The overall trend, according to the CCHS, is similar to that of the PCHS, i.e. **a substantial proportion of parents who started breastfeeding stop after 6 or 7 months and the majority stop by 1 year.** The PCHS estimated a six months duration rate of 58%. The PCHS and the CCHS estimated a seven months duration rate of 45% and 24%, respectively. All breastfeeding duration estimates from the CCHS were lower than those of the PCHS estimates, with differences ranging from 6.4 to 21.0 percentage points. The greatest differences in estimates occur at the latter stages of duration. Again, these differences are likely explained by the CCHS sample being younger and having lower levels of education and household income than the PCHS sample. Breastfeeding duration rates for '6 months or more' and '12 months or more' could not be calculated from the CCHS cycle 1.1 given limitations associated with how the data were collected.

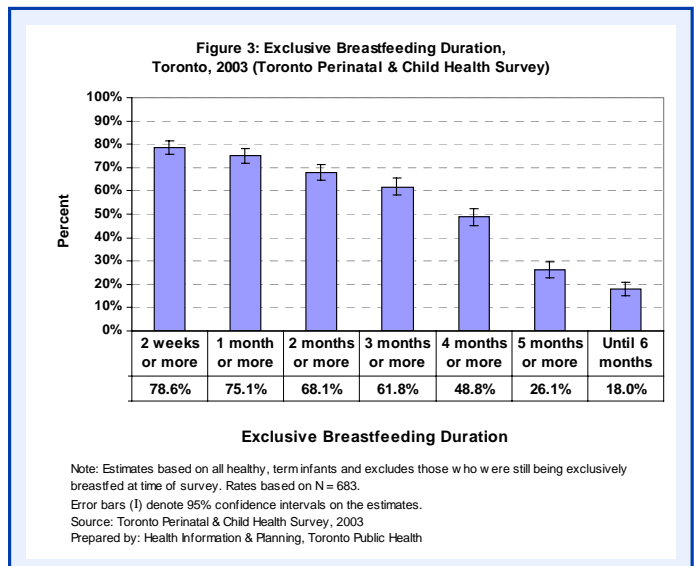


Figure 3 shows that:

- just over three-quarters of all healthy term babies were exclusively breastfed for 2 weeks or more
- just over two-thirds were exclusively breastfed for 2 months or more
- just under one-half were exclusively breastfed for 4 months or more
- approximately one-quarter were exclusively breastfed for 5 months or more
- less than one in five were exclusively breastfed until 6 months

Data Sources and Limitations

Table 1 compares the two surveys in terms of overall survey characteristics and details related to the survey questions, numerators and denominators for the relevant indicators, sample sizes, and any exclusions pertaining to each of the three breastfeeding analyses.

Table 1: Comparison of Toronto Perinatal & Child Health Survey (PCHS) and Canadian Community Health Survey (CCHS) Cycle 1.1 Characteristics

	PCHS	CCHS (Cycle 1.1)
Overall Characteristics		
Year	2003	2001
Geography	Toronto	Toronto
Survey respondents	Randomly selected Toronto parents with children 0-6 yrs	Randomly selected males and females aged 12 years+
Survey sample size	1,000	2,382
Respondents included in all breastfeeding analyses	Birth parents (males & females) – referred to as “respondents” in cells below	Females aged 15-55 who had a livebirth in the past 5 years (responses pertain to last child of the 5 year period) – referred to as “respondents” in cells below
Breastfeeding Initiation		
Survey question	“Did you (or your partner) breastfeed or try to breastfeed (child) even if only for a short time?”	“(For your last baby), did you breastfeed or try to breastfeed your child, even if only for a short time?”
Numerator	# of respondents who breastfed or tried to breastfeed child	Total weighted # of respondents who breastfed or tried to breastfeed child
Denominator	# of respondents	Total weighted # of respondents
Sample size for analysis	973	148
Breastfeeding Duration		
Survey question	“How long was (child) breastfed?”	“How long did you breastfeed (your last child)?”
Numerator	# of respondents who breastfed or tried to breastfeed child with known duration, by duration categories	Total weighted # respondents who breastfed or tried to breastfeed child with known duration, by duration categories
Denominator	# of respondents who breastfed or tried to breastfeed child with known duration + # of respondents who never breastfed child	Total weighted # of respondents who breastfed or tried to breastfeed child with known duration + Total weighted # of respondents who never breastfed child
Sample size for analysis	851	130
Exclusions	Respondents who were still breastfeeding at time of survey (n=115) *	Respondents who were still breastfeeding at time of survey (n=18) *
Exclusive Breastfeeding		
Survey question	“At what age did your child first receive any food or drink besides breast milk? This would include giving the child some water or taste of any food even one time, but not drops or syrups consisting of vitamins, mineral supplements, or medicines.”	Not asked in Cycle 1.1
Numerator	# of respondents who had a healthy term baby, who exclusively breastfed child, by duration	N/A
Denominator	# of respondents who had a healthy term baby and who breastfed or tried to breastfeed child with known duration + # of respondents who had a healthy term baby and who never breastfed child	N/A
Sample size for analysis	683	N/A
Exclusions**	<ul style="list-style-type: none"> ▪ babies with unknown gestational age or birthweight ▪ babies born <1500 grams ▪ babies < or = 32 weeks gestation ▪ babies with health problems within first 6 months of life that may have been supplemented for medical reasons ▪ those still being breastfed at time of survey ▪ no information re: age at which baby first received any food/drink other than breast milk. 	N/A

* Respondents who were still breastfeeding at the time of the survey were excluded from breastfeeding duration analysis because duration was unknown. This exclusion may slightly underestimate the breastfeeding duration rates.

** Babies born <1500 grams, < or = 32 weeks gestation, or babies with health problems within first 6 months of life that may have been supplemented for medical reasons were excluded from the analysis based on guidelines from the World Health Organization and the United Nations Children’s Fund (UNICEF).⁴

Toronto Perinatal and Child Health Survey (PCHS), 2003

The PCHS was conducted by TPH as part of the Ministry of Health and Long-Term Care Perinatal & Child Health Surveillance Strategies Initiative. The purpose of this telephone survey was to provide population-based data on the prevalence of risk and protective factors related to health and development outcomes of children from birth to 6 years of age in Toronto. Topics include: childhood injury due to falls, breastfeeding initiation/duration, physical activity participation, smoking restrictions in the home, parenting practices, child food security, parental depression, and dental health. The survey was conducted from March 2003 to April 2003.

As with other phone surveys, households without phones were excluded. Results may not be generalized to the non-English speaking population because interviews were conducted in English only. Results may also be subjected to social desirability bias as respondents may be more likely to provide what they perceive to be socially desirable answers. This may lead to overestimation of the prevalence of child health protective factors such as breastfeeding. Questions on breastfeeding were asked retrospectively, thus misreporting may have occurred if respondents could not accurately recall relevant details.

The survey sample was representative of the general population of Toronto parents with young children in terms of parental age and age of the reference children, region of Toronto in which respondents live, and gender distribution of lone-parent families. When compared to the 2001 Census, the survey over-represented mothers, parents with higher education levels, and parents who were not recent immigrants (Table 2). These three demographic characteristics may have had varying effects on the breastfeeding estimates. The extent of these effects is not known.

Demographic characteristics	PCHS	2001 CENSUS*
Mothers	74%	54%
Post Secondary or higher education	60%	39%
Less than High School education	5%	27%
Immigrated 11+ years ago or born in Canada	70%	55%

* 2001 Census data on Toronto households of parents with at least one child from birth to 6 years of age.

Health Status News is an ongoing series of information updates that summarize new data and events related to community health status in Toronto.

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Canadian Community Health Survey (CCHS), Cycle 1.1, 2001

Analysis was performed based on data from the Public Use Microdata File of the CCHS, Cycle 1.1 provided by the Ministry of Health and Long-Term Care. The survey was conducted by Statistics Canada from September 2000 to November 2001 using both face-to-face and telephone interviews in a variety of languages. Data collection was based on self-reporting and/or proxy interview information and may therefore be subjected to inaccurate recall or false information. A representativeness assessment has not been conducted for the CCHS sample.

Despite the limitations with telephone surveys such as the PCHS and CCHS as noted above, these surveys still provide very useful local information for public health program planning, monitoring and evaluation. Data from these surveys, when assessed with other forms of evidence (e.g. literature reviews, focus groups), can provide important information, otherwise unavailable, to support best practice initiatives that are based on appropriate evidence.

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