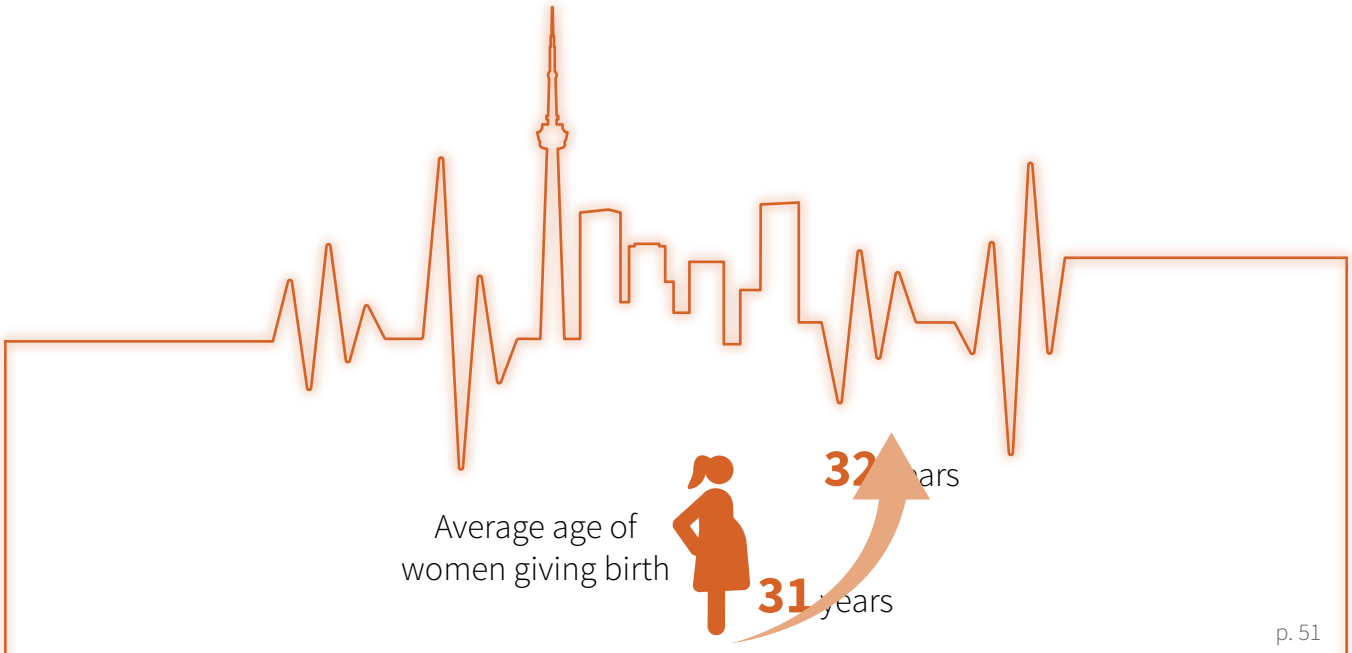
Introduction

The early years are an important time for rapid growth and development. A person's future health status is heavily influenced by experiences, exposures, and relationships during the first few years of life. Even before birth, a child's health is influenced by the preconception health of both of their parents [1] and by their mother's prenatal health and exposures while they are developing in utero. Positive physical, social, and emotional development in early childhood are the building blocks for favourable long-term educational, behavioural, and health outcomes [2].

Because the preconception and prenatal periods and the early years are such important times for setting the stage for a lifetime of health, they are key windows of opportunity for public health promotion and intervention to encourage the best possible beginnings for Toronto's youngest residents and their families.



p. 51

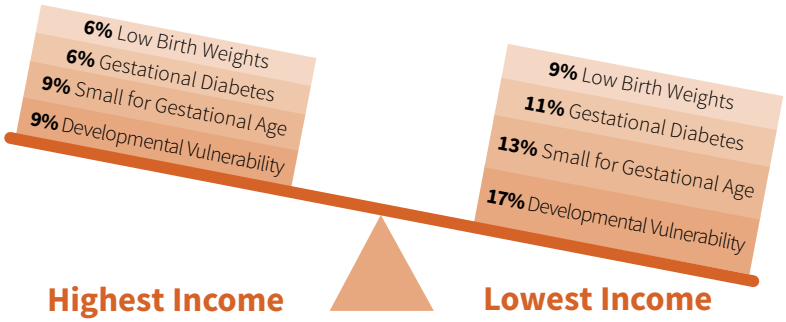
1 in 10 pregnant women have gestational diabetes

p. 54

1 in 10 have mental health concerns during pregnancy

p. 56

Families in lower income areas are more likely to have unfavourable reproductive and early childhood health outcomes



pp. 57-63

1 in **7** kindergarten students may not be meeting developmental expectations

p. 62

Fertility

Fertility reflects the reproductive behaviours and attitudes of reproductive-aged individuals 15 to 49 years of age. Two important public health issues in this area are teen births and the trend towards delayed childbearing. Teens and women of advanced maternal age (35 years and older) are at increased risk for pregnancy complications, while babies born to these women have an increased risk of poor birth outcomes and perinatal mortality [1, 3, 4].

- The general fertility rate in Toronto has gradually decreased over a ten-year period from 44 live births per 1,000 women of reproductive age in 2007 to 39 per 1,000 in 2016. The age-specific fertility rate was highest for females aged 30 to 34 years throughout that time period.
- There is a trend in Toronto to delay childbearing. The average age of women giving birth has increased by approximately one year over a ten-year period from 30.9 years in 2007 to 32.0 years in 2016. Fertility rates in all age groups under 35 decreased in the same time period. In 2016, Toronto had the highest fertility rate in women of advanced maternal age of all Ontario health units (29.2 live births per 1,000 women aged 35 to 49).
- The teen fertility rate decreased in Toronto over a ten-year period from 10 live births per 1,000 women aged 15 to 19 in 2007 to 4 per 1,000 in 2016.
- Lower income areas of Toronto have higher general and teen fertility rates while higher income areas have higher fertility rates in women of advanced maternal age (ages 35 to 49).
- Women in Toronto are having fewer children on average than they were in the past. The total fertility rate[1] has declined over a ten-year period from 1.5 in 2007 to 1.2 in 2016.

More information on sexual health attitudes, knowledge, activity and protection is included in Chapter 8.

Preconception Health

Preconception health refers to the health of all individuals during their reproductive years, regardless of gender, sexual orientation, or pregnancy intentions. The health of women and men in the preconception period has an impact on their fertility and health of any future child. As a result, the preconception period is a critical time for individuals to reduce risks and promote healthy behaviours to increase readiness for pregnancy, whether or not they plan to have a child in the future [1]. There is growing evidence that to improve birth and child health outcomes, intervention before pregnancy is needed [5].

DATA GAP

Despite the growing evidence of the importance of the preconception period, there are very few defined preconception health indicators in Ontario. Those that do exist are focused solely on women and collected once pregnant or after giving birth. To have a more comprehensive picture, a system of core preconception health indicators is needed, including those which focus on men and are collected before pregnancy.

[1] Total fertility rate refers to the average number of children that would be born per female if all females lived to the end of their childbearing years and bore children according to the age-specific fertility rates for that area and period.

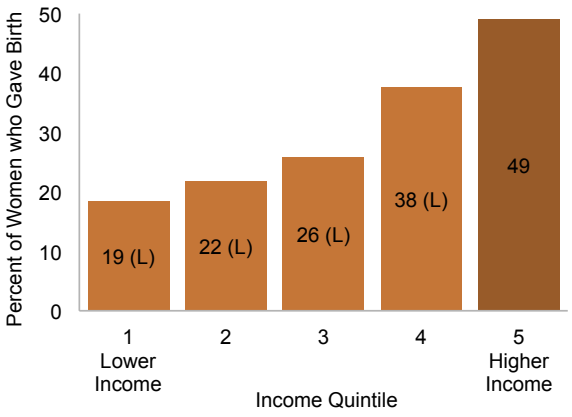
Folic Acid Supplementation[2]

Folic acid supplementation before and during pregnancy reduces the risk of neural tube defects. The benefits of folic acid supplementation are most important very early in pregnancy, when many women do not yet know they are pregnant. As such, it is recommended that women who may become pregnant take a daily multivitamin with 0.4 mg folic acid [6, 7].

In Toronto, in 2016:

- 30% of women giving birth reported taking folic acid prior to pregnancy.
- There was an income gradient for folic acid supplementation. Women in lower income areas were less likely to take folic acid prior to pregnancy compared to women in higher income areas (Figure 4.1).
- Women in younger age groups were less likely to take folic acid prior to pregnancy compared to those in older age groups (Figure 4.2).
- Multiparous women were less likely to take folic acid supplements prior to pregnancy compared to primiparous women (35% compared to 25%)[3].

Figure 4.1: Percent of Women Who Took Folic Acid Supplementation Prior to Pregnancy by Income Quintile, Toronto, 2016

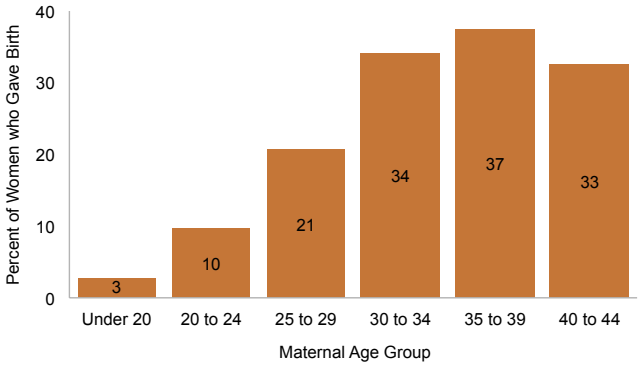


L: Significantly lower than Quintile 5, the highest income quintile.

Note: Interpret with caution as 17% of Toronto records were missing folic acid usage information and are excluded from the analysis.

Data Source: BORN Information System: BORN Ontario. Public Health Cube (2016 calendar year). Accessed on May 24, 2018.

Figure 4.2: Percent of Women Who Took Folic Acid Supplementation Prior to Pregnancy by Maternal Age Group, Toronto, 2016



Note: Interpret with caution as 17% of Toronto records were missing folic acid usage information and are excluded from the analysis.

Note: The 45 plus age group is suppressed due to high proportion of missing information.

Data Source: BORN Information System: BORN Ontario. Public Health Cube (2016 calendar year). Accessed on May 24, 2018.

COMPARING TO The percent of Toronto women (30%) who gave birth and took folic acid prior to pregnancy in 2016 was lower than the in rest of Ontario (35%).

Pre-Pregnancy Body Mass Index[4]

Entering pregnancy at a healthy weight is important for optimal maternal and child health. Individuals who enter pregnancy at a higher body mass index (BMI) are at increased risk of pregnancy complications such as gestational diabetes, pre-eclampsia, large for gestational age babies, and preterm birth [8, 9]. Children born to parents who are obese are at higher risk of developing obesity, diabetes, and cardiovascular disease later in life [8]. Individuals who enter pregnancy underweight are also at risk for certain pregnancy and birth complications such as preterm birth and small for gestational age babies [9].

[2] Interpret with caution as 17% of Toronto records were missing folic acid usage information and are excluded from the analysis.

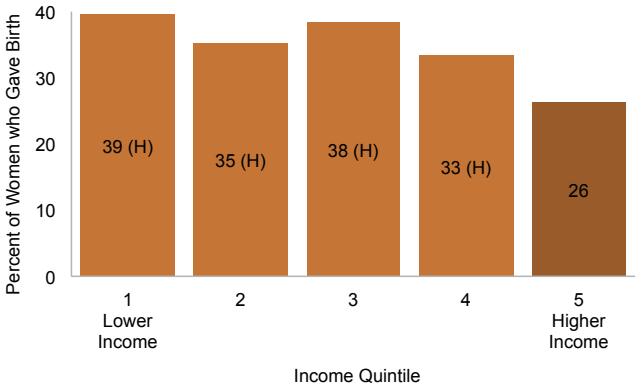
[3] Parity refers to the number of times a women has given birth to date. Primiparous refers to women who are giving birth for the first time while multiparous refers to a woman who has previously given birth to at least one child.

[4] Interpret with caution as 13% of Toronto records were missing pre-pregnancy BMI information and are excluded from the analysis.

In Toronto, in 2016:

- Approximately 35% of women entered pregnancy overweight or obese.
- Multiparous women were more likely to enter pregnancy overweight or obese compared to primiparous women (40% compared to 30%).
- Those in the highest income group were the least likely to enter pregnancy overweight or obese (Figure 4.3).

Figure 4.3: Percent of Women Entering Pregnancy Overweight or Obese by Income Quintile, Toronto, 2016



H: Significantly higher than Quintile 5, the highest income quintile.

Note: Interpret with caution as 13% of Toronto records were missing pre-pregnancy BMI information and are excluded from the analysis.

Data Source: BORN Information System: BORN Ontario. Public Health Cube (2016 calendar year). Accessed on May 31, 2018.

COMPARING TO

Fewer Toronto women entered pregnancy overweight or obese (35%) than in the rest of Ontario (44%) in 2016.

Prenatal Health

The prenatal period is a time of rapid change and the general health of a woman before and during pregnancy has an impact on fetal development, and maternal and birth outcomes [10]. Early follow-up with a primary health care provider and identification of pregnancy-related health concerns allows timely and appropriate intervention to promote healthy behaviours and prevent or reduce harmful exposures. This sets the stage for positive maternal health outcomes and the future health trajectory of the child.

Gestational Weight Gain[5]

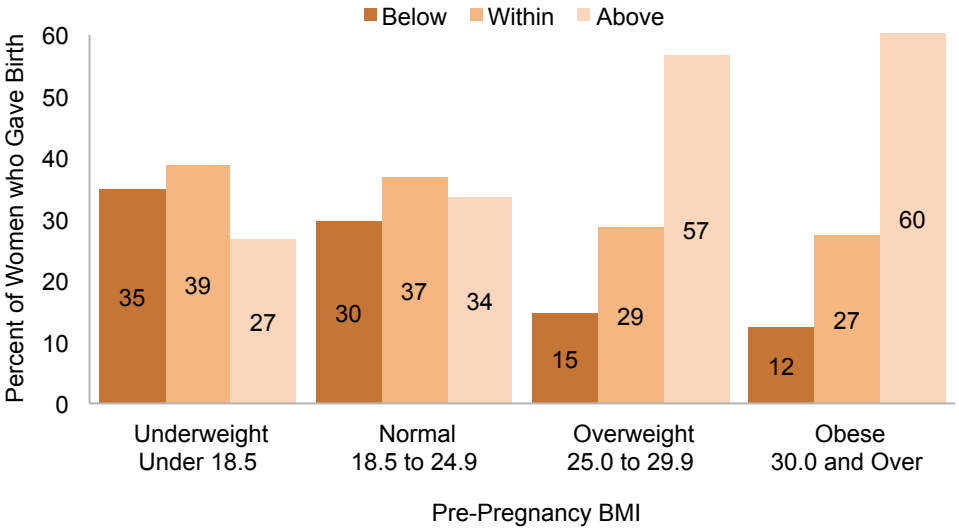
Gaining more or less weight than recommended during pregnancy comes with certain health risks. Excessive gestational weight gain is associated with increased risk of caesarean section, large for gestational age babies, maternal postpartum weight retention, and overweight or obesity later in life for the child [11, 12, 13]. Insufficient weight gain is associated with increased risk of preterm birth and small for gestational age babies [11, 12].

In Toronto, in 2016:

- 41% of pregnant Toronto women gained more than the recommended weight. 34% were within the recommended range.
- Multiparous women were more likely to gain less than the recommended weight while primiparous women were more likely to gain more weight than recommended.
- The percentage of women who gained more than the recommended weight during pregnancy increased with increasing pre-pregnancy BMI (Figure 4.4).

[5] Interpret with caution as 21% of Toronto records were missing gestation weight gain information and are excluded from the analysis.

Figure 4.4: Percent of Women Who Gained Weight During Pregnancy by Pre-Pregnancy Body Mass Index, Toronto, 2016



Note: Interpret with caution as 21% of Toronto records were missing gestation weight gain information and are excluded from the analysis.
Data Source: BORN Information System: BORN Ontario. Public Health Cube (2016 calendar year). Accessed on May 31, 2018.

COMPARING TO Toronto women (41%) were less likely to gain more than the recommended weight during pregnancy compared to women in the rest of Ontario (47%) in 2016.

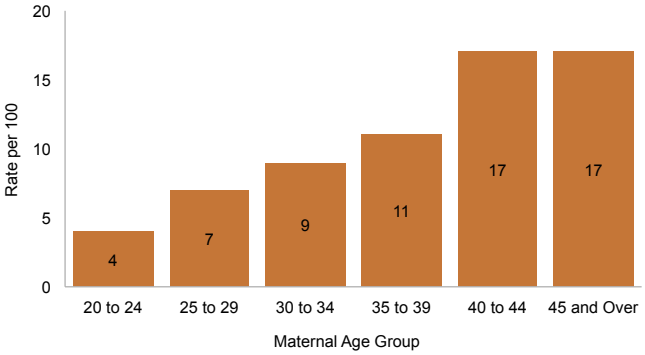
Gestational Diabetes

Gestational diabetes is a type of diabetes that develops during pregnancy. Women with gestational diabetes are at increased risk for developing type 2 diabetes later in life while their babies are more likely to be born large for gestational age [14, 15, 16].

In Toronto, in 2016:

- 9% of pregnant women were diagnosed with gestational diabetes.
- Gestational diabetes rates gradually increased over the last four years from 6% in 2013 to 9% in 2016.
- Older women had higher rates of gestational diabetes compared to younger women (Figure 4.5).
- Multiparous women had higher rates of gestational diabetes compared to primiparous women (10% compared to 8%).
- The rate of gestational diabetes increased with increasing pre-pregnancy BMI.
- 7% of women with normal pre-pregnancy weight had gestational diabetes, whereas 5% of underweight women, 11% of overweight women and 15% of obese women had gestational diabetes.

Figure 4.5: Percent of Women Who Had Gestational Diabetes by Maternal Age Group, Toronto, 2016



Note: The less than 20 age group is suppressed due to small counts.
Data Source: BORN Information System: BORN Ontario. Public Health Cube (2016 calendar year). Accessed on May 31, 2018.

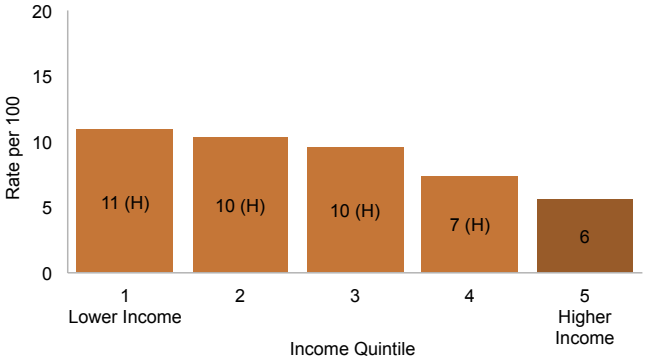
COMPARING TO

Gestational diabetes was higher among women in Toronto (9%) than in the rest of Ontario (7%) in 2016.

HEALTH INEQUITIES

There was an income gradient in gestational diabetes rates. Women in lower income areas had higher rates of gestational diabetes compared to women in higher income areas. The rate of gestational diabetes in the highest income areas was 6% whereas the rate for areas with the lowest income was 11% (Figure 4.6).

Figure 4.6: Percent of Women with Gestational Diabetes by Income Quintile, Toronto, 2016



H: Significantly higher than Quintile 5, the highest income quintile.
Data Source: BORN Information System: BORN Ontario. Public Health Cube (2016 calendar year). Accessed on May 31, 2018.

Alcohol and Substance Exposure during Pregnancy[6]

Prenatal alcohol and substance use can have significant impacts on the pregnancy such as miscarriage, stillbirth, and preterm birth, and is a major cause of preventable birth defects and developmental delays in children [17]. Alcohol use in pregnancy is the only cause of Fetal Alcohol Spectrum Disorder[7] and there is no known safe amount, time, or type of alcohol to consume during pregnancy. Health Canada recommends that all women who are pregnant or trying to become pregnant abstain from alcohol [18, 19]. For optimal pregnancy outcomes, it is also best to abstain from substance use.

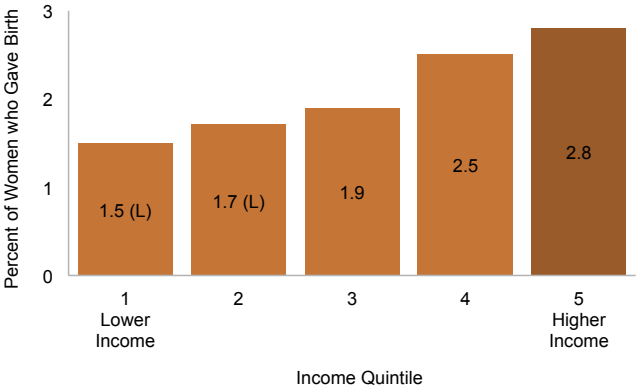
In Toronto, in 2016:

- 2% of women reported drinking alcohol during pregnancy. This was slightly lower than the rest of Ontario. Of those who did consume alcohol, the majority consumed less than one drink per month or had exposure only prior to when their pregnancy was confirmed.
- There was an income gradient in alcohol exposure rates; alcohol exposure increased with increasing income (Figure 4.7).
- Less than 1% of women reported drug and substance exposure[8] during pregnancy. This was lower than the rest of Ontario (2.5%). The most commonly reported drug used in pregnancy was cannabis.

Cannabis was legalized in Canada in October, 2018. Legalization of cannabis does not imply that it is safe for use during the preconception or prenatal periods or while breastfeeding. Cannabis should be avoided in any form or amount to avoid potential harm to the infant. [20] Continued health surveillance is required to assess the impact of cannabis legalization on its use during the preconception and prenatal periods and while breastfeeding.

[6] Alcohol, drug and substance exposure data elements from BORN are self-reported and thus subject to under-reporting and social desirability bias. Interpret with caution as 11% of Toronto records were missing alcohol exposure information and 12% were missing substance exposure information and are excluded from the analysis.
[7] Fetal Alcohol Spectrum Disorder is an umbrella term used to describe a range of physical, mental, behavioural, and learning disabilities caused by prenatal alcohol exposure.
[8] This refers to the use of street drugs (e.g., sniffing glue, gasoline, other solvents) and the inappropriate use of prescription and non-prescription drugs.

Figure 4.7: Percent of Women with Any Alcohol Exposure During Pregnancy by Income Quintile, Toronto, 2016



L: Significantly lower than Quintile 5, the highest income quintile.
Note: Interpret with caution as 11% of Toronto records were missing alcohol exposure information and are excluded from the analysis.
Data Source: BORN Information System: BORN Ontario. Public Health Cube (2016 calendar year). Accessed on May 29, 2018.

More information on alcohol and substance use in the general population is included in Chapter 7.

Perinatal Mental Health[9]

Perinatal mental health is an important component of overall reproductive and infant health. The perinatal period[10] is a time when families are most vulnerable to serious mental health issues such as anxiety and depression [21]. Multiple factors, such as a previous experience during pregnancy, personal or family history, and exhaustion, place women at increased risk [22]. Although often stigmatized, under-recognized, under-reported, and under-treated, anxiety and depression can impact a parent's ability to function with profound long-term negative consequences for fetal, infant, and family outcomes such as attachment issues, poor emotional regulation, sleep disturbances and behavioural issues [23,24,25].

HEALTH INEQUITIES

Health disparities affect the distribution of perinatal mental health issues and in turn create barriers that impact access to care [23]. Research shows that immigrant women are at an increased risk for perinatal mental health concerns; this may be attributed to stressors such as the migration experience, lack of social support, language difficulties, and unfamiliarity with Canadian life and health care [26].

DATA GAP

True estimates for the prevalence of perinatal mental health issues in Toronto are not available due to a lack of local population health data for issues arising in the post-partum period. Data that do exist at the population health level are for mental health concerns during pregnancy or in past pregnancies for women having another child. Also, due to the self-reported nature this data and the stigma associated with mental illness, it is likely that the issue is under-reported in the existing data.

Mental Health Concern during Pregnancy

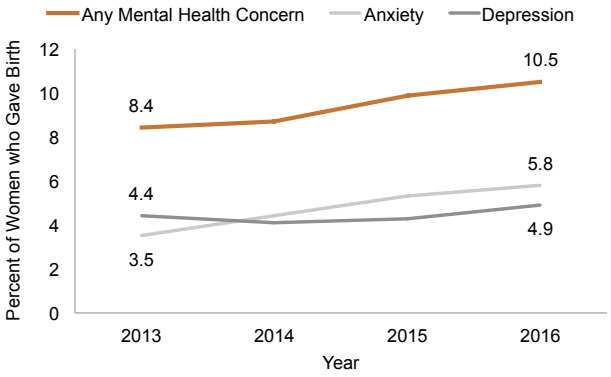
Mental health concern during pregnancy is defined as the proportion of women who experienced any mental health concern during pregnancy, expressed as a percent of the number of women who gave birth. A mental health concern can include anxiety, depression, addiction, bipolar, schizophrenia, other, or a history of postpartum depression.

[9] Maternal mental health variables from BORN are self-reported and thus subject to under-reporting and social desirability bias. Interpret with caution as 14% of Toronto records were missing mental health information and are excluded from the analysis.
[10] The perinatal period is defined as the time spanning conception to one year postpartum.

In Toronto:

- 10% of women who gave birth in 2016 experienced any mental health concern during pregnancy.
- The most common concerns during pregnancy were anxiety and depression; 6% of mothers experienced anxiety while 5% experienced depression in 2016.[11]
- The rate of women experiencing any mental health concern during pregnancy gradually increased from 8% in 2013 to 10% in 2016 (Figure 4.8).
- Women under 20 years of age were the most likely to experience mental health concerns during pregnancy (15%), followed by older women, 35 years and over (12%) (2015 to 2017 combined).
- Primiparous women were more likely to experience any mental health concern during pregnancy compared to multiparous women (12% compared to 9%).
- The rate of mental health concern during pregnancy was highest in the highest income quintile (Figure 4.9).

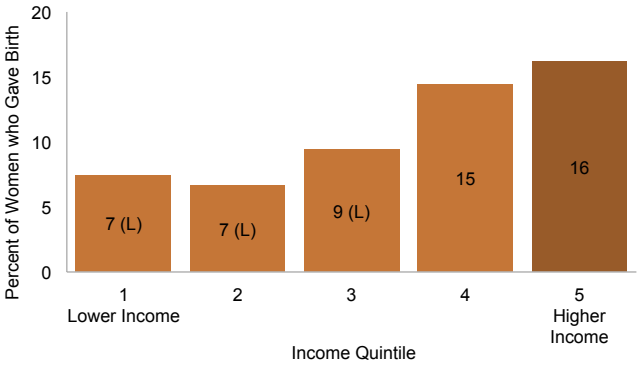
Figure 4.8: Percent of Women with Mental Health Concerns during Pregnancy, Toronto, 2013 to 2016



Note: Interpret with caution as 14% of Toronto records were missing mental health information and are excluded from the analysis.

Data Source: BORN Information System: BORN Ontario. Public Health Cube (2013 to 2016 calendar years). Accessed on May 16, 2018

Figure 4.9: Percent of Women with Any Mental Health Concern During Pregnancy by Income Quintile, Toronto, 2016



L: Significantly lower than Quintile 5, the highest income quintile.

Note: Interpret with caution as 14% of Toronto records were missing mental health information and are excluded from the analysis.

Data Source: BORN Information System: BORN Ontario. Public Health Cube (2016 calendar year). Accessed on May 16, 2018.

More information on mental health and illness in the general population is included in Chapter 6.

Births and Birth Outcomes

Approximately 30,000 babies are born to Toronto women each year, almost twice that of the next largest Ontario public health unit [27]. A healthy birth is a predictor of a child's future health, development, and overall well-being. A healthy birth is linked to the health and health behaviours of the mother and father both before conception and during pregnancy and is influenced by the social determinants of health as well as other factors.

[11] Occurrences of different types of mental health concerns during pregnancy are not mutually exclusive; therefore, the total number of mental health concerns may be greater than the total number of women with any mental health concern.

Live Births

In Toronto:

- There were 30,676 live births to Toronto women in 2016. The majority (85%) of these babies were born to women aged 25 to 39 and 48% were born to primiparous women. Table 4.1 shows the distribution of babies by maternal age group.
- In 2012, 62% of Toronto babies were born to women who were born outside of Canada. The five most common maternal countries of origin were China, Philippines, India, Sri Lanka, and Pakistan.

Table 4.1: Number and Percent of Live Births by Maternal Age Group, Toronto, 2016

Maternal Age Group (years)	Number of Live Births	Percent of Total
15 to 19	326	1%
20 to 24	2,220	7%
25 to 29	6,558	21%
30 to 34	11,862	39%
35 to 39	7,727	25%
40 to 44	1,789	6%
45 to 49	139	Less than 1%

Note: this table includes only births to women aged 15 to 49. Where maternal age is missing, less than 15, or greater than 49, the birth is excluded.

Data Source: BORN Information System: BORN Ontario. Public Health Cube (2016 calendar year). Accessed on June 21, 2018.

It is estimated that from 2012 to 2014, approximately 300 babies were born each year to under-housed women in Toronto [28]. Children without access to permanent housing often live in poverty and lack access to adequate nutrition, which in turn puts them at higher risk for numerous acute and chronic physical and mental health disorders.

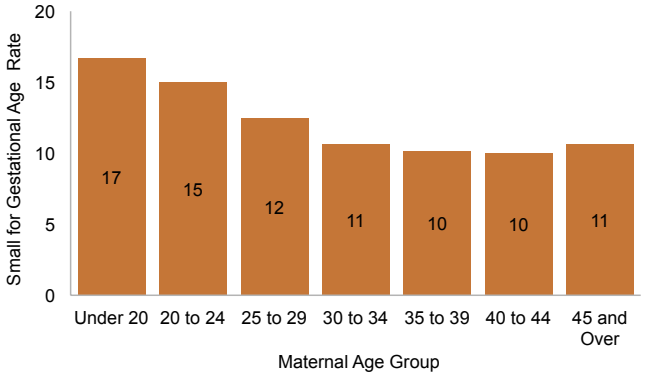
Small for Gestational Age

Small for Gestational Age (SGA) refers to babies with birth weights below the 10th percentile of birth weight for babies of the same sex and gestational age[12]. Babies who are SGA at birth are at higher risk for negative health outcomes including neurodevelopmental delays and death during infancy [29, 30, 31]. Long-term health consequences include higher rates of hypertension, cardiovascular disease and diabetes [29]. Risk factors for SGA include maternal smoking and drug use, inadequate weight gain during pregnancy, and congenital infections [29, 32].

In Toronto, in 2016:

- 12% of singleton live births were SGA. This rate has remained relatively stable for the past decade.
- Primiparous women had higher SGA rates compared to multiparous women (14% compared to 9%).
- Higher rates of SGA were found among younger women (Figure 4.10).

Figure 4.10: Rate of Small for Gestational Age Babies by Maternal Age Group, Toronto, 2015 to 2017 Combined



Data Source: BORN Information System: BORN Ontario.Public Health Cube (2015 to 2017 calendar years). Accessed on September 27, 2018.

[12] The percentile cut-offs are based on the population-based Canadian reference tables that apply to singleton babies born between 22 and 43 weeks of gestation [42].

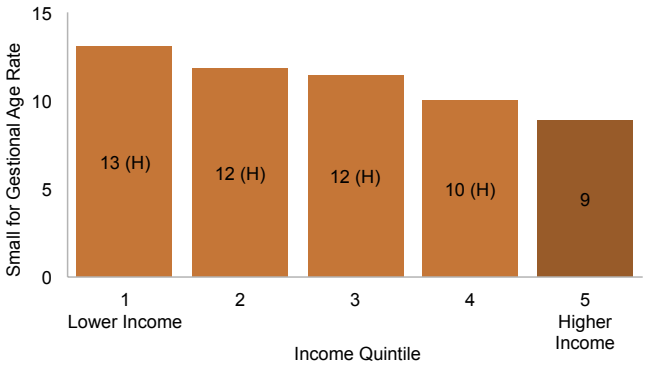
COMPARING TO

The SGA rate in Toronto (12%) was significantly higher than in the rest of Ontario (9.1%) in 2016. Compared to other public health units, Toronto has one of the highest rates of SGA in the province.

HEALTH INEQUITIES

Women in lower income areas had higher rates of SGA compared to women in higher income areas. The rate of SGA in the highest income areas was 9% whereas the rate for areas with the lowest income was 13% (Figure 4.11).

Figure 4.11: Rate of Small for Gestational Age Babies by Income Quintile, Toronto, 2014 to 2016 Combined



H: Significantly higher than Quintile 5, the highest income quintile.
Data Source: BORN Information System: BORN Ontario. Public Health Cube (2014 to 2016 calendar years). Accessed on September 22, 2017.

Low Birth Weight

Low Birth Weight (LBW) is defined as a birth weight less than 2,500 grams (5.5 pounds), regardless of gestational age. LBW has both short- and long-term consequences for the health of the newborn at the time of birth and later in life. These include higher risk of childhood illness, inhibited growth and cognitive development, and chronic diseases in adulthood such as diabetes and heart disease [33, 34, 32]. LBW babies include those who have not had adequate time to develop because they are born prematurely, as well as full-term or preterm babies who have weights below the norm for their gestational age because of restricted growth in utero. There are many risk factors for LBW including young or advanced maternal age, smoking or illicit drug use during pregnancy, low socioeconomic status, and multiple birth pregnancies [33, 32].

In Toronto, in 2016:

- 8% of newborns were born with LBW. The rate of LBW remained relatively stable from 2007 to 2016.
- Primiparous women had higher LBW rates compared to multiparous women (8% compared to 6%).

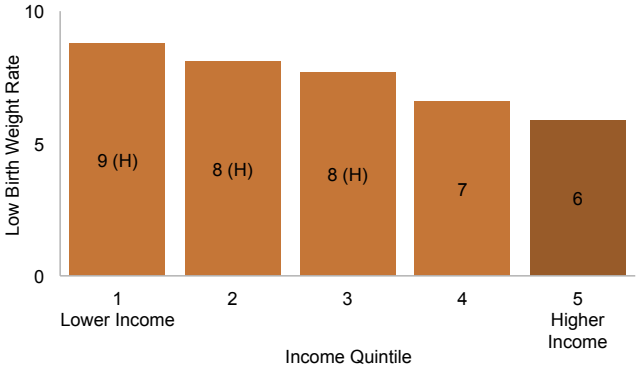
COMPARING TO

Toronto's LBW rate (8%) was higher than in the rest of Ontario (7.1%) in 2016.

HEALTH INEQUITIES

Women in lower income areas had higher rates of LBW compared to women in higher income areas. The rate of LBW in the highest income areas was 6% whereas the rate for areas with the lowest income was 9% (Figure 4.12).

Figure 4.12: Rate of Low Birth Weight Babies by Income Quintile, Toronto, 2016



H: Significantly higher than Quintile 5, the highest income quintile.
Data Source: BORN Information System: BORN Ontario. Public Health Cube (2016 calendar year). Accessed on January 22, 2018.

Preterm Births

Preterm birth, defined as birth before 37 completed weeks of pregnancy, is the leading cause of death among newborns and infants in industrialized countries [29]. Preterm birth is also associated with higher risks of long-term health problems such as cerebral palsy, hearing loss, and intellectual disabilities [29, 35]. Known risk factors for preterm birth include multiple birth pregnancies, history of preterm birth, certain infections during pregnancy, chronic health problems in the mother, young or advanced maternal age, and substance use during pregnancy [29, 35].

In Toronto:

- The preterm birth rate remained relatively stable at 9% from 2007 to 2016.
- Preterm birth rates were highest at 25% in the oldest age group (45 years and over), followed by 40 to 44 years of age (11%) and under 20 (10%) (2015 to 2017 combined).

COMPARING TO

Toronto's preterm birth rate of 9% was higher than in the rest of Ontario (8%) in 2016.

HEALTH INEQUITIES

21% of Indigenous infants in Toronto were born preterm [36].

Breastfeeding[13]

Breastfeeding has a variety of well documented short and long-term health benefits for both mother and child [37]. For example, breastfeeding is associated with a reduced risk of certain infections and sudden infant death syndrome for the baby as well as lower rates of diabetes and obesity later in life [38, 39]. With respect to maternal health, a history of breastfeeding is associated with reduced risk of diabetes and ovarian and breast cancers [38, 39].

The World Health Organization recommends exclusive breastfeeding to six months of age and continued breastfeeding up to two years and beyond [40, 41].

- In 2016, while 95% of Toronto infants were receiving breast milk at entry to service[14], only 60% were exclusively breastfeeding.[15]
- In 2017, Toronto Public Health surveyed over 1,000 mothers about how they were feeding their babies during the first six months. The survey found that 98% of Toronto mothers fed or attempted to feed their baby breast milk. Figure 4.13 shows the any[16] and exclusive[17] breastfeeding rates at two, four, and six months post-partum. At about six months of age:
  - 75% of babies were receiving breastmilk
  - 14% of babies were exclusively breastfeeding[18]
  - Exclusive breastfeeding rates were lower for babies born by C-section, first time mothers, mothers without a post-secondary degree or diploma, mothers born outside of Canada, lower income families, and single mothers.

[13] The terms breast milk/breastfeed/breastfeeding are also known as chest milk/chestfeed/chestfeeding respectively and can be used interchangeably.

[14] Feeding at entry to service is what an infant is being fed when they leave hospital or midwife practice group and enter a public health or community service.

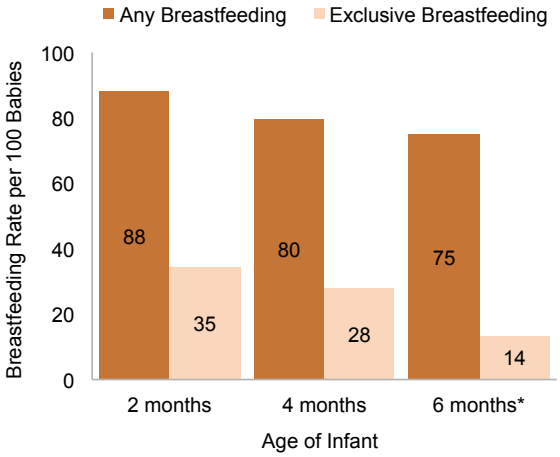
[15] Interpret with caution as 22% of Toronto records were missing feeding information and are excluded from the analysis. Breastfeeding rates at entry to service may be slightly over-estimated as there is a higher proportion of missing feeding information for infants born preterm or low birth weight and for multiple births due to missing feeding information from two hospital Neonatal Intensive Care Units (NICUs) in Toronto.

[16] "Any breastfeeding rate" is the proportion of babies at a certain time point who were receiving human milk with or without other liquids or solid foods. Any breastfeeding includes both exclusive and non-exclusive breastfeeding.

[17] "Exclusive breastfeeding rate" is the proportion of babies at a certain time point who were receiving human milk and had never been fed any liquid or food other than breast milk.

[18] "Exclusive breastfeeding" at six months was determined using the 5.5 month time point.

Figure 4.13: Rate of Babies Breastfeeding by Duration and Exclusivity, Toronto, 2016



*Exclusive breastfeeding at six months was determined using the 5.5 month time point.
Data Source: 2017 IFSP survey conducted by Toronto Public Health.

Early Child Development

Positive physical, social, and emotional development during the period from prenatal development to age eight, are the building blocks for favourable long-term educational, behavioural, and health outcomes [2]. Healthy development in the early years is associated with positive outcomes in well-being, mental health, academic performance and economic participation later in life, as well as a reduced risk of heart disease, obesity, and criminality [2]. Understanding how children are progressing helps public health service providers and policy makers to make informed decisions about how services and policies can best support children and families.

DATA GAP

There are extensive data gaps in early childhood health in Ontario. Examples include but are not limited to: achievement of developmental milestones, exposure to adverse childhood experiences, childhood healthy weights, and positive parenting. These gaps in data limit the ability of public health to properly assess the health status of children in the province and limits the evidence for program planning.

18-Month Well-Baby Visits

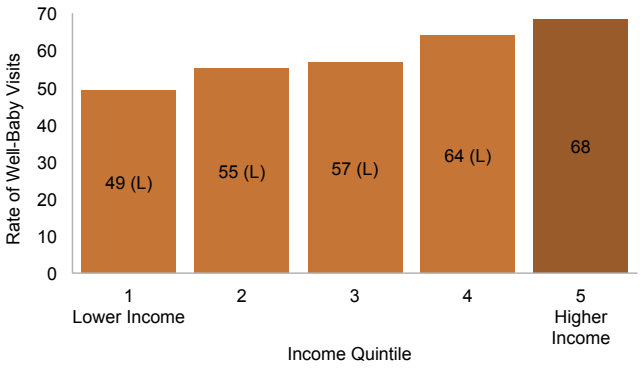
First introduced in 2009, the 18-month well-baby visit is the last in a series of routine immunization visits for children prior to school entry. This visit is a critical point for a health care provider to assess the developmental progress of children, discuss any potential health concerns with parents and/or caregivers, and refer children to specialized services if necessary. Understanding how many children receive the visit is an indicator of the extent to which children receive the best possible support for healthy development. This is useful for public health service planning because many of the specialized services children are referred to (such as speech and language, hearing and low vision, nutrition, and parenting) are provided by public health.

The rate of 18-month well-baby visits[19] in Toronto, in 2015:

- Increased from 38% when the visit was first introduced in late 2009 to 58% in 2015.
- Was higher for children who lived in higher income areas than those who lived in lower income areas (Figure 4.14).

[19] Rate of 18-Month Well-Baby Visits is the number of children receiving the visit divided by the total population of children one year of age who were registered for the Ontario Health Insurance Plan.

Figure 4.14: Rate of 18-Month Enhanced Well-Baby Visits, Children One Year of Age by Income Quintile, Toronto, 2015



L: Significantly lower than Quintile 5, the highest income quintile.

Data Sources:

Numerator: OHIP: Medical Services Claims History Database 2015, Ontario Ministry of Health and Long Term Care, IntelliHEALTH ONTARIO, Date Extracted: January 5, 2018.

Denominator: Population: Ontario Registered Persons Database 2015, Ontario Ministry of Health and Long Term Care, IntelliHEALTH ONTARIO, Date Extracted: January 9, 2018.

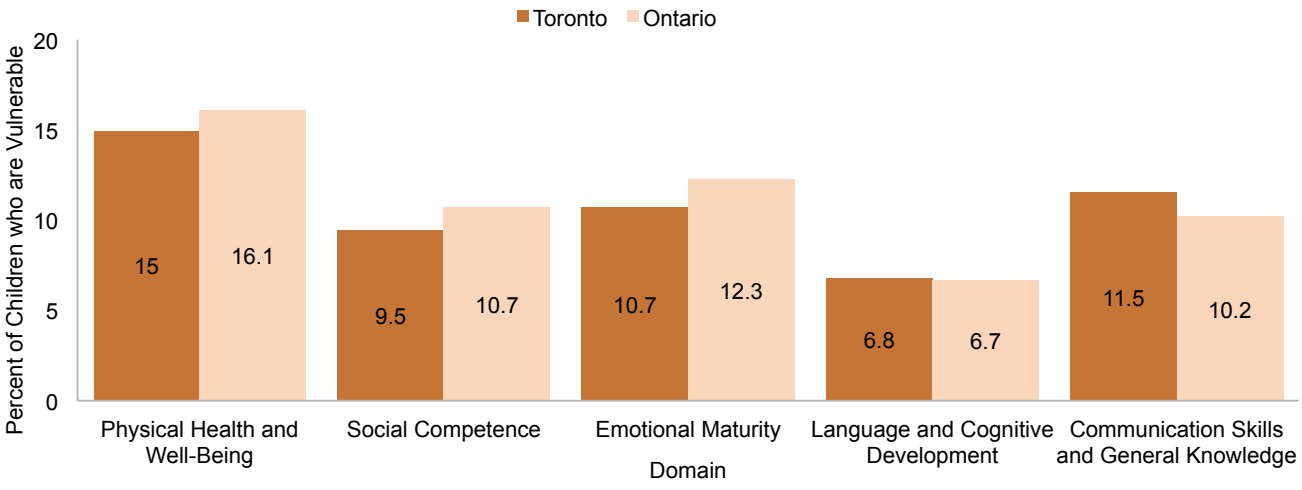
Vulnerability in Early Child Development

Vulnerability in early child development is measured using the Early Development Instrument (EDI). The EDI is a tool that assesses kindergarten students in five domains: Physical Health and Well-Being; Social Competence; Emotional Maturity; Language and Cognitive Development; and Communication Skills and General Knowledge. The EDI measures vulnerability, or the inability to meet age-appropriate developmental expectations, in each of the five domains and can be used to predict future outcomes in school and life.

In Toronto, in 2015:

- 14% of children were vulnerable on two or more domains of the EDI. This was significantly lower than previous years.
- The percent of children who were vulnerable on two or more domains was similar to all of Ontario. There were differences in vulnerability on individual domains – Toronto children were more likely to be vulnerable in Communication Skills and General Knowledge (Figure 4.15).
- Male children were twice as likely as female children to be vulnerable on two or more domains (18% compared to 9%).
- English or French Language Learners (EFLL)[20] were more likely than non-EFLL children to be vulnerable in two or more domains (28% compared to 12%).

Figure 4.15: Percent of Children Vulnerable in Early Development by Domain, Toronto and Ontario, 2015

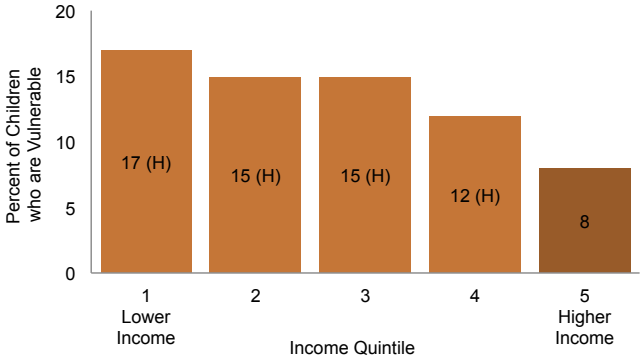


Data Source: Early Development Instrument: Offord Centre for Child Studies, McMaster University, 2014/2015.

HEALTH INEQUITIES

Children living in lower income areas of the city were more likely to be vulnerable in two or more domains (17%) compared to children living in higher income areas (8%) (Figure 4.22).

Figure 4.16: Percent of Children Vulnerable* in Early Development by Income Quintiles, Toronto, 2015



* Two or more domains.

H: Significantly higher than Quintile 5, the highest income quintile.

Data Source: Early Development Instrument: Offord Centre for Child Studies, McMaster University, 2014/2015.

[20] English or French Language Learners (EFLL) refers to children who are identified by the school board as being enrolled in an English Language Learning or French as a Second Language program. It does not refer to Anglophone children who are enrolled in a French Immersion program.

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