2013 growing up in Peel

Key Findings on the Health of Our Children

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INTRODUCTION

During early life, a child's genetic make-up and their environment interact to set their lifelong path for learning, health and behaviour.[1] The environment in which a child develops – including aspects such as nutrition, pollutants, drugs, infections, and the health and well-being of their primary caregivers – affects this development with varied and lifelong effects. Effective prevention programs, at various levels, aimed at decreasing negative experiences for children, for example exposure to violence and stress, can reduce the social and economic impact of illness across their lifespan. It can also reduce the need for costly and potentially less effective interventions later in life.

The Framework for Reconceptualizing Early Child Policies and Programs to Strengthen Lifelong Health, from Harvard University's Center on the Developing Child, reflects current knowledge related to the role of genetics and the broader environment on child development. It has been chosen to underpin the work of the Family Health Division at Peel Public Health. The framework has been used to provide the basic structure for the full version of this report and to identify the key topics covered within it.

The framework outlines the three foundations of healthy development. These foundations are: a stable and responsive environment of relationships; safe and supportive physical, chemical and built environments; and sound and appropriate nutrition. It also acknowledges that both caregivers and communities differ in their capacities to support children.

GROWING UP IN PEEL OVERVIEW

This report is intended to highlight some of the key findings reported by Peel Public Health in ***Growing Up in Peel: The Health of Our Children***. The full report describes the current health status of children aged one through 18 years in Peel. The full version of the report can be found at **peelregion.ca/health/reports**.

SUMMARY OF KEY FINDINGS

There are 318,605 children and youth one to eighteen years of age living in Peel.[A1] This represents one-quarter of the total population.

Life expectancy has improved dramatically

Life expectancy at birth has increased dramatically over the past eight decades. This is the result of reductions in infant death and improvements in medical treatment. Females continue to live longer than males. Life expectancy at birth is 84 years for females compared to 81 years for males in Peel.[B]

Rate of death among children due to injuries has declined

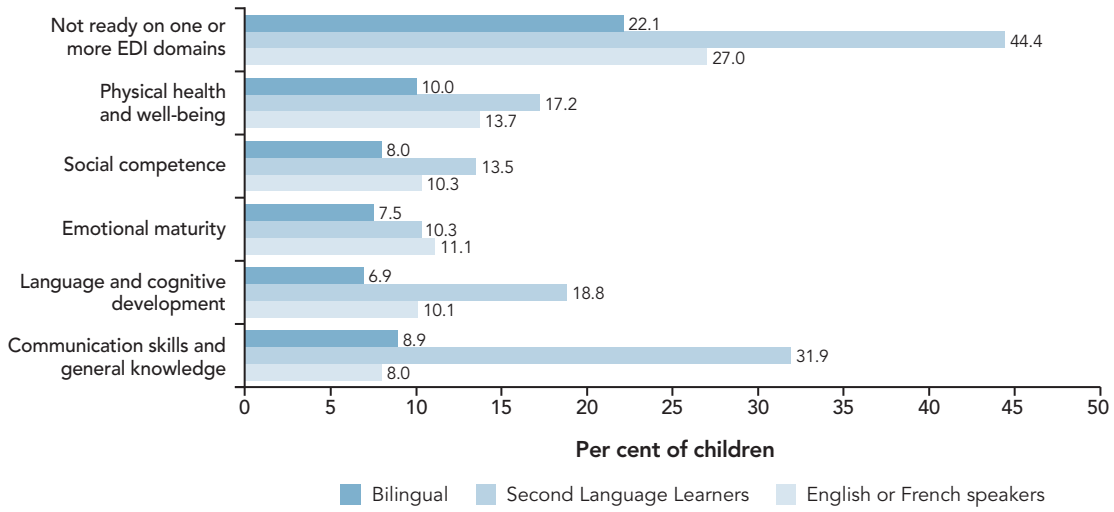
The rate of death due to injuries has declined substantially over the past 20 years.[B] The introduction and enforcement of legislation related to the use of safety equipment, such as car and booster seats and bike helmets, have contributed to this decline.

Many children speak languages other than English or French

One in five Peel children speak a language other than English or French most often at home.[A2] Children who are bilingual are more likely than children who speak only English or French to be developmentally ready to enter school (Figure 1).

Figure 1

Proportion of Children Not Developmentally Ready by Language Group and EDI Domain, Peel, 2007 and 2010 Combined



Source: Early Development Instrument 2007 and 2010, Region of Peel

Children who are learning English or French at school entry are less likely than those who are bilingual or speak English or French fluently to be developmentally ready to enter school. The data do not reveal if these children catch up to their peers academically in later years.

Most Peel parents are immigrants

Although most children in Peel were born in Canada, two-thirds of Peel parents were born elsewhere (Figure 2) and immigrated to Canada as adults.[A2] This means that the majority of parents were not raised in the Canadian context. This may lead to conflict between children and their parents as children grow up exposed to different values, norms and expectations.

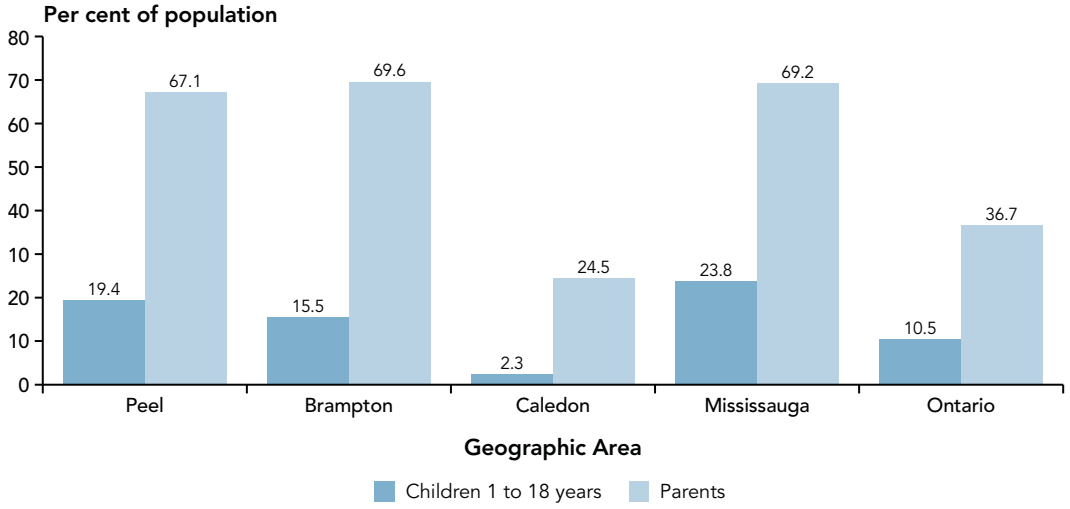
Parents are educated, but family income level is low

Almost 60% of Peel parents have a college or university-level degree or diploma.[A2] However, Peel has a higher proportion of families living in low-income compared to Ontario, with 15% of Peel children under six years of age living in a low-income household.[A2] Higher education typically results in a higher income, however, this pattern is not seen in Peel. This is likely the result of the high proportion of parents who are immigrants. Recent immigrants have lower income than non-immigrants and long-term immigrants despite education level.[C]

Peel parents are healthy

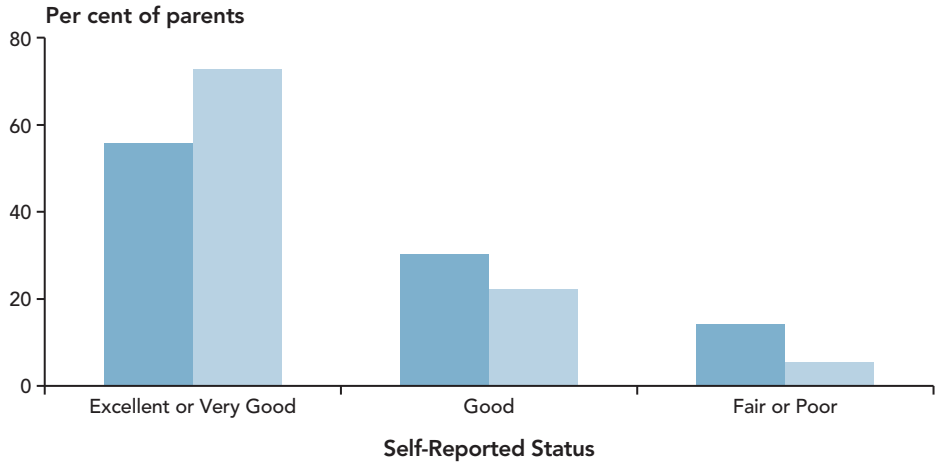
Parents who are in good health and have a positive mental health status are more likely to provide a nurturing environment for their children and to have responsive relationships with them. Over half of Peel parents rate their general health as excellent or very good, and almost three-quarters rate their mental health status as excellent or very good (Figure 3). A minority of parents report limitations on their daily activities as a result of a long-term physical, mental or health condition or problem.[C]

Figure 2
Proportion of Children and Parents who are Immigrants, Peel, Brampton, Caledon, Mississauga and Ontario, 2006



Source: Custom Profile, 2006 Census, Statistics Canada

Figure 3
Self-Reported General Health Status and Mental Health Status among Parents, Peel, 2009/2010



	Excellent or Very Good	Good	Fair or Poor
General health status (95% CI)	55.6 (49.3–61.7)	30.3 (24.6–36.7)	14.1 (10.1–19.3)
Mental health status (95% CI)	72.6 (66.7–77.8)	22.1 (17.3–27.7)	5.3* (3.3–8.6)

* Use estimate with caution
95% CI reflects the 95% confidence interval of the estimate
Source: Canadian Community Health Survey 2009/2010, Statistics Canada, Share File, Ontario Ministry of Health and Long-Term Care.

CHALLENGES IN PEEL

Injuries are common among children

Injuries are the most common cause of emergency department visits and are one of the leading causes of hospitalization and death among children and youth in Peel. Falls are the most common reason for injury.

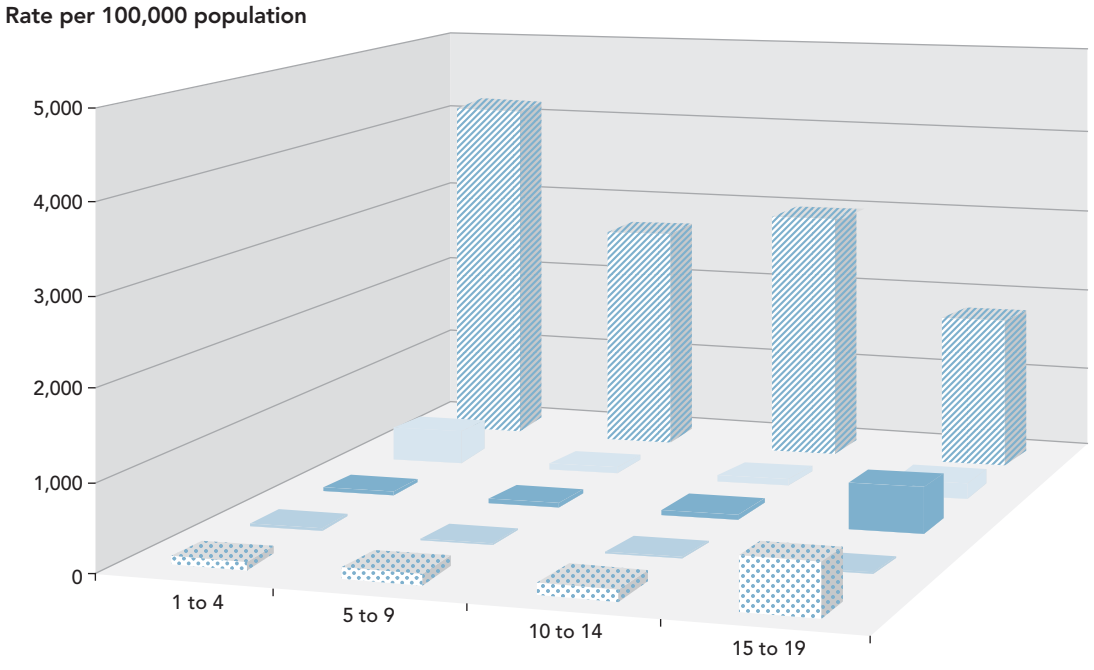
The types of injuries that occur among children change as children get older (Figure 4).

Unlicensed child care is common

Approximately half of senior kindergarten children were cared for by someone other than their parents (including licensed and unlicensed care) after the first year of life.[D] The majority of children (51%) one to five years of age who received non-parental care were in unlicensed child care.[D] The quality of unlicensed care is unknown, as are the reasons why Peel parents use unlicensed care.

Figure 4

Rate of Emergency Department Visits due to Selected Types of Injuries among Children by Age Group, Peel, 2010



	1 to 4	5 to 9	10 to 14	15 to 19
Motor vehicle collisions	81.1	135.6	158.5	565.3
Accidental drowning	10.3	1.2	2.2	5.2
Assault	16.2	27.1	83.1	517.5
Accidental poisoning	352.4	69.6	63.2	173.6
Accidental falls	4,170.7	2,649.4	2,947.4	1,770.9

Sources: National Ambulatory Care Reporting System 2010, IntelliHEALTH Ontario, Ministry of Health and Long-Term Care
Population Estimates 2010, IntelliHEALTH Ontario, Ministry of Health and Long-Term Care.

Not all children are ready for school

The Early Development Instrument (EDI) is a teacher-completed assessment of senior kindergarten students that measures their developmental readiness to learn at school. In 2010, 30% of Peel children were not developmentally ready to enter school on one or more of the EDI domains, a significant reduction since 2007.[E]

Peel youth are at risk for chronic diseases due to obesity and poor fitness

Peel youth are at significant risk for poor health outcomes as indicated by their body mass index (BMI), fitness and activity levels. Thirty-two per cent of students in Grades 7 to 12 are overweight or obese (Figure 5). Forty-one per cent of Grade 9 students scored in the "low fit" category of cardiorespiratory fitness and 76% scored in the "needs improvement or fair" category of musculoskeletal fitness (Figure 6).

Screen time, including television, computer and video game use, is high among youth, particularly on weekends.

The majority of parents in Peel are physically inactive (62%).[C] This means they are not modelling active lifestyles for their children.

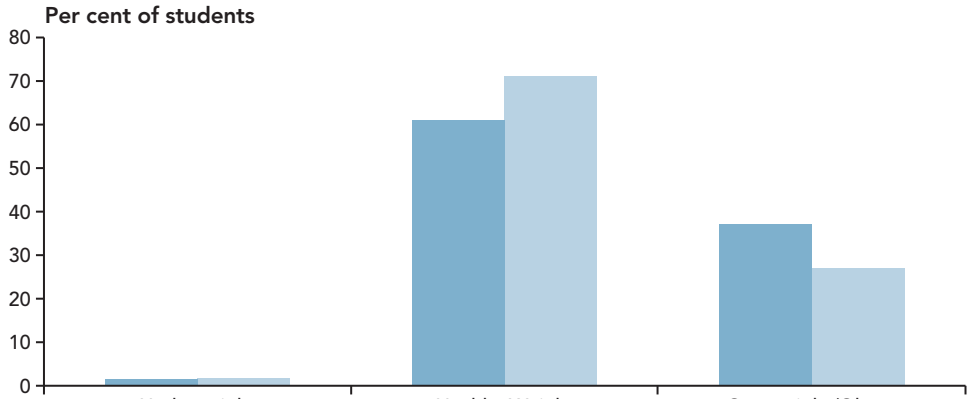
Youth have poor nutritional habits

A significant portion of youth report eating unhealthy foods daily (e.g., deep-fried foods, chips, pretzels or candy bars), as well as drinking beverages with little nutritional value (e.g., soft drinks, energy drinks, sports drinks).[F] The proportion of children taking part in daily meals with their families and who eat breakfast daily declines as children get older.

Female students consistently report poorer mental health than males

Female students in Grades 7 to 12 are more likely to feel stressed, lonely, and unhappy

Figure 5
Proportion of Students by Body Mass Index Category and Sex, Peel, 2011



	Underweight	Healthy Weight	Overweight/Obese
Males per cent (95% CI)	1.6 (1.2–2.2)	61.1 (56.1–63.1)	37.2 (35.3–39.2)
Females per cent (95% CI)	1.8 (1.3–2.4)	71.2 (69.4–73.0)	27.0 (25.2–28.9)

95% CI reflects the 95% confidence interval of the estimate
Source: Student Health Survey 2011, Peel Public Health

or depressed compared to males (Figure 7). They are also less likely to feel good about themselves.[F] Female students are more likely to have seriously considered suicide in the past year compared to males.[F]

Many youth engage in risky behaviours

The pre-teen and teen years can be a period of experimentation with sexual activity, smoking, alcohol or drugs. However, frequent use of alcohol and drugs or risky sexual behaviour can lead to significant threats to health and well-being over the lifespan. Over one-third of students have tried smoking a cigarette by the time they reach Grade 12 (Figure 8). Over one-quarter of Grade 12 students report binge drinking at least once per month, and almost half have used marijuana.[F]

Forty-three per cent of Grade 12 students have had sex (Figure 9). Twenty-eight per cent of sexually active youth have had sex without birth control.[F] Rates of Chlamydia, a sexually transmitted infection, increased among teens between 2006 and 2010, especially among females.[G]

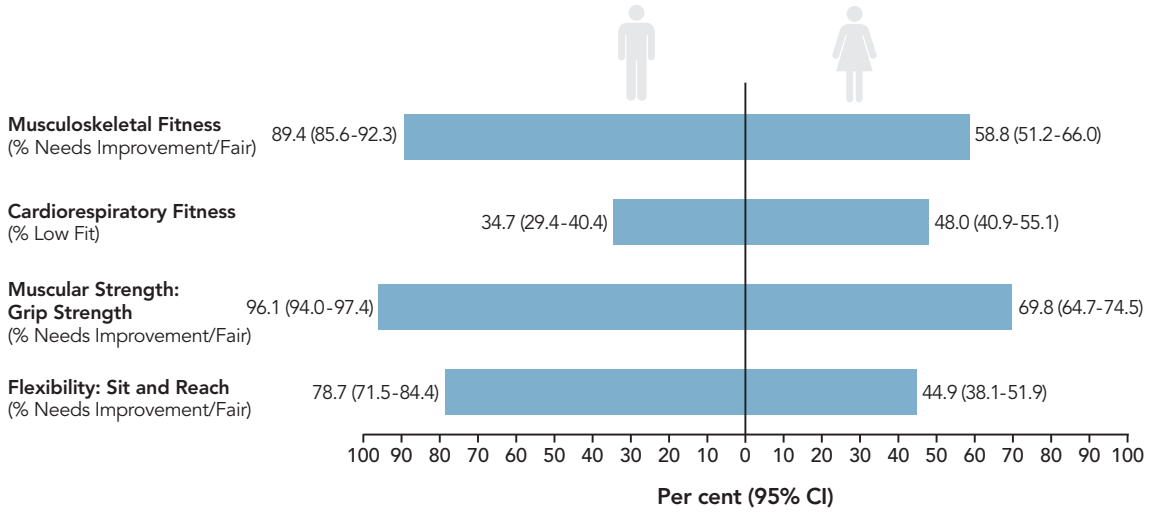
Many gaps exist for child health status measures

There are a number of important health topics for which there are limited or no data to measure the current health status of children. For example, there are minimal data on the nature and quality of the relationships between children and their parents, which makes it challenging to gauge whether these relationships are stable or responsive. Other data gaps noted in the report include, but are not limited to:

- Prevalence of chronic health conditions, such as diabetes.
- Level of exposure to environmental toxins (e.g., lead, mercury).
- Quality and accessibility of child care which children receive outside of their home.

Figure 6

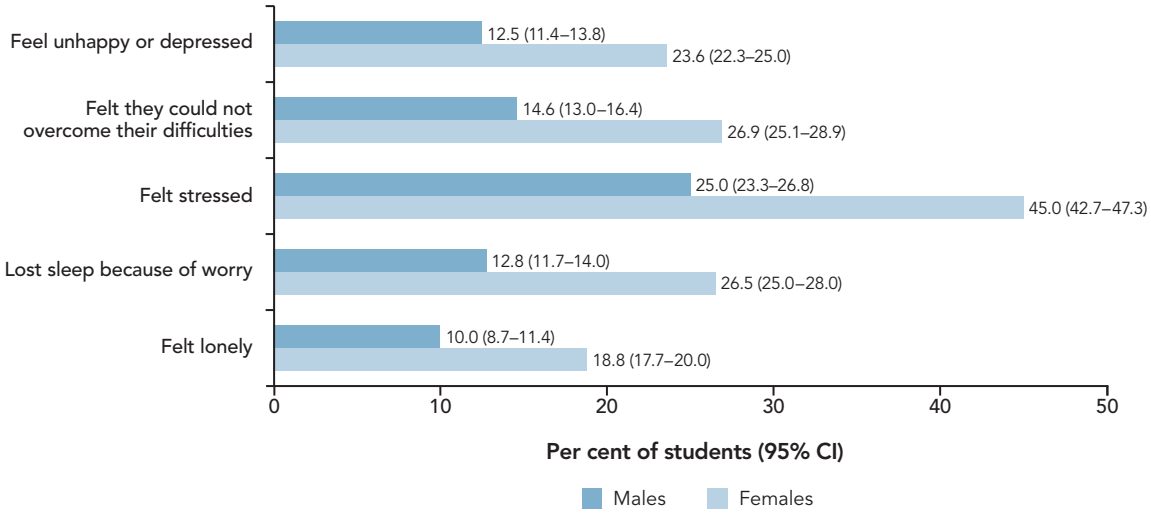
Per cent of Students with Suboptimal Health Ratings for Selected Fitness Measures, Peel, 2011



95% CI reflects the 95% confidence interval of the estimate
Source: Student Health Survey 2011, Peel Public Health

Figure 7

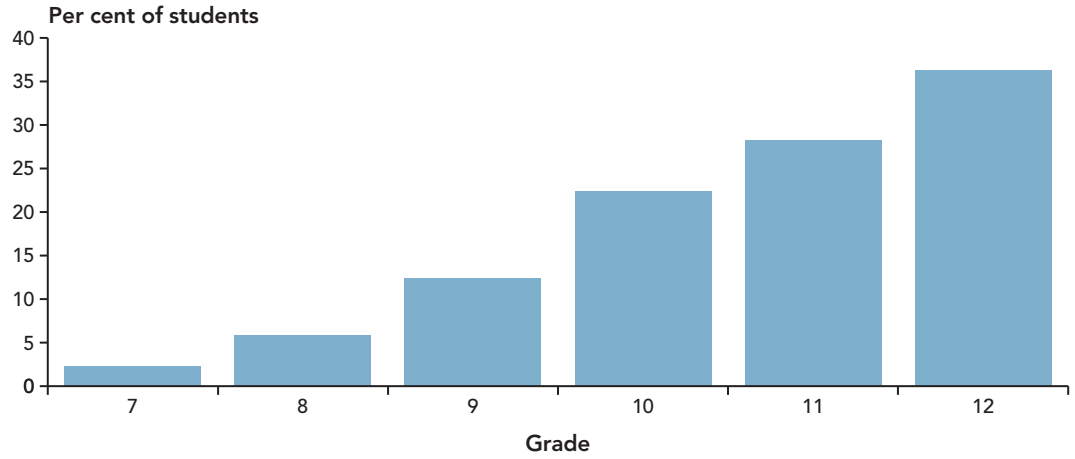
Proportion of Students Who Reported Feelings of Emotional Distress Always or Often by Sex, Peel, 2011



95% CI reflects the 95% confidence interval of the estimate
Source: Student Health Survey 2011, Peel Public Health

Figure 8

Proportion of Students who Ever Smoked a Cigarette by Grade, Peel, 2011

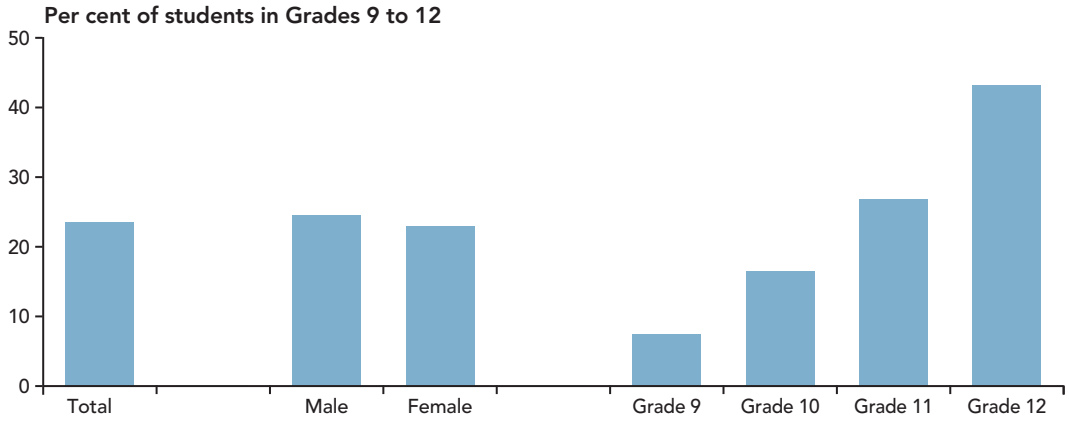


	7	8	9	10	11	12
Per cent (95% CI)	2.3* (1.5–3.4)	5.8 (4.6–7.3)	12.4 (11.0–13.9)	22.4 (19.3–25.8)	28.2 (24.9–31.7)	36.3 (32.0–40.8)

* Use estimate with caution
95% CI reflects the 95% confidence interval of the estimate
Note: Ever smoked defined as ever tried a cigarette (even just a few puffs)
Source: Student Health Survey 2011, Peel Public Health

Figure 9

Proportion of Students who Report Having had Sexual Intercourse† by Sex and Grade, Peel, 2011



	Total	Male	Female	Grade 9	Grade 10	Grade 11	Grade 12
Per cent (95% CI)	23.5 (20.5–26.9)	24.5 (20.5–27.9)	22.9 (19.6–9.3)	7.4 (5.9–26.9)	16.5 (13.2–20.4)	26.8 (23.0–30.9)	43.2 (37.3–49.2)

† Sexual intercourse defined as oral, vaginal and anal intercourse
95% CI reflects the 95% confidence interval of the estimate
Source: Student Health Survey 2011, Peel Public Health

CONCLUSIONS

A child's lifelong trajectory for learning, health and behaviour is set in early life. Their early environment interacts with their genetic make-up during the development of the brain and other biological systems. Although later experiences can affect outcomes, early life experiences are built into a child's biology and are carried throughout the rest of their lives.[1]

The full report provides a picture of the health status of children in Peel. For some topics, data are available to understand health status, but for others they are not. This is not meant to imply that the topic is unimportant, rather that there are no national, provincial or local data available. The data gaps identified in the report lead to an incomplete picture, therefore, Peel Public Health will advocate for surveillance efforts within these areas to help provide a more complete picture of child development.

REFERENCES

1. McCain MN, Mustard JF, McCuaig K. Early Years Study 3: Making decisions, taking action. Margaret and Wallace McCain Family Foundation; 2011.

DATA REFERENCES

A1 2011 Census, Statistics Canada

A2 2006 Census, Statistics Canada

B Ontario Mortality Database, IntelliHEALTH Ontario, Ministry of Health and Long-Term Care

C Canadian Community Health Survey 2009/2010, Statistics Canada, Share File, Ministry of Health and Long-Term Care

D Senior Kindergarten Census 2010, Peel Public Health

E Early Development Instrument 2007 and 2010, Region of Peel

F Student Health Survey 2011, Peel Public Health

G Integrated Public Health Information System (iPHIS), Ministry of Health and Long-Term Care

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7120 Hurontario St., P.O. Box 667 RPO Streetsville
Mississauga, ON L5M 2C2 • 905-799-7700

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