



# 2012 destination Peel

Key Findings on Immigrant and  
Ethnocultural Health



## INTRODUCTION

Immigration to Canada has varied over the last 150 years.<sup>1</sup>

Immigrants contribute to their new country in many ways. In addition to having a beneficial effect on population growth and the age distribution of the population, immigrants enhance cultural diversity, the exchange of perspectives, and contribute to the economic well-being of their destination country.<sup>2</sup>

The population of Peel is diverse. Peel's ethnocultural make-up has been shaped over time by different waves of immigrants and their descendants. Immigrants are an important part of our community, making up nearly half (49%) of Peel's population; a significantly higher proportion than in Ontario (28%) or Canada (20%) as a whole.<sup>A1</sup>

Immigrants tend to arrive in Canada healthier than the native population. The longer they are in Canada, however, the more their health approaches that of the native-born population. This observation is called the "healthy immigrant effect."<sup>3,4,5,6,7,8</sup>

A person's ethnicity is associated with their health status (e.g., health behaviours and health outcomes, life expectancy and mortality experiences). Individuals of South Asian background, for example, have a higher risk of developing diabetes; while individuals identifying themselves as White tend to smoke and drink more. It is important for public health to understand the relationships between ethnicity and these health outcomes so that effective population-based interventions reach the right individuals or groups of individuals.

This report is intended to highlight some of the key findings reported by Peel Public Health in *Destination Peel 2012: Immigrant and Ethnocultural Health*. Readers interested in a more detailed examination of issues related to immigrant and ethnocultural health in Peel can access the full report in electronic format at:

[peelregion.ca/health/reports](http://peelregion.ca/health/reports). The report includes information on topics such as self-rated health, life expectancy, reproductive and perinatal health, communicable diseases, chronic diseases (e.g., cancer, heart disease, diabetes, overweight and obesity), and risk factors for chronic diseases and poor health.

Throughout this report, we present Peel data by ethnicity and immigrant status when available. However, due to lack of data or poor data quality as it relates to immigrant and ethnocultural variables within many of the health datasets, there are still numerous data gaps and unknowns. It is also important to note that we present data and associations at the population level, which may not be applicable in every circumstance at the individual level because differences within a subgroup (e.g., a particular cultural or ethnic group) may be just as marked as those between members of different cultural or ethnic groups.

## ABOUT THE REGION OF PEEL



### Peel Facts

- Peel has a culturally diverse population.<sup>A1</sup>
- Almost half of Peel's population are immigrants (49%).<sup>A1</sup>
- Peel immigrants comprise a larger proportion of young adults aged 25 to 44 years.<sup>A2</sup>
- One in 10 recent immigrants (9%) in Peel do not speak English or French.<sup>A1</sup>
- Among immigrant seniors, almost one in five seniors do not speak English or French.<sup>A2</sup>
- Recent immigrants are highly educated compared to non-immigrants.<sup>A2</sup>
- While recent immigrants have lower income than non-immigrants,<sup>A2</sup> it is not known how long immigrants live in low-income for.

Peel's recent immigrant population is made up of a larger proportion of adults aged 25 to 44 years compared to long-term immigrants and non-immigrants, as shown in Figure 1.

In contrast, Peel's long-term immigrant population tends to be older (40 years and older) than the recent- and non-immigrant population.<sup>A2</sup> The proportion of young children is highest among the non-immigrant population.<sup>A2</sup>

More than half (51%) of Peel's immigrant population was born in Asia and the Middle East, although historically more immigrants arrived from Europe. While European-born immigrants still comprise a large portion of Peel's immigrant population (27%)<sup>A2</sup>, overall they make up a smaller proportion of recent immigrants (8%) (Figure 2).

**Recent immigrants in Peel are highly educated, but their unemployment rate is higher than that of long-term immigrants and non-immigrants.**

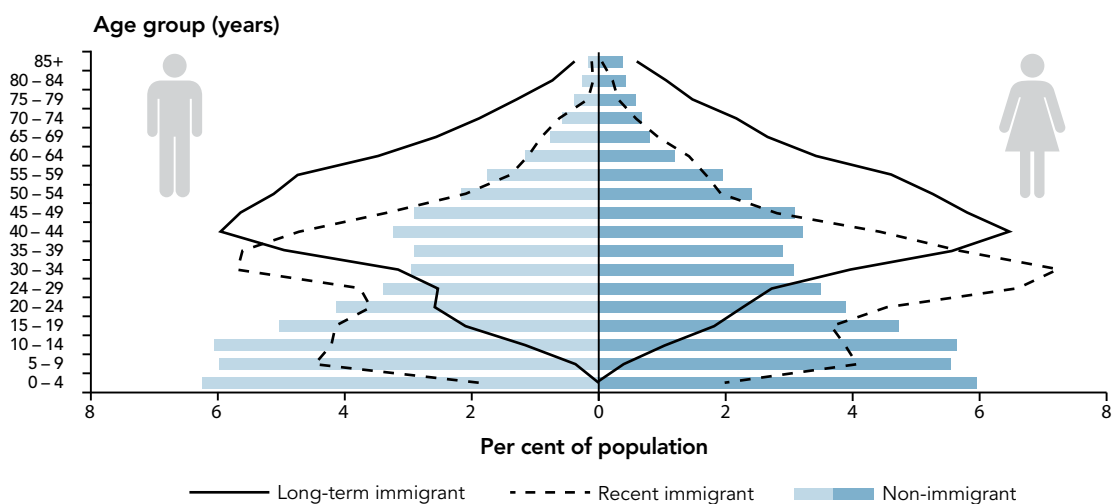
Recent immigrants to Canada are among the most educated in our region. In Peel, a greater proportion of recent immigrants (52%) have a university education compared to non-immigrants (22%).<sup>A2</sup>

The employment rate of immigrants to Canada increases and approaches the national average the longer they reside in Canada.<sup>9</sup> In Peel, the unemployment rate for recent immigrants is higher than the unemployment rate for long-term and non-immigrants (data not shown).<sup>A2</sup>

**In Peel, recent immigrants have lower income than long-term immigrants and non-immigrants. How long this income difference lasts is unknown.**

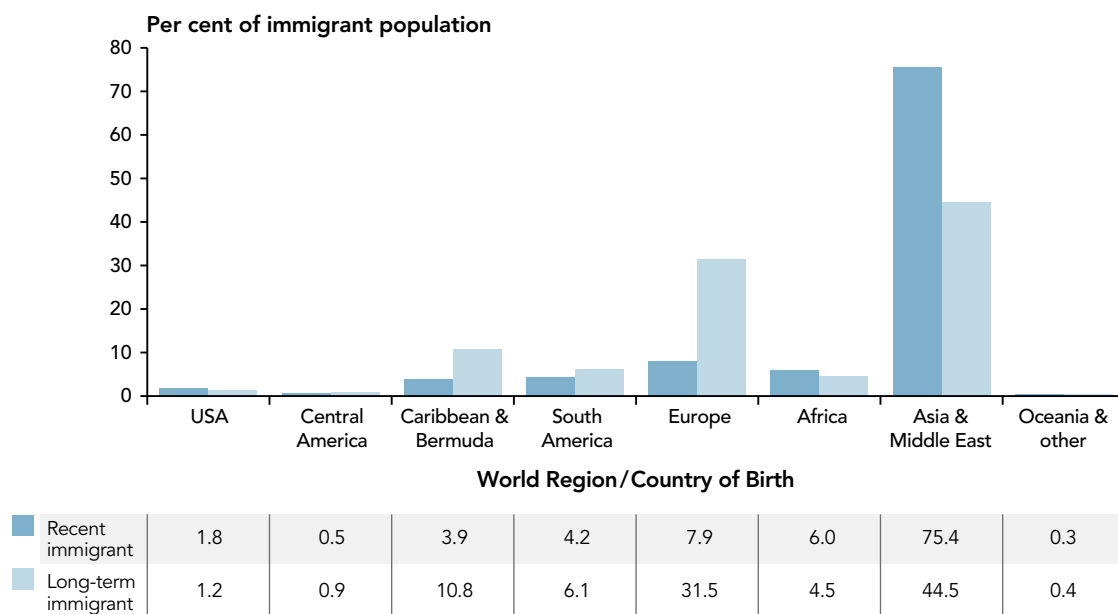
Many immigrants begin life in Canada with low income. For newcomers, it takes time to find employment, build professional networks, overcome language barriers and, where possible, have their foreign credentials and work experience recognized. As a result, many accept employment below their level of training.

**Figure 1**  
Population Distribution by Immigration Status, Age Group and Sex, Peel, 2006



Note: By definition, a long-term immigrant arrived in Canada prior to 2001. This explains why the proportion of 0 to 4 year-olds that are long-term immigrants is 0%.  
Source: Custom Profile Data, 2006 Census, Statistics Canada

**Figure 2**  
**World Region/Country of Birth by Immigrant Status,**  
**Peel, 2006**



Source: Custom Profile Data, 2006 Census, Statistics Canada

### LIFE EXPECTANCY, MORTALITY AND BIRTH EXPERIENCES

The life expectancy and mortality experience of immigrants is more positive compared to the Canadian-born population.

Immigrants in Toronto and Peel who are 25 years or older can expect to live longer than their non-immigrant counterparts. This is true for both males and females. The gap in life expectancy between immigrants and non-immigrants is greatest among those in the lowest income group (difference of 8.7 years for males and 7.8 years for females) (Figure 3 and 4).<sup>10</sup>

#### **Mortality rates are lower for Peel immigrants compared to the Canadian-born population.**

Immigrants in Canada, including refugees, generally have lower age-standardized mortality rates compared to the Canadian-born population. Although their mortality rates tend to rise as their

time in Canada lengthens, they remain lower than that of the non-immigrant population.<sup>11</sup>

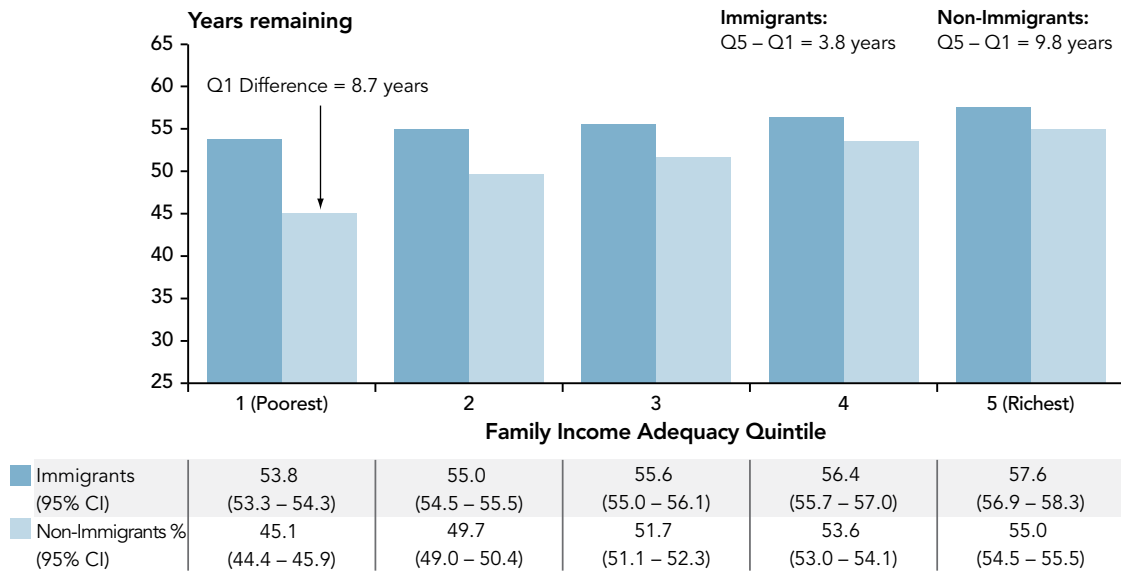
Similar to the national trend, the mortality rate was lower for Peel immigrants (435.5 per 100,000 population) compared to non-immigrants (613.9 per 100,000 population), between 2005 and 2007.<sup>A2, B</sup>

#### **Immigrant mothers give birth to infants that weigh less than infants of non-immigrant mothers.**

Immigrant women give birth to infants that weigh significantly less than infants of non-immigrant women. While the differences in birthweight are greatest for mothers born in South Asia, mothers born in East Asia, the Caribbean, Africa and other regions also deliver babies that weigh less.<sup>C</sup>

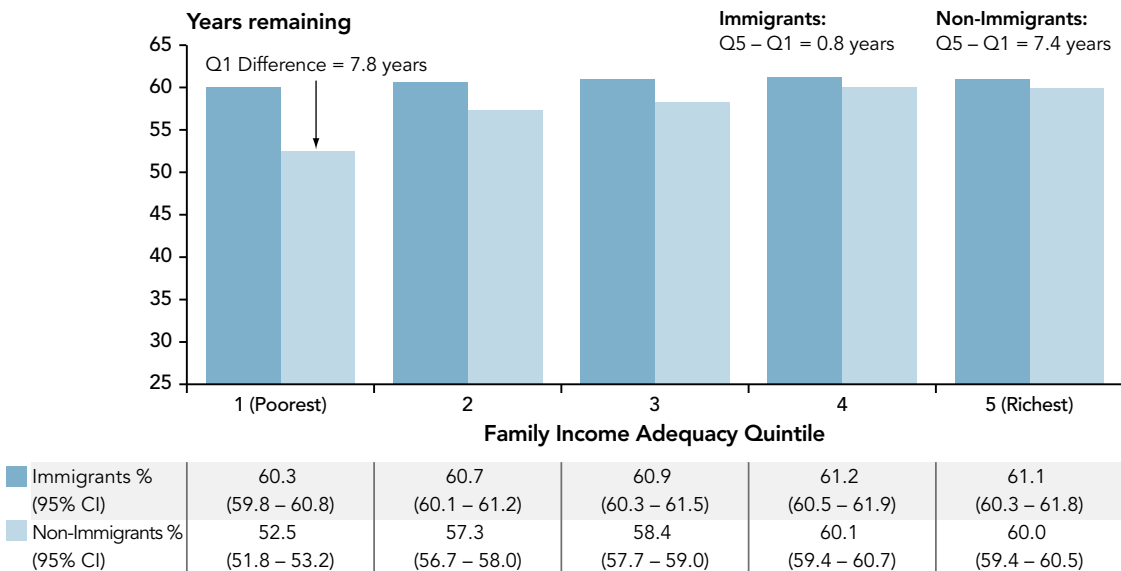
As a result of these differences in birth weight, infants of immigrant mothers may be “misclassified” as being small for their gestational age (SGA), when they may be appropriately sized for their ethnic background.

**Figure 3**  
**Remaining Life Expectancy at Age 25 by Immigrant Status and**  
**Income Adequacy Quintile, Males,**  
**Toronto and Peel, 1991-2001**



† Including non-permanent residents (foreign-born)  
 Notes: Q5-Q1 difference for immigrants = 3.9 years; Q5-Q1 difference for non-immigrants = 9.8 years  
 95% CI reflects the 95% confidence interval of the estimate  
 Source: Stratton J, Mowat D, Wilkins R, Tjepkema M. Income disparities in life expectancy in the City of Toronto and Region of Peel, Ontario. Chronic Dis Inj Can. 2012 Sep; 32(4):208-215.

**Figure 4**  
**Remaining Life Expectancy at Age 25 by Immigrant Status and**  
**Income Adequacy Quintile, Females,**  
**Toronto and Peel, 1991-2001**



† Including non-permanent residents (foreign-born)  
 Notes: Q5-Q1 difference for immigrants = 0.8 years; Q5-Q1 difference for non-immigrants = 7.4 years  
 95% CI reflects the 95% confidence interval of the estimate  
 Source: Stratton J, Mowat D, Wilkins R, Tjepkema M. Income disparities in life expectancy in the City of Toronto and Region of Peel, Ontario. Chronic Dis Inj Can. 2012 Sep; 32(4):208-215.

Ethnic-specific fetal growth standards would be required to ensure that infants are not inappropriately defined as being SGA, thereby avoiding unnecessary parental stress and health-care follow-up.

For all reproductive health datasets, ethnicity as a variable is not currently collected. Therefore, the mother's region of birth was used as a proxy. This may lead to an underestimation of the true difference between infants birth weights as it does not account for women born in Canada or other regions from an ethnic background with a naturally lower birth weight.

### **Breastfeeding**

While 97% of Peel mothers start breastfeeding, only 58% continue to do so for six months or longer. Immigrant mothers (61%) are more likely to breastfeed their babies for six months or longer compared to Canadian-born mothers (53%). Among immigrants, the proportion of mothers who breastfeed for at least six months decreases as the length of time they are in Canada increases (data not shown).<sup>D</sup>

Although immigrant mothers are more likely to breastfeed their babies for six months or longer, six-month breastfeeding rates could improve overall regardless of immigrant status. We do not know whether the reasons for the low breastfeeding rates are the same for different immigrant groups or ethnic groups.

## **HEALTH BEHAVIOURS**

### ***Physical activity among Peel residents is suboptimal, particularly amongst immigrants.***

Regular physical activity is recommended as part of a healthy lifestyle. In addition to building cardio-respiratory fitness and muscle tone, physical activity has numerous health benefits, which includes reducing the risk of Type 2 diabetes, heart attacks and some cancers, as well as lowering the risk of premature mortality.<sup>12,13</sup>

In Peel, leisure-time physical activity is more common among Canadian-born individuals (55%) compared to recent (39%) and long-term immigrants (37%).<sup>E1</sup>

### ***Fruit and vegetable consumption among Peel residents is poor.***

Fruit and vegetable consumption is one indicator of healthy eating. In Peel, less than half of residents (48%) consume fruit and vegetables five times per day or more often.<sup>E1</sup> Fruit and vegetable consumption is equally poor regardless of ethnicity or immigrant status (data not shown).

### ***Tobacco and alcohol use is higher among the Canadian-born population compared to immigrants.***

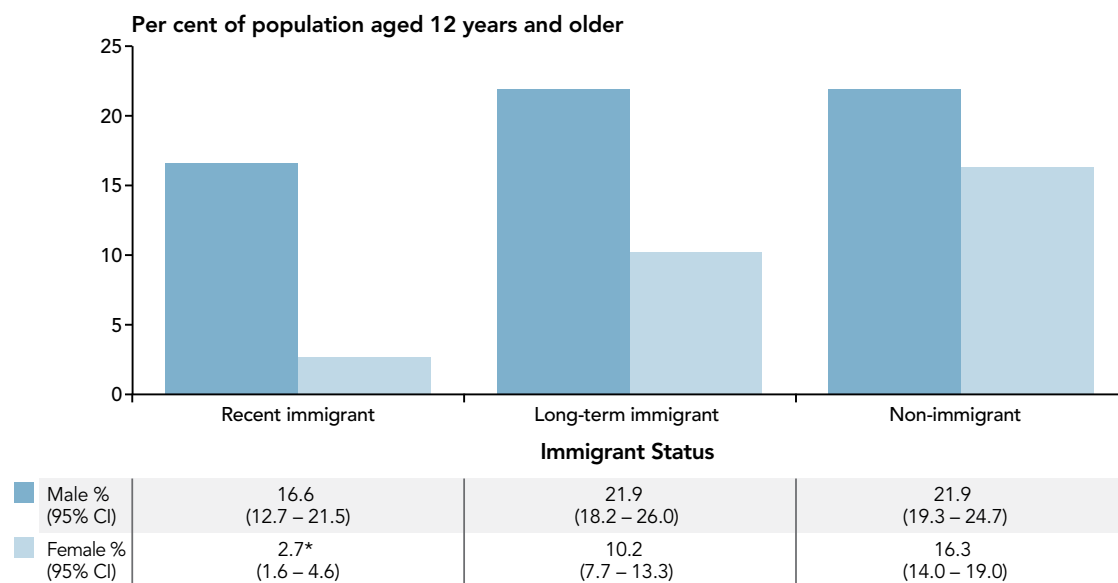
The use of substances, such as tobacco in the form of cigarettes, alcohol and illicit drugs, tends to be less common among immigrant groups compared to Canadian-born residents.

In Peel, immigrant men (both recent and long-term) smoke at a similar rate as non-immigrant men, while immigrant women are less likely to smoke than non-immigrant women (Figure 5).

In Peel, grade 7 to 12 students of South Asian and South-East Asian origin are less likely than their British and North American counterparts to have ever tried a cigarette.<sup>F</sup>

The use of alcohol and illicit drugs is less common among immigrant groups compared to Canadian-born residents. Peel's recent and long-term immigrants are less likely than non-immigrants to binge drink.<sup>E</sup> Similarly binge drinking occurs less frequently among immigrant youth than in their non-immigrant counterparts.<sup>F</sup> In Ontario, alcohol and illicit drug use is higher in third-generation Canadian youth compared to those who are first generation Canadians.<sup>14</sup> Alcohol and illicit drug use vary by ethnicity.

**Figure 5**  
**Current Smoking by Immigrant Status and Sex,**  
**Peel, 2005, 2007/2008, 2009/2010 Combined**



\*Use estimate with caution  
 Note: 95% CI reflects 95% confidence interval of the estimate  
 Source: Canadian Community Health Survey 2005, 2007/2008, 2009/2010, Statistics Canada, Share File, Ontario Ministry of Health and Long-Term Care

**Immigrants are less likely to report first having sex before the age of 20 years.**

In Peel, recent immigrants (24%) are less likely than long-term (48%) and non-immigrants (60%) to report first having sex before the age of 20 years. In Ontario, having two or more sexual partners in the past year is also less common among immigrants compared to non-immigrants (data not shown).<sup>E1</sup>

**CHRONIC DISEASES**

While the development of a chronic disease is of concern for all Peel residents, the risk of developing certain chronic diseases is higher among some ethnic groups.

**Overweight and Obesity**

Half (50%) of Peel’s population is overweight or obese. The prevalence of overweight and obesity varies by immigrant status (data not shown) and by ethnicity (Figure 6).

The measurement of overweight and obesity using body mass index (BMI) is one way to assess an individual’s risk of developing certain chronic diseases. Measuring abdominal obesity is another way of assessing this risk. Abdominal obesity has been found to increase the risk of diabetes, cardiovascular disease and all-cause mortality.<sup>15-18</sup>

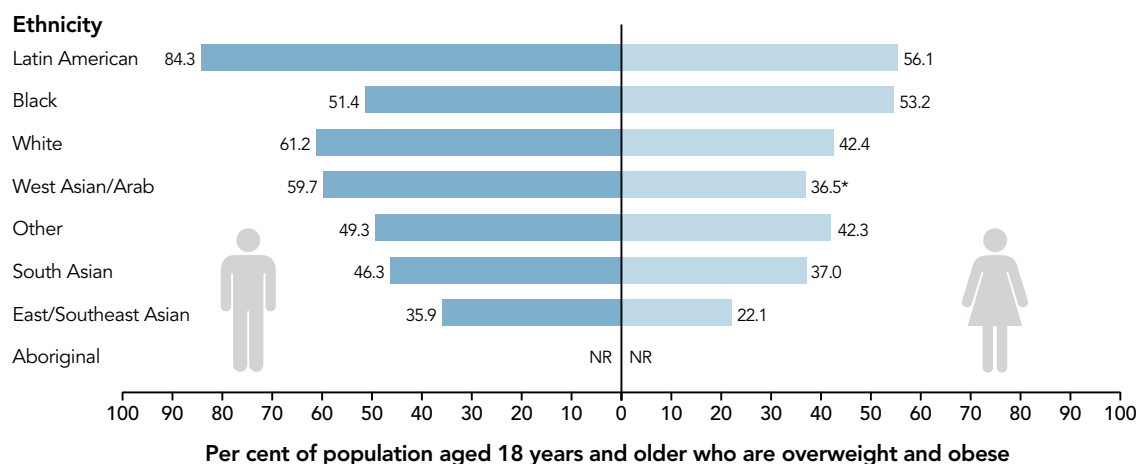
Body fat distribution and its impact on health varies by ethnicity.<sup>15,19</sup> For example, while South Asians may not have high rates of overweight or obesity as measured by BMI, they tend to have increased rates of abdominal fat, which result in greater insulin resistance at BMI levels classified as normal (BMI < 25kg/m<sup>2</sup>) by Canadian standards.

**Cardiovascular Disease**

Cardiovascular diseases are among the most common causes of mortality in Canada. In Peel, ischaemic heart disease is the leading cause of



**Figure 6**  
**Overweight and Obesity by Ethnicity and Sex,**  
**Peel, 2001, 2003, 2005, 2007/2008 and 2009/2010 Combined**



\*Use estimate with caution  
 NR = Not releasable due to small numbers  
 Note: Excludes pregnant and lactating women  
 Source: Canadian Community Health Survey 2001, 2003, 2005, 2007/2008, 2009/2010, Statistics Canada, Share File,  
 Ontario Ministry of Health and Long-Term Care.

death for both immigrants and non-immigrants.<sup>A1,B</sup> Certain ethnic groups, such as South Asians, have a higher risk of developing cardiovascular disease.<sup>20-22</sup>

**Diabetes**

Overall, approximately 10% of Peel’s population has diabetes.<sup>23</sup> Peel’s immigrant population is more likely than those born in Canada to report that they have been diagnosed with diabetes (data not shown).<sup>E1</sup> Diabetes is of particular concern among immigrants from South Asia, the Caribbean and Latin America (Figure 7).

**COMMUNICABLE DISEASES**

**Peel’s immigrant population has a higher risk of acquiring certain infectious diseases than the Canadian-born population.**

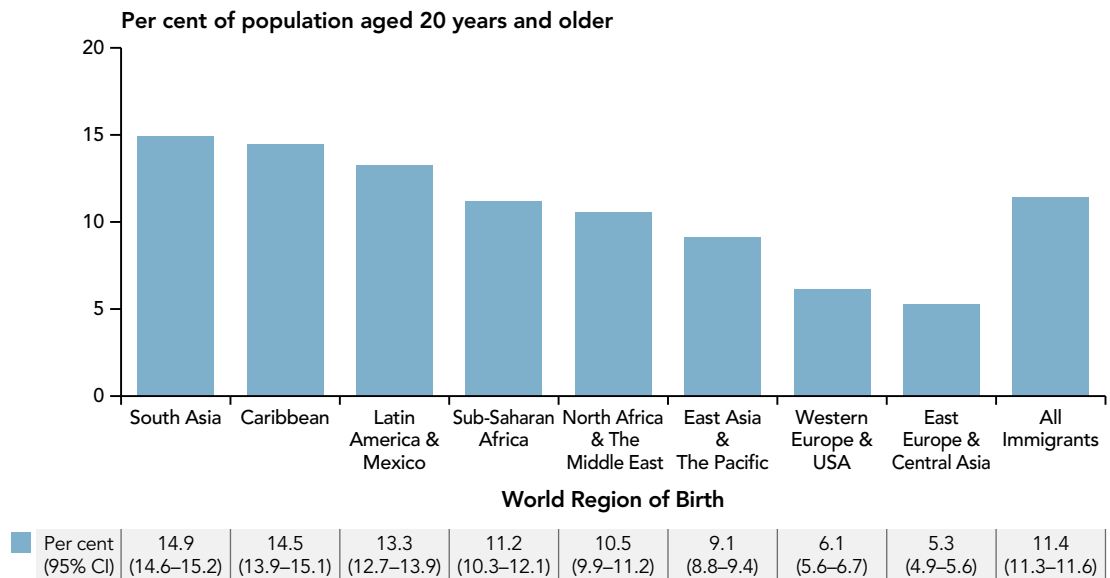
Peel’s immigrant population is at higher risk than the Canadian-born population of acquiring certain infectious diseases, (e.g., tuberculosis, hepatitis B, hepatitis C, syphilis, travel-related diseases and vaccine-preventable diseases).

This is due to exposure to these diseases before immigration and the risk of re-exposure during travel back to their home country to visit family and friends. Immigrants who are visiting friends and relatives are at greater risk than Canadian-born travellers because they may not recognize or consider health risks associated with travel to their countries of origin.

**Certain vaccine-preventable diseases are of concern for Peel residents as a whole, but are of most concern among the immigrant population who travel.**

Vaccine-preventable diseases (VPDs) still occur in Peel in unimmunized populations. Adult immigrants may not have immunity to VPDs (e.g., rubella and mumps) as childhood vaccination programs were not introduced in developing countries until the late 1970s. Even after arrival into Canada, issues, such as language barriers, incomplete immunizations and records, and different vaccine schedules in other countries, have hindered some immigrants from having up-to-date immunizations.<sup>24</sup>

**Figure 7**  
**Diabetes Prevalence<sup>†</sup> by World Region of Birth,**  
**Peel, 2008**



\*Standardized to the 1991 Canada population based on 1991 Census data from Statistics Canada.  
 † Prevalence on March 31, 2008 for immigrants (immigrating between 1985-2005)  
 ‡ All immigrants is not equivalent to the sum from all regions, since people from unknown or stateless origin are included in the total.  
 Note: 95% CI reflects the 95% confidence interval of the estimate  
 Reference: Creator, M.I. (2011). Unpublished data from PhD dissertation in preparation. Data sources: Landed Immigrant Database (Citizenship and Immigration Canada, 1985-2000); Ontario Diabetes Database (Institute for Clinical Evaluative Sciences, 2010).

Babies and young children of immigrants are at high risk of certain VPDs when they travel with their parents to their country of origin (where VPDs are endemic) prior to receiving their vaccinations. If they return with a VPD, they can put local children, who have never travelled and are not fully immunized, at risk.

## HEALTH-CARE ACCESS AND USE

### **Long-term immigrants are more likely to have a regular medical doctor.**

Health-care utilization is influenced by many factors, including access to care, beliefs about health and level of health literacy.

In Peel, long-term immigrants (96%) are more likely than recent immigrants (83%) and non-immigrants (91%) to report having a medical doctor.<sup>E1</sup>

### **Cancer screening varies by immigrant status and ethnicity in Peel.**

Cancer can develop at any age and overall risk increases as we age. In 2007, lung, prostate, breast and colorectal cancer made up 51% of all new cancers in Peel.<sup>G</sup> Cancer screening guidelines have improved detection; however, the uptake of screening programs still varies by immigrant status and ethnicity for some types of cancer. For example, mammography uptake is lower among recent immigrant women aged 50 to 69 years (49%\*) compared to long-term immigrants (85%) and non-immigrants (88%).<sup>E2</sup>

\* use estimate with caution

### **Dental caries are more common among immigrant children in Peel.**

Dental caries (i.e., cavities) and dental decay are more common among immigrant children compared to their Canadian-born counterparts.

Within Peel, Canadian-born children in elementary school have fewer dental caries, urgent conditions, gingivitis and calculus (i.e., tartar); however, they have a higher rate of fluorosis and more restored caries (i.e., dental fillings) compared to children born outside of Canada.

**Recent immigrants have fewer dental visits and are less likely to have insurance for extended health benefits, including dental insurance and insurance that covers the cost of eye glasses or contact lenses.**

In Peel, recent immigrants (50%) are less likely than long-term immigrants (63%) and non-immigrants (76%) to have dental insurance (Figure 8). In general, recent immigrants have fewer yearly visits to a dentist (52%) compared

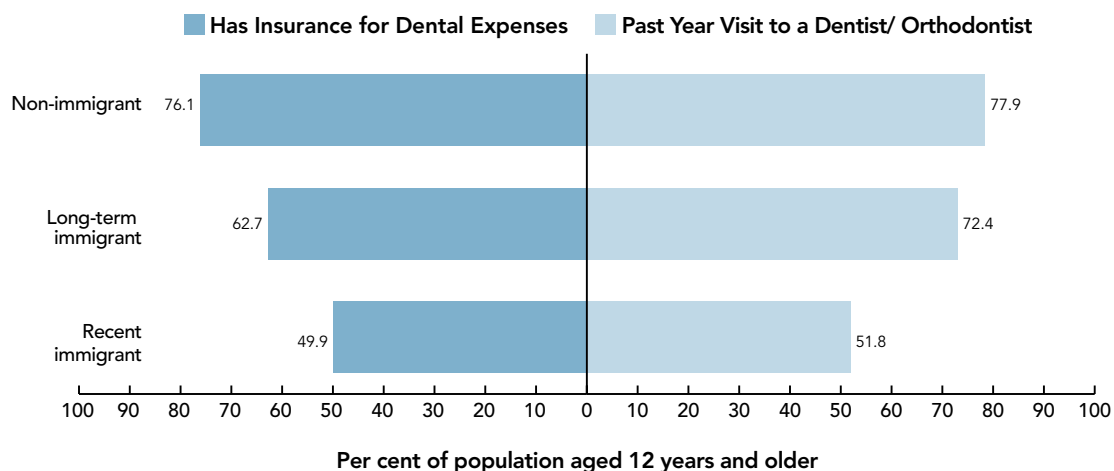
to non-immigrants (78%).<sup>E1</sup> Immigrant students in Grade 7 to 12 are also less likely to visit the dentist compared to Canadian-born students (data not shown).<sup>F</sup>

In Peel, approximately 61% of residents have insurance (private, government or employer-paid plans) that cover all or part of the cost of eye glasses or contact lenses. Recent immigrants (42%) are less likely than long-term immigrants (59%) and non-immigrants (71%) to have insurance coverage for vision care (data not shown).<sup>E1</sup>

In Ontario, recent immigrants are less likely than long-term immigrants and non-immigrants to have consulted with an eye specialist such as an ophthalmologist or optometrist in the past year. <sup>E1</sup>

**Figure 8**

**Insurance for Dental Expenses and Past Year Visits to a Dentist/Orthodontist by Immigrant Status, Peel, 2009/2010**



Source: Canadian Community Health Survey 2009/2010, Statistics Canada, Share File, Ontario Ministry of Health and Long-Term Care.

## CONCLUSIONS

Throughout this report, we have highlighted differences in health behaviours and health outcomes by immigrant status and ethnicity. While immigrants tend to benefit from the healthy immigrant effect, there are some health behaviours and health outcomes that are less favourable for immigrants. Likewise, this report has also identified health behaviours and health outcomes of concern for the Canadian-born population.

The profile of an immigrant to Peel has changed over the years. In order to address the health inequalities and needs in this diverse population, there is a need to collect data on an ongoing basis in order to assess and monitor the health status of Peel's population.

## FUTURE OUTLOOK

Recent immigrants have many positive characteristics and health behaviours, some of which are likely to dissipate over time. How do we prevent immigrants from adopting many of the risky health behaviours exhibited by the Canadian-born population?

- The health outcomes and health risks by ethnicity and immigrant status described in this report will be considered and explored through the work associated with Peel Public Health's "Serving an Ethnoculturally Diverse Community" infrastructure priority.
- We will continue to work with relevant agencies and/or academic institutions to further understand differences by immigrant status and ethnicity in life expectancy and mortality, ethnic-specific growth charts, chronic diseases risks and communicable diseases risks.
- Continued vigilance is required for the prevention and control of communicable diseases, particularly those that are endemic in the countries from which Peel's residents have immigrated.
- There are significant gaps in the data required to understand health outcomes and health behaviours by immigrant status and ethnicity. We will continue to advocate for improvements in the collection of immigrant and ethnocultural information in both internal and external data sources.
- We will continue to analyze data by immigrant status and ethnicity where this information is available.



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- C Ontario Live Birth Database, 2002-2006, INTELLIHealth Ontario, Ministry of Health and Long-Term Care
- D Breastfeeding Practices in the Region of Peel 2009/2010, Peel Public Health
- E1 Canadian Community Health Survey 2009/2010, Statistics Canada, Share File, Ontario Ministry of Health and Long-Term Care
- E2 Canadian Community Health Survey 2007/2008, Statistics Canada, Share File, Ontario Ministry of Health and Long-Term Care
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- G Cancer Incidence and Mortality 2007, Cancer Care Ontario – SEER\*Stat Release 7 – OCRIS (February 2009), released March 2009





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