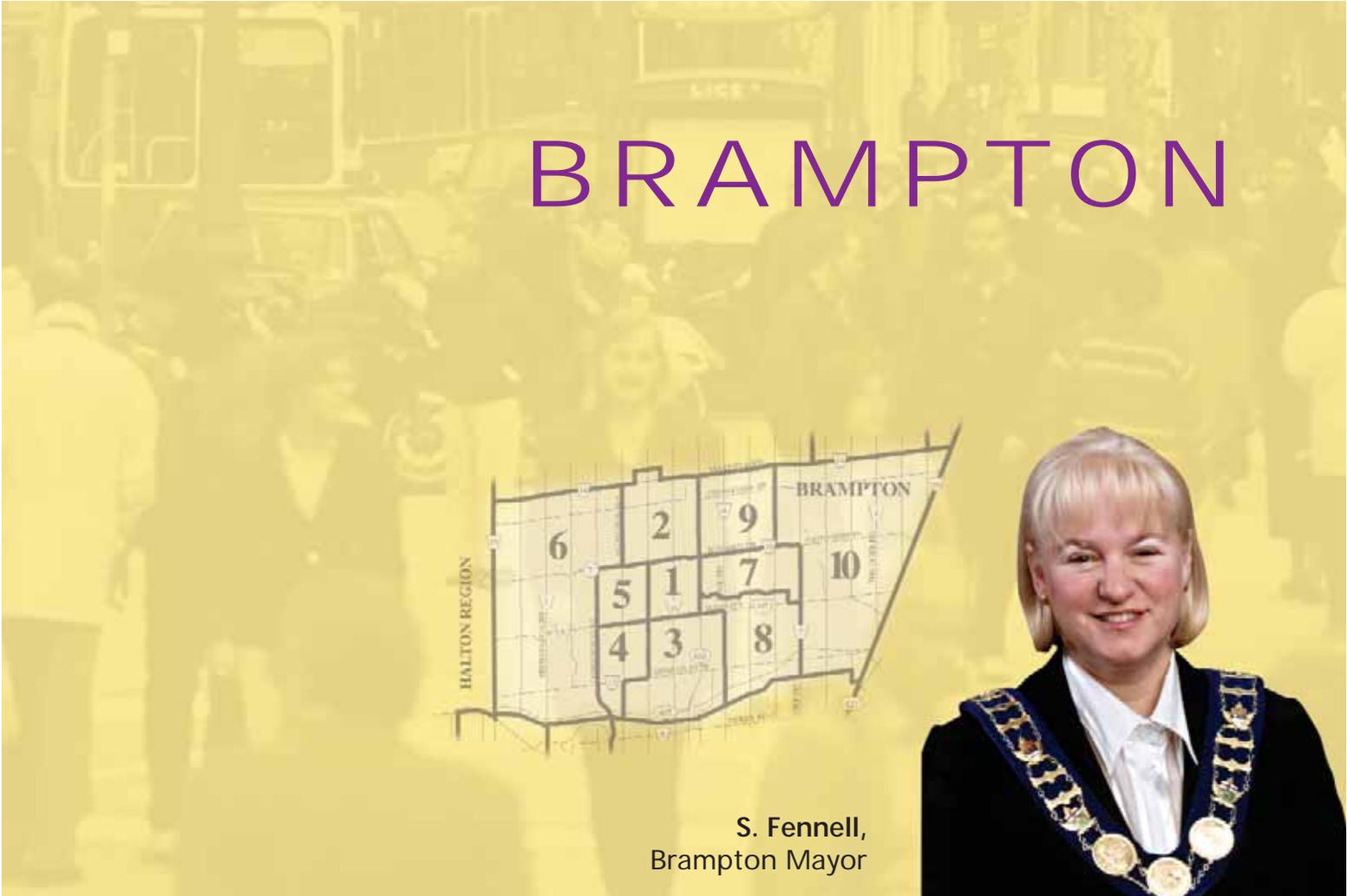




Neighbourhood HEALTH PROFILE 2005

A PEEL HEALTH STATUS REPORT



BRAMPTON



S. Fennell,
Brampton Mayor



 Region of Peel
Working for you
Public Health

Brampton

This report provides an overview of the health status of residents of Brampton, including:

- Socio-demographic facts
- Reported births
- Leading causes of death
- Leading causes of hospitalization
- Selected leading causes of injury-related hospitalizations
- Commonly reported communicable diseases

Where appropriate, comparisons are made between Brampton and Peel overall. For the purposes of this report, terms such as “significant”, “more likely”, and “less likely” are used only when differences in proportions have been found to be both statistically significant and where a difference of proportions of 5% or more is observed.

This report makes use of a wide variety of data to describe health in Brampton. A number of important data limitations are noted in the Data Sources, Methods and Limitations Section at the end of this report.

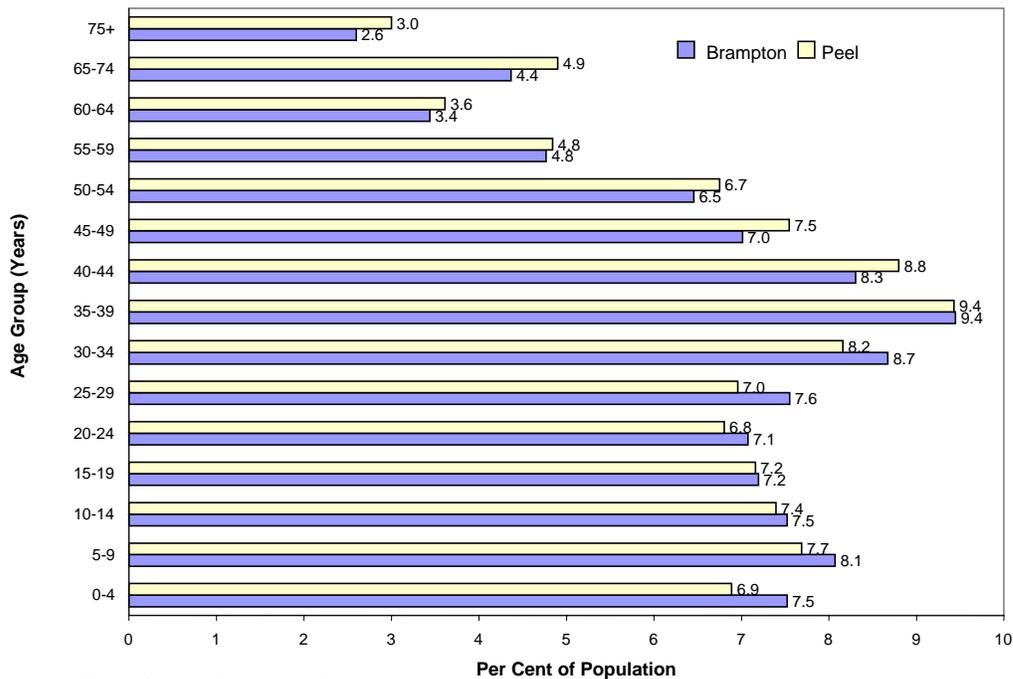


SOCIO-DEMOGRAPHIC FACTS

The Population

According to the 2001 Census, there were 325,425 people living in Brampton in 2001. This represents about 33% of the population of Peel. Figure 1 shows the population of Brampton, by age group, compared to Peel's population in 2001. In the city of Brampton, in 2001, there was a higher proportion of children aged 0 to 19 years and adults aged 20 to 39 years compared to Peel overall. In contrast, there were lower proportions of older adults (aged 40 years and older) in this city compared to Peel.

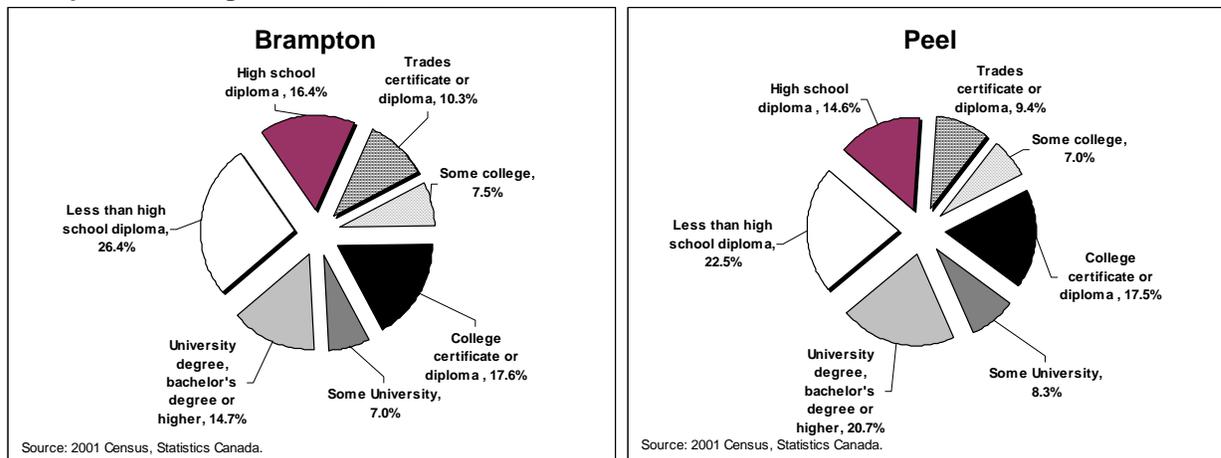
Figure 1: Proportion of Population by Age Group, Brampton and Region of Peel, 2001



Highest Level of Schooling Completed

Figure 2 shows the population, aged 20 years and older, in Brampton by highest level of schooling completed compared to Peel in 2001. Residents of this city were more likely to report their highest level of education as high school or less (43%) than were Peel residents overall (37%). Correspondingly, they were less likely to have attained a university bachelor’s degree or higher (15%) than were Peel residents (21%). Brampton residents attained similar levels of college education compared to Peel residents in this age group.

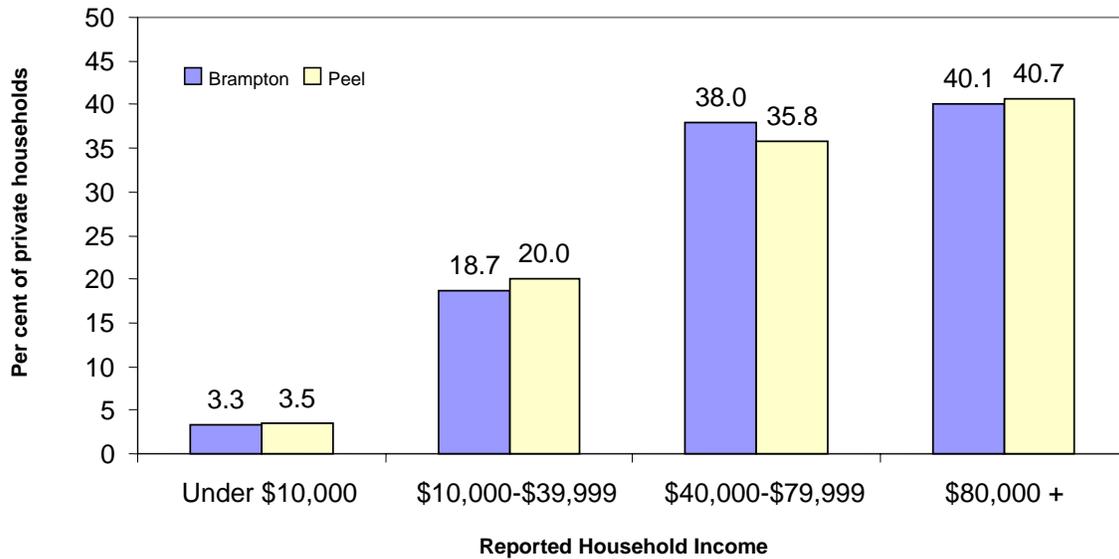
Figure 2: Proportion of Population Aged 20 Years and Older by Highest Level of Schooling Completed, Brampton and Region of Peel, 2001



Household Income

The distribution of household income for private households in Brampton compared to Peel in 2000 is shown in Figure 3. A private household refers to a person or a group of persons (other than foreign residents) who occupy a private dwelling and do not have a usual place of residence elsewhere in Canada. The total income for the majority (78%) of all private households in this city was \$40,000 or greater. There was a slightly higher proportion of households in the \$40,000-79,999 for Brampton compared to Peel overall.

Figure 3: Distribution of Household Income in Private Households, Brampton and Region of Peel, 2000



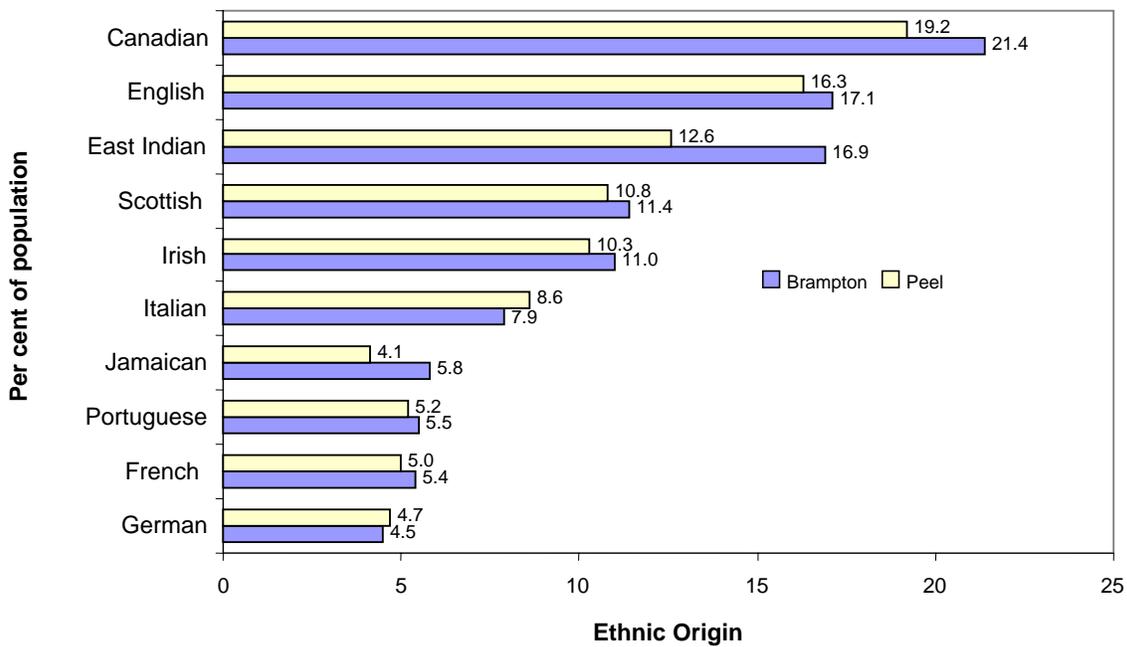
Source: 2001 Census, Statistics Canada.

Cultural Diversity

Ethnic Origin

As in the rest of Peel, residents living in Brampton belong to a diverse group of ethnic backgrounds. As part of the 2001 Census of Canada, a sample of Canadian residents was asked to identify which ethnic or cultural group(s) their ancestors belonged to. Eight of the top ten ethnic groups in this city were among the top ten ethnic groups in Peel overall, although the proportions of each within these geographic neighbourhoods differed. Brampton had a larger proportion of residents of Canadian, East Indian and Jamaican origins than Peel overall. Similar proportions of the remaining top 10 ethnic groups resided in Brampton compared to Peel (Figure 4).

Figure 4: Proportion of Population by Top Ten Ethnic Origins, Brampton and Region of Peel, 2001



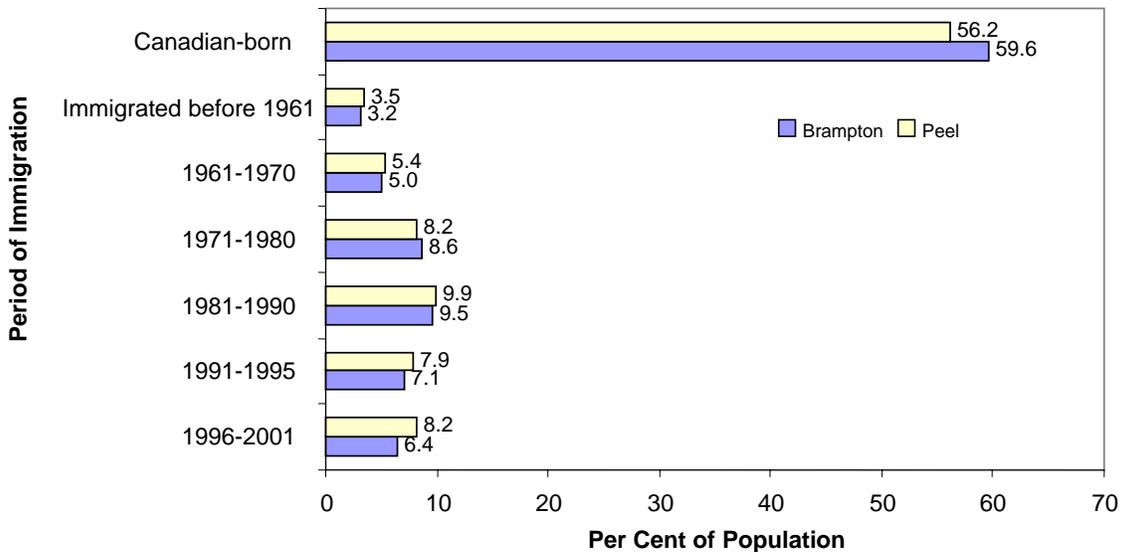
Source: 2001 Census, Statistics Canada.

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Immigration Status and Period of Immigration

In 2001, more than half (60%) of residents in Brampton were Canadian-born, whereas under half (40%) were immigrants to Canada (Figure 5). Brampton had a lower immigrant population than Peel overall (40% vs. 44%); however, the city had a similar proportion of the population who immigrated between 1996 and 2001 (6% vs. 8% respectively) as shown in Figure 5.

Figure 5: Population by Immigrant Status and Period of Immigration, Brampton and Region of Peel, 2001



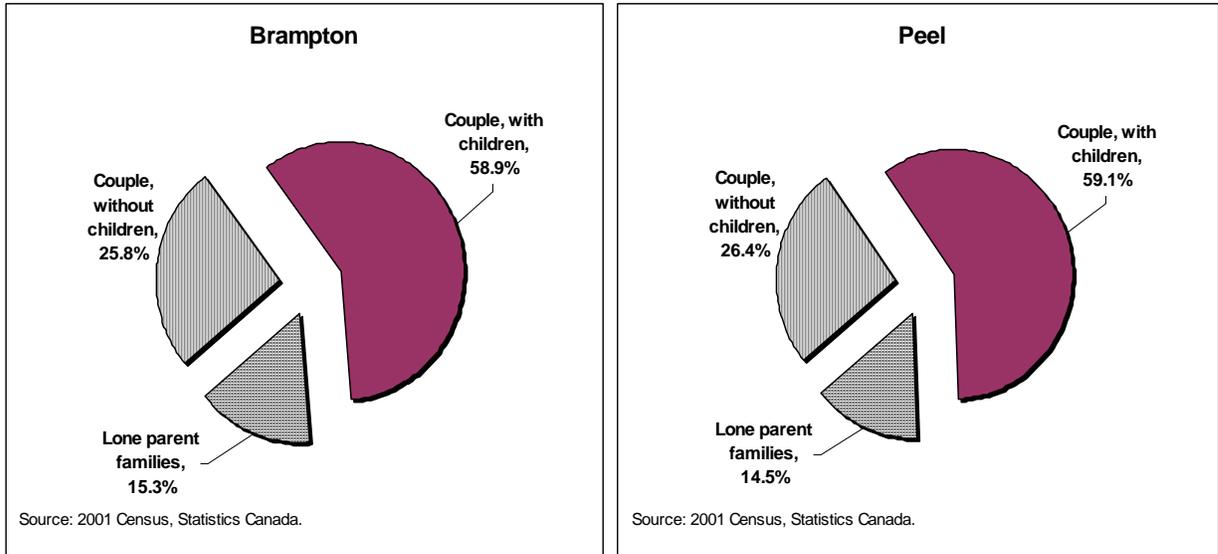
Note: Percentages may not add to 100% due to rounding.
Source: 2001 Census, Statistics Canada.

Families

During the 2001 census year, information was collected about different types of families, one of which was the “census family”. The census family was defined as a married couple (with or without children of either or both spouses), a couple living common-law (with or without children of either or both partners) or a lone parent of any marital status, with at least one child living in the same dwelling. A couple living common-law may be of the opposite or same sex.

Figure 6 shows the types of families living in the city of Brampton and in the Region of Peel in 2001. The majority of families in this city consisted of couples with children (59%) (Figure 6). Couples without children accounted for 26% of families, whereas single parent families made up 15% of families. When examining family types in Brampton compared to Peel, this city had a similar distribution of the types of families as Peel.

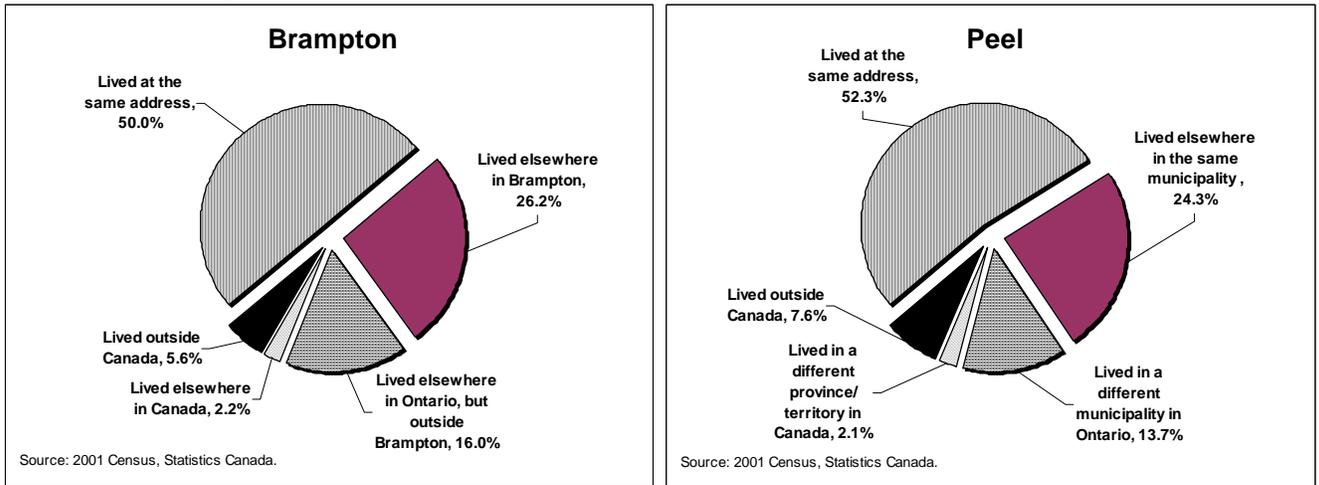
Figure 6: Proportion of Census Families by Family Type, Brampton and Region of Peel, 2001



Mobility – Where Residents Lived on May 15, 1996

The 2001 Census collected information on where residents lived ‘five years ago’, that is on May 15, 1996. Half of residents aged five years and older in Brampton lived at the same address five years before and 26% lived elsewhere in Brampton (Figure 7). The remainder of residents lived elsewhere in Ontario but outside of Brampton (16%), lived elsewhere in Canada (2%), or lived outside of Canada (6%). Similarly, 52% of Peel residents lived at the same address five years before. Overall, a similar proportion of residents of Brampton moved during the past five years compared to Peel residents overall.

Figure 7: Where Residents Lived on May 15, 1996, Total Population Aged Five Years and Older, Brampton and Region of Peel, 2001

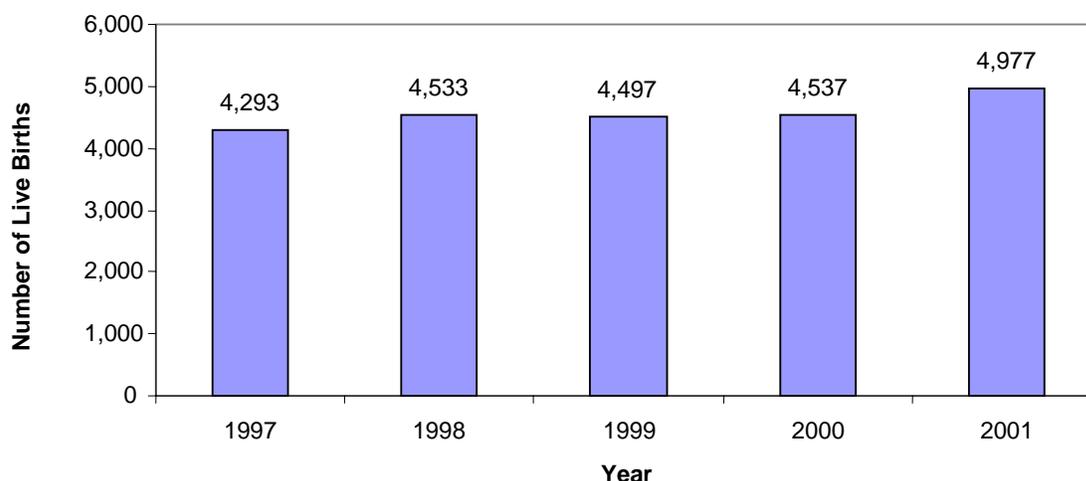


HEALTH FACTS

Births

In 2001, the most recent year for which official data are available, there were 4,977 live births in Brampton (Figure 8), which represented approximately 36% of the 13,654 live births in the Region of Peel. The number of live births in Brampton remained relatively stable between 1998 and 2000 and increased in 2001. Although an increase in the number of births was observed, it does not represent an increasing trend in birth rates. Any trend in rates would depend not only on the number of births per year, but also on the size of the population for the same time period. In Peel overall, the number of live births remained stable over the five-year period, with an average of 13,143 live births per year (data not shown).

Figure 8: Number of Live Births by Year, Brampton, 1997-2001



Source: Ontario Live Birth Database 1997-2001, HELPS (Health Planning System), Public Health Branch, Ontario Ministry of Health and Long-Term Care.

Birth weight is an important predictor of maternal and infant health. Infants born with low birth weight (weight less than 2,500 grams) tend to have an increased risk of dying and experience more developmental and physical health problems than babies born with normal birth weight.^{1,2} The singleton[†] low birth weight rate in Brampton in 2001 was 5.1 per 100 live births, compared to 4.9 per 100 live births in Peel overall.

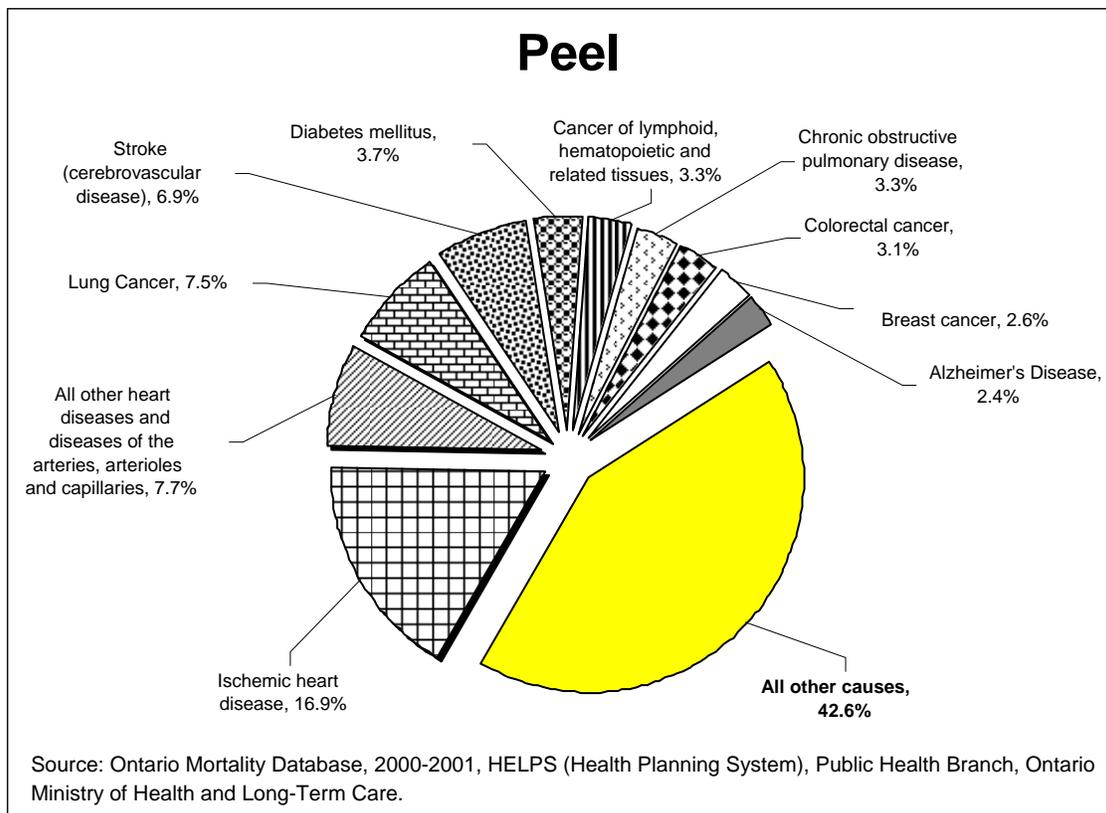
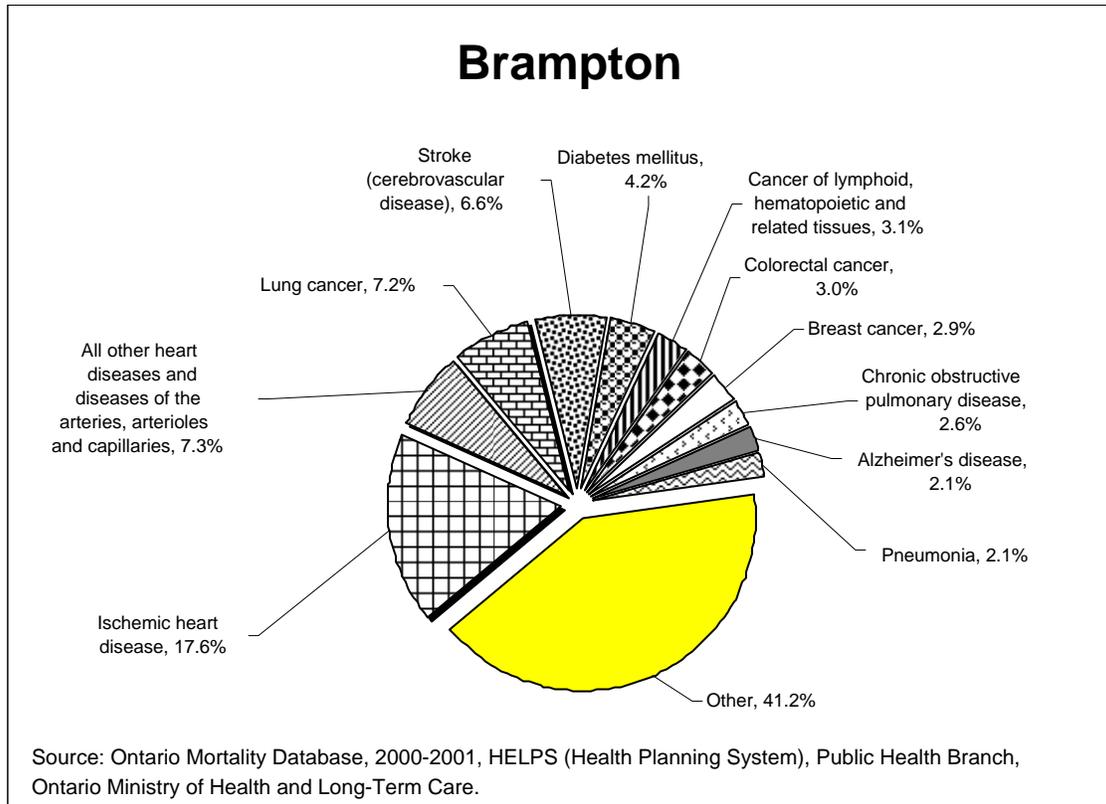
Deaths

Between 2000 and 2001, the most common causes of death in Brampton were ischemic heart disease, accounting for an estimated 18% of all deaths within the city; all other heart diseases and diseases of arteries, arterioles and capillaries (7%); lung cancer (7%); stroke (7%); and diabetes mellitus (4%) (Figure 9). There were no significant differences between the top causes found in this city compared with Peel. Please note that caution must be used when comparing these proportions, as higher proportions of deaths due to specific causes do not mean higher rates of deaths. The differences in proportions presented here do not account for differences in size and age distributions between populations.

[†] A singleton is a baby that is not a twin or other multiple birth.

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Figure 9: Top Causes of Mortality, Brampton and Region of Peel, 2000-2001 Combined



Communicable Diseases

The communicable diseases (CD) described herein, are among those that must be reported to the local Medical Officer of Health under the Health Protection and Promotion Act (HPPA). Table 1 depicts the top 10 reportable communicable diseases for Brampton during 2003. These were similar to the top 10 CD's reported among residents of the Region of Peel (data not shown).

Table 1: Top Ten Reportable Diseases, Brampton, 2003

Reportable Disease	Number of Cases Reported
Chlamydia (sexually transmitted)	852
Gonorrhea (sexually transmitted)	184
Influenza (vaccine-preventable)	141
Campylobacteriosis (foodborne)	114
Hepatitis C (bloodborne)	103
Giardiasis (waterborne / foodborne)	71
Salmonellosis (foodborne)	63
Amebiasis (waterborne / foodborne)	42
Tuberculosis (spread by close personal contact)	38
Encephalitis / Meningitis (spread by close personal contact)	15

Source: Reportable Disease Information System, Region of Peel Health Department, as of 06/08/2004.

Hospitalizations

Table 2 depicts the top ten causes of hospitalization among females in Brampton from 1997 to 2001 combined, and compares them to those of the Region of Peel. The proportions of hospitalizations for females in Brampton were similar to those in Peel.

Table 2: Top 10 Causes of Hospitalization in Females, Brampton and Region of Peel, 1997-2001 Combined

Cause of Hospitalization	Brampton #	Brampton %	Peel %
Labour, delivery and associated complications	21,040	25.3	24.9
Complications of pregnancy	4,724	5.7	5.2
Injury and poisoning	3,674	4.4	4.4
Ischemic heart disease	2,140	2.6	2.9
Benign neoplasms	1,914	2.3	2.0
All other heart disease and diseases of arteries, arterioles and capillaries	1,831	2.2	2.6
Chronic obstructive lung disease	1,669	2.0	1.9
Miscarriage, abortion and complications	1,397	1.7	1.5
Arthropathies	1,272	1.5	1.6
Pneumonia and influenza	1,268	1.5	1.5
Other	42,355	50.9	51.5

Source: Hospital In-Patient Data, 1997-2001, Provincial Health Planning Database (PHPDB), Extracted: January 13, 2004. Health Planning Branch, Ontario Ministry of Health and Long-Term Care.

Table 3 depicts the top ten causes of hospitalization among males in Brampton from 1997 to 2001 combined, and compares them to those of the Region of Peel. The proportions of hospitalizations for males in Brampton are similar to those in Peel.

Table 3: Top 10 Causes of Hospitalization in Males, Brampton and Region of Peel, 1997-2001 Combined

Cause of Hospitalization	Brampton #	Brampton %	Peel %
Injury and poisoning	4,393	7.7	7.3
Ischemic heart disease	4,177	7.4	8.3
All other heart disease and diseases of arteries, arterioles and capillaries	2,181	3.8	4.5
Chronic obstructive lung disease	2,094	3.7	3.2
Pneumonia and influenza	1,328	2.3	2.3
Arthropathies	945	1.7	1.9
Stroke (cerebrovascular disease)	912	1.6	1.8
Affective psychoses	566	1.0	1.2
Schizophrenia	540	1.0	1.0
Diabetes mellitus	536	0.9	0.8
Other	39,052	68.8	67.7

Source: Hospital In-Patient Data, 1997-2001, Provincial Health Planning Database (PHPDB), Extracted: January 13, 2004. Health Planning Branch, Ontario Ministry of Health and Long-Term Care.

Please note that caution must be used when comparing these proportions, as higher proportions of hospitalizations due to specific causes do not mean higher rates. The differences in proportions presented here do not account for differences in size and age distributions between populations.

Injuries

For the years 1997-2001 combined, injury and poisoning was the second leading cause of hospitalization in Peel residents overall. For this reason, this section of the report focuses on injuries in more detail.

In order to profile injuries of various levels of severity in a population, one must draw upon multiple sources of data. Injury-related data provided here are based only on hospitalizations, and do not represent injuries that are not severe enough to result in hospitalization or injury-deaths.

For the years 1997 to 2001 combined, the leading causes of injury-related hospitalizations in residents of Brampton included accidental falls which accounted for an average of 701 hospitalizations per year (Table 4); drugs causing adverse effects (an average of 447 per year); suicide and self-inflicted injury (an average of 305 per year); other accidents* (an average of 250 per year); and motor vehicle traffic crashes (an average of 203 per year). Over the five-year period, an average of 55 injury-related hospitalizations per year among these residents resulted from accidental poisonings; an average of 53 per year from assault; an average of 47 per year from road and air transport accidents; an average of 39 per year from late effects of accidental injury; and an average of 32 from environmental and natural factors. Although not shown, over the five-year period, similar proportions of hospitalizations among residents of this city were due to these top ten causes of injury compared to Peel residents.

*Other accidents include: those caused by being struck by, against or between objects or persons; those involving machinery, cutting or piercing objects, firearms, explosive materials, hot, caustic or corrosive materials, electric currents, or radiation; or those resulting from overexertion and strenuous movements or other environmental factors.

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Table 4: Top Ten Causes of Injury-Related Hospitalizations, Brampton, 1997-2001 Combined

Cause of Hospitalization	Average Annual Number
Accidental falls	701
Drugs causing adverse effects	447
Suicide and self-inflicted injury	305
Other accidents*	250
Motor vehicle traffic crashes	203
Accidental poisonings	55
Assault	53
Road and air transport accidents	47
Late effects of accidental injury	39
Environmental and natural factors	32

***Other accidents include:** those caused by being struck by, against or between objects or persons; those involving machinery, cutting or piercing objects, firearms, explosive materials, hot, caustic or corrosive materials, electric currents, or radiation; or those resulting from overexertion and strenuous movements or other environmental factors.

Source: Hospital In-Patient Data, 1997-2001, Provincial Health Planning Database (PHPDB), Extracted: January 13, 2004. Health Planning Branch, Ontario Ministry of Health and Long-Term Care.

Data Sources, Methods and Limitations

Data sources used in this report and limitations of the data are described below.

For the purposes of this report, terms such as “significant”, “more likely”, and “less likely” are used only when differences in proportions have been found to be both statistically significant at the 95% confidence level and where a difference of proportions of 5% or more is observed.

Census Data

2001 Census data used in this report were obtained from Semi-Custom Profiles from Statistics Canada.

Reportable Diseases

Since 1990, reportable diseases have been monitored through a public health surveillance system called the Reportable Disease Information System (RDIS). Data for Peel for 2003 were obtained from the Region of Peel Health Department and downloaded on June 8, 2004. It is noted that data for Peel may change in future years, especially for diseases such as tuberculosis (TB) which can take longer to be reported to the Health Department.

Hospitalizations

Hospitalization data in this report were collected by the Canadian Institute for Health Information (CIHI). Data for Peel from 1997 to 2001 were obtained through the Provincial Health Planning Database (PHPDB) initiative at the Ontario Ministry of Health and Long-Term Care. CIHI data were coded based on the International Classification of Diseases, 9th Revision (ICD-9) system of classifying causes of death and hospital stay. Injury-related hospitalizations included in this report are based on external causes of hospitalization for all admissions.

Vital Statistics

Mortality data in this report were collected by the Office of the Registrar General (of Ontario). Data for Peel from 2000 to 2001 were obtained through the Health Planning System (HELPS) initiative of the Ontario Ministry of Health and Long-Term Care. Death data for the year 2000 were coded based on the International Classification of Diseases, 9th Revision (ICD-9) system of classifying causes of death and hospital stay, whereas 2001 data were based on the ICD-10 system. Birth Data were obtained from the Live Birth data file also distributed to Peel Health through the HELPS. This report was prepared using 1997 to 2001 live birth data.

References

1. Chen J, Millar WJ. Birth outcome, the social environment and child health. *Health Rep* 1999; 10(4): 57-67.
2. Health Canada. *Measuring Up: A Health Surveillance Update on Canadian Children and Youth—Infant Mortality* [monograph on the Internet]. 1999 [cited 2004 Oct 12]. Available from: http://www.hc-sc.gc.ca/hpb/lcdc/brch/measuring/mu_c_e.html

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