

DATA SOURCES AND LIMITATIONS

Numerous data sources were used in this report and are described in this section. For additional details about the methods of analysis used in each of the chapters of this report, please refer to Chapter 13 – Data Methods.

Census Data

The Census is conducted every five years and data are provided by Statistics Canada. While the most recent Census was in May, 2011, not all data from this Census have been released. As a result, with the exception of the age and sex population counts for Peel, we have continued to refer to 2006 Census data.

Limitations:

- The Census undercounts some groups, such as the homeless, young adults and Aboriginal people on reserves.
- Comparison between censuses is affected by changes in question wording and in the definition of the population concerned.

Canadian Community Health Survey

The Canadian Community Health Survey (CCHS) is a Statistics Canada survey aimed at providing health information at the provincial, regional and health unit levels. The target population of the CCHS includes household residents in all provinces and territories, with the principal exclusion of populations on Indian Reserves, Canadian Forces Bases, and those living in institutions or more remote areas. There is one randomly selected respondent per household, with an over-sampling of youths resulting in a second member of certain households being interviewed. The CCHS sample is primarily a selection of dwellings drawn from the Labour Force Survey area sampling frame. For the regional level survey, the sample is supplemented with a random digit-dialling sample in some health regions.

The interview for the health region-level survey includes common content to be asked of all sample units, optional content determined by each health region from a predefined list of questionnaire modules, and socioeconomic and demographic content. A focused provincial-level survey consists of some general health content and one focus content topic per cycle. Focus content is intended to be an in-depth treatment of topical issues.

Prior to 2007, data were collected every two years on an annual period. Data presented for 2000/2001, 2003 and 2005 reflect this data collection method. Starting in 2007, major changes were made to the survey design in order to improve its effectiveness and flexibility through data collection on an ongoing basis. As a result, data collection now occurs every year, but for Peel a “cycle” is still considered to be a two-year period (e.g., 2007/2008, 2009/2010).

Data collection for the CCHS is done by either computer assisted personal or telephone interviewing for the area sample or telephone interviewing for the random digit-dialling sample. Data are weighted to reflect the population of Peel.

Limitations:

- Depending upon the question, data may be subject to recall bias, social desirability bias and errors from proxy reporting.
- Individuals and/or households without a telephone would be excluded from the sampling frame.
- Some analyses are limited by sample size.

Peel Student Health Survey

In March 2011, Peel Public Health conducted the Student Health Survey of students in the region of Peel between grades 7 and 12 in partnership with the Dufferin-Peel Catholic District School Board and the Peel District School Board. The survey consisted of a self-completed questionnaire completed by students within randomly selected schools and classes in Peel. The survey captured information on a variety of topics, including eating habits, physical activity, substance use, mental health, bullying, injury and sun safety. Height and weight measurements were taken by a public health nurse for each participating student. In addition, a physical fitness assessment was conducted by trained assessors (for Grade 9 students only) and an oral health assessment was completed by public health dental hygienists (for grades 10 and 12 only). The final sample included approximately 8,500 students from 37 elementary schools and 23 secondary schools in Peel.

Limitations

- Data are not weighted to reflect the student population in Peel.
- Excluded by design are student dropouts and students enrolled in French schools and private schools.

- Results should be interpreted with caution as self-reported survey data have the potential for recall error and providing socially desirable answers.
- Due to the cross-sectional nature of the data, causal relationships cannot be inferred.

Cancer Incidence

The Ontario Cancer Registry (OCR), housed at Cancer Care Ontario, is a computerized database of information on all Ontario residents who have been newly diagnosed with cancer (incidence) or who have died of cancer (mortality). All types of cancer are registered, except non-melanoma skin cancer. The system is passive and relies predominantly on administrative data. The Registry is compiled by linking administrative data, clinical and demographic data from four major data sources:

- Hospital discharge and ambulatory care records with cancer diagnoses in the Canadian Institute of Health Information (CIHI), Discharge Abstract Database (DAD) and National Ambulatory Care Reporting System (NACRS),
- Pathology reports with any mention of cancer from hospitals and private laboratories,
- Records from Regional Cancer Centres or Princess Margaret Hospital, and
- Ontario death certificates with cancer as the underlying cause of death.

All cancer-related data on these records are reviewed by an electronic system of medical logic to produce consolidated information about the cancer diagnosis. Cancer diagnoses are classified according to the International Classification of Diseases for Oncology, 3rd edition (ICDO-3).

Limitations

- Currently, this data source only provides information at the Census Division (CD) or Public Health Unit (PHU) level of geography.
- The population data source is not as current as that used for other analyses.

Mortality Data

The Office of the Registrar General obtains information about mortality from death certificates, which are completed by physicians. All deaths within Ontario are registered in the office of the division registrar within which the death occurs. A Statement of Death must be filed with a division registrar before a Burial Permit can be issued.

Limitations:

- Co-morbidity contributes to uncertainty to classifying the underlying cause of death.
- Determining the true cause of death may be influenced by the social or legal conditions surrounding the death and by the level of medical investigation (e.g., AIDS, suicide).

Hospital Discharge Data

A hospital separation is a discharge from a hospital due to death, discharge home or transfer to another facility. Hospitalization data provide only a crude measure of the condition being quantified for the following reasons: a person may be hospitalized several times for the same disease or injury event, or may be discharged from more than one hospital (when transferred) for the same injury event or may not seek care at a hospital.

Limitations

- Co-morbidity contributes uncertainty to classifying the most responsible diagnosis.
- Data are influenced by factors that are unrelated to health status such as availability and accessibility of care, and administrative policies and procedures. This may influence comparisons between areas and over time.

Better Outcomes Registry Network (BORN)

BORN-Niday data includes detailed information on maternal, infant and perinatal care characteristics. Starting in 2009, the former Niday database captured data from all hospitals in Ontario. Prior to 2007, Headwaters Health Care Centre in Orangeville did not participate in Niday, therefore Peel mothers who delivered there were not captured. This means the number of births to Peel mothers prior to 2007 may have been an underestimate of the true number of births.

Limitations

- As the data are entered by hospital staff or retrieved from the hospital's database electronically, estimates may be an under-representation of the true prevalence of the occurrence in the population.
- For some variables (e.g., smoking during pregnancy, intention to breastfeed), some women may provide the socially desirable response to avoid perceived negative consequences or feelings of being judged by their health care provider.