

DATA SOURCES AND METHODS

The communicable diseases contained in this report are required to be reported to the local Medical Officer of Health under the Health Protection and Promotion Act (HPPA). Since 1990, reportable diseases have been monitored through a public health surveillance system called the Reportable Diseases Information System (RDIS). Data for Peel for the years 1995 to 2004 were collected by Peel Public Health. Data for Ontario for the same time period were obtained from the Public Health Branch of the Ontario Ministry of Health and Long-Term Care. Only selected reportable diseases were included in this report. A more complete listing of reportable diseases in Ontario can be found in Appendix tables 1 through 4.

Comparative data for Ontario were provided in the figures and appendices when available and appropriate. Data for the year 2004 were the latest that were available for Peel and Ontario. It is recognized that data for the Region of Peel and Ontario may change in future years when additional information becomes available, especially for some diseases such as tuberculosis which can take longer to be reported to the Peel Public Health. The Peel-specific Reportable Disease Information System (RDIS) data were downloaded on April 11, 2005. The Ontario RDIS data provided by the Ministry of Health and Long-Term Care were downloaded on April 14, 2005. Peel data for West Nile Virus were taken from the *2004 West Nile Virus in the Region of Peel Report*. West Nile Virus has been reported on RDIS since January 2003. The cyclosporiasis data were based on manual counts by Peel Public Health Environmental Health Staff before 2003. Since January 2003, cyclosporiasis and invasive streptococcus pneumoniae infection also have become reportable on RDIS. Severe Acute Respiratory Syndrome (SARS) data for Peel and Ontario were taken from data reported to the Region and the Province during the outbreak of spring 2003.

Age can be a factor in whether a person acquires a disease and in the progression of that disease. When comparing two populations, differences in the respective age distributions can be controlled by using a process called "age-standardization". This minimizes the effect of differences in age distributions between populations so that observed differences can then be attributed to factors other than age.

In this report, direct age-standardization was used for reporting total rates of most of the diseases that occurred in Peel. For the more commonly reported diseases such as chlamydia or salmonellosis, age-specific rates were provided for 2004. In some instances, sex-specific data were provided. For less frequently reported diseases (those with low annual case numbers) such as hepatitis B and syphilis, age and sex-specific rates were based on average annual rates for the Region of Peel for the years 1995 to 2004.

For some diseases such as pertussis, influenza, salmonellosis, meningococcal disease, and group A streptococcal infections, it is important to look at incidence in children less than one year old since this age group experiences markedly higher rates of these diseases. The Population Estimates from 1995 to 2004 for single-year age groups were downloaded from the Provincial Health Planning Database (PHPDB) on March 30, 2005 and were used to calculate age-specific rates in Peel residents in the report.

Age-standardization was not used for acquired immunodeficiency syndrome (AIDS) and human immunodeficiency virus (HIV) because these conditions primarily affect more men than women. Moreover, age-standardized rates were not used for Severe Acute Respiratory Syndrome (SARS) and West Nile Virus (WNV) because the age of cases was not known at the provincial level. In all these instances, crude incidence rates were used as indicated.

Incidence rates were age-standardized using the 1991 Canadian population provided by Statistics Canada, Population Estimates and Projection and Distributed by the Ontario Ministry of Health and Long-Term Care.