

EXECUTIVE SUMMARY

The *Communicable Disease 1995-2004* report is the latest in a series of annual reports on communicable diseases in the Region of Peel based on the information provided from the mandated reporting of specific “Reportable Diseases” to the local Medical Officer of Health by health care professionals, hospitals, laboratories and schools, as outlined by the Health Protection and Promotion Act (HPPA), for the ten years ending in 2004.

Communicable diseases are illnesses caused by organisms or the toxins they produce. They are spread directly from an infected person, animal or environmental source. Sometimes transmission occurs indirectly by contaminated animals and objects.

The *Communicable Disease 1995-2004* report provides data on a selected list of communicable diseases that are organized by mode of transmission (sexually transmitted and bloodborne infections; vaccine-preventable diseases; diseases spread by food and water; diseases spread by close personal contact; and diseases spread by insects). In addition, it has an Appendix section providing data on the number of cases and incidence rates of all communicable diseases reported in Peel along with corresponding data for Ontario.

The report is intended to be a resource for individuals and organizations concerned with communicable diseases. Further information on communicable diseases in Peel may be obtained by contacting Peel Public health.

The key findings of the report are summarized below.

Sexually Transmitted Infections (STI) and Bloodborne Diseases

In Peel, the incidence of Acquired Immunodeficiency Syndrome (AIDS) has remained low and stable since 1997 (1.4 cases per 100,000 or less). Any variability from year to year may be due to the small number of cases.

The incidence of chlamydia, the most common STI in Peel, increased approximately 73% from 1996 to 2004 (100 to 173 cases per 100,000 population). The incidence of gonorrhoea in Peel has remained stable from 2000 to 2004 (approximately 30 to 33 cases per 100,000). The incidence rate of chlamydia and gonorrhoea was highest in those 15 to 24 years of age.

The incidence of syphilis has increased considerably over the last two years (0.9 per 100,000 in 2003 and 1.7 per 100,000 in 2004). A similar trend has been observed in the Greater Toronto Area.

In Peel, the incidence of hepatitis B has been low since 1997 (approximately one case per 100,000 or less). The incidence of hepatitis C has steadily decreased since 1995. The incidence was highest for hepatitis B in those aged 20 to 29 and highest for hepatitis C in those aged 40 to 49 years old.

Vaccine Preventable Diseases

The incidence of most vaccine preventable diseases has decreased over the past ten years. Six cases of measles have occurred since a second dose of measles vaccine was made mandatory in 1996. The incidence of mumps and rubella has also decreased since 1996, when a second dose of Measles/Mumps/Rubella conjugate vaccine (MMR) was added to the routine childhood immunization schedule. The incidence of influenza during the 2003/2004 season was the highest among the past ten seasons. The incidence of influenza was highest in those aged less than one year, followed by those aged 1 to 4 and those greater than 60 years old.

Diseases Spread by Food and Water

The incidence of most diseases spread by food and water was generally higher for Peel than Ontario and was highest in those under five years of age. There has been a decreasing trend in rates of campylobacteriosis, giardiasis, hepatitis A and yersiniosis in Peel and Ontario over the last ten years (1995 to 2004).

Diseases Spread by Close Personal Contact

On average, less than ten cases of invasive meningococcal disease were reported in Peel each year. The incidence was highest in those less than one year of age followed by those 1 to 4 years and 15 to 19 years old. The incidence of reported invasive group A streptococcal (GAS) infection has decreased since 2002, after demonstrating an upward trend from 1995 to 2001. Improved reporting starting in 1996 partially explains this increase. The incidence of tuberculosis has generally been stable in Peel over the last ten years and has been found to be more prevalent in those aged 60 or older.

* Dr. Kim Barker. "Memorandum to all Medical Officers of Health and STD Program Managers Re: Increasing Syphilis cases in Ontario." Public Health Branch, Ontario Ministry of Health and Long-Term Care. April 8, 2004.

Diseases Spread by Insects

Malaria is not indigenous to Canada. Cases seen in Peel are exclusively travel-related. Each year approximately 2 to 6 cases of malaria per 100,000 population were reported, with the exception of 1996 and 1997. In these years, the incidence of malaria in Peel was much higher (16.4 and 15.6 cases per 100,000 respectively), which was likely due to travel to and immigration from the Punjab, India where an outbreak of malaria was occurring at the time. The incidence of malaria has remained low and stable since.

Human cases of locally-acquired West Nile Virus (WNV) occurred for the first time in 2002, with a total of 37 confirmed and 20 probable cases in Peel. Case definitions and laboratory testing methods have changed since 2003, which makes direct comparisons between the years more difficult. Nevertheless, there were only ten Peel residents who had laboratory evidence of WNV infection in 2003 and none in 2004.