

STAFF REPORT INFORMATION ONLY

Communicable Diseases in Toronto 2006

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To:	Board of Health
From:	Dr. David McKeown, Medical Officer of Health
Wards:	All
Reference Number:	

SUMMARY

Communicable Diseases in Toronto 2006 describes trends in reportable communicable diseases for the City of Toronto. The data in this report provide updates to trends described in previous annual reports and highlight significant considerations for communicable disease control in Toronto.

In order to make the data available as soon as possible, disease-specific sections of this report have been posted on the Toronto Public Health (TPH) website as the information became available. This composite annual report provides an overall picture of communicable disease trends for Toronto, identifying areas of progress from the past and areas for further improvement. Ongoing vigilance in monitoring, detecting and controlling communicable diseases in Toronto continues to be a key role for Toronto Public Health.

Financial Impact

There are no financial implications stemming directly from this report.

ISSUE BACKGROUND

The attached report entitled "Communicable Diseases in Toronto 2006" (see Appendix 1) summarizes 2006 data for diseases designated as "reportable" and "communicable" under the Health Protection and Promotion Act (HPPA) and associated regulations. Laboratories, physicians, hospitals, schools, and long term care homes are required to report communicable diseases to the Medical Officer of Health so that the appropriate public health action may be taken.

Surveillance and case management data were collected through routine case and outbreak investigations and stored and maintained in the integrated Public Health Information System (iPHIS), a new provincial system which was adopted at the end of 2005.

COMMENTS

Communicable Diseases in Toronto 2006 provides an update to the four previous annual reports on communicable diseases in Toronto, focusing on trends for 2006. This information was already posted to the Toronto Public Health (TPH) website by disease-specific section and is compiled annually for a more complete picture of communicable diseases in Toronto. The report also complements weekly and monthly communicable disease bulletins which are posted on the TPH website, to allow a broader understanding of how communicable diseases affect particular subpopulations in Toronto and how trends have recently evolved. Comparisons of Toronto data with the rest of Ontario and Canada also highlight the ways in which Toronto is uniquely affected by the burden of communicable diseases. These data continue to inform the ongoing development of Toronto Public Health's communicable disease prevention and control strategies.

The most notable communicable disease highlights for 2006 in Toronto include:

- 1. An outbreak of hepatitis B (HBV) and hepatitis C (HCV) was detected in May 2006 among a population of patients receiving dialysis treatment at a hospital-based hemodialysis program. The investigation detected five cases of HBV, three (60%) of which were co-infected with HCV and an additional four cases of hepatitis C infection alone. Genetic testing showed that all cases of HBV and four of the HCV cases were a match to a previously identified infectious case (a returning traveller who had received dialysis while on vacation in SE Asia). In these cases, HBV and HCV were likely transmitted during breaches in infection control.
- 2. A long term care home was the site of an outbreak that involved five cases of HBV. All five cases were genotypically identical and therefore likely shared a common source. The most probable exposure may have involved an invasive medical procedure (blood sugar monitoring), however a definitive source for the outbreak was not identified.
- 3. In the late summer and fall of 2006, TPH investigated a community-based outbreak of hepatitis A in the west region of Toronto. A total of 23 cases were identified, associated with six households. Children between 5 and 14 years of age accounted for 65% of cases and all but one case was under 19 years of age. TPH conducted six vaccination clinics in the neighbourhood and immunized over 1,400 individuals.
- 4. Two adult cases of botulism were reported and linked to an outbreak associated with the consumption of carrot juice that was distributed across North America. There were four additional cases in the United States.

- 5. The incidence rate of Chlamydia increased by 5% overall, with a 7% increase among females. The increase was observed in females across all age groups between 20 and 50 years. Some of this increase may be due to a social marketing campaign initiated by TPH in October 2006 which may have resulted in increased testing of women ages 15-24 years.
- 6. Following three years of relatively stable rates, both the numbers of reported HIV infections and the incidence rate of HIV in Toronto increased in 2006. Although HIV continues to be most common among men who have sex with men, new HIV diagnoses among people from HIV-endemic countries increased 50% (from 104 cases in 2005 to 156 cases in 2006); some of this increase appears to be due to increased HIV positive immigrant/refugee arrivals during the AIDS conference held in Toronto in August 2006. Females experienced the highest proportional increase (49%) in the reported rates of HIV, particularly among those aged 40 to 44 years.
- 7. Recently, Vancouver, Edmonton and Calgary experienced outbreaks of invasive Streptococcus pneumoniae (ISP) serotype 5 disease, predominantly among homeless or under household individuals, many of whom were illicit drug users and/or had chronic underlying medical conditions. Since Toronto has a significant high risk population and because there may be migration of the homeless and under housed across the country, TPH proactively worked with local service providers to enhance surveillance efforts and undertake an immunization campaign, which occurred in early 2007. To date, no cases of ISP serotype 5 have been detected in Toronto.
- 8. For the first time in its five-year surveillance history, Toronto's rate of West Nile Virus (WNV) was lower than that reported for the rest of Ontario and Canada. There were six cases reported and no related deaths.
- 9. There were no cases of mumps reported in 2006 for the first time since 1996.
- 10. The number of cryptosporidiosis cases reported in 2006 (85) was the highest since this disease became reportable in 1996. Toronto's cases and the increased numbers observed in five other Ontario health units were investigated epidemiologically, but no common exposure could be found to explain this increase.

The full report is posted on the TPH website, and its availability will be announced through letters to the Ministry of Health and Long Term Care, Public Health Agency of Canada, Ontario Public Health Units, Toronto hospitals, laboratories, school boards and universities, the Association of Local Public Health Agencies (ALPHA), the Association of Public Health Epidemiologists in Ontario (APHEO), the Association of Supervisors of Public Health Inspectors of Ontario (ASPHIO), the Institute for Clinical Evaluative Sciences (ICES) and the Ontario Public Health Association (OPHA).

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SIGNATURE

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ATTACHMENTS

Appendix 1: Communicable Diseases in Toronto 2006