

Public Health in Toronto, 2004 Program Profiles and Indicators



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Introduction

Toronto Public Health (TPH) works to enhance the health of people who live, work and play in Toronto. *Public Health in Toronto, 2004* summarizes programs and activities and connects these with related health indicators. Its purpose is to provide an overview of public health and to serve as a resource for TPH program managers and staff in planning and evaluating programs.

The provincial Mandatory Health Programs and Services Guidelines (MHPSG)¹, under the *Health Protection and Promotion Act*, set out minimum requirements for public health programs and services targeted at disease prevention, health promotion and health protection. In addition TPH delivers programs and services in response to local needs and City Council and Board of Health directives.

The MHPSG form the basis for program planning in Ontario public health units. Using this framework, TPH programs are grouped under six major headings or “clusters”:

- Chronic Disease, Injury Prevention and Substance Abuse Prevention
- Family Health
- Dental Health
- Communicable Disease Control and Sexual Health
- Health and the Environment
- Animal Services and Rabies Control

TPH programs are delivered through the following service areas:

- Healthy Living
- Healthy Families
- Dental and Oral Health
- Communicable Disease Control
- Healthy Environments
- Planning and Policy
- Support Services

In some cases, program activities may be delivered across a number of service areas. For example, the Tobacco Use Prevention and Control Program includes tobacco control activities that are delivered through Healthy Environments services, smoking cessation activities through Healthy Living services, and policy development activities supporting smoke-free environments through Planning & Policy services.

Program Profiles and Indicators

Public Health in Toronto, 2004 profiles 21 programs within the six clusters identified above. Each program profile in the report includes the goals, selected health indicators and activities linked to the indicators. The goals of each program were developed by TPH, taking into consideration the provincial MHPSG goals and recent TPH program redesign processes. Presenting health indicators and related program activities together reinforces the connection between program service delivery and the health of the population.

Health indicators illustrate changes over time and help to identify populations and communities of concern. Timely and accurate indicators also help to determine goals and objectives and to measure performance or progress toward the achievement of these objectives. This evidence helps to inform budget deliberations and guide the allocation of resources to ensure effective program delivery. Indicators also help determine the extent to which TPH complies with the provincial MHPSG.

The set of indicators used in this report was selected initially from the list of *Core Indicators for Public Health in Ontario*.² These indicators link to objectives outlined in the MHPSG and were produced through the collaborative efforts of public health epidemiologists in Ontario. The availability of data and its relevance to TPH programs influenced the final selection of indicators. Provincial data is used for comparative purposes where available and appropriate.

For some programs, there are information gaps and few health indicators. TPH is working to fill these gaps. For example, TPH is producing health status reports on attitudes and behaviours using data collected through the Rapid Risk Factor Surveillance System, a series of ongoing monthly surveys conducted by Ontario Public Health Units. In the area of children's health, a new perinatal information system recently began reporting more timely and comprehensive data on Toronto birth outcomes and maternal risk factors.

Public Health in Toronto, 2004 brings together selected health indicators and related activities for public health programs and services. This report is part of TPH's strategy to "make information matter" and ensure that health information is used by public health decision-makers to improve health in Toronto.

Chronic Disease, Injury Prevention, and Substance Abuse Prevention Program Cluster

Heart Health Program

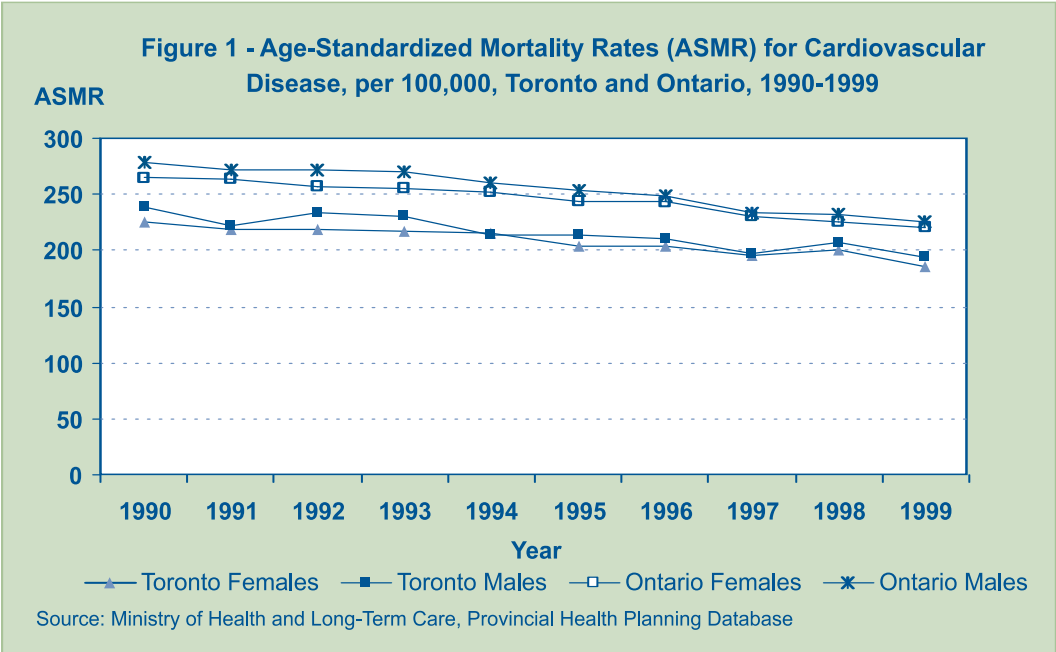
Goals:

To reduce the incidence and prevalence of the modifiable risk factors for cardiovascular disease, such as smoking, physical inactivity and unhealthy eating.

To make Toronto a dynamic and diverse community that supports and takes action for heart healthy living.

Selected Heart Health Indicators:

Cardiovascular Disease (CVD). Cardiovascular disease refers to all conditions and diseases involving the heart and blood vessels. Toronto CVD mortality rates were lower than Ontario rates for men and women from 1990 to 1999. Rates in both Toronto and Ontario decreased throughout the 1990s (Figure 1).



In 2000, Canada began using the tenth revision of the International Classification of Diseases and Related Health Problems (ICD-10) to classify mortality data. ICD-10 coding differs from the previous coding method, so the 2000 data cannot be compared with previous years' data. Using the new system, the CVD mortality rate was 188 per 100,000 for men and 177 per 100,000 for women in Toronto in 2000. The Ontario CVD mortality rate was 215 per 100,000 for men and 212 per 100,000 for women in 2000.

Ischemic heart disease (IHD) is a common type of heart disease. IHD includes any condition in which heart muscle is damaged or works inefficiently because of an absence or relative deficiency of blood supply. IHD mortality rates in Toronto and Ontario have been decreasing since the late 1980s. Toronto mortality rates are consistently lower than Ontario's. Ischemic heart disease mortality rates are higher among males compared to females. For example, in 2000, the rate was 119 per 100,000 for males, compared to 93 per 100,000 for females in Toronto (calculated using ICD-10).

Indicators for the modifiable risk factors smoking, physical inactivity, and unhealthy eating can be found in the Tobacco Use Prevention and Control, Physical Activity Promotion, and Nutrition Promotion sections of this report, respectively.

Selected Heart Health Program Activities:

As part of a national strategy to impact the dramatic effects of heart disease, Toronto was one of 37 provincial sites of the Ontario Heart Health Project – Phase One (1997-2003). This was a comprehensive community health initiative based on a community partnership model.

The Toronto Heart Health Partnership has identified four priority populations for future heart health programs and services: children, women, youth and diverse and marginalized groups. Heart health program proposals were solicited from a range of community partner organizations. Thirty-three programs were selected for core funding in 2004/2005. A sample of the TPH programs that were funded include:

Community Partnership Initiatives, which provide start-up funds to smaller local projects across the city. Communities, local agencies and non-profit groups are encouraged to apply. In 2004/2005, 22 projects will receive up to \$2,500 per year for their unique heart health programming.

Eat Smart! (Ontario's Healthy Restaurant Program) identifies and promotes restaurants that meet certain high standards in food safety, non-smoking seating and healthy food choices.

The Multicultural Heart Health Partnership is a group of partners working to address the accessibility of diverse communities to culturally and linguistically appropriate heart health information, resources and services. In 2003, the group successfully launched the "Heart Health Tool Kit for Diverse Communities", a resource for facilitators working with both multi-cultural and ethno-specific communities. As a program enhancement, a 20-minute video was produced to accompany the Tool Kit in the community.

Toronto Schools on the Move/ Physical Activity Action Planning are separate initiatives being implemented by the Toronto District School Board and the Toronto Catholic District School Board. Support is provided by TPH to participating schools to help them develop action plans that facilitate the establishment of a healthy, active school environment.

Love Your Heart! Daycare Tool Kit promotes heart health through local daycares. The resource is a train-the-trainer tool kit and training event that supports childcare providers in promoting heart healthy messages with children aged 3-12. This initiative offers heart health workshops to Early Childhood Education (ECE) students at local community colleges. Over 3,000 childcare staff, and 350 ECE students, have been trained with Phase One funding.



Physical Activity Promotion Program

Goals:

To promote health by increasing physical activity.

To reduce premature mortality and morbidity from preventable chronic diseases associated with physical activity.

Selected Physical Activity Indicators:

Low rates of physical activity can contribute to diseases such as diabetes, heart disease, and osteoarthritis. In 2000/2001, according to the Canadian Community Health Survey, 15% of Toronto residents 12 years of age and over met the definition of physically active, based on the frequency, intensity, and duration of leisure-time physical activity. This was the second-lowest rate among the 37 health unit areas in the province. Rates in the province ranged from 14% to 33%, with an overall rate of 21%.³ In 2003, the “physically active” rate was 22% in Toronto, and 26% in Ontario.⁴ Although the 2003 Toronto rate is an improvement from 2000/2001, it still ranks third last among health unit areas in the province.

Toronto has the highest proportion of the workforce in sedentary jobs, with 30% reporting jobs where they “usually sit during the day and don’t walk around very much.” This compares to an overall Ontario rate of sedentary jobs of 25%. Toronto ranked in the bottom third of areas in Ontario for reports of non-leisure-time walking (i.e. walking to work, school, or while doing errands), with only 20% of the population reporting 6 or more hours of non-leisure-time walking per week (CCHS 2000/2001).

A recent survey by TPH asked parents how often in a typical week they participated in physical activity such as walking and swimming with their child 0-6 years of age. Thirteen percent reported 0-1 times, 30% reported 2-3 times, and 58% reported 4 or more times.⁵

Another factor in the prevalence of physical activity is the availability of safe and convenient public spaces in which to walk, bicycle, and be active. Between January and April 2003, respondents to the Rapid Risk Factor Surveillance System (RRFSS) were asked if they know about the walking/biking/nature trails in Toronto. Approximately 70% (+/-5%) responded that they did, and about 60% (+/-6%) of those who knew about the trails reported using them in the past year.

Selected Physical Activity Program Activities:

Get Your Move On is an inter-sectoral partnership to increase physical activity among children, youth, their families, and the adults who influence them. This inter-sectoral partnership initiative has formed action groups to increase opportunities and decrease barriers to participation in physical activity. Activities focus on schools and school policy, workplace, community access to space, access and equity, early childhood, public awareness and community engagement.

Active and Safe Routes to School is a community action program that brings together parents, the elementary school community, police services, traffic engineers, and city councillors. The goal of the program is to work in partnership to create safe community environments and supportive networks that encourage and enable students to walk to school with parents or older students. Encouraging parents and children to walk to school instead of driving, helps contribute to a healthier environment, safer school community, and active living for children and their families.

Outdoors: The Ultimate Playground is a resource that includes fifty games for children ages 6-12 along with supplementary material to encourage inclusive structured physical activity outdoors. The games support the building of fundamental movement skills that can contribute to life-long physical activity. Training and distribution is centred on providers who work with this age group, including childcare centres, schools, Toronto Parks and Recreation, and other community-based agencies.

The goal of the *Daily Physical Activity Communications Strategy* is to increase physical activity levels of children in grades Junior Kindergarten to 8 at home, at school, and in the community through various awareness-raising projects. For example, TPH staff deliver physical activity presentations to parents' councils at schools. These presentations raise awareness and provide tips on how to advocate for changes in the school and broader community. TPH is also planning physical activity awareness raising projects for the community at large in partnership with community organizations and other health care professionals.

Initiated by TPH, *Girls Unlimited* is a community mobilization project to enhance physical activity opportunities for teenage girls ages 13 to 17. There are four Girls Unlimited networks across the city, including TPH, Toronto Parks and Recreation and diverse community-based organizations (e.g. YWCA, Boys and Girls Clubs, community health centres, youth organizations). By engaging female youth, the networks reduce the barriers to physical activity for girls and increase opportunities for physical activity by identifying and responding to local needs. Some of the initiatives include community events in girls-only supportive environments, a female youth leadership program, and a female youth drop-in program based on a model designed by female youth.

The *Toronto Heart Health Partnership Walking Initiative* promotes walking, reduces the barriers to walking, and creates infrastructures supportive of walking. Some of the activities have included the creation and distribution of the Toronto Parks and Trails map, inventory and distribution of a list of city-wide indoor and outdoor walking clubs, and a training manual to assist Toronto Parks and Recreation summer camp staff in integrating walking into their curriculum. Plans include regular walking groups with trained walk leaders at community recreation centres, and clearer signage on city trails.

Nutrition Promotion Program

Goal:

To reduce the premature mortality and morbidity from preventable chronic diseases associated with diet.

Selected Nutrition, Weight and Food Security Indicators:

Healthy nutrition contributes to the prevention of several chronic conditions, such as cancer, heart disease and Type 2 diabetes. The World Cancer Research Fund and the American Institute of Cancer Research estimate that between 30% and 40% of all cases of cancer could be prevented by feasible and appropriate diets, adequate physical activity, and maintenance of appropriate body weight.⁶ Dietary intake surveillance is important, but population-based nutrition data has historically been difficult to collect.

Vegetables and Fruit. Canada's Food Guide to Healthy Eating recommends consuming 5 to 10 servings of a variety of vegetables and fruit every day. The Food Guide also advises Canadians to choose dark green and orange vegetables and orange fruit more often.⁷ According to the Ontario Nutrition and Cancer Prevention Survey (ONCPS), 44% of men and 36% of women in Toronto, and 45% of men and 36% of women in Ontario are not consuming the minimum 5 recommended servings of vegetables and fruit per day. This represents a conservative estimate based on the survey method used.⁸

The *Body Mass Index (BMI)* is commonly used to determine whether an individual is maintaining a healthy weight. A BMI between 18.5 and 24.9 is considered to be within a healthy weight range and is associated with a decreased risk of health problems, compared with a BMI that is classified as "overweight" (25.0 to 29.9), "obese" (30.0 or over), or "underweight" (less than 18.5). The BMI is calculated by dividing weight in kilograms by height in metres squared. In 2003, Toronto had a higher percentage of the population with a BMI in the "acceptable" range (52%) than the rest of Ontario did (47%) (CCHS).

Food Security. "Food security exists when all people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preference for an active and healthy lifestyle."⁹ Household food insecurity is a concern to public health given the documented association with poor diet quality and poor overall health. As estimated in the ONCPS, about 11% of Toronto adults or more than one in ten Toronto adults were identified as food insecure. Significantly more Toronto men (13.8%) than women (8.1%) were identified as food insecure.⁸

Child food security was recently estimated in the Toronto Perinatal and Child Health Survey. Approximately 6.8% of households reported that they could not afford to feed a balanced meal to their child(ren) and 15.6 % of respondents reported relying on low-cost food to feed their child(ren).¹⁰ It is likely that these numbers underestimate the prevalence of food insecurity and child hunger in Toronto because both surveys included a higher percentage of high income households than the general public.

Selected Nutrition Program Activities:

TPH's *Invite Us Along!* Program encourages women to increase the variety and amount of vegetables and fruit they eat and serve to their families through:

- A health communication campaign including a Web site with articles, tips and recipes, a poster with tear-off tips and recipe sheets, and a series of newsletters that share creative and practical ways to eat more vegetables and fruit;
- An educational and skill development program called *Take Five: 5 to 10 a day...your way!* This Provincial program helps women and their families learn to eat the recommended 5 to 10 servings of vegetables and fruit each day. This program will be run in 8 community locations in 2004/2005 and will be implemented in partnership with 4 Community Health Centres in Toronto;
- A point of purchase program in a grocery store chain. This includes posters and recipe cards in-store, weekly flyer inserts and Web site features on 11 highlighted vegetables and fruit.

The main messages of *Invite Us Along!* are:

- Eating vegetables and fruit reduces the risk of chronic diseases;
- Vegetables and fruit can be affordable and convenient;
- There are simple ways to prepare vegetables and fruit that the whole family can enjoy;
- Don't leave home without vegetables and fruit.

The *Healthy Weights Initiative* is a comprehensive program to enable people in Toronto to attain and maintain a healthy weight by increasing self-esteem, being active and eating in a healthy way. This program involves three main projects that increase knowledge and understanding of healthy weights messages and behaviours: the Healthy Measures Communication Campaign, the Healthy Weights Education Initiative, and the Healthy Weight – Children and Youth Initiative. Key messages come from the *Healthy Measures* tool kit for health professionals that was developed by the Nutrition Resource Centre in partnership with TPH and Cancer Care Ontario.

The *Peer Nutrition Program* is offered to parents and caregivers from ethnically and culturally diverse communities in Toronto. The goal of the program is to improve access to nutrition programs and enhance the nutritional status of children between the ages of 6 months and 6 years. Nutrition programs and education material are available in a variety of languages. The Peer Nutrition Program works in partnership with other community agencies. Currently there are 40 nutrition workshops and support groups/drop-in sessions throughout the city in various community sites.

Action Towards Healthy Eating in Toronto Schools is a comprehensive initiative that helps schools implement a variety of activities that enable students to make

healthy food choices in school settings. TPH partners with school staff, parents and students to help them identify priority nutrition areas and strategies to address these areas. Examples of activities include developing healthy eating guidelines for the school setting, providing teachers with curriculum resources, providing school councils with resources and information such as newsletter inserts to send home to parents, and non-food options for fundraising. TPH staff also work with student nutrition co-ordinators and school staff to ensure that schools have high quality student nutrition programs.



The Cost of the Nutritious Food Basket in Toronto is an annual estimate conducted by TPH staff that provides information on how much it costs to buy a very economical basket of foods. The information can be used to promote and support increased access to adequate, nutritious food through advocacy and programming initiatives.

Cancer Prevention and Early Detection Program

Goals:

To reduce the morbidity and mortality from cancer.

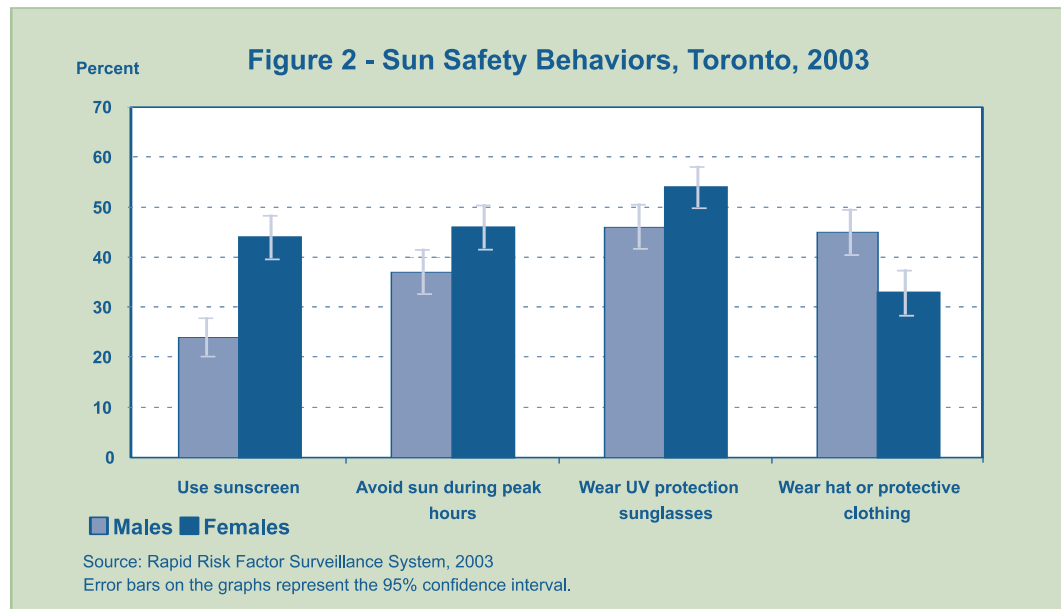
To promote prevention and early detection of cancer.

Selected Cancer Prevention and Early Detection Indicators:

Screening and Early Detection of Cancer. Mammograms can find 85-90% of breast cancers, and regular mammograms help lower the chance of dying from breast cancer.¹¹ Health Canada recommends that women aged 50-69 have a screening mammogram at a dedicated facility every two years, unless there are indications for yearly mammograms. The Canadian Community Health Survey (CCHS) 2003 recently reported that 52% of women in Toronto, and 50% of women in Ontario aged 50-69 had received a routine screening mammogram in the past 2 years.¹² The age-standardized mortality rate per 100,000 for breast cancer among women was 27 per 100,000 in Toronto, and 29 per 100,000 in Ontario in 2000. Comparisons over time cannot be provided for this indicator since a new coding system, the tenth revision of the International Classification of Diseases and Related Health Problems, was introduced in 2000.

Cervical cancer is one of the most preventable types of cancer. The Pap smear test is used to screen for pre-cancerous cervical lesions in asymptomatic women. Early detection of pre-cancerous lesions can lower the risk of cervical cancer. The CCHS 2003 reported that 72% of women in Toronto, and 74% of women in Ontario aged 18 to 69 had a Pap test within the last 3 years.¹³ Human Papilloma Virus is a very common infection; approximately 70 percent of the adult population has been infected with the virus. The virus can be transmitted during intimate contact. It is estimated that 97% of abnormal Pap tests are due to HPV.¹⁴ In 2002, 54% (+/-4%) of female respondents to the Rapid Risk Factor Surveillance System (RRFSS) reported having read or heard of HPV. Of those who had heard of it, 45% (+/- 5%) reported knowing about the link between HPV and cervical cancer.

Sun safety. Skin cancer, including basal cell carcinoma, squamous cell carcinoma and melanoma, accounts for about 1/3 of all cancers diagnosed in Ontario. The rate of malignant melanoma has increased dramatically since the 1970s. Since most melanoma is caused by excessive exposure to the sun, practicing “sun safety” is an important way to reduce the risk of developing skin cancer.¹⁵ According to RRFSS, the proportion of Toronto residents who reported a sunburn in the past 12 months was 27% (+/-3%) in 2003. The rate did not differ significantly by gender. The proportion of respondents who reported a sunburn within the previous 12 months varied by age group; the rate ranged from 42% (+/-7%) for 18-24 years olds, to 31% (+/-4%) for 25-44 year olds, decreasing to a low of 10% (+/-5%) for respondents aged 65 and older.



Women were more likely to report that they “always or often” practice sun safety behaviours such as using sunscreen and avoiding sun during peak hours than men were in 2003 (Figure 2).

Selected Cancer Prevention and Early Detection Program Activities:

The Cancer Prevention/Early Detection Program fosters partnerships, provides resources and consultations to community organizations, and develops and implements education campaigns for the community, health professionals and agencies. The primary focus of the program is the prevention and the early detection of breast, cervical and skin cancer. The breast and cervical health programs work to raise awareness, promote increased screening and eliminate the barriers to these services among identified priority populations: women aged 50 and older, individuals with low income and literacy levels, and those who are new to Canada.

Through the *Breast Health Program*, staff promote breast self-examination, clinical breast examination and mammography. TPH works closely with the Ontario Breast Screening Program to promote mammography and increase the number of women aged 50 and older who receive screening according to the provincial guidelines. This includes working with other health departments in the Cancer Care Ontario Central East Region.

The *Cervical Health Program* promotes the Pap test as an important screening tool. Program staff partner with the Ontario Cervical Screening Program to increase the number of women who undergo Pap testing according to the provincial guidelines.

The *Skin Cancer (Solar and Artificial Ultraviolet Radiation (UVR))* Prevention Program's outreach consists of media campaigns (National Sun Safety Week), and the provision of education and print resources to high risk groups such as employees who work outdoors and those who work with children. UVR policy work and other prevention efforts are achieved by partnering with many organizations



including The Canadian Dermatology Association, The Canadian Cancer Society, Environment Canada, Ryerson University and Health Canada.

Staff give community presentations and displays on breast and cervical topics for the hard to reach female population in targeted age groups. Breast and cervical presentation content is being translated into Arabic, Somali and Mandarin. A multimedia campaign will be using the OMNI multicultural television network to promote cancer prevention and early detection.

Cancer Prevention/Early Detection staff participate in the Toronto Cancer Prevention Coalition.

The Coalition was created in 1998 by TPH and prominent community partners. The Coalition and its seven working groups work to develop and advance healthy public policy and standards and to increase public support for eliminating the underlying causes of cancer. In November 2002, Toronto City Council endorsed the Coalition Action Plan as the cornerstone of cancer prevention in the City of Toronto.

Internal partnerships and working relationships also exist with other City of Toronto departments and programs that either have similar goals or provide an avenue to reach the identified priority populations. Staff also participate in Cancer Care Ontario's Central East Cancer Prevention and Screening Network.

Tobacco Use Prevention and Control Program

Goal:

To reduce morbidity and mortality from tobacco use and exposure to second-hand smoke.

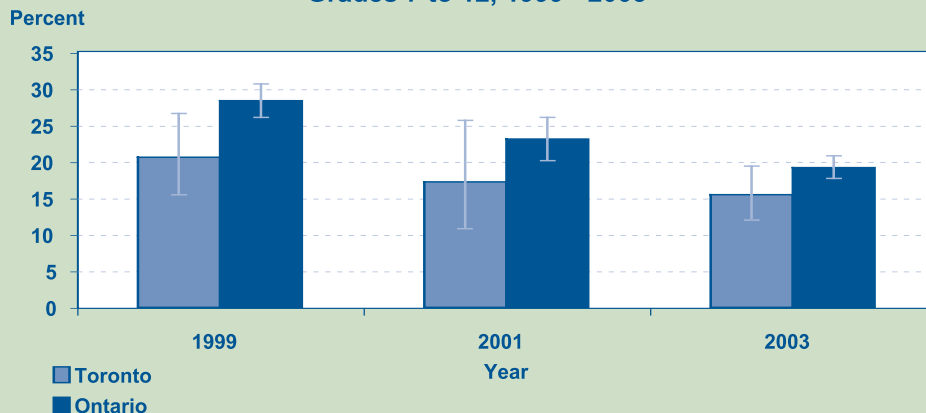
Selected Tobacco Use Indicators:

Tobacco use is the leading cause of preventable disease and premature death in Canada.¹⁶ Many cases of lung cancer, cardiovascular disease, and respiratory diseases can be attributed to tobacco use. The lower rates for these conditions among women are in part a reflection of the historically lower smoking rates among women. Recent statistics show that:

- In Toronto, the female lung cancer incidence rate declined slightly from 34 per 100,000 in 1990 to 33 per 100,000 in 2000, while the male lung cancer incidence rate declined from 76 per 100,000 to 62 per 100,000 over the same time period. The pronounced mortality decline among males is associated with a decline in male smoking rates over the past several decades.
- Approximately 23% of cardiovascular disease mortality in Canada is attributable to smoking. Among residents over the age of thirty-five, 1,200 smoking-attributable cardiovascular deaths occurred in Toronto, and 6,600 smoking-attributable cardiovascular deaths occurred in Ontario each year from 1995 to 1997.¹⁷

The prevalence of daily or occasional smoking during the previous 12 months was 16% among Toronto youth in 2003. Rates of smoking among Toronto and Ontario youth have declined since 1999 (Figure 3).

Figure 3 - Recent Smoking Prevalence Among Toronto and Ontario Youth, Grades 7 to 12, 1999 - 2003



Source: Centre for Addiction and Mental Health, Ontario Student Drug Use Survey, 1977-2003
Error bars on the graphs represent the 95% confidence interval.

A variety of surveys have been used to determine the rate of smoking in the adult population. Estimates of the adult population that smokes daily in Toronto range from 20% (+/-2%)ⁱ to 25%.ⁱⁱ Daily smoking estimates for the adult population in Ontario range from 19%ⁱⁱⁱ to 26%.^{iv}

Exposure to second-hand smoke also remains a concern. In 2003, 68% (+/-3%) of Toronto households reported being completely smoke-free, and 75% (+/-3%) of Toronto residents who drove reported not allowing any smoking in their vehicle (RRFSS).

Selected Tobacco Program Activities:

The TPH Comprehensive Tobacco Control Program aims to prevent morbidity and mortality associated with tobacco use through:

- Prevention of the initiation of tobacco use among young people;
- Protection of people from exposure to second-hand smoke; and
- Cessation support for smokers of all ages.

Examples of key program activities are:

Breathing Space combines award-winning mass media messages with locally tailored community based activities to increase awareness about second-hand smoke. The campaign focuses on the protection of children, and encourages people to make their homes and vehicles 100% smoke-free.

Mission Possible (MP) is a peer-led, teacher-supported initiative that presents a variety of tobacco control activities for implementation within the high school setting. MP supports the Ontario Ministry of Education's Health and Physical Education curriculum (2000) for grades 9 – 11 students. The MP campaign empowers youth with supports & resources to achieve a smoke-free lifestyle.

The *Not to Kids* campaign is a community wide social marketing, education and enforcement campaign to strengthen the impact of the Ontario Tobacco Control Act (1994). The Not to Kids program promotes community action to reduce the sale and supply of tobacco to kids. Key messages are:

- It is against the law to sell, or supply cigarettes to anyone under 19.
- Stores selling, or persons supplying tobacco to kids under 19 should be reported to the Not to Kids Tobacco Hotline at 338-SALE (7253).

Promotion of Smoke Free Living is a committee that co-ordinates tobacco initiatives and activities of a "themed", time sensitive nature. Examples include the annual co-ordination of events such as National Non-Smoking Week in January, World No Tobacco Day on May 31st, and the Provincial Quit Smoking Contest.

i Rapid Risk Factor Surveillance System, 2003, population aged 18 and older

ii Centre for Addiction and Mental Health Monitor eReport: Addiction & Mental Health Indicators Among Ontario Adults in 2001, and changes since 1977, population aged 18 and older

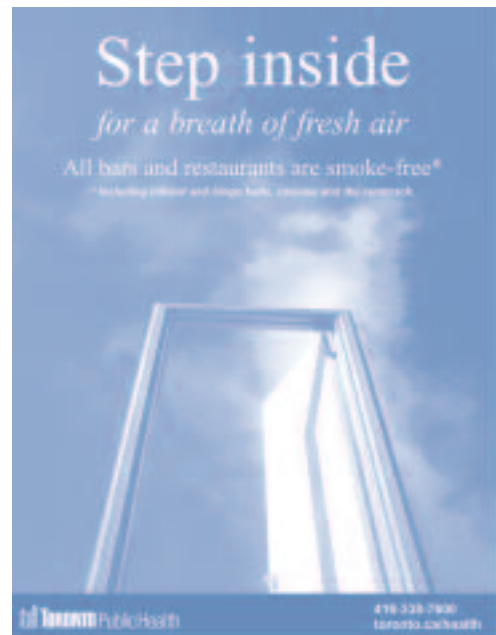
iii Canadian Tobacco Use Monitoring Survey, 2003, population aged 15 and older

iv Canadian Community Health Survey, 2000/2001, population aged 18 and older

The *Tobacco Use Prevention Curriculum Resources (TUPCR) Workgroup* is dedicated to increasing the profile, accessibility and uptake of Tobacco Use Prevention resources suitable for students in Kindergarten to Grade 12. The workgroup reviews, selects and promotes ready-to-use programs that support the Ontario Health and Physical Education Curriculum on tobacco use prevention.

TPH is involved in community partnerships to deliver smoking cessation supports at various sites such as hospitals, community health centres and public health offices. Toronto Public Health also promotes an access and referral service that includes marketing existing resources and referring to appropriate resources in the community.

The *Ontario Tobacco Control Act (TCA)* places restrictions on selling and supplying tobacco and on smoking in public places throughout the province. TPH inspectors, as well as the police, enforce the TCA. The City of Toronto Municipal Code Chapter 709 – Smoking Bylaw prohibits smoking (with some exceptions) in all workplaces and public places within the City of Toronto. TPH inspectors ensure compliance.



Injury Prevention and Substance Abuse Prevention Program

Goals:

To reduce disability, morbidity and mortality due to unintentional injuries, motorized vehicles, bicycle crashes, alcohol and other substances, and falls in the elderly.

To increase protective factors and reduce risk factors for injuries and substance abuse in communities.

Selected Injury and Substance Abuse Indicators:

Injury rates. In 2000/2001, Toronto had the lowest rate of injuries (2 per 10,000) of any region in Ontario. In Toronto, injury deaths are most likely to occur among those 65 years of age and over (50%). Only 5% of injury deaths in Toronto were of individuals less than 20 years of age. The 3 most common causes of trauma related deaths in Toronto in 2000/2001 were falls (46%), suicide, excluding poisoning (27%), and motor vehicle accidents (9%).¹⁸ The most common cause of hospitalization due to unintentional injury for children 0-14 years of age was falls in Toronto and Ontario in 2001.

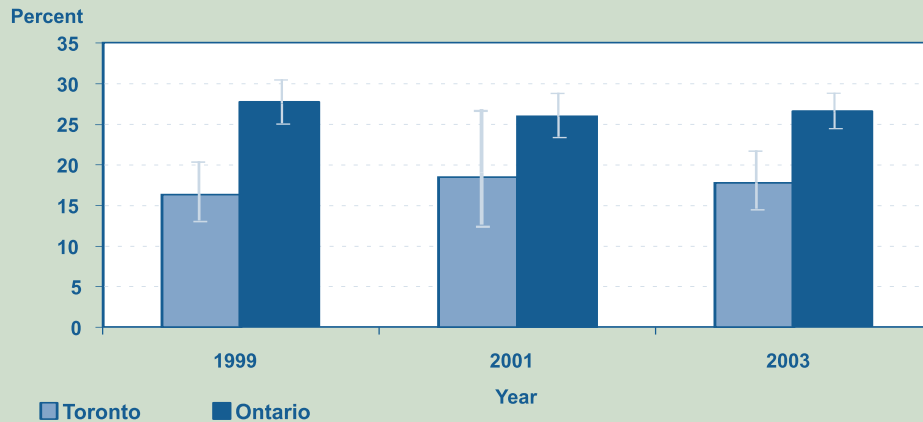
Falls Among Seniors. In 2000, the number of fall-related deaths among seniors was 147 in Toronto, and 574 in Ontario. The introduction in 2000 of the tenth revision of the International Classification of Diseases and Related Health Problems (ICD-10) coding system has resulted in a dramatic drop in the number of deaths attributed to falls. This decrease has occurred because the category “fracture, unspecified” has been removed from the falls category.¹⁹ The removal of unspecified fractures from the falls category is appropriate because its inclusion was based entirely on an assumption that in the absence of information to the contrary, a fracture most probably resulted from a fall. In ICD-10, unspecified fractures are classified under “accidental exposure to unspecified factor.” In 2001, the number of hospitalizations due to falls among seniors was 3,441 (1,022 per 100,000) in Toronto, and 18,152 (1,216 per 100,000) in Ontario. Hospitalization data for 2001 was coded using the ninth revision of the International Classification of Diseases (ICD-9), and includes “fracture, unspecified”.

Injury and Substance Abuse. The primary burden of substance abuse is injuries, including falls, motor vehicle crashes, and family violence. For example, in 2000/2001, drugs/alcohol were involved in 22% of motor vehicle traffic deaths, 23% of drownings, and 33% of pedal cycle deaths.¹⁸ Women were at six times the risk of violence by partners who frequently consumed five or more drinks at one time, compared to women whose partners never drank.²⁰ Six percent of the population reported drinking hazardously or harmfully in Ontario in 2001.^v The corresponding Toronto rate could not be determined due to the small sample size. Men are more likely than women to drink hazardously or harmfully.²¹

^v Based on a score of 11 or higher on the World Health Organization Alcohol Use Disorders Identification Test, which assesses alcohol consumption and past year alcohol related problems

Binge drinking among Ontario youth varies significantly by region of the province. In 2003, Toronto students were least likely to report binge drinking (consuming 5 or more drinks of alcohol on the same occasion) in the past four weeks (18%), compared to the overall rate of youth binge drinking in Ontario (27%) (Figure 4).

Figure 4 - Percent Reporting Binge Drinking at Least Once During the Past 4 Weeks, Grades 7 to 12, Toronto and Ontario, 1999-2003



Source: Centre for Addiction and Mental Health, Ontario Student Drug Use Survey, 1977-2003
 Error bars on the graphs represent the 95% confidence interval.

Selected Injury Prevention and Substance Abuse Prevention Program Activities:

The Injury Prevention and Substance Abuse Prevention program (IPSAP) underwent a redesign in 2003. The redesign team recognized that Injury Prevention and Substance Abuse Prevention are strongly linked, and that combined delivery of the two programs would be more efficient and meaningful. The newly redesigned combined IP/SAP program has three issue specific components:

1. Children – Unintentional Injuries
2. Youth – Alcohol and Drugs
3. Older Adults – Falls

TPH collaborates with school boards for the *In The Driver's Seat Program*, a peer led injury prevention program that is implemented in interested high schools throughout the school year. It provides students with tools to develop and deliver their own activities to reduce and prevent death and injuries related to impaired and unsafe driving. It motivates students to take action and make a difference in their schools and community.

The *At Home Alone* program helps families prepare their 10-14 year old(s) to stay home alone safely. The program is designed to assist families in developing a personal safety and injury prevention plan that is tailored to meet their unique needs. Families learn 5 easy steps to independence. A stands for Assess if you are ready; L stands for Learn about safety; O stands for Organize your home; N stands for Negotiate the terms; E stands for Evaluate how things are going. The program includes a workshop, video and family handbook.

TPH hosts an annual conference in November for high school students using an innovative peer education approach to increase youth awareness and their safety planning skills related to parties. This conference is a day-long event featuring interactive workshops on liability and legal consequences, risk-taking and communication strategies, reducing impairment, and dealing with emergencies. TPH staff are available to provide follow-up support to schools attending the conference. TPH also provides the manual *Party in the Right Spirit* to students and school staff with information and ideas on how to host safer events throughout the year.

The *Drug Prevention Grants* provide funding opportunities for non-profit organizations to address illicit drug use within the City of Toronto. The Drug Prevention Grants (DPG) program was established by the City of Toronto in 1990 to build community capacity that will support local drug prevention and/or harm reduction initiatives. The grants program, under the direction of the Board of Health, is subject to City Council's annual budget approval. The DPG projects utilize a variety of strategies and approaches to address the issue of illicit drug use in the community. Previously funded projects include after-school drop-ins, skill-building workshops, theatre productions, and harm reduction outreach.

Additional programming related to illicit substance use, the City's needle exchange and low dose methadone program, The Works, will be discussed in the section on Sexual Health Promotion, Sexually Transmitted Infections/HIV.

Wheel Safety. TPH works collaboratively with corporate and external partners to promote the proper use of safety gear for all wheel sports such as skate boards, scooters, and bicycles. The school boards have been provided with a Bike Safety Teacher's package which contains lesson plans and activities designed to support the Health and Physical Education curriculum. The "Guide to Organizing a Bike Rally" publication is also available.



Family Health Program Cluster

Reproductive Health Program

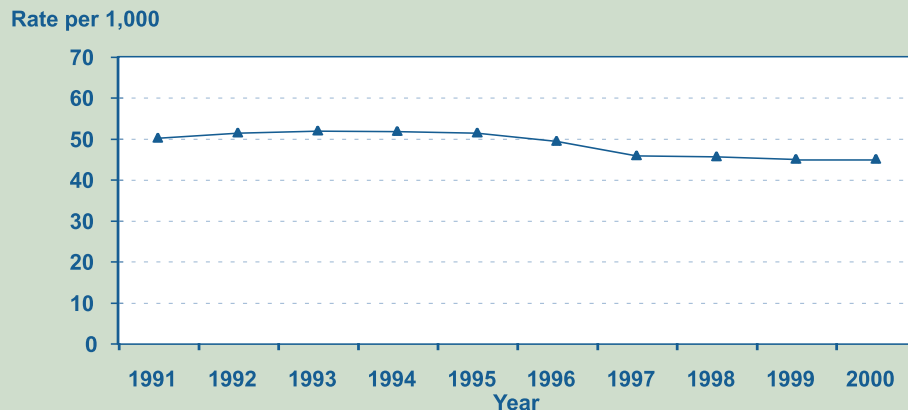
Goal:

To promote and support healthy behaviours and environments, healthy birth outcomes, and readiness to parent for people in their reproductive years.

Health Status Indicators:

General Fertility Rate (GFR). The GFR is the total number of live births to women aged 15-49 divided by the total number of women 15-49, multiplied by 1,000. The GFR has fluctuated in Toronto over the past several years. The net result has been a decline from 50 per 1,000 in 1991 to 45 per 1,000 in 2000 (Figure 5). The GFR in the rest of Ontario was 41 per 1,000 in 2000. There are about 33,000 babies born each year to Toronto residents. The crude birth rate (CBR) is the number of births per 1,000 people in the total population. The CBR was 12.5 per 1,000 in 2000.

Figure 5 - General Fertility Rate, per 1,000, Toronto, 1991-2000

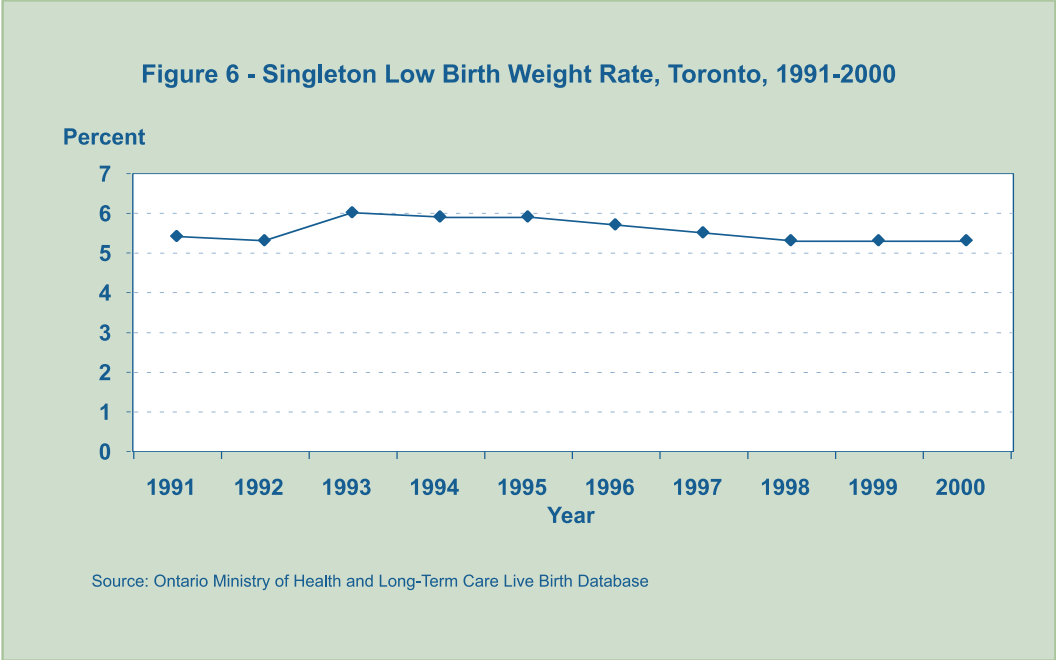


Source: Ontario Ministry of Health and Long-Term Care Live Birth Database

Low Birth Weight Rate. Babies born with a weight of less than 2,500 grams are considered low birth weight babies (LBW). Those born with a weight of less than 1,500 grams are considered very low birth weight. LBW babies are more likely to die in infancy, or to experience health or developmental problems. Toronto's singleton low birth weight rate, while improved between 1993 and 1998, levelled off at 5.3% between 1998 and 2000 (Figure 6). The rate in the rest of Ontario was 4.0% in 2000. Moreover, there are disparities in the singleton LBW rate across geographical areas of Toronto.²²

The Ministry of Health and Long-Term Care’s objective is to reduce the total low birth weight rate in Ontario to 4.0% by 2010.¹

Teen pregnancies. Specific sub-populations of pregnant women such as pregnant teens may be at increased risk of poor reproductive health outcomes.^{23,24,25,26,27} During the period 1997-2000, the teen pregnancy rate in Toronto declined 12% from 52 per 1,000 to 45 per 1,000. The teen live birth rate declined 10% during the same time period, from 18 per 1,000 to 16 per 1,000. About two-thirds (64%) of teen pregnancies ended in abortion between 1997 and 2000, compared to 54% in Ontario.²⁸ Pregnant teens have been identified as a priority population in the Reproductive Health program.



Selected Reproductive Health Program Activities:

TPH works with individuals, families, groups, community partners/coalitions and various levels of government to promote healthy behaviours and environments, which support healthy birth outcomes and readiness to parent. TPH uses a variety of health promotion strategies to address the full range of health determinants. These strategies include health promotion activities as well as collaborating with key stakeholders to build healthy public policies and to enhance community-based supports and services for people of reproductive age. The current emphasis is on expectant parents, including those at risk for an unhealthy birth outcome and poor transition to parenthood. Several programs/initiatives are described below:

Healthiest Babies Possible (HBP) is a one-to-one nutrition education and counselling program that is provided in approximately 65 community based sites. Pregnant women, who meet the eligibility criteria, receive nutrition education and counselling, prenatal vitamins, food coupons, and interventions and referrals regarding other risk factors. The program is delivered by

Registered Dietitians (RDs), in cooperation with Public Health Nurses (PHNs) and Family Home Visitors (FHV) from the Healthy Babies Healthy Children Program.

The *Canada Prenatal Nutrition Program (CPNP)* is a comprehensive community-based program that supports pregnant women who face conditions of risk that may compromise the health and development of their babies. The CPNP provides weekly prenatal support programming which includes food and nutritional supplements, education regarding factors related to healthy pregnancy outcomes, counselling, and other supports. PHNs and RDs collaborate with community partners to deliver these services. In Toronto, seven coalitions, funded in part by Health Canada, oversee 38 CPNP sites, four of which are provided for pregnant teens.

The *Healthy Babies/Healthy Children (HBHC) Program* is a prevention/early intervention provincially funded initiative that helps families promote healthy child development and achievement of full potential. The prenatal screening component of HBHC identifies families at risk and ensures that they are referred to services prior to their baby's birth. Consenting at risk pregnant women are offered prenatal services including a phone call and home visiting. Interventions include the provision of information, psychosocial support, counselling and referral.



The *At-Risk Homeless Pregnant & Parenting Women Project* receives partial funding from an Ontario Early Child Development grant until 2006. In collaboration with selected shelters and youth serving agencies, two PHNs provide a combination of strategies and interventions, including intensive one-to-one services, sustained outreach and service co-ordination to homeless young women who are pregnant. Due to finite project resources, the target group for referral focuses on transient, homeless pregnant women under age 29 in the South and East Regions of Toronto. Strategies and interventions target specific risk factors. Development of a specialized network of service providers and partner agencies has supported fast tracking of high-risk pregnant women to obstetrical, mental health and medical services. One to one addictions counselling is provided by the Pathways to Healthy Families program of the Jean Tweed Centre. Food security is enhanced through activities that increase access to food and support the development of food preparation skills. Young women are referred to HBP or CPNP for nutritional support.

Child Health Program

Goal:

To promote the optimal health of children and youth.

Selected Child Health Indicators:

Children in Toronto:

- There were 577,100 children and youth aged 0-19 years living in Toronto in 2001. Of these, 205,200 were aged 0-6, down 4% from 214,000 in 1996.
- In 2001, 62% of Toronto parents with children 0-6 years of age were born outside of Canada. Slightly more than half (52%) of Toronto parents with children aged 0-6 spoke a language other than English as their first language.
- In 2001, 142,070 Toronto children aged 0-5 (81%) lived in dual parent families and 31,905 (18%) lived in single parent families.
- In 2000, 29% lived in families with a household income below Statistics Canada's low income cut-off. Although this was a 25% decrease since 1995, this is still cause for much concern.^{vi}

Breastfeeding. In 2002, the Breastfeeding Committee for Canada endorsed "exclusive breastfeeding to the age of six months and provision of safe, appropriate, and locally available complementary foods, with continued breastfeeding for up to two years of age and beyond."²⁹ Exclusive breastfeeding means that no solid foods or liquids other than breast milk are included in the diet. In 2003, a TPH survey found that 94% of parents reported initiating breastfeeding, and about one-quarter (26%) reported breastfeeding for 12 months or more. The same survey also showed that 58% of parents reported breastfeeding for 6 months or more in 2003, but only 18% reported exclusively breastfeeding for 6 months or more.⁵

Preschool Speech and Language and Infant Hearing. In the fiscal year 2003/2004, 5,534 children of preschool age were receiving speech and language services. In the same year, of the nearly 20,000 children who were screened for hearing loss in hospital, community clinics, and midwifery practices, 40 children were diagnosed with some level of hearing loss.

Please see the Physical Activity Promotion Program, Nutrition Promotion Program and Dental Health Program sections for more child health indicators.

^{vi} Source of demographic data for children 0-5 years of age: Census 2001 custom tabulation for Children's Services. Source of demographic data for families with children 0-6 years of age: Census 2001 custom tabulation for Toronto Public Health.

Selected Child Health Program Activities:

Recognizing that positive postpartum and early childhood experiences have a significant impact on subsequent health, the child health program focuses on children from birth to six years of age. Selected TPH initiatives for older children and youth are described in other sections of this report.

TPH works with individuals, families, groups, community partners and various levels of government to promote child health and optimize children's development and functioning. Health related issues currently being addressed include: growth and development, breastfeeding, SIDS, postpartum depression, parenting capacity, intimate partner violence, positive child discipline, child poverty, food security, healthy eating, childhood obesity, and childhood injury. TPH uses a variety of health promotion strategies to address the determinants of health. These strategies include developing health communication campaigns, as well as collaborating with key stakeholders to build healthy public policies and to enhance community-based supports and services for families with young children. Several programs/ initiatives are described below:

The *Healthy Babies Healthy Children (HBHC) Program* is a prevention/early intervention provincial initiative designed to help families promote healthy child development and support their children to achieve their full potential. HBHC works with hospitals and midwives to ensure that all women who give birth are offered screening and assessment for risks to their child's healthy development. Families are offered postpartum support services, including a phone call and home visit to all consenting families with newborns. If needed, at risk families receive more intensive home visiting by a nurse and family home visitor with children 0-6 years. Early childhood screening, assessment and monitoring aim to reach all families with children from six weeks to age six.

The *Toronto Preschool Speech and Language Services and Infant Hearing* programs are community based programs. Preschool Speech and Language Services provides assessment, parent training, caregiver consultation, group and/or individual therapy, community information sessions, and referral to a wide range of child and family services in the community. The Infant Hearing Program provides universal newborn hearing screening, high risk monitoring and audiology services, family support and communication development services for deaf or hearing impaired children from birth to two years of age.

Nobody's Perfect is an education and support program for parents of children from 2-4 years of age. It is designed for parents that are particularly vulnerable to parenting stress: parents who are young, single, have low incomes or low educational levels and experience social, cultural or geographic isolation. Program components include body (growth, health and illness), safety (accident prevention and first aid), mind (social, emotional and intellectual development), behaviour (problem solving) and parents (addressing parents' needs as well as those of their children).

Seniors and Vulnerable Adults Program

Goal:

To promote the health of frail and isolated seniors and vulnerable adults.

Selected Seniors and Vulnerable Adults Program Indicators:

According to the 2001 Census of Canada, there were 337,900 adults 65 years of age and over living in Toronto in 2001. Fifty-eight percent of seniors in Toronto are female. The number of seniors in Toronto increased by 6% between 1996 and 2001.

Living Arrangements of Seniors. There were 319,400 non-institutionalized seniors in Toronto in 2001. Sixty-four percent lived with their immediate family (spouse/partner/children). The rest either lived alone (27%), with extended family (8%), or non-relatives (2%). The number of seniors living alone increased 5% between 1996 and 2001. This increase corresponds to an overall increase in the number of seniors in Toronto.

Activity Limitation. Forty-two percent of Toronto seniors indicated that they are limited in the activities that they can do at home because of one or more long-term physical or mental condition, or health problem (Canadian Community Health Survey 2000/2001).

Food Bank Use. Six percent of food bank users in Toronto are over the age of 60. This is a decrease from the rate of 11% in 2000, and is equivalent to the rate in 1995.³⁰

Housing and Homelessness. According to the 2001 Census, 250,000 households in Toronto (42%) paid more than 30% of their income in rent, and 119,135 households paid more than 50% of their income in rent. In Toronto, almost 32,000 people stayed in an emergency shelter at least once in 2002.³¹

Falls Among Seniors. In 2000, the number of fall-related deaths among seniors was 147 in Toronto, and 574 in Ontario. The introduction in 2000 of the tenth revision of the International Classification of Diseases and Related Health Problems (ICD-10) coding system has resulted in a dramatic drop in the number of deaths attributed to falls. This decrease has occurred because the category “fracture, unspecified” has been removed from the falls category.¹⁹ The removal of unspecified fractures from the falls category is appropriate because its inclusion was based on an assumption that in the absence of information to the contrary, a fracture most probably resulted from a fall. In ICD-10, unspecified fractures are classified under “accidental exposure to unspecified factor.” In 2001, the number of hospitalizations due to falls among seniors was 3,441 (1,022 per 100,000) in Toronto, and 18,152 (1,216 per 100,000) in Ontario. Hospitalization data for 2001 was coded using the ninth revision of the International Classification of Diseases (ICD-9), and includes “fracture, unspecified”.

Selected Seniors and Vulnerable Adults Program Activities:

TPH works with health care providers, community agencies, and groups to provide health programs and services to everyone who lives and works in Toronto, including seniors. Programs and services for seniors include family health, chronic disease prevention, injury prevention, communicable disease control and dental health. Some program activities specifically targeting seniors include the promotion of active living, informal caregiver support initiatives and falls prevention as well as dental services for low-income seniors.



Falls. Working with coalitions, other partnerships and GTA Health units, TPH uses a variety of health promotion strategies to prevent falls and reduce environmental and physical risk factors for falls among seniors. Some falls prevention initiatives include workshops, community-based events, coalition building and referral to other community resources. TPH recently piloted the *Falls Intervention Project (FIT)*, a collaborative, community-based falls/injury prevention and safe medication use program for seniors living independently.

Heart Walk is a mall walking program for adults and seniors that currently operates in several malls in the West end of the city. There are approximately 900 participants registered in the program. In addition to organizing walking groups, TPH, program partners, and community volunteers co-ordinate educational health promotion and safety seminars along with social events for program participants.

Toronto Public Health continue to provide leadership to the *Homeless Health Reference Group*, made up of diverse stakeholders, to develop innovative responses to the complex health needs of people who are homeless and underhoused. For example, the development of discharge protocols for Toronto hospitals to improve discharge planning and followup for homeless people.

Service models for infirmity and for homeless youth with concurrent disorders have been developed. Staff are also working in partnership with community organizations to develop a comprehensive and co-ordinated response for homeless pregnant youth and their children.

Mental Health, Violence Prevention, and Suicide Prevention Program

Goal:

To promote the mental health of Toronto's diverse communities by enhancing protective factors, reducing inequities and impacting on risk factors for poor mental health.

Selected Mental Health, Violence, and Suicide Indicators:

Stress and Depression Among Adults. According to the Canadian Community Health Survey 2003, 24% of Toronto residents 18 years of age and over reported that they experience "quite a lot" of life stress.³² The same survey reported that approximately 4% of Toronto residents 12 years of age and over had a high likelihood of having experienced a major depressive episode in the past 12 months (based on responses to the short-form Composite International Diagnostic Interview).³³

Mental Health Among Students. According to the Centre for Addiction and Mental Health's Mental Health and Well-Being of Ontario Students (grades 7-12) Report (2003), about 3% of students in Toronto, and 6% of students in Ontario are at elevated risk for depression. Nine percent of Toronto students and 12% of Ontario students reported serious thoughts about suicide in the past 12 months. Thirty-two percent of students in Toronto and 31% of students in Ontario reported elevated psychological distress. The most common symptoms of psychological distress were feeling constantly under stress, and losing sleep because of worrying. Females were more likely than males to report suicidal thoughts, be at elevated risk for depression, and have elevated psychological distress.³⁴

Suicide. In 2001 there were 1,788 hospitalizations due to attempted suicide, comprising about 4% of all injury hospitalizations in Toronto. Youth between 15 and 24 years had the highest hospitalization rate of all age groups due to attempted suicide.³⁵

Violence. The rate of violent crimes in Toronto was 13.2 per 1,000 in 2002. This was a slight decrease from 13.9 per 1,000 in 2001. In 2002, there was a 6.5% increase in the number of female youth, and a 4.7% decrease in the number of male youth charged with violent offences (youth 12 to 17 years of age, over the previous 5 years).³⁶

Selected Mental Health, Violence, and Suicide Program Activities:

Mental health, violence prevention and suicide prevention have been identified through the Board of Health as “locally mandated” requirements. Mental health is part of the holistic principles of health, which includes an individual’s physical, mental, social, emotional, and spiritual health. Mental health promotion is a program that cuts across all TPH service areas including Family Health, Healthy Lifestyles, clinical services within Communicable Disease, Emergency Preparedness, Healthy Environments and Intake.

Consultation is provided to TPH staff and local community agencies. Consultation may include home visits with PHNs who have concerns regarding the mental health of their clients, case reviews, mental health assessments, and assistance with linking and referral to mental health services. One component of the role of the Mental Health Nurses is to attend case reviews at local shelters to offer advice and information on mental health concerns.

A variety of educational presentations and workshops are provided to TPH staff and local community agencies on mental health related topics. Topics include: Brief Solution Focused Narrative Strategies, Vicarious Trauma, Violence Prevention and Personal Safety, Crisis Intervention, Suicide Prevention, the Mental Health Continuum and the Mental Health Act, Postpartum Depression and many others as requested.

Community Crisis Intervention and Support (CCIS) Team. The CCIS Team is coordinated by the Mental Health Nurses and provides psychosocial crisis support to groups and communities that have experienced a traumatic event.

Community Capacity Building. Community Health Officers and other TPH staff work with various communities to address underlying causes of violence, suicide and mental illness across the lifespan.

Dental Health Program Cluster

Dental Health Program

Goals:

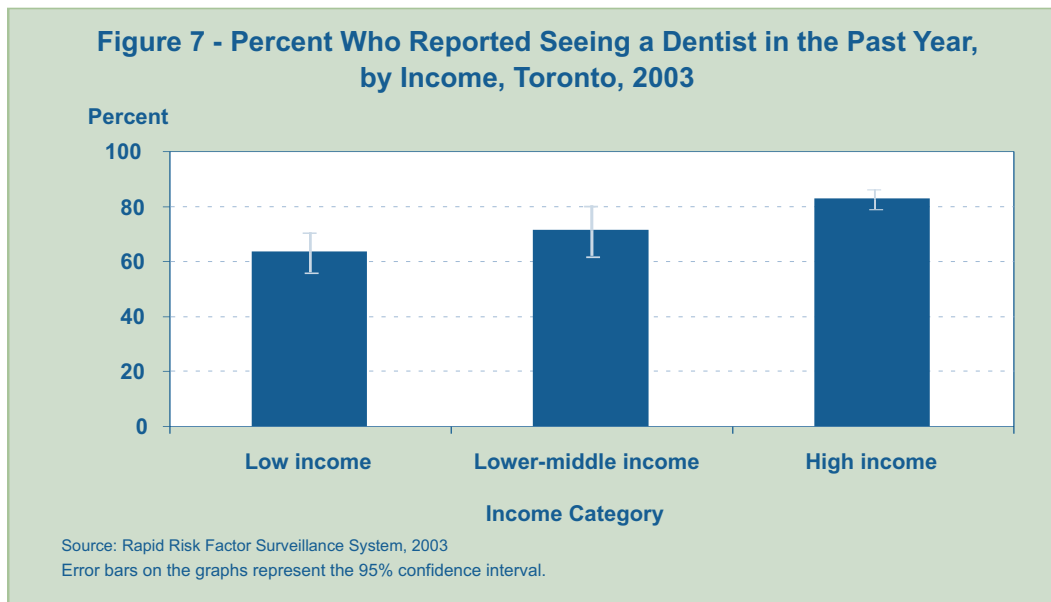
To promote the dental health of children, youth, mothers at risk, and seniors.

To reduce the prevalence of oral disease and improve oral health function, and aesthetics.

Selected Dental Indicators:

Early childhood tooth decay (ECTD) is a preventable form of tooth decay among young children. A telephone survey conducted by TPH in 2003 found that 6% of parents with children 0-6 reported that a physician or dentist had told them that their child had ECTD. A significant difference was found according to whether or not the child was born in Canada; only 5% of children born in Canada had been diagnosed with ECTD, while 14% of children not born in Canada had been so diagnosed. In the same survey, the parents were asked why their child had not been taken to see a dentist more recently, if they had not been taken in the last year. The most common reasons were “child is too young” (47%), “child has no problems” (33%), and “we don’t have insurance/can’t afford to take them” (6%).⁵

Adult dental health. The proportion of respondents that consider their oral health to be excellent or very good was influenced by income and ranged from 46% (+/-8%) in the lowest income group, to 61% (+/-5%) in the highest income group. Respondents who were under 45 years of age and those with dental health insurance were also more likely to report excellent or very good dental health and have all or most of their natural teeth (RRFSS, 2003).



Results from the Rapid Risk Factor Surveillance System (2003) show that 76% (+/-3%) of respondents reported visiting a dentist in the past year. In 2003, visiting a dentist within the past year was also related to household income, and ranged from 63% in the lowest income group, to 71% in the low-mid income group, to 82% in the highest income group (Figure 7).

Selected Dental Health Program Activities:

Access to basic dental care remains an issue for many individuals and families because dental care is not included in Ontario's provincial health care plan (OHIP) that covers all citizens for medical and hospital services. People without ready access to dental care often cannot get treatment until pain or infection causes them to go to hospital emergency rooms, which are often not staffed or equipped to provide dental care. The programs operated by TPH are designed to reduce the burden of illness by preventing disease before it occurs (primary prevention) and by screening and providing follow-up prevention and treatment (secondary prevention) to those who have no insurance or finances to pay for basic dental care. In order to ensure equitable access to oral health and care, TPH operates the programs described below:

There are about 266,000 children in the Toronto schools between Junior Kindergarten and Grade 8, and about 3,500 adolescents in English as a Second Language programs. Twenty-two dental hygiene teams screen over 208,000 of these children, and 3,500 adolescents each year. Depending on the age group, between 8% and 26% of these children and adolescents have unmet treatment needs. With the treatment programs available in Toronto, all of the children who need dental care have access to it, and many meet the Ministry of Health and Long-Term Care's criteria for the provision of clinical preventive services to reduce the expected occurrence of new decay.

Basic dental services include examination and diagnosis, clinical preventive services (sealant, topical fluorides, oral hygiene instruction, denture cleaning and adjustment), restorations (fillings), periodontal scaling and denture repair or replacement. Preventive services are provided to about 22,000 children or adolescents, and 6,400 seniors each year.

CINOT administration. CINOT is a provincially mandated program to provide dental care for children who are in urgent need of care. In Toronto, children with urgent needs can be treated by private dentists or in TPH clinics. The CINOT administrative office validates the referral information against claims for care, reviews and adjudicates claims from dentists, authorizes payment for invoices of private dentists and invoices the Ministry of Health and Long-Term Care for the transfer payments to cover the costs. TPH dental services annually oversees requests from about 1800 private dentists for a total of \$1.1 million, and additional transfer payments for care provided in TPH clinics of about \$800,000.

Ontario Works administration. Ontario Works (OW) is the provincial program administered by social service departments in municipalities to provide income support for eligible clients needing short-term financial assistance. The children of OW clients are eligible for a comprehensive list of dental services, while

adults are eligible for emergency services only. As with CINOT, clients can obtain care from either private dentists, or TPH clinics, or both, and about 85% of clients attend private dentists. Each year, TPH dental services provides claims adjudication and invoice payment services for Toronto Social Services amounting to \$2.7 million, and transfer payments to TPH of about \$600,000.



Preventive services to residents of collective living centres. Dental teams visit homes for the aged on an 18-month cycle. Over that period they conduct approximately 11,250 screening assessments, clean 2,800 dentures, label and adjust dentures, and conduct in-service education for caregivers. They also provide referrals for about 300 residents who need care beyond what the team can offer.

Dental health education and promotion. Staff of collective living residences including long term care facilities, parents, teachers and community-based caregivers need current and relevant oral health information to achieve and maintain good oral health. Each year, TPH provides approximately 75 education sessions for teachers in those schools with high numbers of children with needs, 40 sessions for parents or health care providers, and 75 sessions to caregivers in collective living centres.

Communicable Disease Control and Sexual Health Program Cluster

Vaccine Preventable Diseases Program

Goal:

To reduce the incidence of vaccine preventable diseases.

Selected Vaccine Preventable Disease Indicators:

Vaccine Preventable Diseases (VPDs) are a group of diseases for which vaccines are readily available and commonly used to prevent illness. Vaccines are highly effective, so the incidence of these diseases is relatively low.

Influenza is the most commonly reported VPD, accounting for 70% of the total VPD reports to TPH in 2002. TPH statistics on influenza are based on laboratory-confirmed cases and cases of influenza-like illness detected during influenza outbreaks. The reported cases are usually influenza type A. Most cases of influenza occur between early November and the end of April. During the 2002/2003 season, there were 203 lab-confirmed cases (8 cases per 100,000) of influenza reported in Toronto (Table 1), a decrease of 93 cases (31%) from the 2001/2002 season. There were 8 per 100,000 lab-confirmed cases reported in the rest of Ontario during the 2002/2003 season. During the 2002/2003 season, only five influenza outbreaks were reported in Toronto compared to 32 during the 2001/2002 season. All of the 2002/2003 outbreaks occurred in institutional settings, 83% of which were in long-term care facilities.³⁷

Vaccination can reduce the incidence of influenza. The percentage of Toronto respondents to the Rapid Risk Factor Surveillance System who reported receiving the influenza vaccination increased from 32% (+/-5%) for the 2002/2003 season to 45% (+/-5%) for the 2003/2004 season.

According to the Immunization of School Pupils Act, children must be immunized against measles, mumps, rubella, diphtheria, tetanus, and polio. The province of Ontario funds these vaccines as well as a hepatitis B vaccine for grade 7 students and diphtheria, tetanus and pertussis vaccine for 14-16 year olds. Reported rates of these vaccine preventable diseases are currently quite low. Pertussis accounted for 29% of reported VPD cases in Toronto in 2002, with a rate of 3 per 100,000. The rate in the rest of Ontario in the same year was 5 per 100,000. These are the lowest rates of pertussis for the period from 1992 to 2002. Three cases of mumps and two cases of rubella were also reported in Toronto in 2002 (Table 1). There were no reported cases of the other vaccine preventable diseases noted above in Toronto in 2002.

The Ontario Ministry of Health and Long-Term Care has announced that free, routine immunization for all children against chickenpox, meningitis and pneumococcal disease is being fully phased-in in early 2005.³⁸ Chickenpox is currently the second most common reportable disease, averaging 3,179 cases per year (129 per 100,000) for the 10-year period from 1992-2001.

Table 1: Number and Percent of Reported Cases of Vaccine Preventable Diseases, Toronto, 2002

Ranking	Reportable Disease	Number of Cases	Percent of Cases
1	Influenza*	203	70
2	Pertussis	83	29
3	Mumps	3	1
4	Rubella	2	<1
	Total	291	100

*Seasonal year from July 1, 2002 to June 30, 2003. Source: Communicable Diseases in Toronto 2002 and Trends 1992 to 2002.

Selected Vaccine Preventable Disease Program Activities:

Influenza Immunization.

2003/2004 was an exceptionally busy year in the Universal Influenza Immunization Program. TPH vaccinated approximately 47,000 Toronto residents against the flu, an increase of 60% from 2002/03. This included an increased number of homeless individuals who were vaccinated at clinics held in conjunction with Toronto Emergency Medical Services. Each year, VPD management makes changes to the program to meet the needs of the community and TPH. Nursing staff from across TPH participate alongside VPD nursing staff to administer the vaccine. To prevent illness and death in those at high risk of flu illness, TPH's infection control staff also ensured that vulnerable individuals living in long-term care facilities in Toronto were protected against the flu.



Immunization of School Pupils. The VPD program continues to review immunization records to ensure that all school students are properly protected against the mandated diseases in the Immunization of School Pupils Act. During the 2003/2004 school year, VPD nurses and clerks reviewed the records of 380,990 students at 850 schools. The vaccination coverage rate for students in these schools was 98.4%.

Hepatitis B Immunization. TPH provides education and offers Hepatitis B vaccine to all Grade 7 students attending Toronto schools. Annually, approximately 28,000 Grade 7 students in 440 schools are eligible to receive the hepatitis B vaccine and 22,000 were vaccinated during 2003/04, for a coverage rate of 80%.

Vaccine Storage and Handling Inspections. To ensure that the public receives effective vaccines, TPH provides on-site annual inspections of health facilities storing publicly funded vaccines, e.g. physicians' offices. This is a requirement of the Ontario Ministry of Health and Long-Term Care. TPH inspected approximately 1,500 sites where publicly funded vaccine is stored in 2004.

Adverse Vaccine Reactions. TPH provides education to physicians in Toronto about reporting requirements for adverse vaccine events. TPH staff investigated 82 reports of an adverse vaccine event reported by Toronto physicians in 2003.

VPD Health Promotion. TPH continues to work with the public, school community and health professionals to ensure that adults and children are properly immunized and able to make informed choices about vaccines.

Other. TPH also delivers vaccinations when there is an outbreak of a vaccine preventable disease. For example, in the summer of 2002, TPH provided hepatitis A vaccinations to approximately 18,000 individuals who had been exposed to an infectious food handler at a local grocery store. Two secondary cases of hepatitis A were associated with this incident.³⁷

Tuberculosis Prevention and Control Program

Goals:

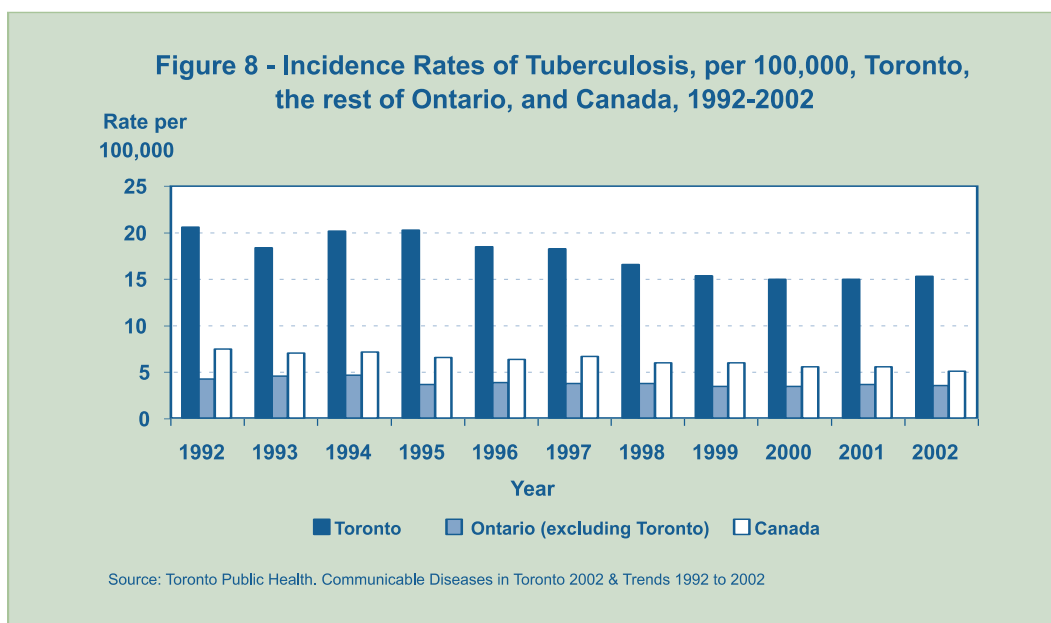
To reduce the incidence of tuberculosis (TB) in Toronto.

To provide an accessible and equitable tuberculosis control program.

Selected Tuberculosis Indicators:

Tuberculosis is primarily a disease of the respiratory system that is spread by tiny droplets that are dispersed into the air when infected individuals cough, sneeze, or talk. Overall, one-third of the world's population is infected with the TB bacillus, and approximately 2 million people died from this curable disease in 2002. People infected with TB bacilli will not necessarily become sick with the disease, because it can remain latent in the body. Only 5-10% of people who are infected with TB bacilli, and do not have risk factors such as HIV, will become sick or infectious during their lifetime. Treatment of latent TB infections reduces the risk of developing active TB. The highest number of estimated TB cases and deaths is in the South East Asia Region, and the highest mortality per capita is in Africa, where HIV has led to a rapid increase in the incidence of TB, and the likelihood of dying from the disease. Left untreated, each person with active TB disease will infect an average of 10 to 15 people every year.³⁹

There were 377 reported cases of TB in Toronto in 2002. There has been an overall decline in the TB rate in Toronto from 21 per 100,000 in 1992 to 15 per 100,000 in 2002. Toronto rates of TB exceeded those reported in the rest of Ontario and Canada from 1992 to 2002. In 2002, Toronto cases accounted for 54% of TB cases in Ontario, and 24% of TB cases in Canada (Figure 8).



In 2002, 88% of TB cases reported in Toronto, for whom the risk setting was known, had either traveled to, or lived in, a country outside of Canada where TB is endemic. Other risk settings included staying at a shelter or rooming house (4%), and the home environment (3%). The likely location of acquisition was unknown for 5% of the cases. In 2002, 94% (n=353) of Toronto's TB cases were born outside of Canada. The most frequently identified countries of birth were China, India and the Philippines (each accounting for 12% of foreign-born cases).

An outbreak of TB in two homeless men's shelters was identified in 2001, involving 15 cases with the outbreak strain and 1,582 contacts between June 2000 and October 2002. Eighty-nine percent of 1,582 contacts were assessed and the prevalence of TB infection was found to be 35%.

Selected Tuberculosis Prevention and Control Program Activities:

Tuberculosis Control and Case Management. TPH TB staff are mandated to ensure that each person who is diagnosed with TB not only receives the correct treatment, but also completes the treatment as prescribed. The length of treatment for someone with TB ranges from 6 months to 2 years. Where appropriate, TB clients are offered Directly Observed Therapy (DOT). Successful treatment of TB is more likely when cases are under DOT, where the patient is observed taking their medication to ensure compliance with treatment. Approximately 50% of patients with active TB in Toronto are on DOT at any time. Highest priority is given to individuals with drug resistant TB, children and adolescents, clients who are HIV positive, homeless or underhoused, clients whose TB has relapsed or re-activated, and clients who are non compliant with treatment. Of Toronto TB cases reported in 2001, 84% of those treated with DOT and 75% of those not treated with DOT were "successfully treated." The TB case managers oversee the treatment of cases by educating clients and their families about TB, ensuring that the treatment is adequate and completed, communicating with the treating physician regarding any side effects, and providing free medication, which is delivered to the physician's office. Case managers also identify any contacts that may have been at risk for becoming infected with TB and ensure that they are adequately tested and treated as appropriate.



With respect to the TB outbreak in shelters, all suspect cases of active TB were isolated in hospital until non-infectious and received DOT upon discharge. A section of one of the shelters was closed to admissions until the outbreak was declared over. TPH utilized proactive approaches such as the use of incentives, flexible DOT arrangements, Directly Observed Preventive Therapy, and broad inclusion criteria for contacts.

TPH initiated an active case finding initiative among staff and residents at all men's and co-ed shelters, after two active cases were identified in one shelter's staff members in the fall of 2004. The case finding began on November 8, 2004. With this endeavour, seven new cases were identified in residents.

Tuberculosis Prevention. The TB Prevention Team is dedicated to outreach and health promotion initiatives, and reaches a variety of populations through multicultural organizations, newcomer agencies, community groups, schools, daycares, agencies that work with the homeless/underhoused population, and Corrections.

The team also follows immigrants/refugees placed on surveillance for inactive TB by Citizenship and Immigration Canada. In 2000, the Team followed approximately 1,500 individuals. By 2002, this number had grown to more than 3,400. In 2002, approximately 2000 individuals with latent TB infection (LTBI) completed prophylactic treatment.

During 2003, the Team delivered 59 presentations, reaching more than 1600 individuals from various groups. The Team operates a telephone consulting line, open to the public, which received close to 600 telephone calls in 2003. The team also supplies numerous groups with TB materials, distributing thousands of resources each year.

On World TB Day, March 24th 2004, TPH hosted a workshop for organizations that service Toronto's newcomer population, reaching more than 200 different groups.

Sexual Health Promotion & Sexually Transmitted Infections/HIV Program

Goal:

To reduce incidence and complications of sexually transmitted infections (STIs), including HIV/AIDS, through surveillance, education, follow-up of cases and contacts, health promotion and protection.

Selected Sexual Health & Sexually Transmitted Infections/HIV Indicators:

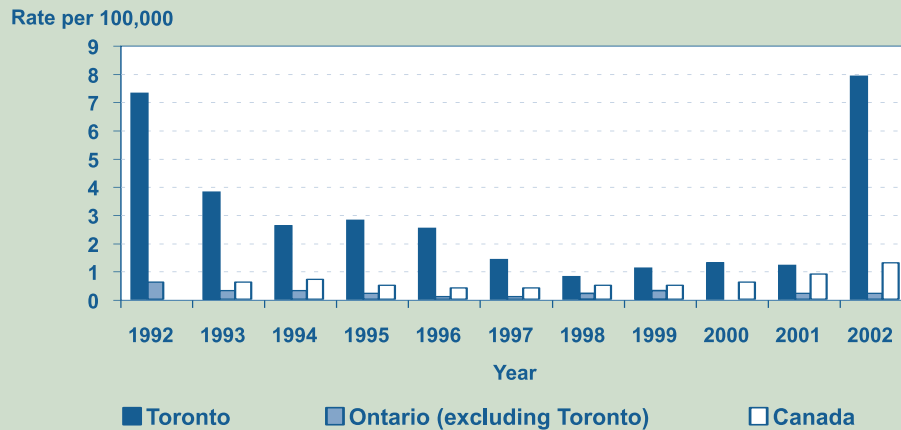
Chlamydia is the most common sexually transmitted infection in Toronto. Rates of chlamydia decreased from 184 per 100,000 in 1992, to 157 per 100,000 in 1997, and then increased to a high of 254 per 100,000 in 2002. The increase between 1997 and 2002 was partly due to increased detection after the introduction of a new screening test in 1994. Chlamydia incidence has historically been higher in women, although recently the gender difference in incidence rates has decreased. This is also partly due to new screening tests allowing for more testing and detection of chlamydia in men. The rate for the rest of Ontario in 2002 was 132 per 100,000.

Gonorrhea. The gonorrhea incidence rate in 1992 was 110 per 100,000, declining to 48 per 100,000 in 1997, and increasing to 72 per 100,000 in 2002. Rates are highest among youth and young adults (ages 15-24). Men are more likely than women to be reported as having gonorrhea. The gonorrhea incidence rate for men was 102 per 100,000 in 2002, while the rate for women was 44 per 100,000 in the same year. The rate for Ontario (excluding Toronto) was much lower than the Toronto rate, at 14 per 100,000 in 2002.

Syphilis. The incidence rate of infectious syphilis declined from 7 per 100,000 (173 cases) in 1992 to a low of 0.8 per 100,000 (19 cases) in 1998. The low rate of syphilis persisted between 1999 and 2001. In 2002, an unexpected and dramatic increase in syphilis cases was noted. The number of syphilis cases in Toronto increased from 31 cases in 2001, to 195 cases in 2002. Males accounted for 96% of all reported cases and had an incidence rate of 16 per 100,000 (n=188) in 2002. In the same year, females accounted for 4% of all reported cases and had an incidence rate of 0.5 per 100,000 (n=7). The recent syphilis cases are occurring primarily in populations of men who have sex with men. Of the 195 reported infectious syphilis cases in 2002, 74 (38%) were known to be co-infected with HIV. Other large urban centres in Canada and elsewhere have experienced a similar increase in the number of syphilis cases. Compared to Toronto, rates in Canada and the rest of Ontario remain low (Figure 9).

HIV and AIDS. The reported rates of HIV have fluctuated in Toronto from 41 per 100,000 in 1992, to 16 per 100,000 in 1998, to 25 per 100,000 in 2002. AIDS rates in Toronto have declined from 19 per 100,000 in 1992 to 3 per 100,000 in 2002. Historically, AIDS rates have been higher among males, with only 4% of cases reported in females in 1992. By 2002, the proportion of females among

Figure 9 - Incidence Rates of Infectious Syphilis, per 100,000, Toronto, the rest of Ontario, and Canada, 1992-2002



Source: Toronto Public Health. Communicable Diseases in Toronto 2002 & Trends 1992 to 2002

AIDS cases had risen to 17%. HIV and AIDS rates in Toronto exceeded those in the rest of Ontario and Canada each year between 1992 and 2002.³⁷

Injection Drug Use. It is estimated that there are 15,000 injection drug users in Toronto. A recent Health Canada study revealed that in 2003 the rate of HIV was 5% among injection drug users in Toronto and the self-reported rate of Hepatitis C was 55%. These rates are actually significantly lower than other large cities in Canada and the United States. The study identified heroin, cocaine, crack, and morphine as the most common injection drugs in Toronto.⁴⁰

Selected Sexual Health Promotion & Sexually Transmitted Infections/HIV Program Activities:

The Sexually Transmitted Infections (STI) Program reduces the incidence and complications of all STIs, including HIV/AIDS, and promotes healthy sexual behaviours. All reports of STIs received from physicians, hospitals and laboratories are followed to ensure that each client received adequate, appropriate treatment, education and counselling. In addition, staff ensure that partners of these clients are identified, counselled and referred for testing and treatment. STI program staff also provide educational outreach to groups of physicians and other health professionals.

The Sexual Health Promotion Program also aims to reduce the incidence of, and complications from, all STIs, including HIV/AIDS, through individual counselling and referral, peer education, consultation with teachers and other community partners, parenting groups, sexual health promotion campaigns, and involvement in community capacity building, advocacy and policy development. The program also aims to increase access to contraception methods and reduce the rate of teen pregnancy.

Sexual Health Clinics provide services in 10 different locations across the City of Toronto. Over 50,000 clinic visits were recorded in 2003. The target group is women under 26 years of age, and men under 30 years of age. The program also provides services to those who have barriers to accessing other health services, such as recent immigrants and refugees, those without OHIP, those with ability limitations, homeless or street involved, and those living in poverty. Sexual health clinic services include STI testing and free treatment, birth control counselling and provision of birth control, the provision of condoms and the emergency contraceptive pill at a low cost or free, pregnancy testing and options counselling, and the provision of vaccines.

The *AIDS Prevention Grants Program* was established by the former Toronto City Council in 1987. Public Health grants are a key component of TPH's comprehensive strategy for the prevention of HIV/AIDS. The goal of the grants is to support strategic, targeted community education programs to influence behaviours and situations that put people at risk of acquiring HIV. The integration of grants with City-delivered programs helps ensure responsiveness to emerging public health issues and timely access to community expertise in local organizations. In 2004, City Council allocated \$1.36 million for AIDS prevention grants which funded 51 community projects.

The objectives of the AIDS Prevention Grants are to address high risk behaviours, enhance access to HIV/AIDS prevention messages and address social barriers related to poverty, race, sexual orientation, culture, sex, language skills, age, physical or mental ability, etc.

The *AIDS and Sexual Health Information Line* is a province-wide anonymous counselling line, offering service in 18 languages, seven days a week. Counsellors assist callers with a variety of concerns including HIV prevention and testing, STI information, clinic referrals, birth control, and relationship issues. The line receives about 40,000 calls annually from across the province.

The Works is an HIV/AIDS prevention program for injection drug users and sex trade workers in Toronto. Using a Harm Reduction Framework, the program provides needle exchange, safer injection supplies, and condom distribution. In the office, nurses and counsellors provide crisis intervention, short-term counselling, basic first aid, referrals, advocacy, assistance with accessing housing, medical, social services, and treatment. There is also a low-threshold methadone maintenance program for opiate users, HIV testing, hepatitis screening, and vaccination. A mobile van also provides services throughout the city. Since the program cannot meet the needle exchange needs of the entire city, there are 28 community agencies across the city that are under contract with TPH to do needle exchange.

In addition to direct service, staff are responsible for various community development initiatives, such as street outreach, prison outreach, participating on community committees and advisory boards and supervising peer training and outreach programs. Each year, *The Works* sees approximately 30,000 clients, distributes 350,000 needles, and 70,000 condoms.

Control of Other Infectious Diseases and Infection Control Program

Goal:

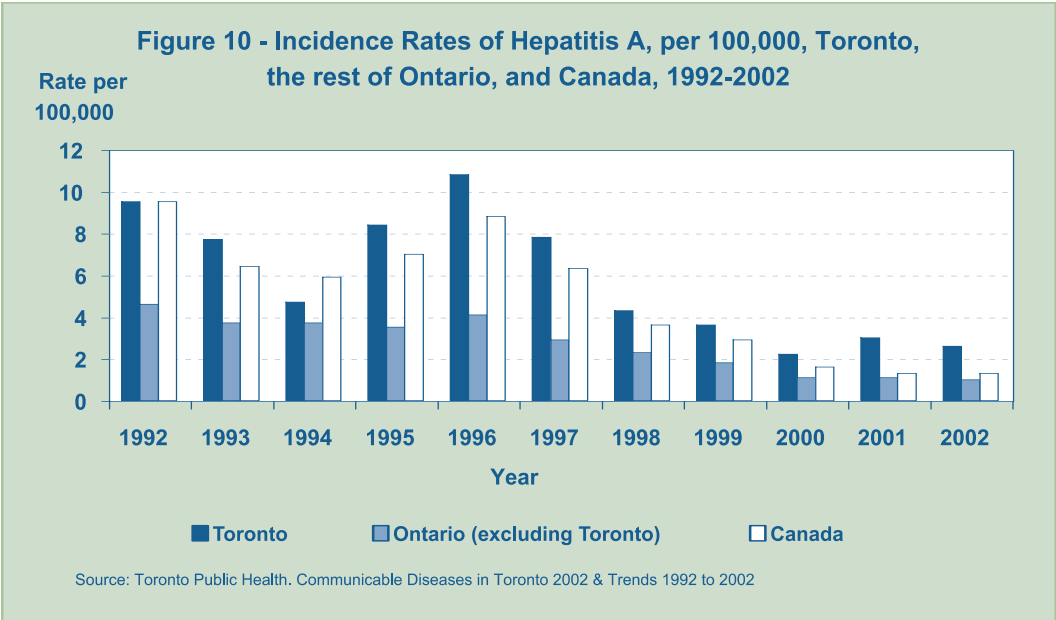
To reduce the incidence of communicable diseases of public health importance.

Selected Other Infectious Diseases Indicators:

An outbreak is generally defined as the occurrence of two or more cases of illness linked by person, place, and time. Disease events that exceed an expected baseline rate are also investigated as potential outbreaks. In 2002, there were 301 enteric disease outbreaks reported in Toronto, an increase of 103% from 2001. The number of respiratory outbreaks decreased by 42% from 140 outbreaks in the 2001/2002 season to 59 outbreaks during the 2002/2003 season. Long-term care facilities were the most common sites for both respiratory and enteric disease outbreaks in Toronto.

West Nile Virus (WNV) occurs when a human is bitten by a mosquito that has been infected with the virus through a blood meal from an infected bird. WNV first appeared in North America in 1999, and was first detected in humans in Canada in 2002. In 2002, there were 163 probable and confirmed cases of WNV reported in Toronto. In 2003, there were 44 cases. In the rest of Ontario, there were 242 cases of WNV reported in 2002, and 45 cases reported in 2003.⁴¹ The decrease in number of cases may be due to the normal cycle of WNV, weather patterns, or mosquito control activities.

Hepatitis A. The rate of hepatitis A in Toronto has decreased from 11 per 100,000 in 1996, to 2 per 100,000 in 2000. The 2002 rate was 3 per 100,000 in Toronto, and 1 per 100,000 in the rest of Ontario (Figure 10).



Selected Other Infectious Diseases Program Activities:

Communicable Disease Surveillance is ongoing and follow-up occurs for all communicable disease reports that are received from physicians, laboratories, and institutions. Cases (and their physicians) are contacted to identify additional ill persons and/or their contacts, provide information about the disease and ways to prevent further spread, implement control measures and ensure appropriate treatment. The disease database is routinely analysed to identify outbreaks, determine disease trends, provide information for program planning, and disseminate information to hospitals, infectious disease specialists, and other relevant partners.

TPH is working with other city divisions, such as Fire, Ambulance and Police Services, and with external agencies to ensure that the city is prepared for a bioterrorism threat. Examples of bioterrorism threats are anthrax, and smallpox.

In 2002, the City of Toronto focused West Nile Virus control efforts on surveillance and education. Given the considerable human illness and several deaths related to WNV in Toronto in 2002, additional measures were added to the WNV program in 2003. These included enhanced educational outreach, the investigation of reports of standing water, remediation of potential mosquito breeding sites and a mosquito control program in catch basins using the pesticide methoprene. Later in the season, mosquito-breeding sites in surface waters were treated with the pesticide *Bacillus thuringiensis israelensis* (Bti) in areas where WNV positive indicators were found.

The TPH response to WNV is a co-ordinated effort. The human surveillance team follows up on communicable disease reports received from physicians, hospitals and laboratories. Where suspected areas of environmental exposure were identified, referrals are made to the Healthy Environments team for follow-up. Health Hazards Investigations responds to WNV standing water complaints. A protocol for dealing with WNV, including the coordination of larviciding, has been developed.

TPH offers infection control expertise to nursing homes, homes for the aged, day nurseries and personal services settings. TPH participates in numerous infection control committees across the city, conducts inspections, consults on policies and procedures, offers in-service education and provide disease statistics.

Communicable Disease Liaison Program

Goals:

To improve early detection of, and co-ordinated response to, communicable diseases in hospitals.

To act as a liaison between hospitals and TPH Communicable Disease Control programs.

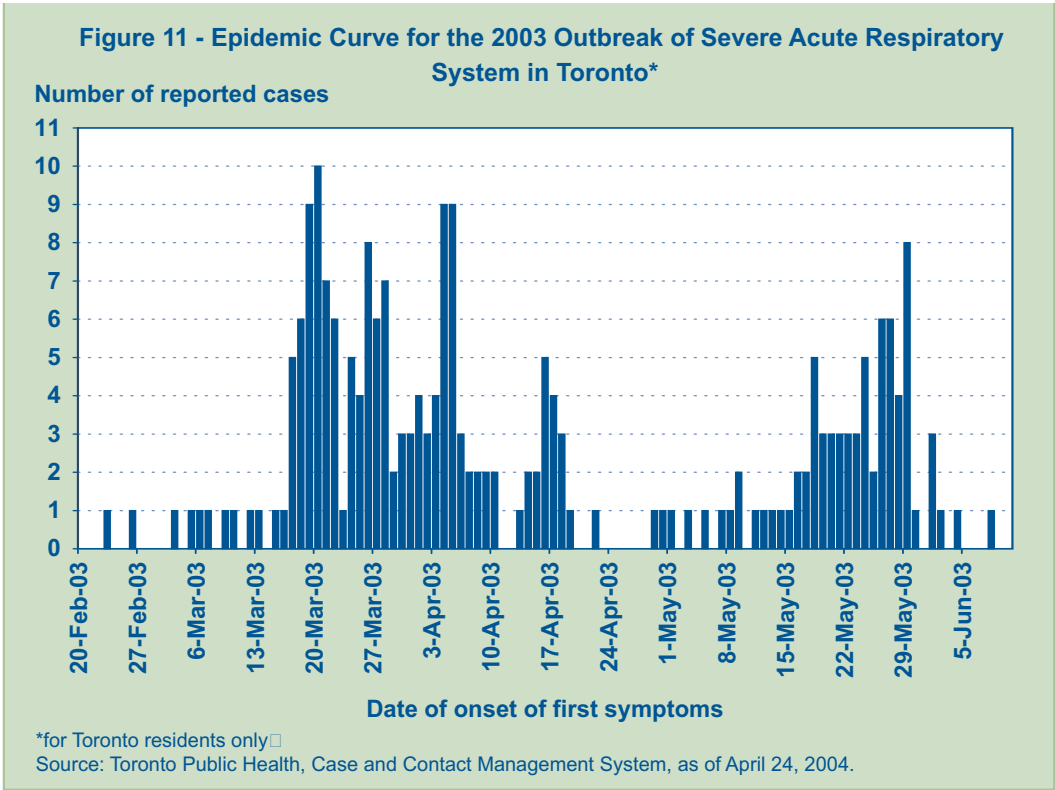
To provide consultation on infection control issues in hospitals.

To continue to strengthen working relationships and partnerships with hospitals in Toronto.

Selected Hospital Communicable Disease Indicators:

In spring 2003, Toronto experienced the largest outbreak of Severe Acute Respiratory Syndrome (SARS) outside of Asia. The first case of SARS in Toronto was reported to Toronto Public Health on March 9, 2003. SARS was made a reportable disease under the Health Protection and Promotion Act (HPPA) on March 24, 2003, and a provincial emergency was declared on March 26, 2003. Phase 1 of the outbreak was from March 13 to April 20, 2003. Phase 2 began on May 20 and continued until June 24, 2003. There have been no cases of SARS reported in Toronto since that time.

During the outbreak of 2003, over 1,800 case investigations were conducted in Toronto. Two hundred and twenty-eight cases of SARS were identified (212



probable cases and 16 suspect cases). Fifty of the patients who were hospitalized required intensive care support. Thirty-eight SARS cases died. Fifty percent of all cases were health care workers. There was no significant community spread. The total number of SARS cases during the 2003 outbreak in Ontario was 375, including 247 probable and 128 suspect cases. There were 44 deaths related to SARS in Ontario. Over 26,000 contacts were identified and followed by TPH. Twenty-seven Section 22 isolation orders were issued under the HPPA during the outbreak. A summary of the SARS outbreak is depicted by the epidemic curve shown in Figure 11.

Selected Hospital Communicable Disease Program Activities:

The Communicable Disease Liaison Unit (CDLU) was established with the support of the Ministry of Health and Long-Term Care (MOHLTC) in June 2003 as a SARS Recovery Team and to provide liaison with hospitals. Support is provided to 14 hospital corporations with 21 sites. In the event of a re-emergence of SARS or other emerging infectious disease, TPH will conduct public health investigations and provide outbreak management. TPH is monitoring global communicable disease activity for emerging infectious diseases.

During the SARS outbreak of 2003, over 300,000 calls were made to the TPH hotline. The highest number of calls received in one day was 47,567. There were 700 TPH staff assigned full time to the outbreak team. Over 1,200 media calls were received in the first 8 weeks of the outbreak, with daily live television briefings being conducted throughout the outbreak. Communication materials were posted on the web and printed in 14 languages.

After the SARS emergency in 2003, surveillance and screening for febrile respiratory illness became a new MOHLTC standard for hospitals. The CDLU provides support to hospitals in planning, developing and implementing FRI screening in emergency rooms and for hospital inpatients. Under new MOHLTC standards, TPH investigates all reported cases of febrile respiratory illness/severe respiratory illness and their contacts.

CDLU participates in hospital infection control committees to provide public health expertise and consultation. The unit supports the planning, development, implementation and evaluation of infection control policies in hospitals, and works with hospitals in managing respiratory and enteric outbreaks.

The co-ordinated liaison role includes the transfer of reportable disease information between communicable disease programs at Toronto Public Health and hospitals. CDLU supports hospital infection control teams in providing education about communicable diseases to hospital staff. Epidemiological information is provided to hospitals on communicable disease and surveillance activity within the community, institutions, and globally.

Over the last several years all levels of government have been considering the issue of pandemic influenza. SARS, and the more recent emergence of avian influenza, have brought these issues to the forefront and focus has been placed on developing a comprehensive plan. Local pandemic influenza plans will be based on plans that have already been developed by Health Canada and the

MOHLTC. A pandemic influenza plan for Toronto is being developed in collaboration with hospitals, infectious disease specialists, Fire, Police, and Emergency Services, the Coroner's office, the Toronto District Health Council, and many other stakeholders, with consideration to the overall Emergency Plan for the City. CDLU staff are integral to the coordination and development of the Toronto Pandemic Influenza Plan.



Health and the Environment Program Cluster

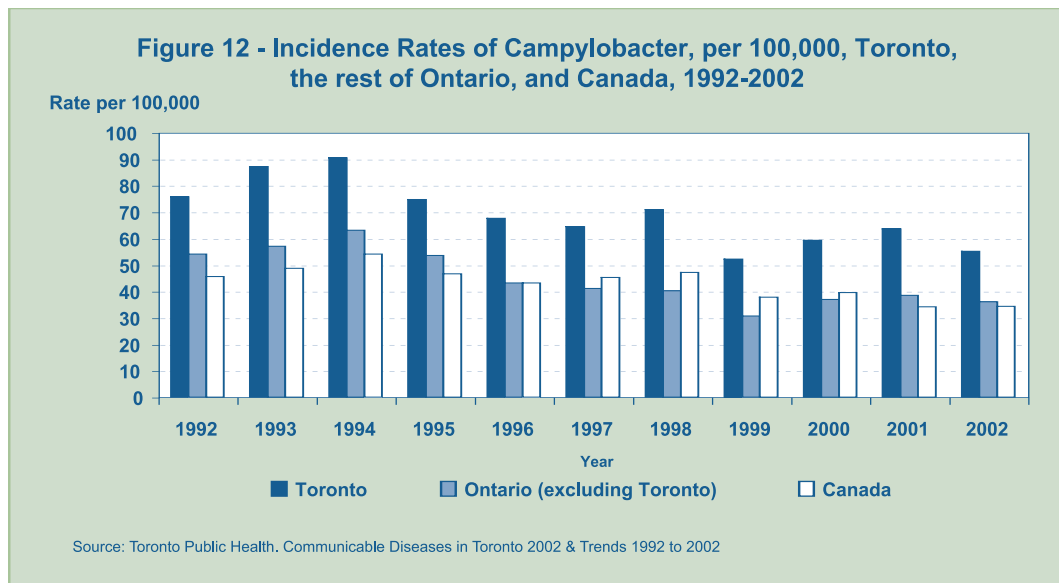
Food Safety Program

Goal:

To improve the health of the population by reducing the incidence of foodborne illness.

Selected Food Safety Indicators:

Campylobacter enteritis continues to be the most commonly reported enteric food and waterborne disease in Toronto, accounting for 36% of all disease reports of this type in 2002. Common sources are undercooked chicken or pork, raw milk and direct contact with animals. Symptoms include mild to severe diarrhea, vomiting, abdominal pain and fever, although most cases are asymptomatic. In 2002, there were 1,367 cases of *Campylobacter* in Toronto, a decrease of 210 cases from 2001.



Toronto has higher rates of *Campylobacter* than the rest of Ontario and Canada. In 2002, Toronto's rate was more than 50% higher than the rate in the rest of Ontario (Figure 12).

In 2002, there were 644 cases (26 cases per 100,000) of salmonellosis reported, which was a decrease of 52 cases from 2001. Outbreak related cases accounted for 5% of salmonellosis cases in 2002. Seven percent of all cases were hospitalized and no related deaths were reported. Toronto rates of salmonellosis typically exceed those reported in the rest of Ontario and Canada. The age group most commonly affected by salmonellosis is children under 5 years of age.

Verotoxin Producing E. coli (VTEC) infection can occur after the ingestion of a very small number of organisms (10-100). In 2002 there were 47 reported cases of VTEC (2 per 100,000) in Toronto. This is the lowest number of cases over the 11-year period from 1992 to 2002. Toronto rates of VTEC were consistently lower than those reported in the rest of Ontario and Canada during this time period. VTEC is more often associated with farming communities than urban areas.

Food and Waterborne Outbreaks. There were a total of 3,868 reported cases of food and waterborne diseases in Toronto in 2002. There were 301 enteric disease outbreaks in 2002, compared to 148 in 2001. The increase in the number of outbreaks was due largely to an increase in the number of reported cases of norovirus (formerly Norwalk virus) in the late fall and winter of 2002. As mentioned above in the section on Control of Infectious Diseases and Infection Control, the setting with the largest number of enteric outbreaks was long-term care facilities in 2001 and 2002.

Selected Food Safety Program Activities:

The Toronto Licensing Bylaw was amended in 2000 to give authority to the *Food Premises Inspections and Disclosure System*. The purpose of the system is to make sure that food premises in the city are clean and safe, and to provide information about inspections.

There are approximately 18,000 food premises in Toronto. Over 6,000 of those are restaurants. During a restaurant inspection, TPH's Public Health Inspectors look for any conditions that are in violation of the Ontario Food Premises Regulation or any other condition that may result in foodborne illness. All food premises in the Province of Ontario must be inspected one to three times per year, depending on the type of establishment, volume of food sales and menu selection. Food premises include restaurants, supermarkets, bakeries, food take-outs, cafeterias, food manufacturers and food warehouses.

A green pass notice indicates that a premises is in compliance with the Food Premises Regulation, or only minor infractions that are not likely to present a significant or immediate risk to the health of the public were noted. Of the 27,552 inspections conducted in 2003, 88% resulted in the premises receiving a green pass notice. The pass rate improved 13% between 2001 and 2003, while the number of inspections increased by 24% during the same time period.

A yellow conditional pass notice indicates that a Public Health Inspector observed significant infractions, which present a potential health risk to the public. A conditional pass does not mean that it is unsafe to eat at the establishment, and the premises may remain open. A conditional pass notice will remain posted until the re-inspection within 24-48 hours, and the Inspector has confirmed that the significant infractions have been corrected. Failure to correct infractions under a conditional pass notice can result in legal action or referral to the Licensing Tribunal.

A red closed notice indicates that the Public Health Inspector observed one or more crucial infractions during an inspection and an order to close was issued. A crucial infraction presents an immediate health hazard to the public, and immediate action must be taken by the owner/operator to remove the health hazard or close the establishment. Only 0.1% of inspections resulted in an establishment closure in 2003.



The Dinesafe Web site provides information to the public concerning the TPH Food Premises Inspection and Disclosure system and the results of the most recent TPH inspections. The Web site is not a substitute for the notification and posting requirements of Toronto Bylaw 574-2000.

Food Handler Certification Courses are offered by TPH to provide food handlers with the knowledge of safe food handling practices to prevent foodborne illness. To obtain the certificate, one must successfully pass an examination from a recognized food handler certification course.

Safe Water Program

Goals:

To reduce the incidence of waterborne illness in the population.

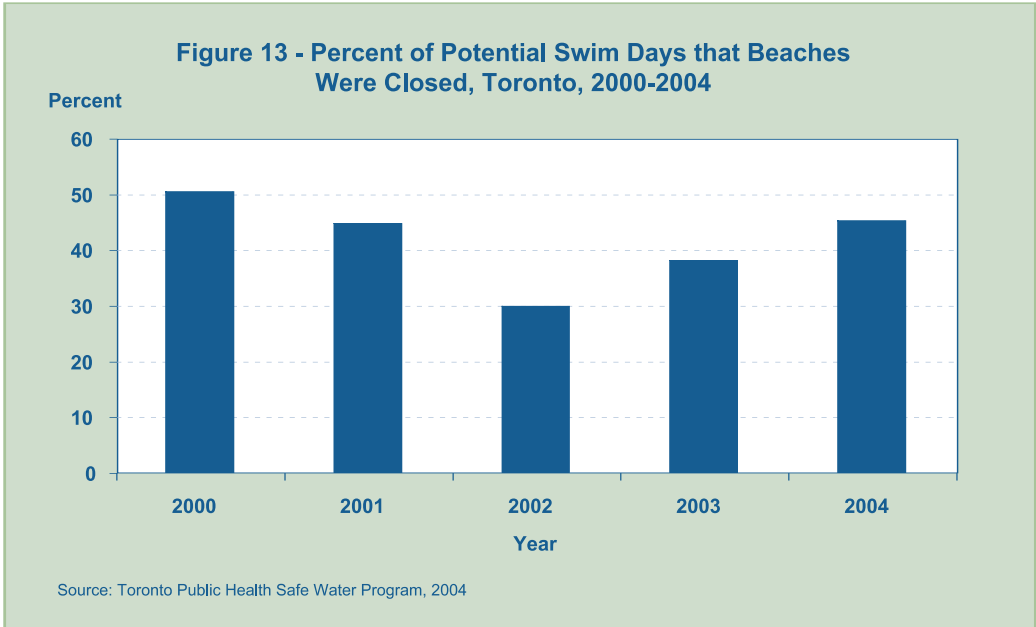
To ensure that community drinking water systems meet the health-related chemical, physical, microbiological and radionuclide standards as published in the *Ontario Drinking Water Quality Standards* (effective June, 2003) and the *Safe Drinking Water Act* (effective December, 2002).

To reduce communicable disease transmission at public beaches.

Selected Safe Water Indicators:

Drinking Water. Of approximately 40,000 microbiological tests carried out on Toronto drinking water from January to mid-November 2003, 61 test results indicated an adverse water quality condition. Only one test result showed that chlorine levels were below the acceptable limit of 0.25 mg/L (25 parts per million). Lead levels are tested in response to inquiries by specific households. Two test results showed that lead levels were above the acceptable limit of 0.01 mg/L in the first 10 months of 2003. Higher levels of lead tend to be more prevalent in older homes. The City of Toronto's Works and Emergency Services (WES) has a program in place to replace old lead pipes. All other test results, such as those for organic compounds and pesticides, were within acceptable limits during this time period.

Beach Closures. Over the 5 year period from 2000-2004, the percentage of potential swim days that Toronto beaches that were posted with warnings against bathing ranged from 30% to 51% (Figure 13). Western Toronto beaches are most likely to be posted with warnings, while Toronto Island Beaches are least likely to be posted with a warning. The percentage of potential swim days that Toronto beaches were closed is based on testing at 14 Toronto beaches. The average bathing season is 92 days from early June until Labour Day.



Selected Safe Water Program Activities:

Drinking Water Quality. The *Ontario Drinking Water Objectives* were renamed the *Ontario Drinking Water Quality Standards* and were given the force of law in August 2000. The City of Toronto meets, and in many cases exceeds, the testing and water quality requirements of these standards. Toronto's water is tested for unsafe microbes, low chlorine levels, lead, other elements, and chemicals. Approximately 12,000 bacteriological tests alone are performed each quarter on the city's drinking water. The Works and Emergency Services division of the City of Toronto is responsible for testing the water and relaying information about adverse test results to the TPH Safe Water Program. In the case of an adverse test result, the Medical Officer of Health is alerted and a boil water advisory may be issued if the drinking water supply is bacteriologically contaminated. A drinking water advisory would be issued if the drinking water was found to have chemical or radioactive contaminants. TPH also participates in a Water Quality Advisory Group, along with the Ministry of the Environment, and Works and Emergency Services.

Beaches. The TPH Safe Water Program is part of the team that posts warning signs on Toronto's 14 beaches when water quality is unsuitable for bathing. Posting of beaches is a collaborative process involving TPH, Works and Emergency Services, the Ministry of Health and Long-Term Care, the Police Marine Unit, and Parks and Recreation. Standard protocols require beach testing only once per week, but TPH samples water from all 14 area beaches daily from June to Labour Day. Bathing water quality can be affected by periods of heavy rainfall, heavy winds, or pollution sources. Warning signs are posted if the geometrical mean of the samples from a beach exceeds 100 *E. coli* per 100 ml of water. Beaches may also be posted because of the presence of hazardous infectious materials, high temperatures that allow bacterial growth, or abnormal pH levels. TPH works with the Police Marine Unit to let lifeguards know when a warning needs to be posted on a beach. In addition to posting warning signs, TPH also updates its beaches hotline, its external Web site, and makes the bathing advisory information available to the Toronto Star each day.



Air Quality Program

Goal:

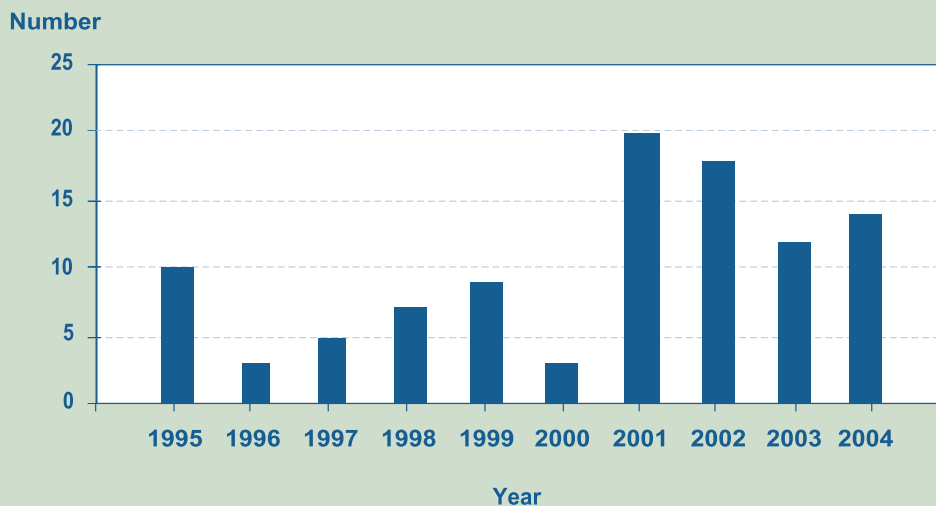
To prevent or reduce the adverse health outcomes from exposure to air pollutants.

Selected Air Quality Indicators:

Poor air quality is related to a range of health effects: increased incidence and duration of respiratory symptoms, reduced lung function, acute and chronic bronchitis, asthma attacks, increased hospitalizations for respiratory and cardiac causes, elevated mortality rates, and reduced life expectancy. Newer studies link air pollution with lung cancer, heart attacks, strokes and high blood pressure. The burden of illness associated with short-term and chronic exposure to air pollution in Toronto is estimated to be 1,700 premature deaths and 6,000 hospitalizations annually. The current mortality estimate is based on the health risk associated with acute exposures to ozone, nitrogen dioxide, carbon monoxide and sulphur dioxide, and chronic exposure to fine particles.⁴²

Air Quality in Toronto. Data collected in 2002 from the downtown Toronto air quality monitoring station shows that Toronto had the highest summer concentration of fine particulate matter in ambient air of cities where measuring takes place in Ontario. Toronto also typically experiences higher levels of nitrogen dioxide because of its higher population density and greater vehicle emissions. While air quality has shown an overall improvement in Ontario over the past several years, levels of some pollutants have been increasing in Toronto. A large proportion of Ontario's population lives in Toronto and this means that a very sizeable population is exposed to high pollution levels.⁴³

Figure 14 - Smog Alert Days in Toronto, 1995-2004



Source: Toronto Public Health, 2004

In 2002, downtown Toronto air quality was rated “very poor” less than one percent of the time, from “moderate” to “poor” almost 11% of the time, and “very good” to “good” 89% of the time. Adverse health effects are more likely to occur when air quality is rated poor or very poor, but they can also occur when air quality is rated moderate, good, or very good. This data is based on hourly reports from Toronto’s downtown air quality monitoring site.

Smog is the most visible form of air pollution. It is made up of ozone, fine particulate matter, sulphur dioxide, and nitrogen dioxide. It is caused when heat and sunlight react with various pollutants emitted from industry, cars, pesticides and oil-based home products. Smog looks like a brownish-yellow hazy cloud. Smog alerts mostly occur because of elevated levels of ozone and fine particulate matter on hot summer days, although smog can be a year-round problem. Smog episodes in Ontario and Toronto are also affected by regional weather conditions and long-range transport of pollutants. There were 14 smog alert days in Toronto in 2004 (Figure 14). The number of smog alert days varies from year to year, and is influenced by the weather and other factors.

Selected Air Quality Program Activities:

TPH works collaboratively with other City departments, other levels of government, industry, non-governmental organizations and the community in addressing air quality issues.

20/20 The Way to Clean Air is a campaign that encourages reducing energy use at home and on the road by 20%. Residents are offered a 20/20 Planner, which is a step-by-step guide to reducing energy use. The campaign also highlights the cost savings that occur with reductions in energy use. 20/20 has a new partnership with the province-wide EcoSchools initiative to bring 20/20 resources to schools across the Greater Toronto Area. The EcoSchools initiative involves children in reducing waste, conserving energy, “greening” the school grounds and learning about environmental issues.

TPH promotes smog-reducing activities year round, and especially during a Smog Alert, when an Air Quality Index rating of at least 50 is expected within the next 24 hours. TPH co-ordinates the corporate smog-alert response plan that is implemented by City divisions. For example, when a smog alert has been issued, there is a suspension or reduction in the use of gasoline or diesel powered vehicles.

TPH also supports the City of Toronto’s Idling Bylaw. An idling vehicle produces twice as much exhaust as a vehicle that is in motion. The Idling Bylaw limits idling to no more than 3 minutes in a 60 minute period.

Other air quality-related activities include research, in collaboration with Health Canada and Environment Canada, into the health effects of exposure to smog, extremes in weather, and the potential effects of smog-heat interaction. TPH is participating in an indoor and outdoor air monitoring research project in collaboration with the University of Toronto, Health Canada and Environment Canada to determine whether staying indoors during smog alert days significantly reduces exposure to air pollutants. TPH is also working to provide a regional approach to air quality through participation in the Greater Toronto Area Clean Air Council and Smog Summit.

Health Hazard Investigation Program

Goals:

To prevent or reduce exposure to toxic chemical, biological and physical agents and other environmental hazards.

To promote enhanced environmental quality and health and to prevent or reduce adverse health outcomes resulting from exposure to health hazards.

Selected Health Hazard Investigation Indicators:

Health Hazards Complaints. TPH responds to complaints about many types of health hazards, including:

- Indoor air quality;
- Workplace complaints;
- Off-site impacts of demolitions;
- Chemical fires.

In February of 2003, TPH began recording health hazards complaints in the Toronto Healthy Environments Information System. Since that time, TPH has received and investigated 9,984 hazard-related complaints. The two most common hazard-related types of complaints are standing water related to West Nile Virus (3244 complaints), and mould (1,021 complaints).

Pesticides and the Pesticide Bylaw. Pesticides are products used to kill plants, insects and plant diseases. Pesticides used on lawns and gardens include herbicides, insecticides and fungicides. Evidence suggests that there is a link between pesticide exposure and adverse neurological or reproductive effects, and some cancers. Research has not definitively shown the number of cases of cancer, neurological impairment or reproductive problems arising from pesticide exposures. However, studies show a greater susceptibility to adverse effects in pregnant women, fetuses, infants, children, and the elderly. Researchers who study the link between health effects and pesticides most commonly use occupational studies. Some researchers in the U.S. have identified links between the above-noted harmful effects, especially in children, and the use of pesticides in and around the home. No such studies have been conducted on people living in Toronto. Similarly, although studies that measure general population exposure to pesticides have not been done in Canada, U.S. researchers testing pesticide levels in urine samples (a measure of total exposure, including through food) have found that most people in the United States (greater than 80% in some samples) carry evidence of having been recently exposed to pesticides and their breakdown products.

An approximate measure of household exposure to outdoor pesticides comes from Toronto survey data on self-reported pesticide use. In 2003, almost 40% (+/-5%) of Toronto respondents to the Rapid Risk Factor Surveillance System

(RRFSS) who cared for a lawn or garden reported using pesticides. This figure is in accordance with those from a 2002 survey of 1,000 Toronto residents conducted by TPH. Of those residents whose homes had a lawn (n = 635), 38% reported having used pesticides outdoors in the previous two years. This figure included pesticide use by the householder (19% of those with lawns), by a lawn care company (3%) and by both the householder and a company (16%).

Selected Health Hazard Investigation Program Activities:

The Toronto Board of Health and City Council recognized that human health could be put at risk from pesticide use. As of April 1, 2004, the City of Toronto's Pesticide Bylaw restricts the outdoor use of pesticides on public and private property in Toronto. It aims to reduce pesticide exposure in Toronto by allowing only certain lower risk products and by encouraging natural methods for lawn and garden care. It provides for the use of pesticides only for pest infestations or to control or destroy a health hazard. TPH is responsible for both public education and enforcement of the bylaw.

The Children's Health and Environment subprogram aims to protect children's health from environmental exposures with a vision that all Toronto children shall enjoy the highest achievable level of health. In 2002, TPH completed a Needs Assessment Framework Study, which included a survey of parents of young children in Toronto to assess beliefs, knowledge and practices regarding children's environmental exposures. A major report will be released in 2005, discussing the state of knowledge in this area while identifying programmatic needs and action steps for TPH and other City institutions.



In addition, as a member of the Canadian Partnership for Children's Health and Environment, TPH is working with local, regional and national community partners to develop a health promotion and education campaign about children's environmental health for public health workers, family physicians and child care practitioners.

Aside from program planning in this area, children's environmental health concerns are incorporated into ongoing work on health hazard investigation and prevention. For example, TPH worked with Toronto Parks and Recreation and Children's Services to develop a study and mitigation plan for arsenic leaching from pressure-treated wood play structures in the City's parks and childcare centres.

Animal Services and Rabies Control Program Cluster

Animal Services and Rabies Control Program

Goal:

To promote and support a harmonious environment where humans and animals can co-exist free from conditions that adversely affect their health and safety.

Selected Animal Services Indicators:

Approximately 2,000 animal bite incidents are investigated each year. This figure includes bites from all domestic and wild animals. There were 386 dog bites reported to Toronto Public Health in 2003. All animals that are involved in a bite incident are quarantined by Animal Services.

Selected Animal Services Activities:

Toronto Animal Services operates six Animal Shelters, and is responsible for sheltering animals that are lost or surrendered by owners or are available for adoption to new homes. The newest Animal Shelter opened June 5, 2003 at Exhibition Place. Toronto Animal Services provides:

- 24-hour emergency response to calls for stray animals that are injured, in distress, or are jeopardizing the safety of the public;
- Public education programs with a focus on rabies and dog bite prevention to school-aged children;
- Dog and cat registration and identification;
- Dog and cat sterilization at our spay/neuter clinics;
- Promotion of responsible pet ownership through the enforcement of the Municipal Code, Chapter 349, the Dog Owner's Liability Act and other animal related laws;
- Adoption of dogs, cats and other companion animals into life-long caring homes;
- Euthanasia and cremation services for owned animals where the animal is not adoptable; and
- Information on how to live in harmony with wildlife in an urban setting, including long-term deterrent strategies for dealing with nuisance wildlife.



In 2003, there were:

- Approximately 2,500 animals adopted from the six animal centres;
- Over 66,000 calls received per year at the 24-hour emergency response line (416-338-PAWS), which accepts calls about animals that are injured, in distress, or jeopardizing the safety of the public;
- 194 classroom education sessions; and
- 31 days of special events.

Pet Adoption. Animal Services has dogs, cats and other furry and winged animals up for adoption at each of six Animal Centres. The animals are vaccinated, dewormed and microchipped, before they are adopted. Adoptions also include refundable certificates towards sterilization, rabies vaccination and a veterinary health check. Prospective pet owners complete an Adoption Questionnaire designed to assist staff in finding the right match. Available pets can be viewed at www.toronto.ca/animal_services.

Pet Identification: It is estimated that one-third of all cats and dogs will be lost at least once in their lifetime. To ensure these pets are returned safely, all cats and dogs must be registered with the city's Animal Services and wear an issued tag. Additionally, if the pet is microchipped and sterilized, the registration fee is reduced from \$50 to \$10 per year. All cats and dogs found by Animal Services, where possible, get a free ride home if they are wearing a current City of Toronto tag. This registration is mandatory under Municipal Code 349.

Rabies is a contagious disease that affects the nervous system in warm-blooded animals, including humans. In most cases the main carriers of rabies are foxes, skunks, raccoons, and bats. The rabies virus is transmitted by saliva from an infected animal's bite, scratch or lick. Some signs of rabid animals may include loss of fear, restless and aggressive behaviour, and depression. Although there is no cure for rabies, prevention measures are available. TPH promotes keeping pets under direct supervision, reporting stray or sick animals to Animal Services and always keeping pet vaccinations up-to-date.

Pets and Pucks. Toronto Animal Services (TAS) and the Toronto Roadrunners Hockey Club of the American Hockey League partnered to promote the adoption of animals from TAS animal shelters. Pets from the South Animal Centre were featured for adoption at last season's hockey games. The new Ricoh Coliseum and the South Animal Centre are both located on the grounds of Exhibition Place. The adopt-a-pet program occurred during the 2003/2004 season whenever the Roadrunners played the Hamilton Bulldogs. Approximately 39 animals were adopted from the South Region during the Pets for Pucks program from Nov 26th, 2003 to April 1, 2004.

Data Notes and Sources

Age-standardized Rates

Direct standardization of data with the 1991 Canadian population were used to account for differences in the age-structures of the populations being compared.

Birth Data

Ontario vital statistics data are collected by the Office of the Registrar General using the birth registration form, which is completed by parents. A number of live births are not reported in the Ontario vital statistics each year. The last estimate, in 1997, was that 3.2% of Toronto live births were not reported. This is was an increase from the previous year. The percentage of unregistered births is higher for mothers less than 20 years of age and for low weight births. A new source for birth data, the Niday Perinatal Database, was implemented in Toronto in April 2003. It is the only database in Ontario that provides immediate access to real-time population-based perinatal data for an entire region. The Niday Perinatal Database provides population-level perinatal data for planning and evaluation of programs, policies and services.

Canadian Community Health Survey (CCHS) Cycle 1.1 (2000/2001)

Data for the CCHS 1.1 was collected between September 2000, and November 2001. The target population was Canadian household residents aged 12 years and older in all provinces and territories, with the exclusion of populations on Indian Reserves, Canadian Forces Bases, and some remote areas. The survey sampled one randomly selected respondent per household, either through face-to-face or telephone interview. The sample size for Toronto is 2,382. The CCHS is weighed to account for proportional representation of groups with different characteristics. To remove language as a barrier to conducting interviews, each of the Statistics Canada Regional Offices recruited interviewers with a wide range of language competencies. When necessary, cases were transferred to an interviewer with the language competency needed to complete an interview. These interviewers translated the survey into the appropriate language in person at the time of the interview. In addition, the survey questions were translated into the following languages: Chinese, Punjabi and Inuktitut.

Canadian Community Health Survey Cycle 2.1 (2003)

CCHS 2.1 data collection occurred between January and December 2003. Both personal and telephone interviews were conducted. Sample characteristics, weighting strategy, and survey languages are consistent with CCHS 1.1. The planned sample size for Toronto was 3,410.

Cancer Incidence Data

Cancer incidence, mortality, survival, and prevalence data were obtained from the Division of Preventive Oncology Surveillance Unit at Cancer Care Ontario.

(CD data for 1964-2001, Release 3, June 2003). Note that changes in incidence may reflect trends in risk factors or changes in early detection and diagnostic practices.

Census Data

Statistics Canada's Census of Population provides the population and dwelling counts not only for Canada but also for each province and territory, and for smaller geographic units such as cities or districts within cities. The census also provides information about Canada's demographic, social and economic characteristics. The most recent Census of Population took place on May 15, 2001.

Centre for Addiction and Mental Health Monitor 2001

Estimates of tobacco use for Ontario adults aged 18 years and older were obtained from the Centre for Addiction and Mental Health's 2001 CAMH Monitor, a survey-based telephone interview of 2,627 Ontario adults. Toronto's adult tobacco use rates are based on the 417 respondents to this survey from the Toronto area. Trend data on tobacco use among Toronto and Ontario adults is based on 16 repeated cross-sectional surveys conducted by the Addiction Research Foundation in 1977, 1982, 1984, 1987, 1989, and 1991 through 1998, and the Centre for Addiction and Mental Health in 1999, 2000, and 2001. Earlier interviews (1977-1989) were face-to-face, and more recent surveys (1991-2001) were administered over the telephone using random digit dialing.

Communicable Disease Data

Communicable disease data for this report was taken from *Communicable Diseases in Toronto 2002, and Trends 1992 to 2002*, a report that was released in June 2004 by Toronto Public Health. It is the first annual report summarizing descriptive data for reportable communicable diseases in the City of Toronto. Data for *Communicable Diseases in Toronto 2002, and Trends 1992 to 2002* was extracted from the Ministry of Health and Long-Term Care mandated Reportable Disease Information System, which is used for disease surveillance and case management data in Ontario.

Hospitalization Data

Hospitalization data are based on hospital separations (i.e. discharges, transfers, or deaths). Since a person may not be hospitalized or may be hospitalized several times for the same disease or injury, or discharged from more than one hospital (after transfer) for the same event, hospitalization data provide only a crude measure of disease and injury prevalence. The presence of co-morbid conditions can contribute uncertainty to the most responsible diagnosis. Data are collected based on location of hospital but are generally analyzed by the residence of the patient.

International Classification of Diseases and Related Health Problems – 10th Revision (ICD-10)

This report is the first from Toronto Public Health to include rates that were calculated using ICD-10. ICD-10 represents the greatest change in the ICD in over 50 years. The main changes from ICD-9 are:

1. some diseases and groups of conditions have been moved between chapters (major disease classifications) to reflect current ideas of etiology and pathology,
2. the first character of each code is now alphabetic rather than numeric, and
3. there have been several changes to the rules governing selection of the underlying cause of death.⁴⁴

Rates calculated using ICD-9 cannot be compared to rates calculated using ICD-10 because of these significant changes.

Mortality Data

The Office of the Registrar General obtains information about mortality from death certificates that are completed by physicians. Causes are those that initiated the sequence of morbid events leading to death, and co-morbidity can contribute some uncertainty as to underlying cause(s) of death. Residential information is based on the deceased's geographic place of residence and not where he or she died. Ontario residents who died outside of the province were included in the Ontario Ministry of Health and Long-Term Care's Health Planning System (HELPS) database from 1981 to 1992 but have been excluded since 1993. Out-of-province residents who died in Ontario are excluded from HELPS. Variation in data collection procedures over time and/or geography may reduce the accuracy of time and/or place-specific comparisons.

Ontario Student Drug Use Survey (OSDUS) 2003

Drug use information for students was obtained from the Centre for Addiction and Mental Health's OSDUS. The OSDUS began in 1977 and is the longest ongoing school survey of adolescents in Canada. The survey includes students in Grades 7 to 12. It describes drug use in 2003 and changes since 1977. All data are based on self-reports derived from anonymous questionnaires administered in classrooms. The sample size for Toronto for 2003 was 1097.

Rapid Risk Factor Surveillance System (RRFSS)

The Rapid Risk Factor Surveillance System (RRFSS) is an on-going telephone survey occurring in various public health units across Ontario. Each month, in each health unit area, a random sample of 100 adults aged 18 years and older is interviewed regarding risk behaviours, knowledge, attitudes and awareness of topics of importance to public health. The survey is conducted by the Institute for Social Research (ISR) at York University, on behalf of all RRFSS-participating health units. A limitation of RRFSS is that it is only administered in English. The RRFSS sample also tends to have a higher education and income level than the general population.

Toronto Healthy Environments Information System (THEIS)

THEIS is an integrated information system. It is used to manage inspections, public disclosure, on-demand requests and time and activity tracking for Healthy Environments staff at TPH. Data is stored in an Oracle database with interfaces to secondary databases linking to the web and remote connectivity environments. The system provides a co-ordinated method of access to environmental health information and services for TPH and its clients.

Toronto Perinatal and Child Health Survey, 2003

The Toronto Perinatal and Child Health Survey was conducted as part of the Ministry of Health and Long-Term Care Perinatal and Child Health Survey Strategies Initiative. The purpose of this telephone survey was to provide population-based data on the prevalence of risk and protective factors related to child health and development outcomes of children aged 0-6 years in the City of Toronto. This information was needed to fill data gaps identified by TPH in various areas of application. Topics for which information was gathered include childhood injury due to falls, breastfeeding initiation and duration, physical activity participation, smoking restrictions in the home, parenting practices, child food security, parental depression, and dental health. The telephone survey was initiated on March 1, 2003 and completed on April 7, 2003. Respondents were randomly selected by random-digit-dialing procedures. One thousand (1,000) parents with children aged 0-6 years residing in the city of Toronto participated in this survey.

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