

# **Toronto**

## **Local Health System**

### **Monitoring Report**



TORONTO DISTRICT  
HEALTH COUNCIL

---

LE CONSEIL RÉGIONAL  
DE SANTÉ DE TORONTO

**May 2002**



TORONTO DISTRICT  
HEALTH COUNCIL

LE CONSEIL RÉGIONAL  
DE SANTÉ DE TORONTO

# **Toronto**

# **Local Health System**

# **Monitoring Report**

**May, 2002**

**Cynthia Damba & Mandana Vahabi**  
**Senior Epidemiologists**

**Sheeraz Irani**  
**Secretary**

© Toronto District Health Council, 2002

Permission is granted to reproduce this document for personal or non-commercial use only. Please cite the Toronto District Health Council as the source when quoting from this document.

# TABLE OF CONTENTS

<b>EXECUTIVE SUMMARY .....</b>	<b>i</b>
<b>FOREWORD .....</b>	<b>1</b>
<b>1 BACKGROUND AND MEMORANDUM OF UNDERSTANDING.....</b>	<b>1</b>
1.1 Project Goals and Rationale.....	1
1.2 Project Purpose .....	2
1.3 Project Structure.....	2
1.4 Project Methods .....	3
1.5 Methodological Issues/Limitations: .....	4
1.6 Acknowledgements .....	5
<b>SECTION I: INDICATORS.....</b>	<b>9</b>
<b>A) Access .....</b>	<b>10</b>
1.1 Alternate Level of Care (ALC) .....	11
1.1a Alternate Level of Care (ALC) for Toronto Hospitals .....	12
1.1b Alternate Level of Care (ALC) for Residents of Toronto.....	13
1.2 Waiting Lists for Long-Term Care Facilities (LTC).....	15
1.2a Waiting Lists for Long-Term Care Facilities in Toronto .....	16
1.3 Waiting Lists for Cardiac Surgery .....	18
1.4 Children with Urgent Dental Needs .....	23
1.5 Utilization of Health Services by Disability Levels and Chronic Illness .....	26
1.5a Utilization of Health Services by People with Long-Term Disability: .....	28
1.5b Utilization of Health Services by People with Short-Term Disability:.....	30
1.5c Utilization of Health Services by People with Chronic Illness: .....	32
1.6 Proportion of Women Who Had Mammograms .....	34
1.6a Utilization of Screening Mammography by Women Aged 50-69.....	35
1.6b Utilization of Screening Mammography by Women Aged 50-69 within the Past Two Years .	37
1.7 Proportion of Women Who Had a Pap Test .....	39
1.7a Utilization of Pap Test by Women Aged 25 and Over:.....	40
1.7b Utilization of Pap Test in the Past Three Years by Women Aged 25 and Over: .....	42
1.8 Immunization Rates at School Entry .....	44
1.9 Proportion of Population Who Needed Health Care or Advice in Past Year, but Did Not Receive it. ....	47
<b>B) Outcomes.....</b>	<b>49</b>
1.10 Incidence of Major Notifiable Diseases .....	50
1.11 Low Birth Weight Singletons by Age of Mother .....	57
1.12 Mortality .....	60
1.13 Potential Years of Life Lost (PYLL) .....	64
<b>C) Sentinel Events .....</b>	<b>69</b>
1.14 Infectious Diseases .....	71
1.15 Vaccine-Preventable Diseases .....	73
1.16 Cancer Related Conditions.....	76
1.17 Congenital Conditions .....	78
1.18 Other Health-Related Conditions .....	80
<b>SECTION II: DESCRIPTOR INFORMATION .....</b>	<b>83</b>
<b>A) Utilization.....</b>	<b>84</b>
<b>I) In-Patient Hospital Care.....</b>	<b>85</b>
2.1 Acute In-Patient Utilization .....	86
2.1a Acute In-Patient Utilization of Toronto Hospitals .....	87

2.1b	Acute In-Patient Utilization of Ontario Hospitals by Toronto Residents .....	89
2.2	Average Resource Intensity Weight (RIW) .....	91
2.2a	Average Resource Intensity Weight for Hospitals in Toronto .....	92
2.2b	Average Resource Intensity Weight for Toronto Residents in Ontario Hospitals.....	94
2.3	Acute In-patient Psychiatric Utilization .....	95
2.3a	Acute In-Patient Psychiatric Utilization of Toronto Hospitals .....	96
2.3b	Acute In-Patient Psychiatric Utilization of Ontario Hospitals by Toronto Residents.....	98
2.4	Over-all In-Patient Psychiatric Utilization (Mental Health Beds only) .....	100
2.4a	In-Patient Psychiatric Utilization (Mental Health Beds including PPH beds) in Toronto .....	101
2.5	Rehabilitation In-Patient Utilization.....	103
2.5a	Rehabilitation In-Patient Utilization for Hospitals in Toronto.....	104
2.5b	Rehabilitation In-Patient Utilization of Ontario Hospitals by Toronto Residents.....	105
<b>II)</b>	<b>Long-Term Care.....</b>	<b>107</b>
2.6	Long-Term Care (LTC) Facility Utilization.....	108
<b>III)</b>	<b>Out-Patient Hospital Care .....</b>	<b>111</b>
2.7	Day Surgery Utilization .....	112
2.7a	Day Surgery Utilization in Hospitals in Toronto .....	113
2.7b	Day Surgery Utilization of Ontario Hospitals by Toronto Residents.....	115
<b>IV)</b>	<b>Community Care .....</b>	<b>117</b>
2.8	In-Home Care Utilization (CCACs, Community Support and Supportive Housing).....	118
2.8a	Utilization of CCACs (formerly Home Care) in Toronto .....	119
2.8b	Long-Term Care Community Utilization .....	125
<b>V)</b>	<b>Ambulatory Care .....</b>	<b>127</b>
2.9	Emergency Department Utilization .....	128
<b>VI)</b>	<b>Public Health .....</b>	<b>131</b>
2.10	Teen Pregnancy Rate .....	132
<b>B)</b>	<b>Health Human Resources .....</b>	<b>135</b>
2.11	Health Human Resources .....	135
2.11a	Health Human Resources - Physicians .....	136
2.11b	Health Human Resources - Nurses .....	139
2.11c	Health Human Resources - Physiotherapists and Occupational Therapists.....	143
<b>C)</b>	<b>Health Care Funding by Sector .....</b>	<b>147</b>
2.12	Health Care Expenditures by Sector .....	148
2.13	Health Care Expenditures - Public Health Care .....	151
2.14	Physician Claims .....	154
<b>D)</b>	<b>Health Status .....</b>	<b>157</b>
2.15	Leading Causes of Hospitalization .....	158
<b>E)</b>	<b>CIHI Indicators .....</b>	<b>164</b>
2.16	CIHI Indicators .....	164
2.16a	Regional Profile.....	167
2.16b	Health System Characteristics.....	170
2.16c	Health System Performance .....	171
<b>SECTION III: CONTEXT DATA .....</b>		<b>173</b>
<b>A)</b>	<b>Population Data .....</b>	<b>174</b>
3.1	Toronto Resident Population by Age, Sex.....	175
3.2	Toronto Residents Population Projections .....	178
3.3	Ethnic Origin in Toronto .....	182
3.4	Period since Immigration in Toronto .....	185
3.5	Knowledge of Official Languages .....	188
3.6	Low Income Incidence.....	190

3.7	Proportion of Population 15 and Over With Less Than 9 Years Education .....	192
<b>B)</b>	<b><i>Structure of the Health Care System</i></b> .....	<b>195</b>
3.8	Utilization of Toronto Hospital System by Patient's Residence and Level of Care .....	196
3.9	Inventory of Health Services in the City of Toronto .....	201
3.10	Hospital Beds by Category.....	209
3.11	Health Planning Target and Benchmarks.....	214
3.12	Health Reform Implementation Progress Report .....	215
	<b>CONCLUSION</b> .....	<b>217</b>
	APPENDIX 1 .....	219
	APPENDIX 2: .....	220
	APPENDIX 3: .....	225
	APPENDIX 4 .....	246
	APPENDIX 5 .....	247
	<b>GLOSSARY OF TERMS</b> .....	<b>247</b>

## EXECUTIVE SUMMARY

The Toronto Health System Monitoring Report represents another milestone in the ongoing efforts of the Toronto District Health Council (TDHC) to monitor health status of the local population and changes to Toronto's health system and their impact. It is the latest and most comprehensive in a series of health system monitoring reports over the past decade by the TDHC to inform planning and policy decisions.

The production of the current report is part of a larger initiative that, for the first time, engaged all 16 of Ontario's District Health Councils in producing parallel local reports examining similar variables.

The City of Toronto consists of its population, which is the sum of individuals, families and neighborhoods. The population is a dynamic, changing entity, and requires regular checkups to determine demographic and other trends. This way, changes and opportunities for early intervention can be identified to prevent more serious problems much like a person's routine medical examination.

Health among individuals or in the population as a whole is the result of many factors, including the ability of the health system to treat individual cases of injury or disease. This report and the local reports of other DHCs look at a broad spectrum of variables, incorporating data about health status from various sources in an effort to monitor the impact of recent changes to the health system.

The following points focus on major changes in various sectors of the health care system, summarizing the main issues and trends that were identified, as well as noting gaps and strengths that have been observed:

- Trends (1995/96-1999/2000) show a decrease in in-patient hospitalization in all sectors (Acute: ↓17%, Psychiatric: ↓11%, Rehabilitation: ↓6%), and an increase in out-patient services (i.e. day procedures including day surgeries: ↑11%).
- Although all hospital sectors experienced a significant reduction in number of beds over the last 10 years they have not reached the HSRC targets (Acute: ↓33%, Chronic: ↓37%, Rehabilitation: ↓15%).
- Access to long-term care (LTC) facilities is an ongoing problem, with average waiting lists increasing by 150% in the last six years. Furthermore, alternate level of care (ALC) separations, which represent the acute beds being occupied by patients waiting for placement in chronic care units/long-term care and rehabilitation facilities or home care programs, increased by 1%, moving further away from Health Services Restructuring Commission's target of zero ALC days.
- The number of admissions to Community Care Access Centers (CCACs) increased by 71% over the past 10 years. The main services utilized by clients were nursing and homemaking. It is suggested that the increase is related to changes that have occurred in the hospital sector such as early discharge of patients who may be sicker and require more home care services and other kinds of services in the community sector.
- Although Toronto's physician-to-population ratio is higher than Ontario's (263/100,000 pop. and 175/100,000 respectively), a considerable number of patients receiving care in Toronto are non-residents, making the effective catchment area much larger than Toronto. This is not taken into account when discussing human resources per 100,000 population. Furthermore, approximately

1/3 of the active physicians are in retirement age range.

- The total number of nurses employed in Toronto decreased by 12% between 1996 and 2000. Toronto has a higher percentage of registered nurses than the provincial average. However, the high proportion may be related to the higher proportion of tertiary care facilities in Toronto.
- Health care funding has been increasing in the past few years, with the hospital sector accounting for the largest proportion of the funding.
- Toronto's seniors had the second lowest rate for pneumonia and influenza among Ontario's DHCs, and the lowest rate of hip fractures.
- Toronto had the second-highest life expectancy among Ontario DHCs. In addition, life-expectancy for seniors in Toronto was slightly higher than the national level (18.9 years beyond the age of 65 vs. 18.2) and ranked first among Ontario DHCs.
- Toronto had the highest rate of low birth weight (LBW) among the 16 DHCs in Ontario. The LBW rate in Toronto is 1.4 times higher than the mandatory health services guideline (i.e. 4% LBW). Some major risk factors for LBW include prematurity, maternal age, maternal smoking, poor maternal nutrition, absent or poor prenatal care, and certain types of infectious diseases. In addition a recent study by TDHC has demonstrated that LBW rates were higher in low- income areas in Toronto and areas with higher levels of recent immigration.
- Toronto has a high rate of teen pregnancy (51.8 per 1,000 women 15-19 years). This is 30% more than the mandatory health programs target. This may also partly contribute to the higher rate of LBW in Toronto. It is noteworthy that the teen birth rate is approximately three times higher in the lowest income areas of Toronto than the highest income areas<sup>1</sup>.
- Toronto has a higher rate of the following infectious diseases than Ontario: tuberculosis, AIDS, syphilis, gonorrhea and chlamydia:
  - Toronto accounts for more than 60% of the TB cases in Ontario and the rate of TB is still much higher than the mandatory planning guideline (15.4 vs. 3.5 per 100,000).
  - Toronto accounts for more than half the new AIDS cases seen in Ontario, and the incidence in 1999 was four times that for the rest of Ontario.
  - The rate of syphilis in Toronto in 1999 was nearly four times that for the rest of Ontario.
  - The rate of gonorrhea in Toronto in 1999 was 5.7 times that of the rest of Ontario.
  - The rate of chlamydia in Toronto is 2.2 times that for the rest of Ontario.
- The rate of Pap testing in Toronto is lower than the recommended provincial rate (84% vs. 95%). The rate is influenced by income and education. Women with low education and income are less likely to report having a Pap test than their counterparts. In view of the high rate of teen pregnancy and sexually transmitted diseases in Toronto, the low rate of women reporting having had a Pap test becomes important.
- Potential Years of Lost Life or PYLL is a measure of premature death. As of 1997, the four leading causes of PYLL for women in Toronto were breast cancer, lung cancer, ischemic heart disease, and

---

<sup>1</sup> Day, N., Fleischer, P., Basrur, S.V. (2001), Toronto's Health Status: A Profile of Public Health in 2001. Toronto Public Health



suicide, while for men they were ischemic heart disease, lung cancer, suicide and AIDS.

- Resource Intensity Weights (RIWs) for in-patients of Toronto hospitals decreased between 1995/96 and 1999/00 and total cases declined. However, the average RIW increased by 15%, which may indicate that fewer patients with more complex illnesses or conditions are being admitted to hospitals.
- Toronto has a lower ratio of long-term care (LTC) beds per 1,000 population aged 75 or older (75.5/1,000) than the provincial average (87.1/1000), which is reflected by local waiting lists for placement.
- Hospitalization of men for all causes in Toronto declined 12% between 1995 and 1999, while hospitalization of women for all causes declined by 14%. It is not clear the extent to which increased use of out-patient and ambulatory care accounts for the declines.
- Toronto was one of the five DHCs with the lowest 30-day acute myocardial infarction in-hospital mortality rate. This indicates that patients seen in Toronto hospitals are among those in Ontario with the best chances of surviving a heart attack.

## FOREWORD

### 1 BACKGROUND AND MEMORANDUM OF UNDERSTANDING

District Health Councils were introduced in the 1970s in Ontario as advisory bodies to the Minister of Health and Long-term Care, at arms' length from government.

Ontario's health care system embarked on a phase of transformation in the mid-1990s. Among the changes that were initiated are hospital restructuring, the establishment of Community Care Access Centres (CCACs) and primary care reform. In the context of these changes, and in light of a growing emphasis on accountability and performance measurement, regular assessment of health system performance becomes a natural companion to the DHCs' core mandate of providing advice to the Minister of Health on matters regarding health issues.

Under the terms of their 1999 Memorandum of Understanding (MOU) with the Ministry of Health and Long-term Care (MOHLTC), DHCs have responsibilities for strategically planning, monitoring and evaluating health system delivery and health outcomes, and for assessing changes to the health care system and their impact on the health status of the community.

Monitoring complements planning, offering the opportunity to assess progress and outcomes. It is considered a fourth mode of learning, in addition to learning by doing, by using and by interacting.

In 2001, resolutions committing to full participation in a collaborative development process for creating local health system monitoring reports were passed by all of Ontario's DHCs. The DHCs recognized that collectively, they constitute a province-wide resource that is uniquely positioned to undertake the regular assessment of system performance, due to their competencies, system perspective and arm's length relationship to both policy and service provision.

This initiative can be traced to a Health System Monitoring template designed by the Toronto District Health Council (TDHC) in 1998 to monitor the intended and unintended impacts on the health system and on population health of changes to Toronto's health care system. The template was organized into three main sections: indicators, descriptors and context data. Based on the template, the TDHC released an *Interim Health System Report Card* in November 1998, and *Toronto's Health System Report Card*, or health system monitoring report, in November 1999.

The release of the TDHC report, which was envisioned as an annual document, coincided with the timing of the MOU between the DHCs and the MOHLTC. The report provided a comprehensive picture of some of the changes in the Toronto Health Care System, and the province's DHCs agreed to use the TDHC template as the basis for Local Health System Monitoring Reports.

Hence, the following is actually the 2<sup>nd</sup> annual *Health System Monitoring Report* for Toronto. However, for consistency with other reports being produced by other DHCs across Ontario, the 2002 report will be referred to simply as the *Toronto Local Health System Monitoring Report*. This document presents highlights from the full report.

#### 1.1 Project Goals and Rationale

In developing this project, the following goals were defined:

To **monitor**, and **advise** the Minister of Health and Long-term Care (MOHLTC) on the structure, function and organization of the local health system.

To **evaluate** the impact of changes on institutions, programs, services and providers, consistent with DHCs' mandate to monitor local health system performance and to provide useful information to the Minister of Health and Long-term Care and other planning organizations.

DHCs are collaborating to make the most efficient use of planning resources by collecting and evaluating data in a standardized way. This project is a cooperative effort of the DHCs, with the assistance of the five Ontario Health Intelligence Units.

The Project was characterized by:

- **Information** collected and assembled for the purpose of contributing to clarity and understanding;
- **Knowledge** and skills leveraged throughout the province;
- **Collaboration** among the project participants, and with other concurrent efforts to understand and clarify changes in the health care system and their impact;
- **Respect** for regional variation in data relevance and in resource availability;
- **Teamwork**; and
- **Commitment** to mutual continuous learning.

The TDHC Local Health System Monitoring Project is an evolutionary process. The information in the current report adds to, expands on and refines the baseline data presented in the 1999 Health System Monitoring Report.

## 1.2 Project Purpose

The purpose of the Project was to develop and use a tool for monitoring changes in the health care system, province-wide and on a local basis for each DHC, to facilitate on-going health system improvement.

## 1.3 Project Structure

The following structure was adopted to guide the project.

- **The Provincial Executive Directors (PED)** - had the ultimate decision-making authority regarding the scope, resources, and timetable for the project.
- **Project Steering Committee (SC)** – was responsible for the following: appointing a Project Manager, appointing members to the Technical Advisory Committee, approving membership of the Project Team, and recommending to PED a detailed project plan, including budget and timetable, developed with the Project Manager. The Steering Committee was also responsible for developing a Communications Plan to identify means to keep key stakeholders (DHCs, MOHLTC, planning partners and providers) informed of project progress and milestones.

The Steering Committee was comprised of:

- half of the **Executive Directors of Ontario DHCs** (balanced geographically)
- one representative from **Health Care Programs Branch** of the MOHLTC
- one representative from **Integrated Policy and Planning Branch** of the MOHLTC
- the **Project Manager**
- the **Chair of the Technical Advisory Committee**

- **Project Technical Advisory Committee (TAC)** – provided advice on data relevance and validity, data sources, and methodology. TAC was comprised of technical experts (i.e. epidemiological, statistical, Information Technologist (IT), health system performance measurement) from universities, Health Intelligence Units, Public Health Units, and other health organizations. Membership included liaison with other health system measurement or monitoring initiatives (CIHI, OHA, and PHRED) to ensure complementarity. The **Chair of the Steering Committee** and the **Project Manager** participated as members of TAC.
- **Project Manager** – was responsible for proposing a detailed work plan to the Steering Committee and for ensuring that the project proceeded according to plan.
- **Project Team** – consisted of a group of five DHC planners and epidemiologists from across the province. These regional representatives were nominated by their DHC counterparts and comprised an appropriate blend of technical expertise (i.e. epidemiological, analytical, project) and regional understanding. Project Team members liaised with the DHCs in their region to communicate project information and help resolve issues. They worked together with the Project Manager to develop and implement the project plan, and made recommendations for next steps.
- **DHC Contacts** – were selected by DHC Executive Directors, and had the following responsibilities: local project management including communication liaison and requests for data verification; processing analytical items; and timely turn-around of requests for sign-off.

## 1.4 Project Methods

A Local Health System Monitoring Report was produced by the Toronto District Health Council (TDHC) in 1999, based on indicators that met five criteria: *relevance*; *validity*; *interpretability*; *comparability*; and *reliability of data collection*. Additional information that did not meet all those criteria but offered insight into the health system was included as *descriptors* or as *context data*. More than 70 variables were covered by the three categories in that report; those have been reduced to less than 50 for the current report. For the purposes of this project, the variables in all three categories are loosely considered indicators, but only those that fall under the section heading “Indicators” represent data that meet the formal criteria.

After DHCs received a mandate for health system monitoring under the MOU, the 1999 report served as the basis for a process of collaboration, taking both a local and province-wide systems perspective. DHCs agreed to use the Toronto experience as a model on which to build their respective local reporting processes, using the indicators developed for the Toronto report as the basis for a common approach (*for project structure, see Appendix A*). This was in recognition of the value of working together to maximize efficiencies, resources, and learning opportunities.

It was also recognized that the TDHC report was specific to Toronto’s health system, and not necessarily reflective of other Districts. Therefore, in addition to collecting a common core of data, DHCs prepared a variety of additional measures relevant to the communities they served, in order to properly monitor and evaluate health systems within each District.

DHCs were divided into five clusters arranged around the five Ontario Health Intelligence Units (HIUs), anticipating the important support role HIUs would have throughout this project. The indicators used in the TDHC report were distributed among these clusters, and each DHC was responsible for preparing several indicators, including all levels of analysis (local, district, regional, provincial), on behalf of all the DHCs.

Some indicators were eliminated due to lack of availability of data, or lack of confidence in available data; however, such data continue to be pursued for future reports.

Issues which could impact the project scope, time or budget were referred to the Steering Committee for resolution. Methodological issues were referred to the Technical Advisory Committee for specific advice.

Files were prepared, exchanged and validated, and burned onto CD-ROM for stability. Protocols for file exchange, validation and reporting of errors were developed by the Project Team and followed by all DHCs to ensure quality and standardization.

Interpretation of data was accomplished locally by each DHC, employing consultation (external, stakeholder or internal) as appropriate to their setting and consistent with timely completion. For Toronto this was done by the DHC's senior epidemiologists. The result is this Local Health System Monitoring Report for the TDHC.

### **1.5 Methodological Issues/Limitations:**

Information was drawn from many different sources that were designed for purposes other than this project. For this reason, a description of each variable is contained in this report. These descriptions are organized in each section according to the following headings: definition, significance and uses, limitations, data sources, and targets or benchmarks established by the Ministry. Please refer to this information if you are unsure of how to interpret a specific chart or information.

The report has a population-based perspective. Therefore, hospitalization data rates were calculated by counting or summarizing events (i.e., separations or patient days) over each fiscal year for individuals identified as residents of Toronto, regardless of where the hospitalization took place. Some analyses of trends on hospital utilization have used "age weighted referral populations" and "expected stay index" calculations as denominators to create comparative rates. These calculations are based on past utilization. As the system is currently undergoing significant change in patterns of service delivery, it was felt that all denominators should be based on characteristics of the population, not on previous patterns of service delivery.

It is important to note that information in some categories is not as up-to-date as for others. For example, although the last available year for expenditure breakdowns in Toronto is 1999/00 - 2000/01, current information for some sectors such as OHIP was not available.

The hospital utilization data (obtained from Canadian Institute for Health Information (CIHI) presented in this report may differ slightly from that presented in our first annual report in 1999. This is due to routine revisions to definitions, such as Case Mix Groupings (CMGs) that are used to group data submitted by hospitals. Accordingly, direct comparison of data presented in tables of this report with other reports is not always possible. Wherever this has been identified as an issue, historical data has been re-grouped according to definitions used in the most current year presented. This ensures that data for all years presented in this report can be directly compared.

## 1.6 Acknowledgements

*The Local Health System Monitoring Project of Ontario's District Health Councils would not have been possible without the assistance of many people who have collaborated and contributed to the Project.*

Name	Organization
<b>MOHLTC:</b>	
John King, Assistant Deputy Minister, Health Care Programs	Ontario Ministry of Health and Long-Term Care
<b>Project Steering Committee:</b>	
Graham Constantine, Executive Director	Simcoe York DHC
Gwen DuBois-Wing, Executive Director	Northwestern Ontario DHC
Scott Dudgeon, Executive Director (Chair, Steering Committee)	Toronto DHC
Marion Emo, Executive Director	Hamilton DHC
Lynda Hessey, Executive Director	Durham Haliburton Kawartha Pine Ridge DHC
Paul Huras, Executive Director	Thames Valley DHC
Phil Jackson, Director, Strategic Health Policy	Ontario Ministry of Health and Long-Term Care
Michael McEwen, Director, Central West Region	Ontario Ministry of Health and Long-Term Care
Terry Tilleczeck, Executive Director	Algoma Cochrane Manitoulin Sudbury DHC
<b>Technical Advisory Committee:</b>	
Sten Ardal, Director (Chair, Technical Advisory Committee)	Central East Health Information Partnership (CEHIP)
Cynthia Damba, Senior Epidemiologist	Toronto DHC
Geoffrey Dunkley, Manager Community Medicine and Epidemiology	Public Health Research Education and Development Program (PHRED)
Dr. Ian Johnson, Professor, Department of Public Health Sciences	University of Toronto
Dr. Pat Main, Dental Director	Durham Region Health Department
Dr. Doug Manuel, Scientist	Institute for Clinical and Evaluative Sciences Ontario
Paula McColgan, Consultant, Hospital	Ontario Hospital Association

Name	Organization
Relations	
Dr. John Millar, Vice President, Research and Population Health	Canadian Institute for Health Information (CIHI)
Mandana Vahabi, Senior Epidemiologist	Toronto DHC
Graham Woodward, Manager, Knowledge Products Unit	Ontario Ministry of Health and Long-Term Care (MOHLTC)
Jennifer Zelmer, Director, Health Reports and Analysis	Canadian Institute of Health Information (CIHI)
<b>Project Team:</b>	
Stephen Bellinger, Senior Health Planner (Team Leader - North)	Algoma Cochrane Manitoulin Sudbury DHC
Kathleen Clements, Project Manager	Clements Consulting
JoAnn Heale, Health Information Analyst (Team Leader-Central West Central South)	Hamilton DHC
Nancy Jaworski, Senior Health Planner (Team Leader – East)	Champlain DHC
Stephanie Loomer, Epidemiologist (Team Leader – Southwest)	Thames Valley DHC
Marguerite Sutherland, Project Support	Toronto DHC
Jill Tettmann, Health Planner, Acute Care (Team Leader – Central East and Toronto)	Simcoe York DHC
<b>DHC Contributors:</b>	
Chris Altmayer, Epidemiologist	Halton Peel District Health Council (DHC)
Zora Arcese, Health Planner	Waterloo Wellington Dufferin DHC
Linda Baigent, Epidemiologist	Essex Kent Lambton DHC
Deb Bourk, Communications Advisor	Toronto DHC
Glenda Clarke, Senior Health Planner	Grey Bruce Huron Perth DHC
Steve Jackson, Health Planner	Durham Haliburton Kawartha Pine Ridge DHC
Phil Kilbertus, Health Planner	Northern Shores DHC
Joanna Krasowski-Oliver, Health Planner	Grand River DHC
Don McGuinness, Information Manager	Southeastern Ontario DHC
Lee-Ann Nalezty, Health Planner	Northwestern Ontario DHC
Dave Pearson, Health Planner	Northern Shores DHC
Shirley Stewart, Health Planner	Niagara DHC

Name	Organization
<b>HIU Contributors:</b>	
Tom Abernathy, Director	Central West Health Planning Information Network (CWHPIN)
Nam Bains, Director	Health Information Partnership, Eastern Ontario
Robert Barnett, Senior Analyst	Northern Health Information Partnership (NHIP)
Michaela Berkowitz, Epidemiologist	Central East Health Information Partnership
Sherri Ennis, Epidemiologist	Central East Health Information Partnership
Iris Gutmanis, Director	Southwest Region Health Information Partnership
Paul Lee, Health Information Analyst	Central East Health Information Partnership
Victoria Robinson, Senior Research Assistant	Health Information Partnership, Eastern Ontario
Vic Sahai, Director	Northern Health Information Partnership (NHIP)

*We would like to thank the following people for their review and feedback on this report.*

**Toronto Public Health**

**Catherine Datta**

**Jo-Ann Ackery**

**Susan Blue**

**Candy Lipton**

**Sharon Pollock**

**Michael Finkelstan**

**Jim Leakey**

**Cardiac Care Network**

**Karen Kaplan**

**Tim Wharton**

**TDHC**

**Michael Moralis**

**Kathleen Clements**

*In addition, we would like to thank Mr. Sten Ardal for his review and feedback on this report, and Ms. Sheeraz Irani for her administrative support in completion of this report.*





---

## **Section I: Indicators**

---

- A) Access**
- B) Outcomes**
- C) Sentinel Events**

**A) Access**

- 1.1 Alternate Level of Care
- 1.2 Waiting List for Long-Term Care Facilities
- 1.3 Waiting Lists for Cardiac Surgery
- 1.4 Children with Urgent Dental Needs
- 1.5 Utilization of Health Services by Disability Levels and Chronic Illnesses
- 1.6 Proportion of Women who had Mammograms
- 1.7 Proportion of Women who had a Pap Smear
- 1.8 Immunization Rates at School Entry
- 1.9 Proportion of People who Needed Service in the Past Year but Did Not Receive It

## 1.1 Alternate Level of Care (ALC)

### Definition:

- 1.1a) Number of ALC separations and days from Toronto hospitals, for a given fiscal year.
- 1.1b) Number of ALC separations and days from Ontario hospitals by residents of Toronto, for a given fiscal year per 1,000 population.

An ALC patient is defined as:

A patient who is considered a non-acute treatment patient but occupies an acute care bed, awaiting placement in a chronic care unit, home for the aged, nursing home, rehabilitation facility, other extended care institution or home care program, etc. The patient is classified as an ALC patient when the patient's physician gives an order to change the level of care from acute care and requests a transfer to another facility.

### Significance/Uses:

- Reasons for patients occupying ALC beds include: lack of family or community support services, and lack of capacity in rehabilitation or long-term care institutional bed capacity.
- ALC days can be converted into a measurement of the number or per cent of acute care beds unavailable. (Exercise caution using this interpretation as local conditions may vary from place to place. For example, a local hospital may have identified a nursing ward for ALC patients but may not have actually reduced its acute care beds).
- Health reforms have potentially differential outcomes on ALC days for different population sub-groups such as those with low income or recent immigrants.
- The HSRC directives call for the elimination of ALC days in acute care hospitals.
- Indicates inefficient use of acute care hospital beds.
- Indicates lack of access to long-term care and rehabilitation facilities, and lack of community support services.
- Identification of target groups based on age, socioeconomic status etc.
- Can be used to estimate the need for additional hospital, LTC beds and residential care spaces required to accommodate ALC patients.
- Comparison over time and place-to-place.

### Limitations:

- ALC separations are assigned/determined by each hospital. There is variability in the reporting of ALC days/separations from institution to institution.
- There is no incentive for physician reporting of ALC separations/days, which raises the possibility of under-reporting. On the other hand, many hospitals have implemented rigorous discharge planning protocols and the incentive for physicians to participate in such programs may rest in the availability of beds to which patients can be admitted. For example, surgeons are particularly interested in access to acute beds, because in their absence surgical procedures must be cancelled.

### Source:

MOHLTC, Provincial Health Planning Database.

**1.1a Alternate Level of Care (ALC) for Toronto Hospitals**

<b>ALC Separations* and Days for Hospitals in the City of Toronto, 1995/96 to 1999/00</b>			
	<b>Separations</b>	<b>ALC Days</b>	<b>ALOS</b>
<b>1995/96</b>	6,813	182,051	26.7
<b>1996/97</b>	6,974	186,006	26.7
<b>1997/98</b>	6,889	157,297	22.8
<b>1998/99</b>	6,837	148,382	21.7
<b>1999/00</b>	6,862	137,140	20.0

\*Total ALC separations and days excludes the following: neonatal, psychiatric, CMG 851, and CMG 910.

<b>ALC Separations* and Days for Hospitals in the City of Toronto by Patient Residence, 1995/96 to 1999/00</b>						
	<b>Toronto Residents</b>			<b>Non-Toronto Residents</b>		
	<b>Separations</b>	<b>ALC Days</b>	<b>ALOS</b>	<b>Separations</b>	<b>ALC Days</b>	<b>ALOS</b>
<b>1995/96</b>	6,125	163,000	26.6	688	19,051	27.7
<b>1996/97</b>	6,279	169,742	27.0	695	16,264	23.4
<b>1997/98</b>	6,113	138,508	22.7	776	18,789	24.2
<b>1998/99</b>	5,949	131,369	22.1	888	17,013	19.2
<b>1999/00</b>	6,007	121,461	20.2	855	15,679	18.3

\*Total ALC separations and days excludes the following: neonatal, psychiatric, CMG 851, and CMG 910.

**Key Findings:**

- Between 1995/96 and 1999/00, the total number of ALC patient days decreased by 25%, but the total number of ALC separations increased by about 1%. This trend suggests that at least for the foreseeable future Toronto will be unable to achieve the target set by the HSRC of completely eliminating ALC beds.
- Between 1995/96 and 1999/00, the total number of ALC separations from Toronto hospitals by residents of Toronto decreased by 2%, and the patient days by 26%.
- It is interesting to note that non-Toronto residents contributed to between 9 -12% of ALC days, and between 10-13% of ALC separations from Toronto hospitals.

**1.1b Alternate Level of Care (ALC) for Residents of Toronto**

<b>ALC Separations* and Days by Residents of Toronto, from Ontario Hospitals, 1995/96 to 1999/00</b>					
	<b>Separations*</b>	<b>ALC Days</b>	<b>ALOS</b>	<b>Separations/ 1,000 Population</b>	<b>ALC Days/ 1,000 Population</b>
<b>1995/96</b>	6,194	164,261	26.5	2.5	67.6
<b>1996/97</b>	6,341	171,599	27.1	2.6	69.7
<b>1997/98</b>	6,196	139,843	22.6	2.5	56.1
<b>1998/99</b>	6,057	133,416	22.0	2.4	53.2
<b>1999/00</b>	6,423	134,148	20.9	2.5	53.2

\*Total ALC separations and days excludes the following: neonatal, psychiatric, CMG 851, and CMG 910.

<b>ALC Separations* by Toronto Residents from Toronto Hospitals and Other Hospitals in Ontario, 1995/96 to 1999/00</b>						
	<b>From Toronto Hospitals</b>		<b>From Non-Toronto Hospitals</b>		<b>Total</b>	
	<b>#</b>	<b>%</b>	<b>#</b>	<b>%</b>	<b>#</b>	<b>%</b>
<b>1995/96</b>	6,125	98.9	69	1.1	6,194	100
<b>1996/97</b>	6,279	99.0	62	1.0	6,341	100
<b>1997/98</b>	6,113	98.7	83	1.3	6,196	100
<b>1998/99</b>	5,949	98.2	108	1.8	6,057	100
<b>1999/00</b>	6,007	93.5	416	6.5	6,423	100

\*Total ALC separations and days excludes the following: neonatal, psychiatric, CMG 851, and CMG 910.

<b>Standardized Rates of Alternate Level of Care for GTA Residents by Region, 1999/00</b>			
	<b>ALC S-Rate/1,000 Population</b>	<b>Lower Confidence Interval</b>	<b>Upper Confidence Interval</b>
<b>Toronto</b>	2.13	2.08	2.18
<b>Simcoe</b>	2.05	1.92	2.19
<b>Peel</b>	1.58	1.48	1.67
<b>York</b>	1.39	1.3	1.49
<b>Halton</b>	0.79	0.7	0.87

**Key Findings:**

- ALC separations and days from hospitals in Ontario by Toronto residents fluctuated between 1995/96 and 1999/00. However, the general trend shows an increase of 4.0% in separations and a decrease of 18% in total patient days. The ALOS decreased significantly during this period. A closer examination of ALC separations for Toronto residents by hospital location shows that while the total number of ALC separations from Toronto hospitals decreased by only about 2%, those from other hospitals in Ontario increased by 500%.
- Between 1995/96 and 1999/00, the rate of ALC separations for residents per 1,000 population remained fairly steady while the patient days decreased significantly.

- The standardized rate of ALC separations for Toronto residents decreased slightly but significantly between this period, from **2.26** in 1995/96 with a confidence interval of 2.21 - 2.32 to **2.13** in 1999/00 with a confidence interval of 2.08 - 2.18.
- In 1999/2000, Toronto residents had the highest ALC rate among the five GTA regions (York, Halton, Peel, and Durham). Simcoe region had the second highest ALC standardized rate (S-rate) while Halton region had the lowest.

**NB:**

Further information on ALC utilization (1994/95 - 1997/98) by age, gender, income and recent immigration is available in the TDHCs 2001 report *Toronto Health System Monitoring Report: Equity Analysis 2001*.

- The report showed that the use of acute care beds for alternate level of care (ALC) continues to be a problem in Toronto.
- Toronto had considerable numbers of ALC cases and the rates were highest for people in low-income areas and among seniors 75 and over.
- Areas with lower recent immigration had higher rates of ALC use when compared to those with more recent immigrants. However, this effect became minimal when controlled for income. The lower rate observed for areas with more recent immigrants could be due to a number of factors including different cultural practices among recent immigrants or the higher proportion of births in these areas, which affects the denominator of acute separations used for this indicator.

## 1.2 Waiting Lists for Long-Term Care Facilities (LTC)

### Definition:

- a) Number of people on waiting lists, and
- b) Average waiting time, by facility, for selected institutional accommodation (e.g., nursing homes and homes for the aged).

### Significance/Uses:

- The former Placement Coordination Service (PCS) established a centralized waiting list database for LTC facilities in 1994. The database was transferred to Community Care Access Centres (CCACs) in September 1997. This database tracks waiting lists in LTC facilities in Toronto.
- All eligible individuals from anywhere in Ontario can be placed on any facility waiting list. Patients on waiting lists may be living in a LTC facility, hospital, chronic care facility or retirement home, or in the community.
- Several factors have led to increased demand for LTC facility services including: aging of the population; increased complexity of care among long-term care facility applicants; and changes in; funding for some facilities.
- Factors affecting waiting lists include availability of: funding; health care personnel; equipment; beds; and specialized supports.
- Some of the people on waiting lists may already be LTC facility residents who are awaiting transfer to their facility of choice.
- Provides information on accessibility and availability of services.
- Provides information on supply-demand mismatch and therefore can help in health services planning.
- Comparisons by type of services, to provincial averages, and over time.

### Limitations:

- Waiting lists may be inflated with people on the list who do not need services immediately.
- People may be on more than one waiting list.
- Waiting lists may be inflated with people on the list who have preference for a specific LTC facility.
- Waiting lists are subject to agency policies.

### Source:

MOHLTC, Long-Term Care Branch.



**1.2a Waiting Lists for Long-Term Care Facilities in Toronto**

<b>Average Number of People Waiting and Admitted per Month to LTC Facilities in Toronto, 1995 to 2001</b>		
	<b>Average # Waiting/month</b>	<b>Average # Admitted/month</b>
<b>1995</b>	3,427	326
<b>1996</b>	4,071	349
<b>1997</b>	N/A	N/A
<b>1998</b>	7,584	343
<b>2001</b>	8,585	492

<b>Number of People Waiting for LTC Facilities in Toronto in November of Each Year, by Place Waiting, 1996 to 2001</b>							
	<b>Community</b>	<b>Chronic Care Hospitals</b>	<b>Acute Care Hospitals</b>	<b>Other LTC Facility</b>	<b>Other*</b>	<b>Other PCS Outside Ontario</b>	<b>Total Waiting</b>
<b>1996</b>	1,930	46	578	1,232	358	375	4,519
<b>1997</b>	2,076	136	493	1,647	668	--	5,020
<b>1998</b>	3,856	78	914	2,205	854	--	7,907
<b>2000</b>	3,383	101	474	2,475	921	--	7,504
<b>2001**</b>	4,019	100	471	2,778	1,217	--	8,585

Source: Placement Coordination Services

\*Other includes retirement homes, convalescent homes, special care homes, etc.

\*\*Data for 2001 is for September

<b>Number of Admissions to LTC Facilities in Toronto in November of Each Year, by Place Waiting, 1996, 1998 and 2001</b>							
	<b>Community</b>	<b>Chronic Care Hospitals</b>	<b>Acute Care Hospitals</b>	<b>Other LTC Facility</b>	<b>Other*</b>	<b>Other PCS Outside Ontario</b>	<b>Total Admissions</b>
<b>1996</b>	114	4	118	52	4	23	315
<b>1998</b>	110	0	132	50	34	--	326
<b>2001</b>	129	--	183	72	29	--	413

\*Other includes retirement homes, convalescent homes, special care homes, etc.

**Key Findings:**

Currently in 2001, there are 70 LTC facilities preferred Toronto with a total of 11,752 beds. Applicants can make an average of three choices on their list of LTC facilities.

- The number of people waiting per month for LTC facility placement has increased considerably over recent years. Average waiting lists increased from 3,427 in 1995 to 8,585 in 2001. This is an increase of 150%. It should be noted that waiting lists may be inflated by people who are on the list but do not need services immediately. Some of the people on the waiting lists may already be

residents of LTC facilities who are awaiting transfer to their facility of choice. In addition prior to 2001, people could be on waiting lists of more than one LTC facility. Hence, there is potential for double counting of people on waiting lists. However, individuals are listed only once in the 2001 data.

- In this same period 1995-2001, the average number of people admitted per month to LTC facilities increased from 326 in 1995 to 492 in 2001. Admissions are based on deaths, which create bed vacancies. The increase in number of admissions in the last year may be due to the increased number of beds in LTC facilities.
- As shown above, the majority of people waiting are in the community. This proportion increased from 43% in 1996 to 47% in 2001. Approximately 32% of the people on waiting lists are waiting in other LTC facilities, and 15% are in acute care hospitals. Between 1996 and 2001, the number of people waiting in the community increased by 110% compared to 125% in LTC facilities and an 18% decline in acute care hospitals. People waiting in the community are supported by family, caregivers and/or community-based services. The strain on caregivers (both paid and family) increases with time and disability.
- Based on information obtained from CCACs, people waiting from rehabilitation hospitals have the shortest wait (8.5 days) followed by those in chronic care hospitals (31.5 days) and those in acute care hospitals (40 days). People waiting in retirement homes had an average wait of 35 days. Among those in the community, people living in their own homes had a longer wait (60 days) than those living with relatives (21 days).

### 1.3 Waiting Lists for Cardiac Surgery

**Definition:**

- 1) The total number of patients registered in the Cardiac Care Network's (CCN) database who a) are waiting for surgery or b) had surgery at one of the three provincially designated cardiac centres in Toronto.
- 2) The median number of days patients waited for bypass surgery based on classification by their CCN Urgency Rating Score (URS), i.e. emergency/urgent, semi-urgent and elective. URS are calculated based on information about the patient and their medical condition. The URS is only calculated for bypass surgeries, which account for between 75-80% of cases. The score does not reflect urgency of other types of cardiac surgery (mostly valve surgery), or in cases involving multiple procedures (e.g. coronary artery bypass graft or CABG and valve done at the same time).
- 3) Percentage of patients who had bypass surgery within their recommended maximum waiting time (RMWT). Each patient has his/her own RMWT within a category. RMWTs are grouped as follows:
 

Emergency:	surgery without delay
Urgent:	within 14 days
Semi-urgent:	within 42 days
Elective:	within 180 days
- 4) "Grandfathered rate" - if a county's actual crude rate for 1999/2000 is greater than its target rate (i.e. it has already surpassed the new target), that actual rate is 'grandfathered' and supercedes the calculated target rate. For example, in Muskoka the calculated target rate is at the maximum 121. However, the 1999/2000 actual rate was 137. The actual rate supercedes the calculated target, and so the 'grandfathered' target is 137.

**Significance/Uses:**

- CCN collects information for all adult patients (age 20 or older) accepted for open-heart surgery by a heart surgeon at the eight provincially designated hospital cardiac centres in Ontario (three of which are in Toronto).
- The three Toronto cardiac surgical centres serve the entire Greater Toronto Area (i.e. 905 GTA does not have a cardiac centre).
- Provides information on how long patients usually wait for bypass surgery.
- Provides information on whether waiting times are within a recommended time range.
- Median waiting times may vary by surgeon within a hospital or by hospital centre.
- Length of waiting list (i.e. number of people on lists) may be affected by the number of heart surgeons in a centre.
- Provides information on volume and rate of patients seen at Ontario's cardiac surgery centres.
- Useful in monitoring access to cardiac services.
- Provides indication of supply-demand mismatch (i.e. unmet need) and therefore can help in health services planning.
- Comparison over time and place-to-place.

**Limitations:**

- Statistics do not include cardiac catheterization and other non-surgical cardiac services, which are not part of CCN's data-base in the fiscal 2000/01 year. In future years, these statistics will be available.
- Because of minor revisions to the URS system in 1997/98, prior years' statistics on median waiting times and surgery within RMWT are not directly comparable.
- Because the URS system is specific to bypass surgery, statistics on median waiting times and surgery within RMWT do not include other types of cardiac surgery (e.g. valve surgery).
- Only captures statistics for adults (age 20 or older).
- Waiting times are calculated from the date a patient was accepted for surgery by a cardiac surgeon.

**Source:**

Cardiac Care Network.

**Patients on Cardiac Surgery Waiting Lists of Toronto Hospitals  
1993/94 - 1999/2000**

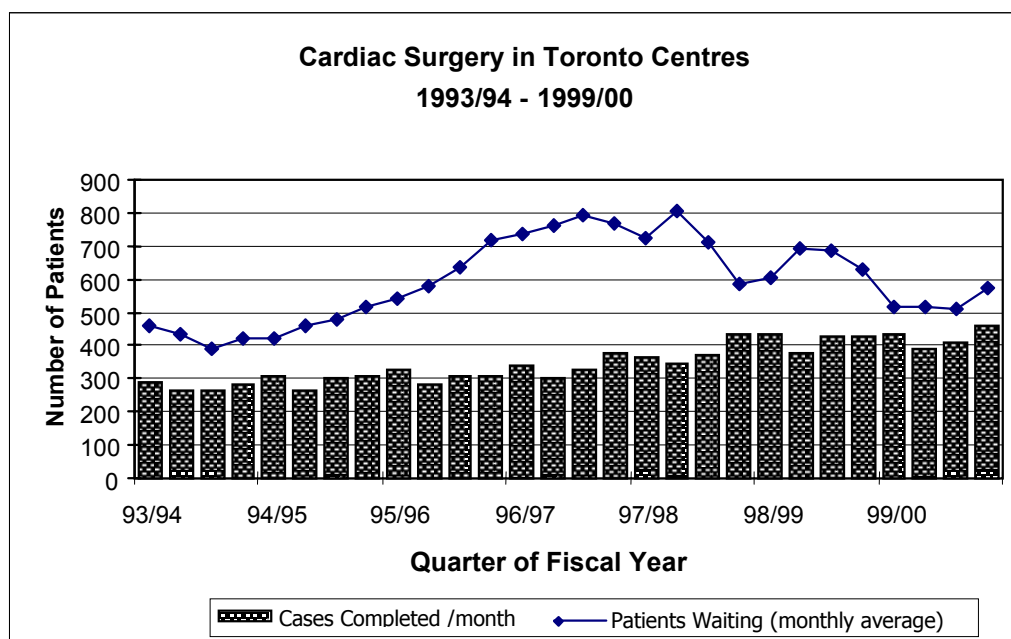
	Toronto Residents		Non-Toronto Residents		Total
	No	%	No	%	
<b>1993/94</b>	195	45.7	232	54.3	427
<b>1994/95</b>	224	47.7	246	52.3	470
<b>1995/96</b>	282	45.7	335	54.3	616
<b>1996/97</b>	348	45.5	417	54.5	765
<b>1997/98</b>	300	42.5	406	57.5	706
<b>1998/99</b>	270	41.3	383	58.6	653
<b>1999/00</b>	212	40.1	383	59.9	529

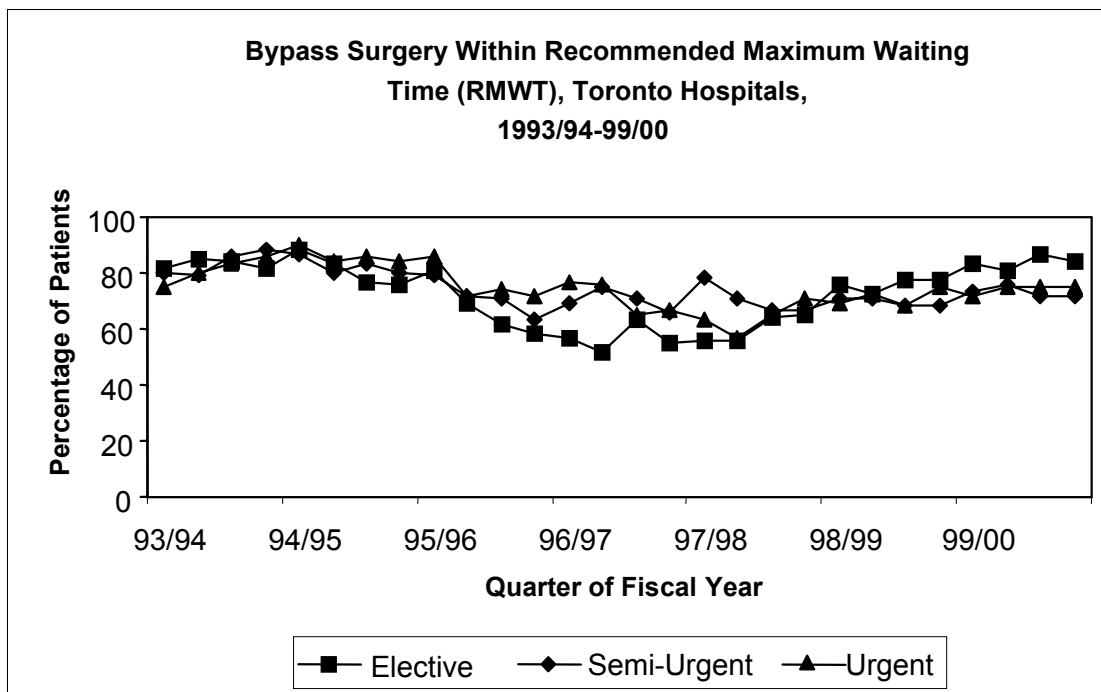
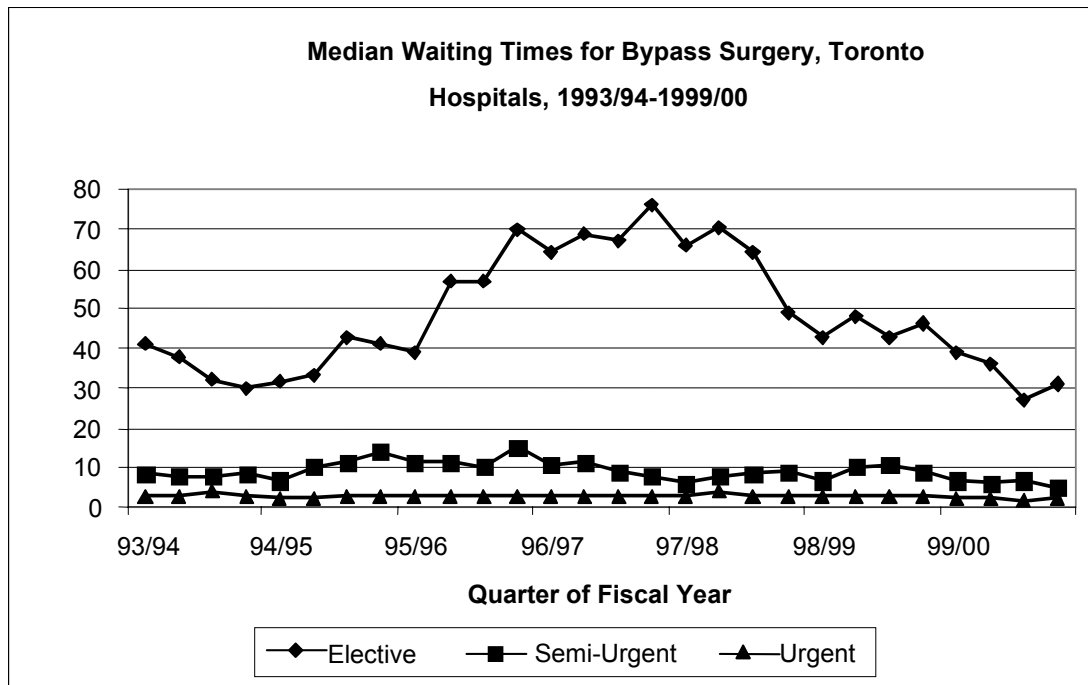
Please Note: Numbers may differ from those reported by CCN at the time, due to the nature of this 'snapshot' statistic.

**Cardiac Surgery Cases Completed in Toronto Hospitals  
1993/94 - 1999/00**

	Toronto Residents		Non-Toronto Residents		Total
	#	%	#	%	
<b>1993/94</b>	1,512	45.5	1,808	54.5	3,320
<b>1994/95</b>	1,660	46.5	1,905	53.5	3,565
<b>1995/96</b>	1,691	46.2	1,969	53.8	3,660
<b>1996/97</b>	1,843	45.7	2,188	54.3	4,031
<b>1997/98</b>	1,948	42.9	2,601	57.1	4,549
<b>1998/99</b>	2,069	41.4	2,922	58.5	4,991
<b>1999/00</b>	2,055	40.5	3,019	59.5	5,074

**Cardiac Surgery in Toronto Centres  
1993/94 - 1999/00**





## Key Findings:

- The three provincially designated cardiac centres in Toronto (Sunnybrook and Women's College Health Science Centre - Sunnybrook site, St. Michael's Hospital and Toronto General Hospital of University Health Network) serve the entire GTA (i.e. there were no cardiac centres in the 905 GTA as of 1999/00). Non-Toronto residents constitute slightly over half of the adult patients (20 years or older) receiving cardiac surgery at the three Toronto centres. In 1993/94, 46% of adult patients served by the three cardiac centres were residents of Toronto. This proportion decreased to 40% in 1999/00.
- The average number of patients waiting for cardiac surgery increased by 79% from 427 in 1993/94 to 765 in 1996/97; then declined significantly (by 31%) to 529 in 1999/00. However, there was a 53% increase in volume during the period 1993/94 to 1999/00, with the number of cardiac surgeries increasing from 3,320 to 5,074.
- The net increase in the numbers of patients on waiting lists and number of procedures completed in the seven-year period (1993/94 to 1999/00) is due to a variety of reasons, including:
  - A growing and aging population
  - Increased numbers of high risk cases
  - Scientific validation of cardiac surgery as an effective procedure
  - Increasing number of previous cardiac surgery patients who need repeat surgery, as cardiac surgery treats heart disease but does not cure it.

It should also be noted that in 1997/98 Ontario adopted a population-based target for adult bypass surgery, which will aid in keeping surgical volumes in line with population changes. Because hospital funding for cardiac surgery is "extra global," cardiac centres have specific annual targets for cardiac surgery cases.

- Between 1993/94 and 1999/00, the median waiting time for urgent bypass surgery remained consistently low (between 2-4 days), but has been declining in the last three years. In 1999/00, the waiting time was only 1.5 to 2 days. Waiting time for semi-urgent cases increased from 8.5 in 1993/94 to a peak of 14 in 1996/97. Since then, it has gradually declined to reach 5 days in 1999/00. Patients waiting for elective surgery have the longest waits. Between 1993/94 and 1997/98, waiting times for elective surgery patients increased gradually. However, since then, there has been a 59% decrease (reaching 31 cases in 1999/00). The fact that there was little variation in waiting times for urgent and semi-urgent patients, and the apparent decrease more recently, highlights the effectiveness of waiting list management. Patients waiting for elective surgery are considered less likely to have an irreversible event (e.g. myocardial infarction or death) while waiting for surgery.
- Between 1993/94 and 1999/00, the proportion of patients receiving bypass surgery within the Recommended Maximum Waiting Time (RMWT) fluctuated considerably. In the first quarter of 1993/94, more than three-quarters of patients received surgery within the RMWT. However, for urgent patients, this proportion was slightly lower than for semi-urgent and elective surgery (i.e. 75% vs. 80% and 82% respectively). Between 1993/94 and 1994/95, this proportion increased for all types of patients, then declined from 1995/96, with the largest decrease occurring for patients waiting for elective surgery. Since the first quarter of 1997/98, the proportion of urgent and elective patients receiving surgery within the RMW was increased.

- In 1999/00, a total of 1,688 coronary artery bypass graft surgery (CABG) cases were done for Toronto residents. This represents 19% of the total cases done in Ontario. Toronto has a lower CABG rate than Ontario (86 per 100,000 population vs. 104 per 100,000). The number of CABG cases is expected to increase, and the target set for Toronto for the year 2005/06 is 104/100,000. The Ontario target is 110/100,000.

## 1.4 Children with Urgent Dental Needs

### Definition:

Number of children identified with urgent unmet dental needs; pain, hemorrhage, pathology infection, including large open carious lesions and irreversible periodontal disease. Identification is carried out by Toronto Public Health Dental Staff through assessments in schools, attendance at clinics and direct referral from community dentists, public health and school staff.

### Significance/Uses:

- “Urgent” data are also collected as part of the MOHLTC Dental Indices.
- There were historical trend data for children aged 5, 7, 9, 11 and 13 years by former geopolitical jurisdiction, now limited to children at school entry.
- Dental services are not covered by Ontario’s health system. Dental health tends to be an early marker of access to health care and preventive practices.
- Prevalence provides an indication of children with no access to dental services: i.e.: low income or former welfare recipients with no dental third party coverage for dental care.
- Monitors unmet dental needs in the elementary school age population from 5-14.
- Children with urgent dental care needs are considered to be a sentinel event/condition. These occurrences should be a warning signal that the access to other preventive health services may need improvement.
- Used to plan dental programs, health promotion, education, prevention and care.
- Used to initiate clinical preventive services and active treatment.
- A mandatory program for all health units in Ontario.

### Limitations:

- May be variable between jurisdictions.
- Access issues for preschoolers are under-reported.
- Increase in rate can also reflect newcomers to Toronto.
- Depends on ability to maintain, on an ongoing basis, the screening program resources.

### Source:

Toronto Public Health Department.  
Sample Survey of the Oral Health of Toronto Children, 2000.

### Mandatory Health Programs and Services Guidelines

To reduce the prevalence of dental diseases in children and youth (*No specific target given*).



<b>Children with Dental Needs, by Age Group, Toronto 1994* and 2002</b>						
<b>Indicator</b>	<b>Age</b>					
	<b>5</b>		<b>7</b>		<b>13</b>	
	<b>1994</b>	<b>2000</b>	<b>1994</b>	<b>2000</b>	<b>1994</b>	<b>2000</b>
<b>Percent with experience of cavities</b>	30.8	30.0	47.9	41.3	48.8	39.3
<b>Percent with urgent treatment needs</b>	8.8	6.8	9.2	7.4	2.9	1.7
<b>Percent with two or more decayed teeth</b>	10.5	10.8	11.6	7.0	4.5	2.0
<b>Average DMFT**</b>	1.34	1.22	2.23	1.59	1.62	1.13

\* 1994 Survey included 5 former municipalities (Scarborough did not participate)

\*\*DMFT = Decayed, missing, or filled teeth

Source for 2000 data: Sample Survey of the Oral Health of Toronto Children, 2000 (Leake, Goettler, Sthal-Quinlan and Stewart)

<b>Children Aged 7 Years with Dental Needs, by Toronto Region, 2000</b>				
<b>Indicator</b>	<b>Region (weighted n)</b>			
	<b>North (670)</b>	<b>South (636)</b>	<b>East (890)</b>	<b>West (599)</b>
<b>Percent with experience of cavities (ns)</b>	41.8	43.0	36.7	40.3
<b>Percent with urgent treatment needs (ns)</b>	8.1	6.6	8.2	7.8
<b>Percent requiring treatment on two or more teeth (ns)</b>	7.5	7.1	8.1	4.7
<b>Average DMFT*</b>	1.6	1.9	1.4	1.6

(ns) = not statistically significant

\*DMFT = Decayed, missing, or filled teeth

Source: Sample Survey of the Oral Health of Toronto Children, 2000 (Leake, Goettler, Sthal-Quinlan and Stewart).

### Key Findings:

The Public Health Unit is mandated to provide services to reduce dental diseases for children. Before amalgamation of the 6 Toronto public health units in 1997, each PHU conducted its own survey to assess children with urgent dental needs. Since amalgamation, the survey has been conducted using standard protocol and with calibrated examiners across the whole of Toronto. The most recent survey (Leake et al. 2001) conducted in 2000 examined oral health of a sample of Toronto children aged 5, 7, and 13.

- According to this survey, the prevalence of urgent needs varied by age. About 7.4% of seven year-olds and 6.8% of the five-year-olds were found to be in urgent need of dental care. The percentage was much lower among 13-year-olds (1.7%). These results, when compared to the aggregated findings from separate surveys conducted in 1994 for five of the six former municipalities (Scarborough excluded), show that the oral health of children in 2000 is better on almost all of the indicators. For example, while 1994 data are perhaps less precise, it appears that 9.2% of the seven-year-olds needed urgent treatment, 48% had previous caries experience, nearly 12% had two or more decayed teeth, and the mean number of decayed, missing and filled teeth

was 2.2. There was a decline in all these proportions in 2000 (i.e. 7.4%, 41%, 7% and 1.6% respectively).

- The 2000 study also looked at these indicators for seven-year-olds to see if there were differences by region. The new regions are such that the North is the former North York, South is the former Toronto, East is the former Scarborough and East York, and West is the former Etobicoke and City of York. Prevalence of dental needs among seven-year-old children did not differ statistically by region.

There is no target set by the MOHLTC for the reduction of urgent dental needs; however, government policies which lead to greater poverty and inequities among families with children have the potential to result in an increase in the rate. In Toronto, the rate probably reflects the number of children from recent immigrant, and particularly refugee families.

Toronto Public Health has set in place some initiatives to address the issue of children with urgent dental needs in Toronto. These include families of recent immigrations, and refugees in particular formation of a technical advisory committee to advise on strategies to reduce the number of children with Early Childhood Tooth Decay. The technical advisory committee has recommended increasing awareness of the condition among pediatricians. Toronto Public Health and staff from Hospital for Sick Children and the Faculty of Dentistry are collectively participating in raising awareness of the issue. The Public Health Unit continues to meet to plan additional revisions to programs of the three organizations and other potential partners.

## 1.5 Utilization of Health Services by Disability Levels and Chronic Illness

### Definition:

Rate of utilization of health services in the previous twelve months (self-reported, from National Population Health Survey (NPHS)/Ontario Health Survey (OHS).

1. **Long-Term Disability:** Long-term disability refers to restriction in the type or quantity of activities because of a chronic physical or mental disease or health problem for at least six months. It is a derived variable. This information was collected by self-report (telephone survey) in the National Population Health Survey/Ontario Health Survey, 1996/97 from the population aged 12 years and older. Information is displayed as the % of the population 12+ with long-term disability (LTD) broken down by age group, income, education, and gender. Use of health services (family doctor, emergency services, in-patient admissions, alternative health care provider, and home care) by those with a long-term disability is also reported.
2. **Short-Term Disability:** Short-term disability (or two-week disability) or restriction, refers to reporting of disability days, i.e. individuals who either stayed in bed or cut down on activities in the 14 days prior to the survey because of ill health. This information was collected by self-report (telephone survey) in the National Population Health Survey/Ontario Health Survey, 1996/97 from the population aged 12 years and older. Information is displayed as the % of the population 12+ with short-term disability (STD) broken down by age, income, education, and gender.
3. **Chronic Conditions:** Living with a chronic condition refers to the presence of one or more health problems such as diabetes, allergies, asthma, arthritis, high blood pressure, sinusitis, chronic bronchitis, cancer, heart disease and others. It is a derived variable. This information was collected by self-report (telephone survey) in the National Population Health Survey/Ontario Health Survey, 1996/97 from the population aged 12 years and older. Information is displayed as the % of the population 12+ with a chronic illness broken down by age, income, education, and gender. Use of health services (family doctor, emergency services, in-patient admission, alternative health care providers, and home care) by those with chronic illnesses is also reported.

### Significance/Uses:

- Disabilities and restrictions in activity can stem from conditions related to mortality (e.g. stroke, congestive heart failure, chronic respiratory disease) or they can be related to conditions that are not life-threatening (e.g. arthritis and mental health problems).
- Restriction in activity or disability vary with age, sex and socio-economic status.
- Restrictions in activity and disabilities affect self-ratings of health and uses of health services. For example, some chronic diseases such as allergies, migraine, asthma and back problems are associated with high utilization of physician services and drugs.
- Marked changes in the use of the health services by persons with disabilities may indicate the effects of health care reform.
- Individuals can either report their uses of health services or one can link administrative data to survey responses, as is done with the NPHS to examine the relationship between restrictions, disability and uses of health services.
- Measures differential utilization of health services and thus helps identify population sub-groups at risk of poor access to health services.
- Planning for health needs and services.
- Comparison over time and place-to-place.

**Limitations:**

- The measurement and definition of disability may change from one survey to another.
- Self reports of restrictions and disability can be subjective assessments not supported by health professionals.
- Individuals tend to under-report use of health services as they cannot accurately recall all visits for health services in the given time period. Using administrative data would get around this problem, but there is always a chance the health status of the person may have changed between the time of the survey response and subsequent use of health services.

**Sources:**

- 1) NPHS/OHS 1996/97.

**1.5a Utilization of Health Services by People with Long-Term Disability:**

<b>Proportion of Individuals with a Long-Term Disability, Toronto and Ontario, 1996/97</b>		
	<b>% of Population with the LTC disability</b>	<b>95% Confidence Interval</b>
<b>Toronto</b>	7.5	6.6 - 8.4
<b>Ontario</b>	9.6	9.3 - 9.9

Source: OHS, 1996/97.

<b>Percentage of Individuals (12 Years and Older) Reporting a Long-Term Disability by Education, Income And Sex: Toronto and Ontario, 1996/97</b>		
<b>EDUCATION</b>	<b>Toronto Rate % (95% C.I.)</b>	<b>Ontario Rate % (95% C.I.)</b>
<b>Less than complete secondary</b>	9.8% (7.8 - 11.9)	12.4% (11.6 - 13.1)
<b>Secondary or post-secondary</b>	7.7% (6.1 - 9.2)	9.1% (8.6 - 9.6)
<b>College or University degree</b>	5.8% (4.5 - 7.1)	7.5% (7.0 - 8.1)
<b>INCOME</b>		
<b>Low</b>	13.1% (9.6 - 16.5)	18.4% (16.9 - 19.9)
<b>Middle or high</b>	7.0% (5.9 - 8.2)	9.0% (8.6 - 9.4)
<b>Not stated</b>	6.3% (4.8 - 7.8)	7.8% (7.2 - 8.4)
<b>SEX</b>		
<b>Male</b>	6.5% (5.2 - 7.7)	9.2% (8.7 - 9.7)
<b>Female</b>	8.4% (7.1 - 9.7)	9.9% (9.4 - 10.4)
<b>AGE</b>		
<b>12-24</b>	(U)	3.9% (3.4 - 4.4)
<b>25-44</b>	4.3% (3.2 - 5.4)	6.7% (6.3 - 7.2)
<b>45-64</b>	9.0% (7.0 - 11.1)	12.2% (11.4 - 12.9)
<b>65 +</b>	19.9% (16.3 - 23.5)	21.1% (19.9 - 22.4)

Source: OHS, 1996/97.

(U) Estimate is unacceptable due to small sample size.

<b>Utilization of Health Services in the past 12 Months by Individuals with a Long-Term Disability, Toronto and Ontario, 1996/97</b>				
	<b>Toronto</b>		<b>Ontario</b>	
	<b>Rate (%)</b>	<b>95% C.I.*</b>	<b>Rate (%)</b>	<b>95% C.I.*</b>
<b>Was a patient overnight in hospital</b>	20.6	15.3 - 25.9	19.1	17.5 - 20.7
<b>Utilized homecare services</b>	11.1 (M)	7.1 - 15.1	12.5	11.2 - 13.8
<b>Used emergency services</b>	32.0	25.6 - 38.3	37.5	35.5 - 39.5
<b>Consulted alternative healthcare provider</b>	(You)	---	8.1	7.1 - 9.1
<b>Visited with a primary care physician</b>	90.3	88.1 - 92.5	91.6	90.5 - 92.7

Source: OHS 1996/97

\* C.I. = Confidence Interval

(M) - Marginal estimate; caution should be exercised when using this estimate as there is a high sampling variability associated with the estimate.

(U) - Unacceptable estimate; this estimate can not be published due to small sample size.

**Key Findings:**

- The proportion of people living with a long-term disability in Ontario is significantly higher than in Toronto (i.e. 7.5% vs. 9.6%). Toronto has a lower rate than Ontario.
- In Toronto and Ontario, individuals with a college or university degree are significantly less likely to report a long-term disability than those with less than complete secondary school education.
- Similarly, those with middle or high household incomes are less likely to report a long-term disability than those with low incomes. Further analysis should be conducted to determine whether people with low incomes are more likely to have long-term disabilities or whether having a long-term disability and the reduced capacity to work contributes to the lower income level.
- There is also a significant difference between males and females, with females more likely to report a long-term disability than males. This trend is the same for both Toronto and Ontario. However, males in Ontario are more likely to have long-term disabilities than males in Toronto.
- The analysis by age demonstrates significant differences at each age level in both Toronto and Ontario. With increasing age, individuals are more likely to report having a long-term disability.
- There was no significant difference in utilization of health services (e.g. home care services, emergency services, and hospital services) between people with long-term disability living in Toronto vs. Ontario.
- In Ontario, approximately 92% of people with a long-term disability visited a primary care physician in the past 12 months.

**1.5b Utilization of Health Services by People with Short-Term Disability\*:**

<b>Proportion of Individuals (12 years and Older) with Short-Term Disability: Toronto and Ontario, 1996/97</b>		
	<b>% Population with short-term disability</b>	<b>95% Confidence Interval</b>
<b>Toronto</b>	10.6 %	10.2 - 11.0
<b>Ontario</b>	11.1 %	11.0 - 11.2

\* Short-term disability refers to individuals who reported restriction in activities in the 14 days previous to the survey.

<b>Percentage of Individuals (12 Years and Older) Reporting a Short-Term Disability by Education, Income And Sex: Toronto and Ontario, 1996/97</b>		
<b>EDUCATION</b>	<b>TORONTO Row % (95% C.I.)</b>	<b>ONTARIO Row % (95% C.I.)</b>
<b>Less than complete secondary</b>	11.7% (9.4 - 14.1)	11.9% (11.2 - 12.6)
<b>Secondary or post-secondary</b>	10.2% (8.4 - 11.9)	10.9% (10.3 - 11.5)
<b>College or University degree</b>	10.5% (8.7 - 12.2)	10.8% (10.2 - 11.4)
<b>INCOME</b>		
<b>Low</b>	14.6% (11.0 - 18.1)	16.3% (14.9 - 17.7)
<b>Middle or high</b>	10.1% (8.7 - 11.4)	11.2% (10.8 - 11.7)
<b>Not stated</b>	10.2% (8.3 - 12.1)	9.0% (8.4 - 9.6)
<b>SEX</b>		
<b>Male</b>	8.4% (7.1 - 9.8)	9.6% (9.1 - 10.1)
<b>Female</b>	12.6% (11.1 - 14.1)	12.6% (12.0 - 13.2)
<b>AGE</b>		
<b>12-24</b>	12.3% (9.5 - 15.0)	10.5% (9.7 - 11.3)
<b>25-44</b>	9.3% (7.8 - 10.9)	10.5% (9.9 - 11.1)
<b>45-64</b>	11.4% (9.2 - 13.6)	11.4% (10.7 - 12.2)
<b>65 +</b>	10.9% (8.1 - 13.7)	13.1% (12.0 - 14.1)

Source: OHS, 1996/97.

\* Short-Term disability refers to individuals who reported restriction in activities in the 14 days previous to the survey.

<b>Percentage of Individuals (25 Years and Older) Reporting a Short-Term Disability by Education: Toronto and Ontario, 1996/97</b>		
<b>EDUCATION</b>	<b>TORONTO Row % (95% C.I.)</b>	<b>ONTARIO Row % (95% C.I.)</b>
<b>Less than complete secondary</b>	11.9% (10.8 - 12.9)	12.5% (12.1 - 12.8)
<b>Secondary or post-secondary</b>	9.4% (8.8 - 9.9)	11.0% (10.8 - 11.2)
<b>College or University degree</b>	10.5% (9.9 - 11.1)	11.0% (10.8 - 11.2)
<b>Not stated</b>	–	7.9% (7.1 - 8.7)
<b>Total</b>	10.3% (9.9 - 10.6)	11.2% (11.1 - 11.4)

**Key Findings:**

- In Toronto, there is a significant difference in the percentage of females reporting that they reduced their activities in the two weeks previous to the survey compared to males (12.6% vs. 8.4%).
- In Ontario, females were more likely to report a two-week disability than males. Income was also a significant predictor in Ontario. Those with middle or high incomes were less likely to report a two-week disability than those with lower incomes.
- These data do not exclude those with long-term disabilities because those with long-term disabilities do not necessarily report restriction in activities. However, these data may overestimate the proportion experiencing short-term disabilities if these percentages are applied to individuals without long-term disabilities.



**1.5c Utilization of Health Services by People with Chronic Illness:**

<b>Proportion of Individuals with a Chronic Condition, Toronto and Ontario, 1996/97</b>		
	<b>% of Population with a Chronic Condition</b>	<b>95% Confidence Interval</b>
<b>Toronto</b>	54.6	52.6 - 56.6
<b>Ontario</b>	57.7	55.6 - 59.8

Source: OHS, 1996/97.

<b>Percentage of Individuals (12 Years and Older) Reporting a Chronic Condition by Education, Income And Sex: Toronto and Ontario, 1996/97</b>		
<b>EDUCATION</b>	<b>Toronto Row % (95% C.I.)</b>	<b>Ontario Row % (95% C.I.)</b>
<b>Less than complete secondary</b>	53.6% (49.8 - 57.4)	57.5% (56.4 - 58.7)
<b>Secondary or post-secondary</b>	54.1% (51.0 - 57.1)	57.4% (56.3 - 58.4)
<b>College or University degree</b>	56.7% (53.7 - 59.6)	58.3% (57.3 - 59.4)
<b>INCOME</b>		
<b>Low</b>	59.3% (53.9 - 64.6)	63.8% (62.0 - 65.6)
<b>Middle or high</b>	56.0% (53.7 - 58.2)	58.2% (57.5 - 58.9)
<b>Not stated</b>	50.3% (47.1 - 53.5)	54.3% (53.2 - 55.4)
<b>SEX</b>		
<b>Male</b>	49.7% (47.3 - 52.2)	53.0% (52.0 - 53.9)
<b>Female</b>	59.2% (56.2 - 62.2)	62.1% (61.5 - 62.8)
<b>AGE</b>		
<b>12-24</b>	38.8% (35.0 - 42.7)	42.5% (41.2 - 43.9)
<b>25-44</b>	47.3% (44.8 - 49.8)	51.2% (50.3 - 52.2)
<b>45-64</b>	61.3% (58.2 - 64.4)	65.7% (64.6 - 66.7)
<b>65 +</b>	82.3% (80.0 - 84.6)	83.4% (82.4 - 84.4)

Source: OHS, 1996/97

<b>Percentage of Individuals 25 + with Chronic Illness by Education: Toronto and Ontario, 1996/97</b>		
<b>EDUCATION</b>	<b>Toronto</b>	<b>Ontario</b>
<b>Less than complete secondary</b>	67.7% (63.7 - 71.7)	70.9% (69.6 - 72.2)
<b>Secondary or post-secondary</b>	55.5% (52.5 - 58.5)	59.6% (58.6 - 60.6)
<b>College or University degree</b>	57.1% (54.5 - 59.8)	59.1% (58.1 - 60.1)
<b>Not stated</b>	--	52.9% (47.9 - 58.0)
<b>Total</b>	57.9% (56.2 - 59.7)	61.5% (60.9 - 62.2)

Source: OHS 1996/97

<b>Utilization of Health Services in the past 12 Months by Individuals 12 years and over with a Chronic Condition, Toronto and Ontario, 1996/97</b>				
	<b>Toronto</b>		<b>Ontario</b>	
	<b>Rate (%)</b>	<b>95% C.I.*</b>	<b>Rate (%)</b>	<b>95% C.I.*</b>
<b>Was a patient overnight in hospital</b>	9.1	7.8 - 10.4	9.4	9.0 - 9.8
<b>Utilized home care services</b>	3.1	2.3 - 3.9	3.7	3.4 - 4.0
<b>Used emergency services</b>	22	20.1 - 23.9	25.6	24.8 - 26.4
<b>Consulted alternative healthcare provider</b>	8.2	6.9 - 9.5	6.9	6.5 - 7.3
<b>Visited with a primary care physician</b>	86.6	85.2 - 88	86.5	86.0 - 87.0

Source: OHS, 1996/97

\* C.I. = Confidence Interval

**Key Findings:**

- In Toronto, 54.6% of the population is living with a chronic condition compared to 57.7% for Ontario. However, this difference is not statistically significant. Note that according to OHS, chronic conditions include health problems such as diabetes, allergies, asthma, arthritis, high blood pressure, sinusitis, chronic bronchitis, cancer, heart disease, epilepsy, and others.
- There was significant difference in the use of emergency services by people living with a chronic disease in Toronto compared to Ontario. However, the reported patterns of utilization of health services (i.e. home care, primary care, and hospital services) were almost the same. Although people with a chronic condition in Toronto reported slightly higher rates of utilization of alternative health care providers than those in Ontario, the difference was not significant.
- There is no significant difference in reporting of a chronic condition by educational level in Toronto and Ontario.
- In Toronto, women are significantly more likely to have a chronic condition than men. This also holds true for Ontario.
- Although there is no significant difference by income for Toronto, individuals with low incomes in Ontario are significantly more likely to have a chronic condition than individuals with high or middle incomes in Ontario.
- As with long-term disabilities, there is a correlation between age and chronic conditions. There is a significant difference for each age level, with individuals in older age groups more likely to report a chronic condition than the next younger age group.

## 1.6 Proportion of Women Who Had Mammograms

### Definition:

- a) Proportion of women aged 50-69 who reported ever having a mammogram, by education and income level.
- b) Proportion of women aged 35+ who reported ever having a mammogram, by education and income level.

### Significance/Uses:

- Breast cancer is one of the leading causes of cancer mortality for women in Ontario and the third leading cause of all deaths in women, after ischemic heart disease and stroke.
- The incidence of breast cancer is increasing. Since there are currently no established methods of breast cancer prevention, mortality reduction depends on early detection and appropriate therapy. Small breast cancers have the highest chance of being cured, and mammography (x-ray of the breasts) can detect small cancers before they can be felt. The effectiveness of mammography screening has been well established by several large clinical trials.
- Data on utilization of mammograms is captured in the OHS and NPHS (self-reported), and in the OHIP database.
- The Ontario Breast Screening Program offers to women 50 years and over: mammography, physical examination of the breast (at most locations), information on breast self-examination, and a reminder to return for screening.
- Based on scientific evidence, the Canadian Task Force on Preventive Health Care recommends, for women aged 50-69, regular breast screening with mammography and clinical breast examination every 1 – 2 years, based on scientific evidence.
- Health Canada's National Committee for the Canadian Breast Cancer Screening Initiatives recommends that all women between the ages of 50-69 have a screening mammogram every two years.
- Identification of target groups based on age, socio-economic status.
- Useful in planning preventive and promotional interventions.
- Could be used to identify under-use or over-use of services.
- Comparison place to place and mandatory health program benchmarks.
- Indicates access to breast screening services.

### Limitations:

- Screening mammography is conducted on a voluntary basis and may not fully capture concerns related to access.
- There is a potential for recall bias in the self-reported utilization.
- OHIP data does not contain information on mammograms done through Ontario Breast Screening Programs (OBSP).

### Sources:

- 1) OHS 1990, 1996/97
- 2) NPHS 1995/96, 1996/97
- 3) OHIP

### Mandatory Health Programs and Services Guideline

To increase to 70% the proportion of women ages 50-69 who receive screening mammography through the Ontario Breast Screening Program by the year 2010.

**1.6a Utilization of Screening Mammography by Women Aged 50-69**

<b>Utilization of Mammography by Age-Group: Toronto and Ontario, 1996/97</b>		
<b>Age group</b>	<b>Toronto % (95% C.I.*)</b>	<b>Ontario % (95% C.I.*)</b>
<b>35-49</b>	40.7 (36.5 – 44.9)	42.3 (40.7 – 43.9)
<b>50-59</b>	83.2 (79.1 – 87.4)	82.1 (80.8 – 83.4)
<b>60-69</b>	82.3 (77.9 – 86.8)	80.9 (79.4 – 82.3)
<b>70 and over</b>	72.7 (65.8 – 79.7)	67.8 (65.4 – 70.3)
<b>Total 35 +</b>	60.8 (58.3 – 63.4)	60.5 (59.5 – 61.4)
<b>Total 50-69</b>	82.8 (79.0 – 86.6)	81.6 (80.2 – 82.9)

Source: OHS, 1996/97

<b>Utilization of Mammography by Educational Level: Women 50-69 Toronto and Ontario, 1996/97</b>		
<b>Educational Level</b>	<b>Toronto % (95% C.I.*)</b>	<b>Ontario % (95% C.I.*)</b>
<b>Less than complete secondary</b>	79.1 (69.8 – 88.5)	77.5 (74.5 – 80.4)
<b>Secondary or post-secondary</b>	84.1 (78.7 – 89.5)	83.2 (81.5 – 84.9)
<b>College or University degree</b>	86.0 (81.0 – 91.0)	84.3 (82.4 – 86.1)

Source: OHS, 1996/97

<b>Utilization of Mammography by Educational Level: Women 35 years and older: Toronto and Ontario, 1996/97</b>		
<b>Educational Level</b>	<b>Toronto % (95% C.I.*)</b>	<b>Ontario % (95% C.I.*)</b>
<b>Less than complete secondary</b>	69.0 (62.9 - 75.0)	66.6 (64.8 – 68.5)
<b>Secondary or post-secondary</b>	59.3 (53.6 - 65.0)	58.7 (57.0 – 60.3)
<b>College or University degree</b>	58.1 (53.0 - 63.2)	58.6 (56.5 – 60.7)

Source: OHS, 1996/97

<b>Utilization of Mammography by Household Income for Women Aged 50-69: Toronto and Ontario, 1996/97</b>		
<b>Household income</b>	<b>Toronto % (95% C.I.*)</b>	<b>Ontario % (95% C.I.*)</b>
<b>Low</b>	85.0 (72.7 - 97.3)	74.3 (69.5 – 79.2)
<b>Middle or high</b>	82.1 (78.1 - 86.0)	82.8 (81.1 – 84.5)
<b>Not stated</b>	83.6 (81.0 - 91.0)	81.4 (78.8 – 83.9)

Source: OHS, 1996/97

\*(U) - Unacceptable Estimate, this estimate can not be published due to a small sample size.

<b>Utilization of Mammography by Household Income for Women Aged 35 +: Toronto and Ontario, 1996/97</b>		
<b>Household income</b>	<b>Toronto % (95% C.I.*)</b>	<b>Ontario % (95% C.I.*)</b>
<b>Low</b>	58.5 (48.6 - 68.4)	55.9 (52.3 – 59.5)
<b>Middle or high</b>	60.5 (57.0 - 64.0)	60.5 (59.3 – 61.7)
<b>Not stated</b>	62.3 (57.7 - 66.9)	62.2 (60.4 – 63.9)

Source: OHS, 1996/97

**Key Findings:**

- In Toronto, about 83% of women aged 50-69 reported ever having a mammogram. Of women 50-69, about 62% had a mammogram within the previous two years, 13% reported having had one, but not within the past two years, and 15% have never had a mammogram. However, the proportion of women age 50-69 following the breast screening guidelines (i.e. undergoing mammography every two years) is unknown.

***Utilization of mammography by age group:***

- In Toronto, the highest rate of mammography utilization was among women aged 50-59 followed by women in their 60s and 70s. Similar results were noted in Ontario.

***Utilization of mammography by education:***

- Further analysis of data by educational level showed that there was no significant difference in the use of mammography for females aged 50-69 in Toronto. However, women with greater than a high school level of education in Ontario were significantly more likely to have ever had a mammogram than women with less than a secondary education.
- The opposite trend is true when the analysis is conducted for all women aged 35 and older. Although there is no statistical significance within Toronto in the relationship between utilization of mammography based on educational level, women in Ontario who had not completed secondary education were significantly more likely to have ever had a mammogram than women with more than secondary education. There is no apparent explanation for this.

***Utilization of Mammography by Household Income:***

- In Toronto, due to small sample size, the estimate for women aged 50-69 with low income can not be published.
- A further examination of women 50-69 in Ontario showed a significantly lower rate of utilization for women with low household incomes compared to middle or high household incomes. However, the observed difference is not statistically significant for women 35 years and older in Toronto or Ontario.
- It should be noted that a large number of women did not state their income level and that might have biased the results.

## 1.6b Utilization of Screening Mammography by Women Aged 50-69 within the Past Two Years

Utilization of Mammography in the Past Two Years by Women who Have Ever Had a Mammogram by Age-Group: Toronto and Ontario, 1996/97		
Age group	Toronto % (95% C.I.*)	Ontario % (95% C.I.*)
35-49	64.8 (57.3 - 72.2)	64.3 (62.2 - 66.3)
50-59	86.4 (81.3 - 91.6)	84.3 (82.8 - 85.8)
60-69	78.6 (70.8 - 86.4)	79.7 (76.8 - 82.6)
70 and over	68.4 (60.6 - 76.2)	67.6 (64.7 - 70.6)
Total 35+	74.1 (70.5 - 77.7)	73.6 (72.4 - 74.8)
Total 50-69	82.8 (78.6 - 87.0)	82.3 (80.8 - 83.8)

Source: OHS, 1996/97

\* C.I. = Confidence Interval

Utilization of Mammography in the Past Two Years by Women 50-69 Who Have Ever Had a Mammogram by Educational Level: Toronto and Ontario, 1996/97		
Educational Level	Toronto % (95% C.I.*)	Ontario % (95% C.I.*)
Less than complete secondary	83.4 (76.9 - 89.9)	79.7 (76.2 - 83.2)
Secondary or post-secondary	78.8 (68.7 - 88.9)	82.7 (80.9 - 84.5)
College or University degree	84.7 (79.3 - 90.2)	83.8 (81.6 - 86.0)

Source: OHS, 1996/97

Utilization of Mammography in the Past Two Years by Women 35 Years and Older who Have Ever Had a Mammogram by Educational Level: Toronto and Ontario, 1996/97		
Educational Level	Toronto % (95% C.I.*)	Ontario % (95% C.I.*)
Less than complete secondary	75.2 (67.4 - 82.9)	74.1 (71.5 - 76.8)
Secondary or post-secondary	73.2 (67.2 - 79.1)	73.8 (71.7 - 75.9)
College or University degree	73.3 (67.6 - 79.1)	72.7 (70.5 - 74.9)

Source: OHS, 1996/97

Utilization of Mammography in the Past Two Years by Women Who Have Ever Had a Mammogram by Household Income for Women Aged 50-69: Toronto and Ontario, 1996/97		
Household Income	Toronto % (95% C.I.*)	Ontario % (95% C.I.*)
Low	(You)*	70.5 (64.4 - 76.6)
Middle or high	83.6 (79.3 - 87.7)	83.1 (81.8 - 84.4)
Not stated	86.2 (80.2 - 91.8)	84.3 (82.1 - 86.5)

Source: OHS, 1996/97

\*(U) - Unacceptable estimate; this estimate can not be published due to a small sample size.

Utilization of Mammography in the Past Two Years by Women Who Have Ever Had a Mammogram by Household Income for Women Aged 35 and More: Toronto and Ontario, 1996/97		
Household income	Toronto % (95% C.I.*)	Ontario % (95% C.I.*)
Low	67.8 (55.8 - 79.7)	65.4 (61.4 - 69.5)
Middle or high	72.9 (68.4 - 77.4)	73.3 (71.7 - 74.9)
Not stated	78.5 (72.9 - 84.2)	77.3 (74.8 - 79.7)

Source: OHS, 1996/97

### Key Findings:

#### ***Utilization of Mammography in the past two years by age group by women who have ever had a mammogram.***

- In Toronto, the highest rate of mammography utilization in the past two years was among women aged 50-59 followed by women in their 60s and 70s.

#### ***Utilization of Mammography in the past 2 years by education by women who have ever had a mammogram.***

- Further analysis of data by educational level showed that there was no significant difference in the use of mammography for women aged 50-69 who had a mammogram in the past two years.

#### ***Utilization of Mammography in the past two years by Household Income by women who have ever had a mammogram.***

- In Toronto, due to the small sample size, the estimate for women aged 50-69 with low income can not be published.
- A further examination of data, looking at utilization of mammogram in the past two years by women aged 35 and over, showed a lower rate of utilization for women with low household incomes compared to those with middle or high household incomes. However, the observed difference is not statistically significant. It should be noted that a large number of women did not state their income level, which might have biased the results.

## 1.7 Proportion of Women Who Had a Pap Test

### Definition:

- a) Number of women aged 25 and over reporting a Pap smear test.
- b) Number of women aged 25 years and older who have had a Pap smear test, reporting a test within the past three years.

### Significance/Uses:

- Useful in identifying high-risk groups based on age, socioeconomic status and sex.
- Useful in planning preventive and promotional interventions.
- Comparison to place and mandatory health program benchmarks.
- Indicators of access to preventive health services.
- The use of the Pap test is recognized as an effective means of reducing cervical cancer incidence and mortality.
- The categories for the OHS 1996/97 Pap smear test question were:  
When was the last time you had a Pap smear test?
  - Less than 6 months ago
  - 6 months to less than 1 year ago
  - 1 year to less than 3 years ago
  - 3 years to less than 5 years ago
  - 5 or more years ago
  - Not applicable
  - Don't know
  - Refusal
  - Not stated
- According to the 1989/90 recommendations from the Task Force for Cervical Cancer Screening, all women aged 18 and over who have had sexual intercourse should participate in cytology screening. It includes an initial Pap test, a repeat after one year followed by rescreening (if the first two are normal) every three years to the age of 69.

### Limitations:

- This indicator should be used in conjunction with the number of sex partners, and the age at first intercourse to assess a woman's risk of cervical cancer.
- There is a potential for recall bias.
- OHIP data does not capture Pap tests done in Community Health Centres.

### Sources:

- 1) Ontario Health Survey, 1996/97.

### Mandatory Health Programs and Services Guideline

To increase the proportion of women screened according to the guidelines of the Ontario Cervical Screening Collaborative Group to 85% and to increase the proportion of ever screened to 95% by the year 2010.



**1.7a Utilization of Pap Test by Women Aged 25 and Over:**

<b>Utilization of Pap Test by Age: Toronto and Ontario, 1996/97</b>		
<b>Age Group</b>	<b>Toronto % (C.I.)</b>	<b>Ontario % (C.I.)</b>
<b>25-44</b>	83.4 (81.2 - 85.6)	92.0 (91.0 - 92.9)
<b>45-64</b>	86.8 (83.7 - 89.9)	93.5 (92.4 - 94.6)
<b>65 and over</b>	80.2 (76.7 - 83.7)	83.9 (82.6 - 85.2)
<b>25 and over</b>	83.8 (82.3 - 85.3)	91.0 (90.5 - 91.5)

Source: OHS, 1996/97

<b>Utilization of Pap Test by Educational Level: Toronto and Ontario, 1996/97</b>		
<b>Educational Level</b>	<b>Toronto % (C.I.)</b>	<b>Ontario % (C.I.)</b>
<b>Less than complete high school</b>	76.7 (70.1 - 83.3)	85.9 (84.9 - 86.9)
<b>Secondary or post-secondary</b>	85.5 (82.8 - 88.2)	92.1 (91.2 - 93.0)
<b>College or University degree</b>	85.4 (83.0 - 87.8)	92.5 (91.4 - 93.6)
<b>Total</b>	83.8 (82.3 - 85.3)	91.0 (90.5 - 91.)

Source: OHS, 1996/97

<b>Utilization of Pap Test by Household Income: Toronto and Ontario, 1996/97</b>		
<b>Income Level</b>	<b>Toronto % (C.I.)</b>	<b>Ontario % (C.I.)</b>
<b>Low</b>	77.8 (70.0 - 85.6)	85.0 (83.5 - 86.5)
<b>Middle or high</b>	85.4 (83.4 - 87.4)	92.7 (92.0 - 93.4)
<b>Not stated</b>	82.9 (79.9 - 85.9)	89.3 (88.2 - 90.4)
<b>Total</b>	83.8 (82.3 - 85.3)	91.0 (90.5 - 91.5)

Source: OHS, 1996/97

**Key Findings:*****Utilization of Pap smear testing by age group:***

- The proportion of women who reported ever having had a Pap smear test was significantly lower in Toronto than for Ontario (i.e. 84% vs. 91%).
- Further examination of data by age revealed that the rate for women aged 25-64 was significantly lower in Toronto compared to Ontario.
- Women over the age of 65 were less likely to report ever having a Pap test compared to younger women. The difference was statistically significant in Ontario.

***Utilization of Pap smear testing by educational level:***

- Women with a more than a secondary school diploma were more likely to report ever having a Pap test than women with less than a high school education. This difference was statistically significant in Ontario (92% vs. 86%).
- In Toronto, women with more than a secondary school diploma were more likely to report ever having a Pap test than women with less than a secondary diploma. However, the utilization rates reported in Toronto were significantly lower than those reported for the province.

***Utilization of Pap smear testing by income level:***

- Although there was no significant difference in utilization of Pap smear tests by income level in Toronto, the difference was significant in Ontario. Approximately 93% of middle or high income women reported ever having a Pap test compared to 85% of low-income women. Note that a large portion of women refused to indicate their income level, which may have biased the results.

**1.7b Utilization of Pap Test in the Past Three Years by Women Aged 25 and Over:**

- Although it is important for women to have a Pap smear test, it is also important that they follow the cervical screening guidelines which include: an initial Pap test, a repeat after one year followed by re-screening (if the first two are normal) every three years to the age of 69. The OHS was not designed to capture information on the proportion of women who actually follow screening guidelines. Hence, the next section focuses on the number of women who reported having a Pap test in the past three years.

<b>Utilization of Pap Test in the Past Three Years by Women Who Have Ever Had a Pap Test by Age Group: Toronto and Ontario, 1996/97</b>		
<b>Age-group</b>	<b>Toronto % (95% C.I.)</b>	<b>Ontario % (95% C.I.)</b>
<b>25-44</b>	95.6 (93.1 - 98.1)	92.3 (91.4 - 93.2)
<b>45-64</b>	87.0 (83.9 - 90.1)	80.6 (79.6 - 81.6)
<b>65 and over</b>	62.7 (56.4 - 69.0)	54.3 (51.8 - 56.8)
<b>25 and over</b>	87.1 (85.7 - 88.5)	82.2 (81.5 - 82.9)

Source: OHS, 1996/97

<b>Utilization of Pap Test in the Past Three years by Women Who Have Ever Had a Pap Test by Educational Level: Toronto and Ontario, 1996/97</b>		
<b>Educational Level</b>	<b>Toronto % (95% C.I.)</b>	<b>Ontario % (95% C.I.)</b>
<b>Less than complete secondary</b>	79.8 (72.6 - 87.0)	69.7 (67.6 - 71.8)
<b>Secondary or post-secondary</b>	85.6 (82.5 - 88.7)	82.5 (81.5 - 83.5)
<b>College or University degree</b>	90.8 (88.3 - 93.3)	87.8 (86.7 - 88.9)
<b>Total</b>	87.1 (85.7 - 88.5)	82.2 (81.5 - 82.9)

Source: OHS, 1996/97

<b>Utilization of Pap Test in the Past Three Years by Women Who Have Ever Had a Pap Test by Household Income: Toronto and Ontario, 1996/97</b>		
<b>Household income</b>	<b>Toronto % (95% C.I.)</b>	<b>Ontario % (95% C.I.)</b>
<b>Low</b>	80.3 (75.2 - 85.4)	73.0 (71.1 - 74.9)
<b>Middle or high</b>	87.8 (85.5 - 90.1)	83.7 (83.0 - 84.4)
<b>Not stated</b>	88.1 (84.6 - 91.6)	81.8 (80.8 - 82.8)
<b>Total</b>	87.1 (85.7 - 88.5)	82.2 (81.5 - 82.9)

Source: OHS, 1996/97

**Key Findings:*****Utilization of Pap Test in the past 3 years by age group***

- In Toronto, significantly more women reported having had a Pap test in the past three years than in the province (i.e. 87% vs. 82%).

- The highest rate of utilization was among women aged 25-44. There was an inverse relationship between women's self-reported use of Pap tests in the past three years and their age.

***Utilization of Pap Test in the past three years by educational level***

- The proportion of women reported who having had a Pap test in the past three years was significantly higher among women with high educational level (i.e. college or university degree) than those with low educational level (i.e., less than grade 12). In Toronto, 91% of college or university graduates reported having a Pap test in the last three years as opposed to 80% of women with low educational backgrounds. Similar patterns of utilization were noted in Ontario.

***Utilization of Pap Test in the past three years by Household income***

- In both Toronto and Ontario, women with low incomes were significantly less likely to report having a Pap test in the past three years than women with middle/ high income levels. Despite universal health insurance coverage, it seems that income may play a role in the use of Pap tests. However, low utilization of a service may be related to other underlying issues such as a woman's health related practices and beliefs, knowledge, and accessibility (i.e. time, transportation, etc). In addition, the number of women who did not state their income is considerable and may bias the results. Further study may be required in this area.

## 1.8 Immunization Rates at School Entry

### Definition:

- 1.8a) Number of pupils enrolled in Kindergarten to grade 12 for a given school year who are completely immunized per 100 pupils enrolled in Kindergarten to grade 12.
- 1.8b) Number of Day Nursery children for a given school year who are completely immunized per 100 pupils enrolled in Day Nursery.

### Significance/Uses:

- The Immunization of School Pupils Act requires that the Medical Officer of Health maintain an immunization record on each pupil attending school in their area. If children are not immunized and are not exempted, warning letters are sent to the parents letting them know that the children will be suspended from school if they don't get full immunization.
- Immunization levels are calculated against each of the six diseases (diphtheria, tetanus, polio (DT-P), and measles, mumps and rubella (MMR) for which immunization is required under the Act. Children receive the first vaccine doses in their first year of life, then get boosters at 18 months, 4-6 years and 14-16 years.
- Immunization coverage is important in evaluating immunization programs.
- Comparisons of coverage over time.
- Comparison of coverage between and within health units.

### Limitations:

- Lack of uniformity of data collection before 1993 (before introduction of Immunization Records Information System (IRIS).

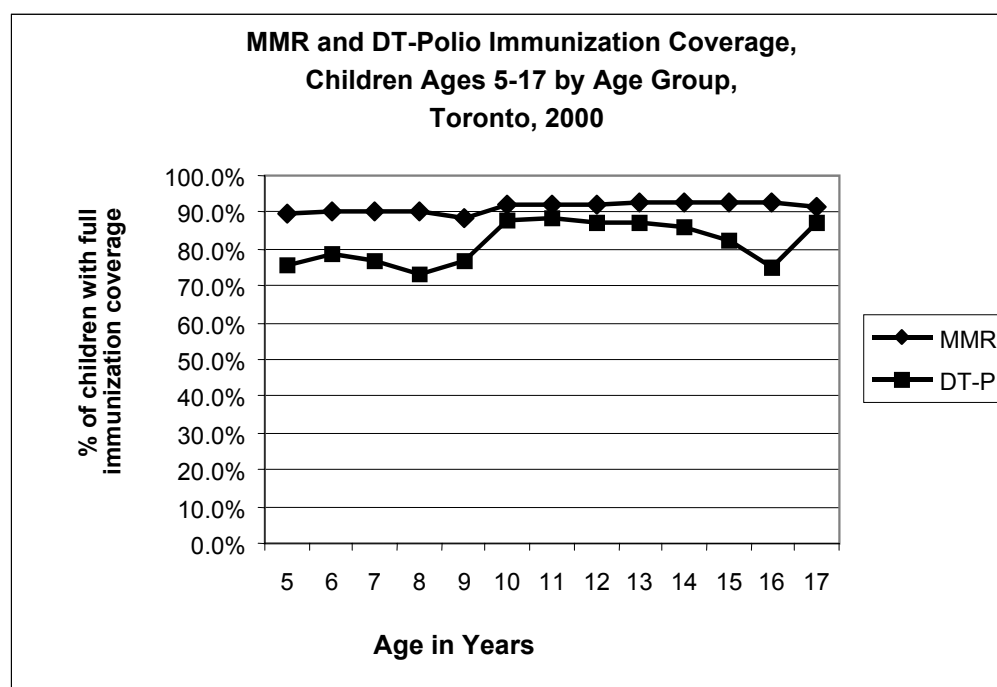
### Source:

Toronto Public Health Department.

### Mandatory Health Programs and Services Guideline

To achieve vaccine coverage target of 95% for up-to-date vaccination against diphtheria, pertussis, polio, tetanus, and measles, mumps, rubella and second dose measles by the seventh birthday by the year 2000.

MMR and DT-Polio Immunization Coverage for School Age Children 5-17 Years, Toronto, As of June 2001		
	MMR	DT-Polio
Total Enrolled	245,975	247,459
% Complete Coverage	91.1%	80.8%
% Incomplete-No exemption	0.3%	10.6%
% Incomplete- Exemption	1.5%	1.2%
% Incomplete No Information	7.3%	7.4%



### Key Findings:

Public Health Units are responsible for assessing immunization coverage for the school aged children in their areas. Before amalgamation, this was done individually by the 6 Toronto PHUs, after amalgamation the Toronto PHU began conducting a single survey for all of Toronto. However, the process is evolving and it has not been possible to include all schools in the survey. In 2000, 50% of the schools across Toronto were surveyed and this proportion increased to 65% in 2001. The proportions will continue increasing until 100% is reached. Lack of uniformity in program implementation in the six former public health units made it difficult to have consistent data. Hence current immunization rates cannot be compared to historical ones.

- Immunization rates continue to be high and stable in Toronto. According to the survey conducted in 2001 (involving 65% of Toronto schools), immunization coverage for Toronto school children for the six diseases which are monitored (i.e. diphtheria, tetanus, polio, (DT + P) and measles, mumps and rubella (MMR)) was high.

- For measles, mumps and rubella, 91% of the children aged 5-17 had full immunization coverage in 2001. Less than 3% of the children had incomplete immunization and the majority of these had an exemption. Information was not available for 7.3% of the children.
- For diphtheria, tetanus and polio, 81% of the children aged 5-17 had full immunization coverage in 2001. Approximately 12% of the children had incomplete immunization and the majority of these had no exemption. Information was not available for 7.4% of the children.
- Although the coverage rates are high, they are still lower than target of 95% set by the MOHLTC Mandatory Health Programs and Services Guidelines.
- A breakdown of MMR immunization coverage rates by age of child showed that there was minimal variation by age group. However, for diphtheria, tetanus and polio, coverage was slightly lower among children aged 8, 9 and 16 years old. The incomplete immunization in these age groups was mainly due to overdue boosters.

## **1.9 Proportion of Population Who Needed Health Care or Advice in Past Year, but Did Not Receive it.**

### **Definition:**

Proportion of population age 12 years and older who needed health care or advice in the previous 12 months, but did not receive it, by reason, age, sex, education, and income.

### **Significance/Uses:**

- Can be used to identify high-risk groups based on age, sex, and socio-economic status.
- Useful in measuring accessibility to health services.
- Comparison over time and place-to-place.
- This is a self-reported lack of access to health services.

### **Limitations:**

- Reliability of data may be affected by memory lapse due to the one-year reference period.
- This indicator does not provide a full picture of the extent of lack of accessibility to health services, since people who are most likely to have problems accessing health services, e.g., the homeless and those without health cards are not likely to be captured in the National Population Health Survey.
- Does not capture the type of services that were required but not received.

### **Sources:**

- 1) Ontario Health Survey, 1990, 1996/97.
- 2) NPHS 1995/96, 1996/97.



<b>Proportion of Population Who Needed Health Care But Did not Receive It: by Age, Sex, Education, and Income, Toronto and Ontario, 1996/97</b>		
	<b>Toronto (C.I.)*</b>	<b>Ontario (C.I.)*</b>
<b>OVERALL</b>	4.6 (3.9 - 5.3)	5.5 (5.2 - 5.8)
<b>AGE-GROUP</b>		
<b>20-44</b>	5.6 (4.4 - 6.8)	6.6 (6.2 - 7.1)
<b>45-64</b>	4.3 (2.9 - 5.7)	5.2 (4.7 - 5.7)
<b>65 +</b>	(U)	4.3 (3.7 - 4.9)
<b>SEX</b>		
<b>Females</b>	5.8 (4.7 - 6.9)	6.7 (6.2 - 7.1)
<b>Males</b>	3.2 (2.3 - 4.1)	4.3 (4.0 - 4.6)
<b>EDUCATIONAL LEVEL</b>		
<b>Less than complete secondary</b>	(U)	3.9 (3.5 - 4.3)
<b>Secondary or post-secondary</b>	4.8 (3.6 - 5.9)	5.9 (5.5 - 6.4)
<b>College or University degree</b>	5.8 (4.5 - 7.1)	6.4 (5.9 - 6.9)
<b>HOUSEHOLD INCOME</b>		
<b>Low</b>	(M)— 7.6 (4.9 – 10.3)	9.6 (8.5 - 10.7)
<b>Middle /High</b>	3.7 (2.9 – 4.5)	4.8 (4.5 - 5.1)

Source: OHS, 1996/7

\* (C.I.) = 95% Confidence Interval

(M) - Marginal Estimate, caution should be exercised when using this estimate as there is a high sampling variability associated with the estimate.

(U) - Unacceptable Estimate, this estimate can not be published due to a low sample size.

### Key Findings:

- Approximately 5% of people in both Ontario and Toronto stated that even though they felt they needed health care/advice they did not receive it.
- The sentiment that care was needed, but not received was significantly higher among females than males (5.8% vs. 3.2% in Toronto, and 6.7% vs. 4.3% in Ontario). Similarly, a higher proportion of people with low-incomes felt they needed health care/advice but did not receive it, compared to those with middle/high incomes (7.6% vs. 3.7% in Toronto, and 9.6% vs. 4.8% in Ontario).
- It is interesting to note that in Ontario, a significantly higher percentage of people with a college or university degree said that care was needed, but not received, compared to those with less than a complete secondary diploma (6.4% vs. 3.9%). In Toronto, there were no significant differences by educational level.
- In Ontario, a higher proportion of younger people reported not receiving health care/advice they needed, compared to older people (i.e. 6.6% vs. 4.3%). Although similar pattern was noted in Toronto, it was not significant.
- The three most common reasons given by those who felt they needed care but had not received it were as follows: 1) care was not available due to long waiting times (19%), 2) care was not adequate (25%), and cost of care was too high (20%).

## **B) Outcomes**

- 1.10 Incidence of Major Notifiable Diseases
- 1.11 Rate of Low Birth Weight by Age of Mother
- 1.12 Mortality
- 1.13 Potential Years of Life Lost (PYLL)

## 1.10 Incidence of Major Notifiable Diseases

### Definition:

Number of new cases of selected notifiable diseases in a given year per 100,000 population. Notifiable diseases include diseases designated reportable under the Health Protection and Promotion Act. The selected major notifiable diseases are: a) Sexually transmitted diseases (chlamydia, gonorrhea and syphilis), b) AIDS, c) enteric diseases (campylobacter, salmonella and shigella), and d) tuberculosis.

### Significance/Uses:

- The diseases counted are reported by physicians, dentists or laboratories (excludes diseases requiring vaccination).
- Notifiable diseases are considered the diseases most likely to cause epidemics, whether fatal or not, in a population.
- Identification of risk groups based on characteristics such as age, sex, lifestyle and habits, and socio-economic status.
- Monitoring trends for certain diseases over time and place in specific sub-populations.
- Detecting outbreaks.
- Planning infectious disease prevention and control programs.
- Assessing prevention programs.
- Comparison over time, place to place and with Mandatory Health Programs and Services Guidelines and Ontario Health Goals.

### Limitations:

- The figures reported represent events, not individuals. More than one disease may be reported per individual.
- Level of under-reporting varies from one area to another.
- Increase in rates can be caused by a number of factors (e.g. better reporting methods, changes in sensitivity or specificity of tests, or definition of diseases).

### Sources:

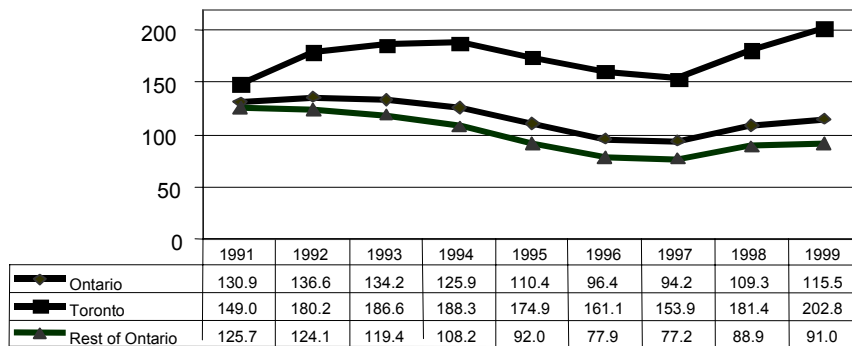
MOHLTC Public Health Branch - RDIS Database.

### Mandatory Health Programs and Services Guidelines

- 1) To reduce the incidence rate of gonorrhea to 15/100,000 population by the year 2005.
- 2) To reduce the incidence rate of genital chlamydia to 500 per 100,000 women ages 15-24 years by 2005.
- 3) To maintain incidence rate of primary and secondary syphilis at less than one/100,000 population by 2005.
- 4) To reduce the number of newly diagnosed human deficiency virus (HIV) infections to less than 800 per year by the year 2005.
- 5) To reduce the incidence of perinatal HIV infection.
- 6) To reduce the annual incidence rate of active and reactivated Tuberculosis to 3.5/100,000 population by 2005.

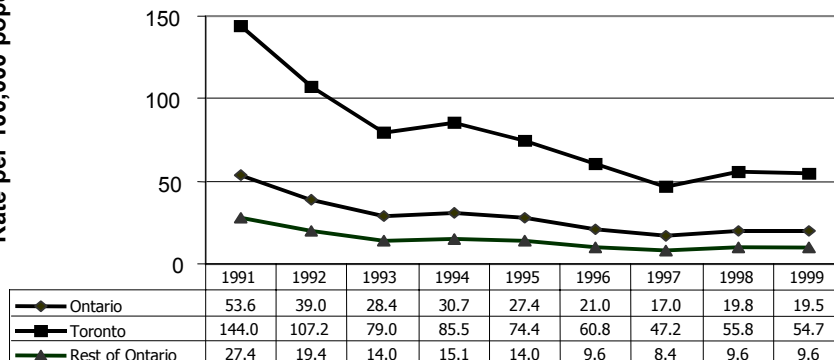
Rate per 100,000 population

### Rates of Reported Cases of Chlamydia, City of Toronto, Rest of Ontario & Ontario, 1991-1999



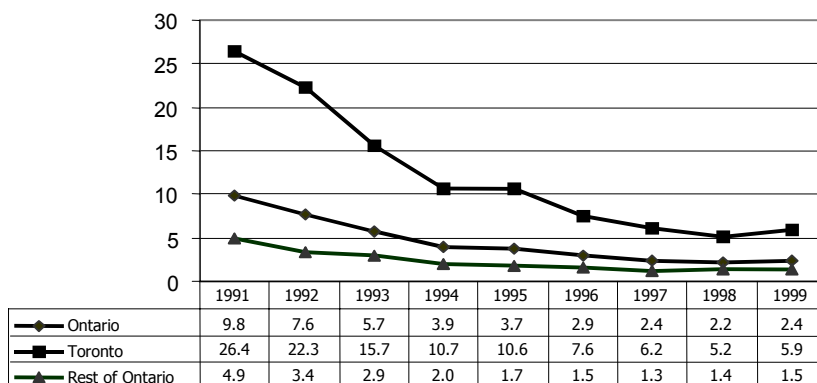
Rate per 100,000 population

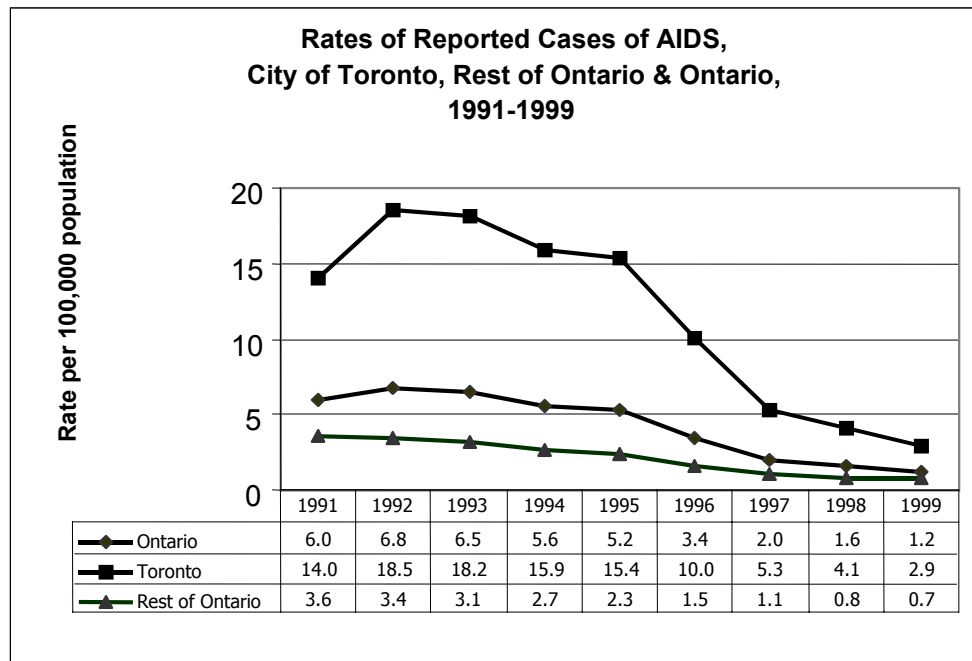
### Rates of Reported Cases of Gonorrhea, City of Toronto, Rest of Ontario & Ontario, 1991-1999



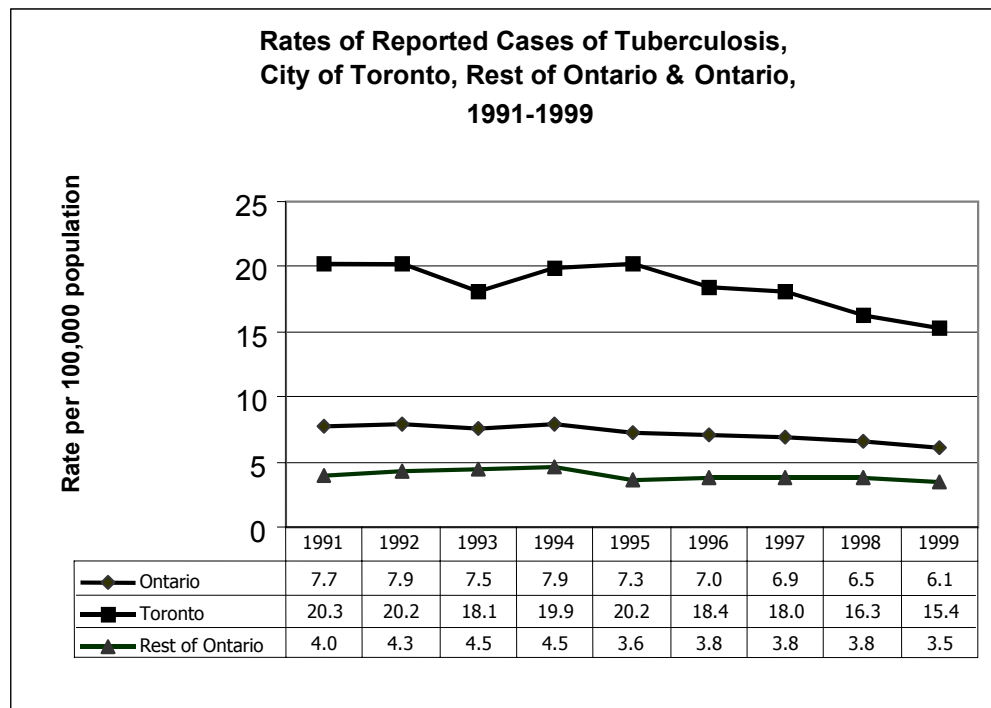
Rate per 100,000 population

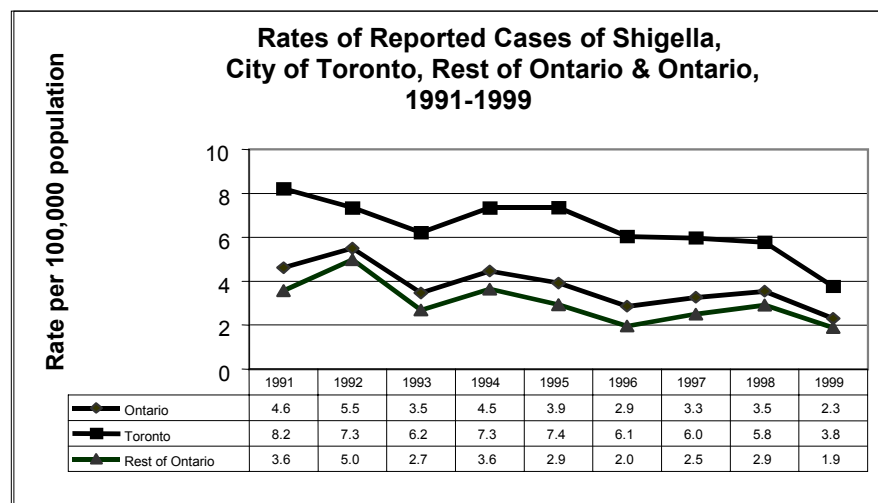
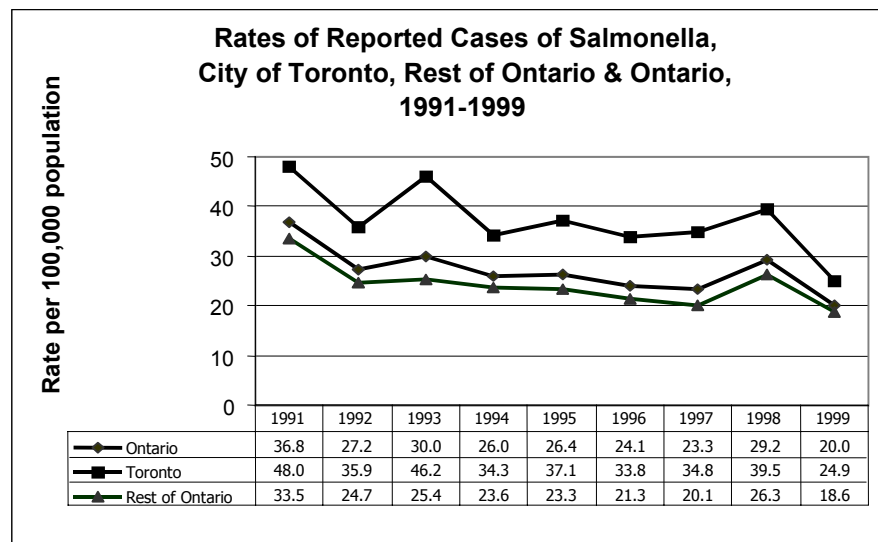
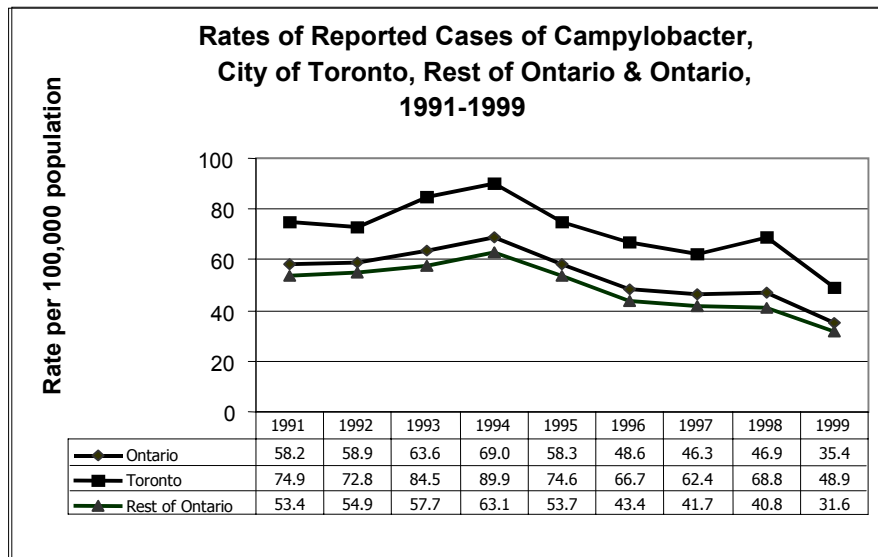
### Rates of Reported Cases of Syphilis, City of Toronto, Rest of Ontario & Ontario, 1991-1999





\* Rates for 1998 and 1999 may be underestimated. These numbers will be adjusted to include late reporting.





**Key Findings:**

- Under the provincial Health Protection and Promotion Act, certain disease must be reported to the local public health department. For the purposes of this report, indicators from four types of notifiable infectious disease have been selected: sexually transmitted disease (STDs); HIV/AIDS; enteric diseases (e.g. salmonella); and tuberculosis.
- Toronto generally has a higher incidence of sexually transmitted diseases than the rest of Ontario. Between 1991 and 1997, the incidence of gonorrhea in Toronto declined by about 67% from a rate of 144 per 100,000 population to 47.2/100,000. The provincial rate also declined in this period. However, after that the Toronto rate increased slightly to reach 54.7% in 1999. In 1999, the rate of gonorrhea in Toronto was 5.7 times that of the rest of Ontario. The incidence of chlamydia increased between 1991 to 1994 then declined slightly to 153.9 per 100,000 population in 1997 then jumped significantly to reach 202.8 in 1999. Rates are higher in females, particularly the 15-19 and 20-24 year age groups, with rates of almost 1,500/100,000 in 1999. The rate of chlamydia in Toronto is 2.2 times that for the rest of Ontario. The increase in chlamydia rates may be partly due to improvements in laboratory detection tests. Between 1991 and 1999, Toronto experienced a significant decline (78%) in the incidence of syphilis. In 1999, the rate of syphilis in Toronto was nearly four times that in the rest of Ontario. The incidence of sexually transmitted diseases in Toronto is still much higher than the mandatory planning guidelines. STD rates are two to four times higher in the lowest-income areas in the city than in the areas with the highest incomes.
- Toronto accounts for slightly over half of the new AIDS cases seen in the province. In 1999, the incidence of AIDS in Toronto was four times higher than that in the rest of Ontario. The high rate of AIDS in Toronto is likely due to the high numbers of people in high risk groups (i.e. homosexual men, intravenous drug users and people from countries where it is endemic). Toronto experienced a 32% increase in the incidence of AIDS from 1991 to 1992. Since then, the incidence of AIDS in Toronto and the province as a whole has been declining. Between 1992 and 1999, the rate of reported new cases of AIDS dropped from 18.5 to 2.9 per 100,000 population (an 84% reduction), with the most marked decline occurring between 1995 and 1997. It is important to note that the rate of AIDS in the most recent two years may be underestimated because of late reporting. The decline in AIDS cases and deaths has been attributed mainly to the intensive drug treatments now available, as well as measures aimed at prevention. The rate of HIV-positive tests has steadily declined for males from 1990-1999, while no clear pattern has emerged for females. This decrease has been less in Toronto than for Ontario. In 1999, 58.6% of first-time positive tests in Ontario were found in Toronto. It is estimated that there are currently over 13,000 people living with HIV in the city.
- The incidence of tuberculosis has gradually declined between 1991-1999 from 20.3 per 100,000 to 15.4 per 100,000 (a 24% decline). However, Toronto accounts for more than 60% of Ontario's TB cases, with 384 new cases reported in Toronto in 1999. One of the major factors contributing to the high TB rate in the City of Toronto is the high number of new immigrants who settle in Toronto from countries where TB is endemic. The TB rate is also strongly affected by social factors such as income and housing. It is also more common among people who are immuno-compromised (e.g. those who are infected with HIV, diabetes and people with advanced kidney disease). The rate of TB in Toronto is still much higher than the mandatory provincial planning guideline of 3.5 per 100,000 population for the year 2005.

- The re-emergence of TB as a significant public health issue was highlighted by the work of the TDHC Tuberculosis Advisory Group. A report by the group, released in the summer of 2000, outlined the scope of the problem as well as documenting the existing system and highlighting best practices for TB prevention and control from other jurisdictions. The TDHC Advisory Group's efforts helped inform the MOHLTC's decision to move forward with funding for a renovated \$1.4-million dedicated 16-bed unit at Toronto's West Park Healthcare Centre for the care and treatment of people with complex cases of TB. The unit opened in early 2000.
- A further examination of the high incidence of STDs, AIDS and tuberculosis in Toronto is required to determine the risk groups and how this problem can be addressed.
- With respect to enteric diseases, Toronto generally has a higher incidence rate than the rest of Ontario. The three most common enteric diseases are salmonella, campylobacter and shigella. The incidence of these three diseases fluctuated between 1991 and 1999, although there was a general decline in the rates. In 1999 Toronto had higher rates of incidences than those for the rest of Ontario (1.3 times for salmonella, 1.5 for campylobacter and two times for shigella).

### **Public Health Initiatives**

Toronto Public Health has taken the following approaches to the high rates of infectious disease:

**Sexually Transmitted Disease Program:** Follow-up on all reported STD cases in Toronto to ensure that each client has received appropriate treatment and to provide counselling, education and referrals as necessary. Offer to notify and counsel all named sexual partners to ensure they also receive appropriate testing and treatment. Provide education to health care professionals. Distribute STD medications to physicians and clinics in Toronto.

**AIDS and Sexual Health Infoline:** Information, counselling and referrals are provided in 19 languages on STD/HIV/AIDS, hepatitis, injection drugs used and sexual health issues. Are in the process of expanding language capabilities and hours of operation during days, evenings and weekends.

**The Works:** Provide this communicable disease prevention program for drug users and sex-trade workers through a fixed site, mobile service and a number of community agencies. Services offered include needle exchange; condom distribution; testing for HIV, hepatitis B and C, syphilis and TB; hepatitis B and influenza vaccine; methadone maintenance; food distribution, counselling and referrals to drug treatment, housing and a variety of other health and social services.

**TB case management and contact follow up:** Directed observed therapy for up to 50% of cases. DOT means that a health care worker directly observes and supervises clients taking their TB medication. Toronto Public Health is currently able to provide DOT to only 30% of TB cases in Toronto. Priority for DOT is given to those with drug-resistant TB, children, patients with HIV and the homeless. On average 10.7 contacts per case are investigated. In 2000 this meant follow-up with more than 3,800 contacts of people with active TB. Contacts who test positive are examined further. Once active TB is ruled out, they are encouraged to obtain treatment for latent TB. When a case of TB is identified in a group setting (i.e. school or shelter) follow-ups increase.



Outreach to and targeted screening with high risk groups: During 2000, Toronto Public Health monitored 1,500 newcomers placed on surveillance for inactive TB by Citizenship and Immigration Canada.

## 1.11 Low Birth Weight Singletons by Age of Mother

### Definition:

Proportion of live births under 2,500 grams (singleton only) to all births (singleton only) by age of mother.

### Significance/Uses:

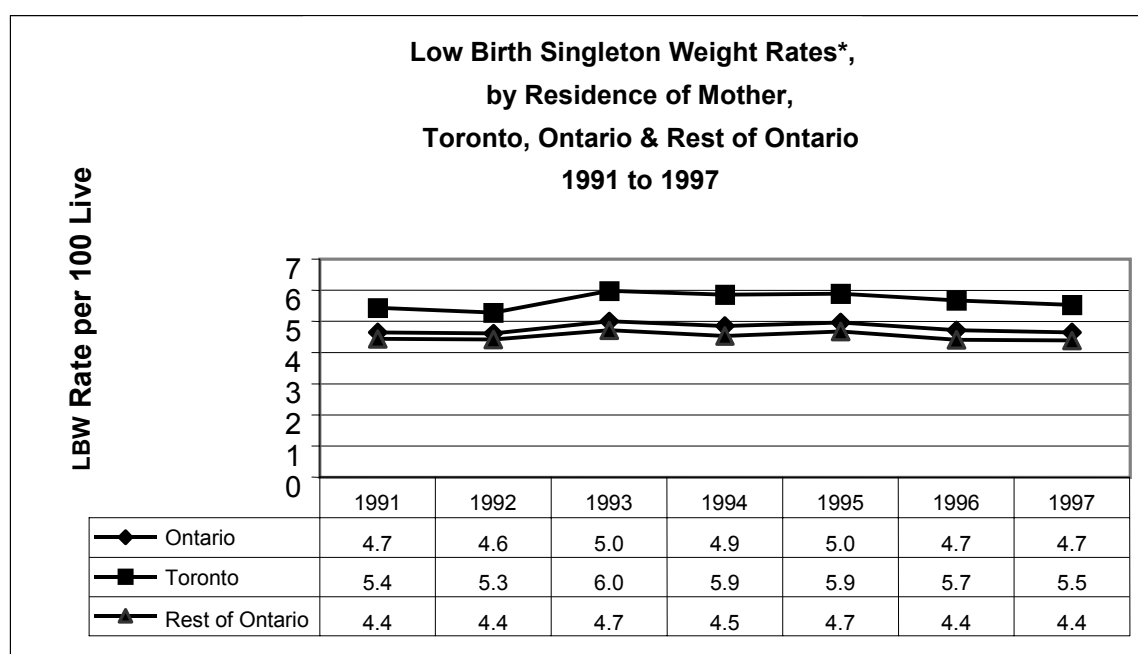
- The birth weight of an infant is related to the pre-conceptual and gestational health of the mother. It is also influenced by a number of other contributing factors, including mother's lifestyle (e.g. nutrition, tobacco use) and socio-demographic characteristics (e.g. income).
- There is a potential that health reforms may have differential outcomes on birth weights of different population sub-groups, such as those with low income and recent immigrants.
- It is a predictor of an infant's chance of survival.
- It is an important indicator of population health status in developed countries.
- Useful in planning comprehensive prenatal programs.
- Setting health objectives and assessing achievement.
- Comparison over time and place-to-place.

### Limitations:

- Differences between geographic areas or over time may be partly due to different distributions of births depending on certain characteristics, such as length of gestation, age of mother, and socioeconomic status.
- Weight at birth is associated with prematurity. This effect can be eliminated by using only low birth weight infants carried to term (37 weeks of gestation or more).
- The Provincial Health Planning Database does not capture vital statistics events that occur outside of the province of Ontario. Thus births to residents of Ontario that occur in another province or another country will be missed. The extent of this problem, and whether some DHC areas are affected more than others, is difficult to estimate. However, a comparison between PHPD live birth events and Statistics Canada data (where out of province deaths to Ontarians are captured) shows that a small number of Ontario women give birth in other provinces (approximately 200-250 each year). In 1996 there were 67 live births in Quebec and 110 in Manitoba where residence of the mother was Ontario. In 1997 these numbers were 55 (Quebec) and 95 (Manitoba). Source: Statistics Canada. Vital Statistics Compendium (1996, 1997).
- A Central East Health Information Partnership study (2001) shows that municipalities which introduced a fee for registering births (since 1996) have a higher prevalence of unregistered births.

### Source:

MOHLTC, Provincial Health Planning Database, Queen's Printer's 2001.



\* Includes only singletons. Multiple births and unknown birth weights were

Rate of Singleton LBW by Age of Mother, City of Toronto, 1991 – 1997									
	< 20	20-24	25-29	30-34	35-39	40-44	45 +	Age unknown	Total
<b>1991</b>	7.9	5.9	5.0	5.0	5.9	6.1	19.0	15.4	5.4
<b>1992</b>	7.6	5.7	4.9	4.8	5.5	7.6	10.0	15.4	5.3
<b>1993</b>	7.5	7.3	5.6	5.4	6.4	5.5	3.3	7.5	6.0
<b>1994</b>	8.2	6.8	5.4	5.2	6.3	8.4	18.8	5.2	5.9
<b>1995</b>	9.8	6.9	5.9	5.1	5.4	7.9	5.4	6.6	5.9
<b>1996</b>	9.9	6.4	5.4	5.1	5.5	8.0	2.8	6.3	5.7
<b>1997</b>	7.4	6.2	5.6	4.8	5.8	7.1	10.6	4.9	5.5

### Key Findings:

- Between 1991 and 1992, the low birth weight (LBW) rate in the City of Toronto remained steady at around 5.4%, then increased slightly to about 6% in 1993. Since then, the rate gradually declined to 5.5 in 1997. This rate is 1.4 times higher than the Mandatory Health Programs and Services Guideline target of 4% by the year 2010.
- Between 1991-1997, the LBW rate of low birth weight was significantly higher in Toronto than the rest of Ontario.
- Mothers with low income and those living in poor housing are at increased risk of having low birth weight babies.

**NB:** Further information on low birth weight by population sub-groups is contained in the TDHC 2001 report *Toronto Health System Monitoring: Equity Analysis*. Analysis in this report examined the impact of low birth weight by income and recent immigration. This analysis showed that there was clear low birth weight distribution pattern observed when geographic areas are ranked by income and immigration characteristics. Higher rates of LBW were observed in lower income areas and areas with higher levels of recent immigration.

#### **Public Health Initiatives:**

Reproductive Health Programs are provided by Toronto Public Health in collaboration with many community partners. Selected activities include:

- HBP: the Healthiest Babies Possible program addresses the nutrition needs of high-risk prenatal women through one-to-one counselling, education, support and referral.
- Prenatal Classes: Prenatal group education is provided to expectant parents throughout the city to support learning about having a healthy pregnancy, expectations of labour and birth, and preparation for breastfeeding and parenting. Toronto Public Health works in partnership with over 40 community-based Canada Prenatal Nutrition Programs (CPNP) to deliver individual and group outreach, support and education to high-risk pregnancy women in Toronto.

## 1.12 Mortality

### Definition:

Number of deaths during a given year per 100,000 population. Includes:

- a) Age-Standardized Mortality Rates (ASMR) for males/females
- b) ASMR for leading causes of death - as defined by Health Planning Systems (HELPS)

*Note: the ASMRs for populations < 75 were not calculated.*

### Significance/Uses:

- Useful in planning health services and programs.
- Mortality statistics are an indicator of objective health status.
- Leading causes of death are useful in determining priority health problems.
- There is a potential that health reforms may have differential outcomes on mortality rates of different population sub-groups such as those with low income and recent immigrants.
- Setting health objectives and assessing achievement.
- Mortality is a sentinel event/condition. The occurrence of cases of these events should be a warning signal that the quality of care may need to be improved.
- Comparison over time and place-to-place.

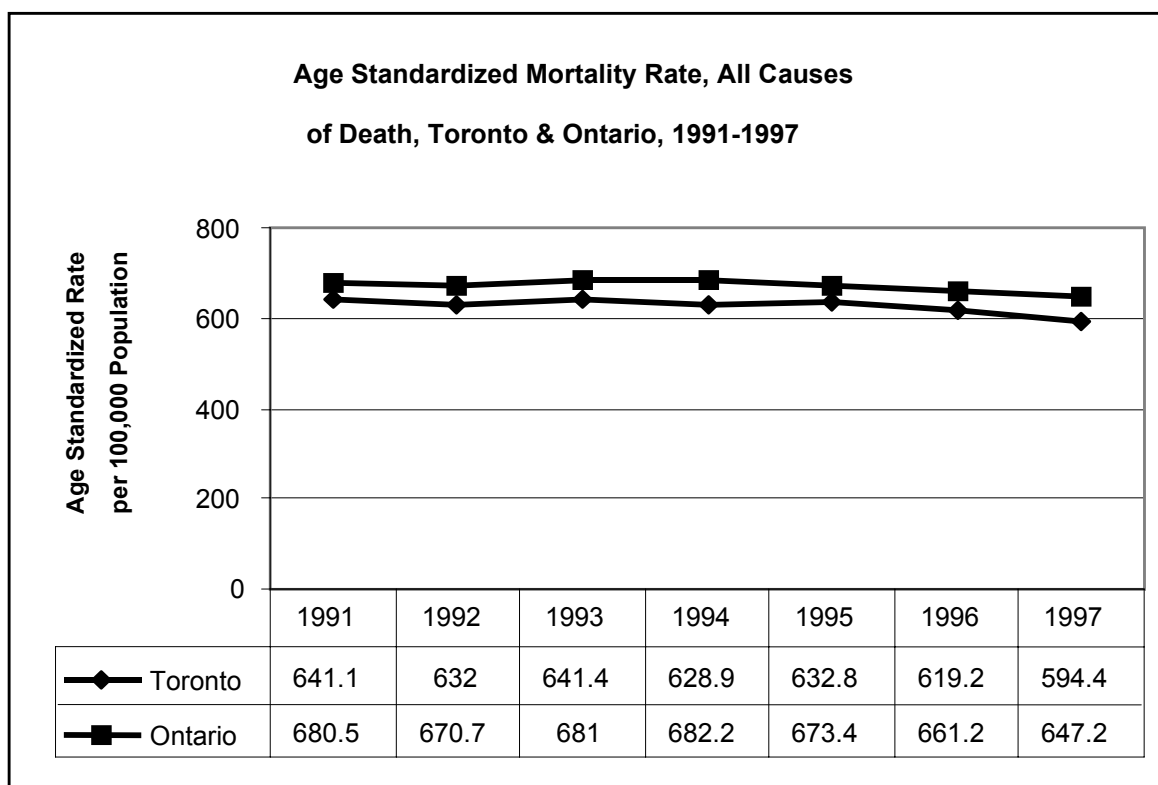
### Limitations:

- Mortality reflects only fatal diseases (does not give information on the number of sick people or diseases that do not lead to death).
- Differences in reporting methods may affect comparison over place and time.
- Mortality levels vary by age, sex, marital status, socioeconomic status etc. Rates should be standardized (e.g. by age and sex) to enable comparisons over time or among different populations. However, crude rates provide the best picture of what is actually happening at the local level. Standardized rates control for one possible explanation of differences in crude rates - the differing age/sex structures of the populations of interest.

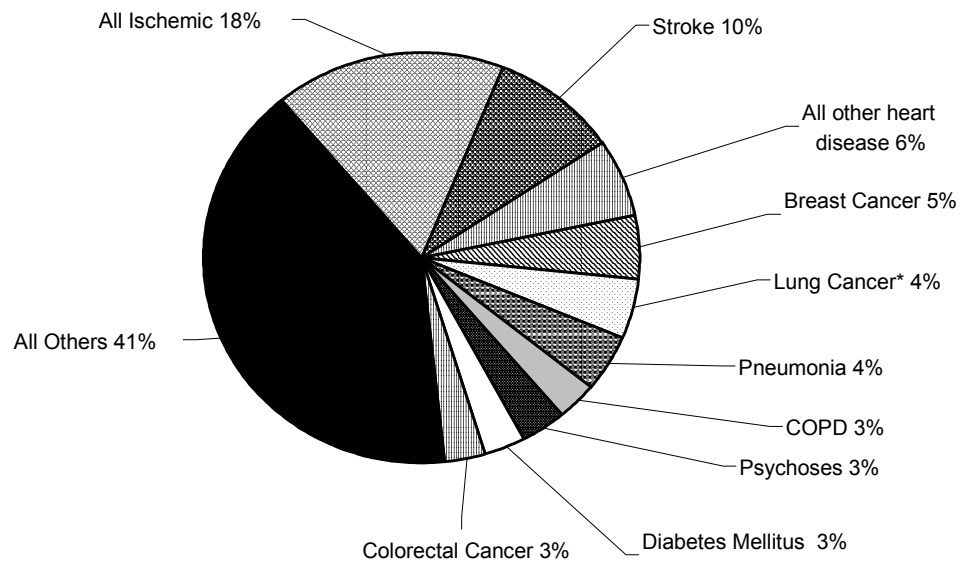
### Source:

MOHLTC, Provincial Health Planning Database.

Age Standardized Mortality Rate per 100,000 by Sex, City of Toronto, 1986 – 1997		
	Male	Female
1986	924.1	552.5
1987	892.2	533.6
1988	914.6	538.1
1989	882.5	528.1
1990	845.7	514.2
1991	821.8	508.4
1992	822.3	491.5
1993	821	507
1994	801.3	498.3
1995	810.5	499.8
1996	788.3	492.5
1997	746.7	480.4

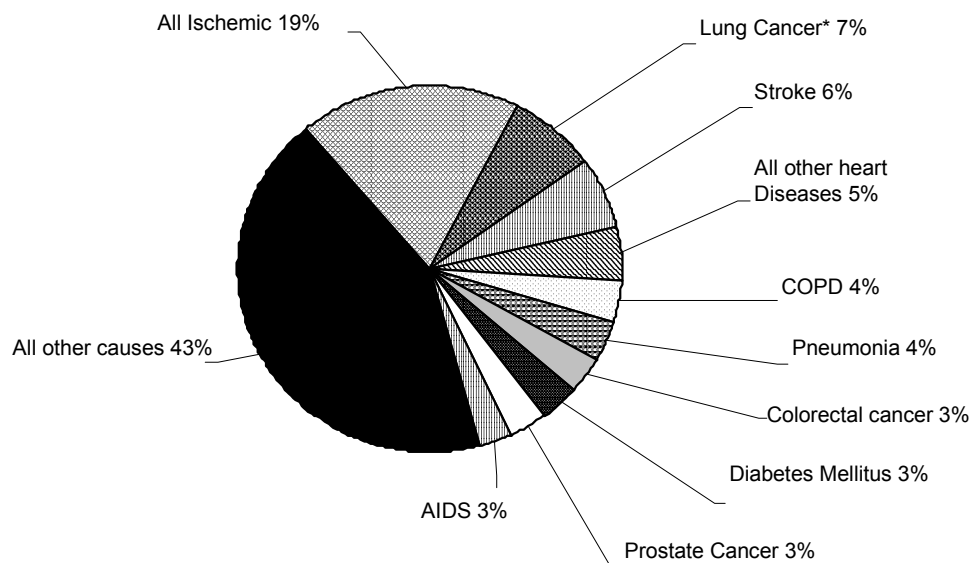


### Ten Leading Causes of Death for Females, Toronto, 1995-1997



Source: MOHLTC Provincial Health Planning Database  
\*Also includes cancer of Trachea & Bronchus

### Ten Leading Causes of Death for Males, Toronto, 1995-1997



Source: MOHLTC Provincial Health Planning Database  
\*Also includes cancer of Trachea & Bronchus

**Key Findings:**

- The age standardized mortality rate (ASMR) for the City of Toronto has been declining since 1986. During the period of 1991-1997, the rate decreased from 641.1 to 594.4 per 100,000 population.
- Toronto has a lower mortality rate than Ontario as a whole (594.4 vs. 647.2 per 100,000 in 1997). Ontario has also experienced a declining mortality rate over the past years.
- Between 1991-1997, diseases of the circulatory system were the leading major cause of death adjusted for (age and sex) in the City of Toronto followed by neoplasms and diseases of the respiratory system. In terms of specific causes, Ischemic heart disease was the leading cause of death for both men and women. This is followed by stroke, other heart disease and breast cancer for women. For men the second leading cause of death was lung cancer followed by stroke and other heart diseases.
- Although the overall mortality rate has been declining in Toronto, it is not clear that the same phenomena is occurring among the different sub-groups of the population such as those with low income and recent immigrants.

**Mortality data for the City of Toronto is not currently available at Census tract (CT) level in an accurate enough form to be used for equity analysis.**



### 1.13 Potential Years of Life Lost (PYLL)

**Definition:**

The number of life years lost to premature mortality assuming all males and females live to a standard age of 75. The PYLLs are not adjusted to allow for comparability between the sexes of the relative magnitude of a specific cause of death.

**Significance/Uses:**

- Provides a measure of the major causes of premature mortality due to a particular cause.
- Crude and standardized PYLL rates are presented. Standardized PYLL rates control for varying age/sex structure of the population under 75 in the area of interest.
- Useful for establishing community health priorities.
- Comparison over time and place-to-place.

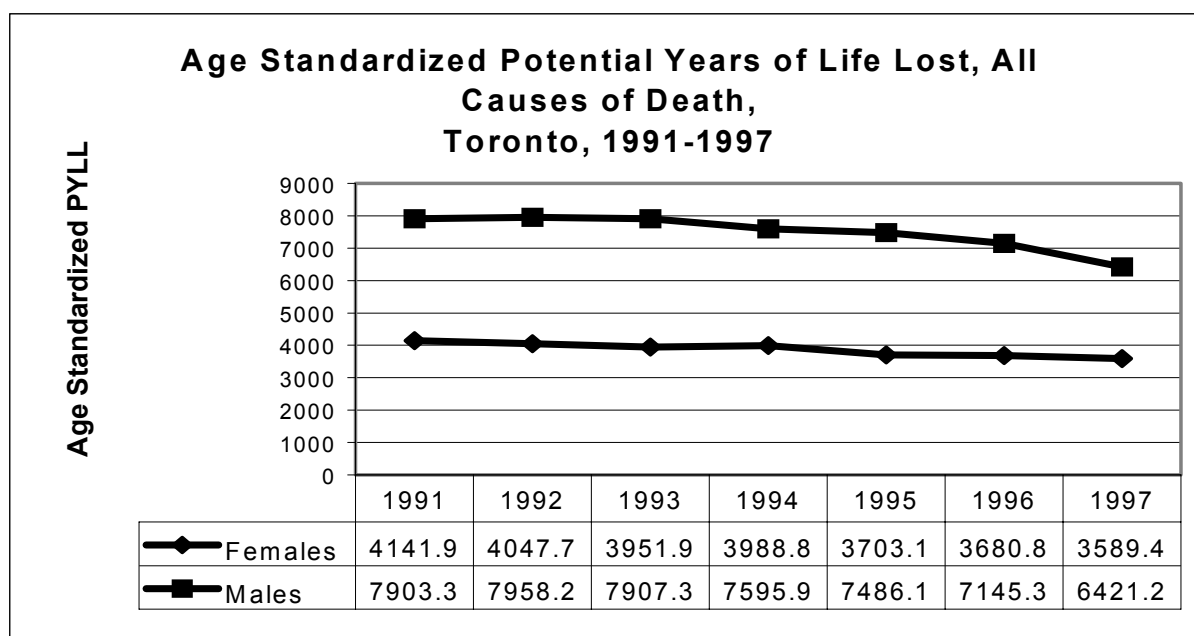
**Limitations:**

- The number of years of life lost is overestimated as not all of the deceased would have reached age 75 even if the stated cause of their death had been eliminated.
- PYLL varies by age, sex, socio-economic status, cause of death and geographic area.

NB: The indicator used in this report differs from that used in the 1999 *Annual Toronto Health System Monitoring Report Card*, Potential Years of Life Lost Adjusted for Life Expectancy (Adjusted PYLL). Data in the two reports is therefore not comparable. The Adjusted PYLL takes into consideration differences in life expectancy for women and men.

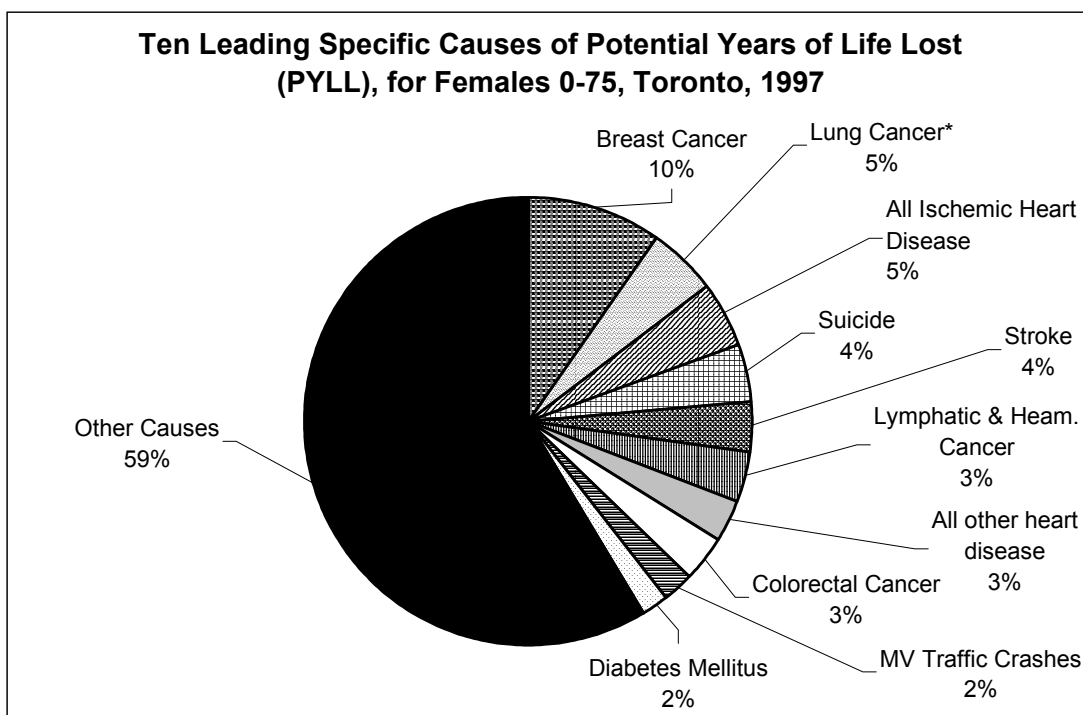
**Source:**

MOHLTC, Provincial Health Planning Database.

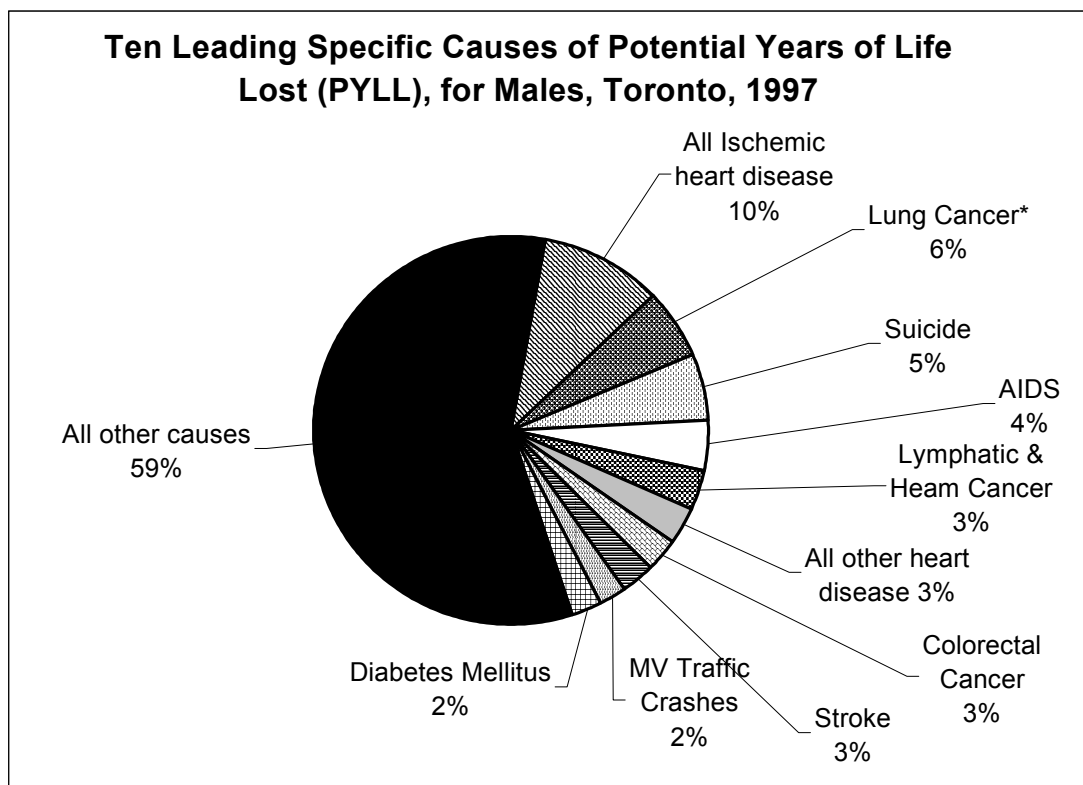


Leading Causes of PYLL by Sex, Ontario and Toronto, 1997			
Toronto		Ontario	
Males	Females	Males	Females
All Ischemic Heart Disease	Breast Cancer	All Ischemic Heart Disease	Breast Cancer
Lung Cancer	Lung Cancer	Suicide	Lung Cancer
Suicide	All Ischemic Heart Disease	Lung Cancer	All Ischemic Heart Disease
AIDS	Suicide	Motor Vehicle Accidents	Motor Vehicle Accidents
Lymphatic and Haematopoietic Tissue Disease	Stroke	Lymphatic and Haematopoietic Tissue Disease	Lymphatic and Haematopoietic Tissue Disease

Source: Ontario Mortality Database and CEHIP.



\* Includes chronic obst. Lung disease, pneumonia, asthma



\* Includes chronic obst. Lung disease, pneumonia, asthma

**Key Findings:**

- There has been a decline in the overall age-standardized mortality rate for men and women.
- In 1997, the leading cause of PYLL in Toronto males was ischemic heart disease followed by lung cancer and suicide. The leading causes of PYLL for males changed over the period of 1991 to 1997. AIDS, which was the leading cause in 1991, accounting for 11% of all PYLL, fell to fourth place in 1997 (accounting for 4.4% of PYLL). This may be due to the fact that people with AIDS live longer due to more effective drug treatment which is now available. Motor vehicle accidents, the fifth leading cause in 1991 (accounting for 3.8% of PYLL), fell to eighth place in 1997 (accounting for 2.4% of PYLL).
- In 1997, the leading causes of PYLL in Toronto females were breast cancer followed by lung cancer and ischemic heart disease. The three leading causes of PYLL for females in 1997 were similar to those of 1991, except for the order; lung cancer rose from third to second place.
- Males have 1.8 times as many potential years of life lost than females (6,421.2 for males vs. 3,589.4 for females in 1997). This might be explained by the fact that males engage in more risk taking behaviours, leading to death at a younger age than females.

**NB: Please note this indicator differs from the one used in the 1999 *Toronto Health System Report Card*, Potential Years of Life Lost Adjusted for Life Expectancy (Adjusted PYLL). Hence there may be some differences in the numbers presented in this current report compared to the previous report.**



**C) Sentinel Events**

(A subset of 10 selected health events)

(For complete list see Appendix 2)

- 1.14 Infectious Diseases
- 1.15 Vaccine-Preventable Diseases
- 1.16 Cancer-Related Conditions
- 1.17 Congenital Conditions
- 1.18 Other Health Related Conditions

Sentinel events include unnecessary disease, disability and untimely deaths. The occurrence of cases of such events is a warning signal that the quality of care may need to be improved. Original work on this concept was done by Rutstein et al, 1976.

For this project, a subgroup of experts was formed to update Rutstein's original list of sentinel events, selecting those which should be monitored in Toronto. This report contains information on 10 of those indicators identified as top priorities. The full list of sentinel events is contained in Appendix 2.

## 1.14 Infectious Diseases

### Definition:

Number of new cases and deaths from selected sentinel infectious diseases in a given year.

1.14a) Tuberculosis (pulmonary and extrapulmonary)

1.14b) Congenital HIV

1.14c) Congenital Syphilis

### Significance/Uses:

- The diseases counted are reported by physicians, dentists or laboratories.
- These three infectious diseases have effective strategies in place to prevent their occurrence. If the conditions do occur, there are effective treatments for them, hence they should not result in death.

**Tuberculosis (TB)** - The first priority for TB programs is to identify and treat active cases of TB. The next goal is to find, test and treat infected contacts of active cases. Individuals and groups at high risk for TB should be screened and if found to be infected with latent TB they should be evaluated for prophylactic treatment. BCG vaccine is recommended for the following people: 1) Infants and children belonging to groups experiencing a high rate of new infections; 2) infants living with mothers who have infectious TB and who are at high risk of becoming infected; 3) individuals repeatedly exposed to persons with untreated or inadequately treated active TB; and 4) health care personnel who are at considerable risk of developing TB (e.g. medical laboratory workers).

**Congenital HIV** - Screening of all pregnant women for HIV is mandatory and early treatment of those who are found to be infected minimizes chances of transmission of the virus to the infant.

**Congenital syphilis** - It is also mandatory to screen pregnant mothers for syphilis and treat any who may be found to have the condition.

- Occurrence of cases of these diseases or death from these diseases may represent a failure of the health care system.

### Limitations:

- The figures reported represent events not individuals.
- Level of under-reporting varies from one area to another.
- Increase in numbers between two periods can be caused by a number of factors (e.g. better reporting method, changes in sensitivity or specificity of test, definition of diseases), or major demographic changes.

### Sources

MOHLTC Public Health Branch - RDIS Database.

Ontario Mortality Database.

Canadian Pediatric AIDS Research Group in MOHLTC Report on HIV/AIDS in Ontario, 1999.

### Mandatory Health Programs and Services Guidelines

- 1) To maintain the incidence of congenitally acquired syphilis at near zero.
- 2) To reduce the incidence of perinatal HIV infection.
- 3) To reduce the annual incidence rate of active (primary) and reactivated TB to 3.5/100,000 population by 2005.



Number of New Cases of Tuberculosis (all forms), Toronto and Ontario, 1991 to 1999				
	Toronto		Ontario	
	#	Rate per 100,000	#	Rate per 100,000
<b>1991</b>	476	20.3	NA	NA
<b>1992</b>	476	20.2	NA	NA
<b>1993</b>	427	18.1	NA	NA
<b>1994</b>	478	19.9	NA	NA
<b>1995</b>	491	20.2	801	7.3
<b>1996</b>	452	18.4	780	7.0
<b>1997</b>	449	18.0	779	6.9
<b>1998</b>	409	16.3	743	6.5
<b>1999</b>	388	15.4	700	6.1

NA = Not available

Source: MOHLTC, Public Health Branch

### Key Findings:

#### ***Tuberculosis***

- The incidence of tuberculosis in Toronto fluctuated mildly between 1991-1995 (between 18-20/100,000) and then gradually declined to 15.4 per 100,000 in 1999. Toronto accounts for more than 60% of the TB cases in Ontario. One of the major factors contributing to the high TB rate is the number of new immigrants from countries where TB is endemic who settle in Toronto. TB rates are also strongly affected by social factors such as income and housing. It is also more common among people who are immuno-compromized (those who are infected with HIV, diabetics and people with advanced kidney disease). The rate of TB in Toronto is still much higher than the mandatory planning guideline of 3.5 per 100,000 population by the year 2005.
- In 1999, 17.3% of the cases of TB in Toronto were resistant to one or more drugs representing 67.6% of drug-resistant cases in Ontario. The rate of multi-drug resistance (resistant to both Isoniazid and Rifampin) was 2.2%. Because of the high rate of drug resistant TB in Toronto, it is recommended that treatment begin with four drugs. In order to prevent drug resistant TB it is essential that all cases of TB are treated according to Canadian Guidelines and that adherence to therapy is closely monitored to ensure compliance.
- The number of deaths in Toronto due to TB fluctuated between 1991 and 1997, ranging from as low as eight to as high as 22.

#### ***Congenital Syphilis***

- The incidence of congenital syphilis is very low in Ontario. Between 1996 and 1999 fewer than five cases of congenital syphilis were reported, none resulting in death.

#### ***Congenital HIV***

- The incidence of congenital HIV in Ontario is very low as well. Between 1984-1999, there a total of 118 reported cases of congenital HIV in Ontario, and Toronto accounted for 62% of these. Between 1991 to 1997, the province recorded a total of 29 deaths due to congenital HIV, with Toronto accounting for 41%.

## 1.15 Vaccine-Preventable Diseases

### Definition:

Number of new cases and rate per 100,000 population of notifiable diseases requiring vaccination for a given year.

The selected vaccine-preventable diseases include:

i) Measles

ii) Influenza and pneumonia

(The diseases are reported by physicians, laboratories or any other source).

### Significance/Uses:

- Incidence rates of notifiable diseases requiring vaccination provides an indication of the effectiveness of vaccination coverage.
- There are effective strategies in place to prevent the occurrence of measles in children, and influenza in seniors. If the conditions do occur, there are effective treatments for them, hence they should not result in death:

**Measles** – It is mandatory to vaccinate all children for measles.

**Influenza** – It is recommended that all seniors 65 and over receive influenza vaccination each year as they are the most vulnerable to this disease. A rise in the rate of influenza may reflect worsening rate of immunization or difficulties in predicting the influenza strain.

- Monitoring trends for certain diseases over time and place in specific sub-populations.
- Planning and evaluating immunization programs.
- Comparison over time and place and to Mandatory Health Program Guidelines and Services Guidelines.

### Limitations:

- The figures reported represent events, not individuals. More than one disease may be reported per individual.
- Level of under-reporting varies from one area to another.
- Increase in rates between two periods can be caused by a number of factors (e.g. better reporting methods, changes in sensitivity or specificity of test, definition of diseases etc).

### Source

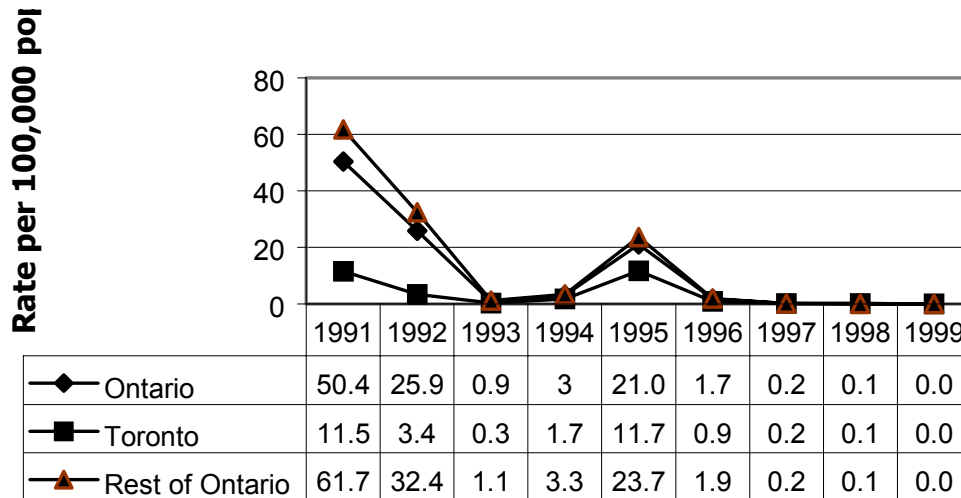
MOHLTC Public Health Branch- RDIS Database.

Ontario Mortality Database.

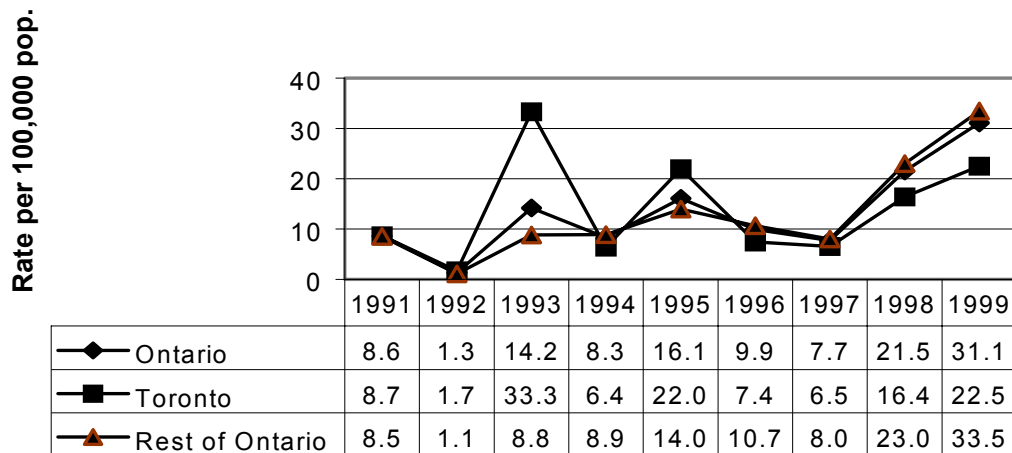
### Mandatory Health Programs and Services Guidelines

- 1) To eliminate indigenous measles by the year 2000.
- 2) To reduce the age-adjusted mortality rate for pneumonia and influenza (using a five-year moving average).

### Rates of Reported Cases of Measles, Toronto, Rest of Ontario and Ontario, 1991-1999



### Rates of Reported Cases of Influenza, Toronto, Rest of Ontario and Ontario, 1991-1999



Number of New Cases of Selected Sentinel Vaccine-Preventable Diseases, Toronto, 1991 to 1999		
	Measles	Influenza (all ages)
1991	271	206
1992	81	40
1993	6	794
1994	41	154
1995	284	535
1996	23	182
1997	5	163
1998	< 5	411
1999	< 5	568

Source: MOH, Public Health Branch

### Key Findings:

#### *Measles*

- Measles occurs in outbreaks and the incidence therefore fluctuates considerably. Between 1991 and 1999, the number of cases in Toronto peaked in 1991 and 1995 and has remained very low since 1996. The peaks are related to outbreaks.
- During the years with outbreaks the rates of measles for Toronto were slightly less than those for the rest of Ontario.

#### *Influenza*

- As with measles, the incidence of influenza greatly fluctuated between 1991 and 1999, with peaks in 1993, 1995 and 1999.
- Toronto had higher influenza rates than the rest of Ontario in the 1993 and 1995 outbreaks while it had lower rates in the 1999 outbreak.
- The incidence of the vaccine-preventable diseases reflects levels of immunity in the community.
- Despite the high number of both measles and influenza cases, there were no deaths from measles between 1991 and 1999 and very few deaths from influenza (less than 10 per year except for 1991 and 1996). Most influenza deaths occurred in the elderly.

## 1.16 Cancer Related Conditions

**Definition:**

Number of deaths due to cancer of the cervix (ICD9: 180) in a given year.

**Significance/Uses:**

- The use of the Pap test is recognized as an effective means of reducing of cervical cancer incidence and mortality. All women aged 18 and over who have had sexual intercourse should participate in cytology screening programs.
- With the exception of some very invasive types, most cancers of the cervix are treatable and should not lead to death if caught at an early stage.
- Indicates access to preventive and medical services.

**Limitations:**

- It is not possible to select out those deaths due to invasive cancer of the cervix.
- It may not adequately capture access to health services since women can have access to certain services but due to lack of knowledge/low education, may not use them.

**Source:**

MOHLTC, Provincial Health Planning Database.

<b>Number of Deaths from Cancer of the Cervix, Toronto and Ontario, 1991 to 1997</b>		
	<b>Toronto</b>	<b>Ontario</b>
<b>1991</b>	50	179
<b>1992</b>	42	150
<b>1993</b>	40	164
<b>1994</b>	48	165
<b>1995</b>	38	154
<b>1996</b>	42	189
<b>1997</b>	35	164

Source: MOHLTC Provincial Health Planning Database

### Key Findings:

- The number of deaths due to cancer of the cervix in Toronto fluctuated over the period of 1991 to 1997, ranging from as high as 50 in 1991 to as low as 35 in 1997.
- Toronto accounts for approximately 28% of the total deaths from cancer of cervix seen in Ontario.

## 1.17 Congenital Conditions

**Definition:**

Number of deaths from cretinism of congenital origin.

**Significance/Uses:**

- Cretinism of congenital origin (congenital hypothyroidism) is a preventable disease.
- It is mandatory to screen all newborns for presence of hypothyroidism at birth.
- The occurrence of cases of cretinism of congenital origin indicates a failure of the system to detect and treat children with hypothyroidism and prevent disability and death.

**Limitations:**

- Data on disability due to cretinism of congenital origin (or even incidence of) is not available.

**Source:**

MOHLTC, Provincial Health Planning Database.

**Key Findings:**

- There were no deaths due to cretinism of congenital origin in Toronto or elsewhere in Ontario between 1991 and 1997. This confirms that for this condition, the health care system is working well and able to treat these conditions in a timely manner to prevent death.



## 1.18 Other Health-Related Conditions

### Definition:

Number of deaths due to:

- I) Diabetes mellitus with acidosis or coma;
- II) Maternal deaths (including abortion, complications of pregnancy, child birth and puerperium);  
and
- III) Mental retardation due to phenylketonuria (PKU).

### Significance/Uses:

- These three conditions have well-recognized and very effective methods of treatment, therefore death should not occur from these conditions.

**Diabetes Mellitus with acidosis or coma** - If diabetes is well-managed, it should not progress to acidosis or coma, and even when acidosis or coma occurs, it is treatable if diagnosed early.

**Maternal Deaths** - Ideally, if women are monitored prenatally and with proper care during and after delivery, no deaths should result.

**Mental retardation due to phenylketonuria** - All newborns are supposed to be screened for phenylketonuria at or soon after birth.

- Occurrence of death from these conditions is an indication of failure of the health care system and of reduced access to essential services.

### Limitations:

- There are no data available specifically on mental retardation due to PKU.
- Data on disability due to PKU is not available.

### Source:

MOHLTC, Provincial Health Planning Database.

Number of Deaths from Diabetes Mellitus with Acidosis or Coma, Toronto and Ontario, 1991 to 1997		
	Toronto	Ontario
1991	25	110
1992	34	152
1993	33	158
1994	58	185
1995	58	182
1996	35	160
1997	38	161

Source: MOHLTC Provincial Health Planning Database

### Key Findings:

#### ***Diabetes mellitus***

- The number of deaths from diabetes mellitus with acidosis or coma increased from 25 in 1991 to 58 in 1995 (an increase of 132%) and then decreased to 38 in 1997.
- Between 1991 and 1997, Toronto accounted for approximately 23% of the total deaths from diabetes mellitus with acidosis or coma in Ontario, except in 1994 and 1995 when this proportion rose to 31%.

#### ***Maternal deaths***

- Maternal deaths are very rare in Toronto and in Ontario as a whole. Between 1991 and 1997, there were a total of 58 maternal deaths in Ontario, 26% (15) of which were for Toronto mothers. Generally in both Toronto and Ontario, there were few deaths (less than 10 per year) except in 1996 and 1997 when the number increased slightly.

#### ***Mental retardation due to phenylketonuria***

- Death due to mental retardation due to phenylketonuria is a very rare occurrence. Between 1991 and 1997, there were no deaths in Toronto or the rest of Ontario due to this cause.



## **Section II: Descriptor Information**

- A) Utilization**
- B) Health Human Resources**
- C) Health Care Funding by Sector**
- D) Health Status**
- E) CIHI Indicators**

## **A) Utilization**

## **I) In-Patient Hospital Care**

- 2.1 Acute In-Patient Utilization
- 2.2 Average Resource Intensity Weight
- 2.3 Acute In-Patient Psychiatric Utilization
- 2.4 In-Patient Utilization of Provincial Psychiatric Hospitals
- 2.5 Rehabilitation In-Patient Utilization

## 2.1 Acute In-Patient Utilization

### Definition:

- 2.1a) Number of acute in-patient separations, patient days, and average length of stay (ALOS) for hospitals in the City of Toronto.
- 2.1b) Number of acute in-patient separations, patient days, and ALOS by Toronto residents from Ontario hospitals per 1,000 area resident population.

### Significance/Uses:

- Indicator of acute in-patient volumes.
- Acute in-patient care represents a major part of hospital expenditures. The indicator serves as a proxy to measure allocation of hospital resources.
- Permits comparisons over time.

### Limitations:

- For 2.1a) it is difficult to calculate the rate (e.g. number of separations/1,000 population) as there is no consensus regarding the population base to be used for the denominator.
- Both 2.1a) and 2.1b) capture utilization patterns but do not capture population needs.
- Adjustments for factors such as age, sex, disease complexity, length of stay are required to allow for a fair comparison to other areas for both a) and b).

### Source:

MOHLTC, Provincial Health Planning Database.

### Benchmarks

Benchmarks are under review by the MOHLTC.

## 2.1a Acute In-Patient Utilization of Toronto Hospitals

Utilization of Acute Hospitals in the City of Toronto, 1995/96 to 1999/00			
	Separations*	Patient Days	ALOS
1995/96	281,551	1,621,875	5.8
1996/97	262,343	1,491,622	5.7
1997/98	255,154	1,425,912	5.6
1998/99	244,676	1,400,026	5.7
1999/00	233,888	1,376,661	5.9

\*Total acute separations and days excludes the following: newborns, acute psych, CMG 851, CMG 910 and ALC.

Utilization of Acute Hospitals in the City of Toronto by Patient Residence, 1995/96 to 1999/00						
	Toronto Residents			Non-Toronto Residents		
	Separations*	Patient Days	ALOS	Separations	Patient Days	ALOS
1995/96	207,071	1,200,429	5.8	74,480	421,446	5.7
1996/97	192,694	1,106,129	5.7	69,649	385,493	5.5
1997/98	185,411	1,044,446	5.6	69,743	381,466	5.5
1998/99	178,820	1,035,901	5.8	65,856	364,125	5.5
1999/00	170,326	1,020,662	6.0	63,562	355,999	5.6

\*Total acute separations and days excludes the following: newborns, acute psych, CMG 851, CMG 910 and ALC.

Separations from Toronto Hospitals by Program Type 1995/96 to 1999/00										
	Medical		Surgical		Obstetrics		Other		Total	
	#	%	#	%	#	%	#	%	#	%
1995/96	123,565	43.9	102,078	36.3	55,574	19.7	334	0.1	281,551	100
1996/97	117,111	44.6	94,005	35.8	51,003	19.4	224	0.1	262,343	100
1997/98	114,455	44.9	92,321	36.2	48,378	19.0	0	0.0	255,154	100
1998/99	109,504	44.8	89,929	36.8	45,243	18.5	0	0.0	244,676	100
1999/00	102,572	43.9	86,857	37.1	44,459	19.0	0	0.0	233,888	100

### Key Findings:

- Between 1995/96 and 1999/00, the total number of separations from acute hospitals in Toronto decreased by about 17%. In addition, the total number of acute patient days dropped by 15%.
- Average Length of Stay (ALOS) in acute hospitals in Toronto gradually declined from 1995/96 to 1997/98, after which it started rising again.
- Between 1995/96 and 1999/00, Toronto residents accounted for about 73% of total separations. Although the total separations and patient days for Toronto and non-Toronto residents decreased, the ALOS was slightly higher for Toronto residents than for non-Toronto residents.



- A closer examination of the data by program type shows that there has been a 15% decrease in in-patient surgery separations as opposed to 17% in medicine and 20% in obstetrics from 1995/96 to 1999/00.
- There was minimal change in the proportions of separations from the three program types between 1995/96 and 1999/00.

**2.1b Acute In-Patient Utilization of Ontario Hospitals by Toronto Residents**

<b>Utilization of Acute Hospitals in Ontario by Residents of Toronto, 1995/96 to 1999/00</b>					
	<b>Separations</b>	<b>Patient Days</b>	<b>ALOS</b>	<b>Separations/ 1,000 Population</b>	<b>Patient Days/ 1,000 Population</b>
<b>1995/96</b>	213,036	1,227,922	5.8	87.6	505.0
<b>1996/97</b>	198,709	1,134,226	5.7	80.7	460.6
<b>1997/98</b>	191,324	1,074,230	5.6	76.8	431.3
<b>1998/99</b>	187,720	1,077,964	5.7	74.8	429.6
<b>1999/00</b>	181,559	1,086,838	6.0	71.9	430.7

Total acute separations and days exclude the following: newborns, acute psych, CMG 851, CMG 910 and ALC.

<b>Separations by Toronto Residents from Toronto Acute Hospitals and other Acute Hospitals in Ontario, 1995/96 to 1999/00</b>						
	<b>From Toronto Hospitals</b>		<b>From Non-Toronto Hospitals</b>		<b>Total</b>	
	<b>#</b>	<b>%</b>	<b>#</b>	<b>%</b>	<b>#</b>	<b>%</b>
<b>1995/96</b>	207,071	97.2	5,965	2.8	213,036	100
<b>1996/97</b>	192,694	97.0	6,015	3.0	198,709	100
<b>1997/98</b>	185,411	96.9	5,913	3.1	191,324	100
<b>1998/99</b>	178,820	95.3	8,900	4.7	187,720	100
<b>1999/00</b>	170,326	93.8	11,233	6.2	181,559	100

Total acute separations and days exclude the following: newborns, acute psych, CMG 851, CMG 910 and ALC.

<b>Separations by Toronto Residents from Ontario Hospitals by Program Type 1995/96 to 1999/00</b>										
	<b>Medical</b>		<b>Surgical</b>		<b>Obstetrics</b>		<b>Other</b>		<b>Total</b>	
	<b>#</b>	<b>%</b>	<b>#</b>	<b>%</b>	<b>#</b>	<b>%</b>	<b>#</b>	<b>%</b>	<b>#</b>	<b>%</b>
<b>1995/96</b>	99,950	46.9	68,223	32.0	44,546	20.9	317	0.1	213,036	100
<b>1996/97</b>	95,609	48.1	61,987	31.2	40,898	20.6	215	0.1	198,709	100
<b>1997/98</b>	93,038	48.6	59,743	31.2	38,543	20.1	0	0.0	191,324	100
<b>1998/99</b>	89,869	47.9	60,409	32.2	37,442	19.9	0	0.0	187,720	100
<b>1999/00</b>	87,410	48.1	56,926	31.4	37,223	20.5	0	0.0	181,559	100

Total acute separations and days exclude the following: newborns, acute psych, CMG 851, CMG 910 and ALC.

<b>Standardized Rates of Acute In-patient Utilization for GTA Residents by Region, 1999/00</b>			
	<b>Acute In-patient S-Rate/1,000</b>	<b>Lower Confidence Interval</b>	<b>Upper Confidence Interval</b>
<b>Simcoe</b>	93.7	92.8	94.6
<b>Halton</b>	75.6	74.7	76.4
<b>Peel</b>	71.8	71.3	72.3
<b>Toronto</b>	67.5	67.2	67.8
<b>York</b>	64.0	63.4	64.6

**Key Findings:**

- Between 1995/96 and 1999/00, the total number of separations from acute hospitals in Ontario by Toronto residents decreased by about 13%. A closer examination of data by location of hospitals indicates that the number of separations from acute hospitals in Toronto dropped by 13%, as opposed to 5% for non-Toronto hospitals.
- Between 1995/96 and 1997/98, the rate of separations and length of stay (LOS) for residents per 1,000 population dropped significantly.
- A closer examination of data by program type shows that there has been a 17% decrease in in-patient surgery, 16% in obstetrics and 12.5% in medicine from 1995/96 to 1999/00.
- There was minimal change in the proportion of separations from the three program types between 1995/96 and 1999/00.
- In 1999/2000, Toronto residents had the second lowest acute in-patient standardized rate (S-rate) among GTA residents (York, Halton, Peel, and Durham). Simcoe had the highest acute in-patient S-rate, followed by Halton.

**NB:** Please note that numbers presented in this report for this indicator may not be directly comparable to those presented in the 1999 *Toronto Health System Report Card* because they are from a different source file (PHPD) and denominators may also differ as population files have been revised.

## 2.2 Average Resource Intensity Weight (RIW)

### Definition:

- 2.2a) i) Total and average Resource Intensity Weight (RIW) for acute in-patients of hospitals in Toronto, by type (typical vs. atypical) and by Major Clinical Category (MCC).  
ii) Total and average Day Procedure Group (DPG) weights for patients in Toronto hospitals.
- 2.2b) i) Total and average Resource Intensity Weight (RIW) for Toronto residents from Ontario hospitals, by type (typical vs. atypical) and by Major Clinical Category (MCC).  
ii) Total and average Day Procedure Group (DPG) weights for Toronto residents in Ontario hospitals.

### Significance/Uses:

- RIW have been developed and calculated by CIHI and used by the Joint Policy and Planning Committee and Ontario Ministry of Health for funding.
- Indicator of case complexity workload in a given hospital or in a group of hospitals.
- Used as proxy for estimating patient costs or resource consumption in acute care patient stays and day surgery.
- RIW standardize measurement of in-patient case volumes by recognizing that not all patients require the same type or quantity of health care resources.
- It is a national classification system with the year 2000 representing the first time that RIWs and DPGs were calculated entirely with Canadian cost data.
- Can compare in-patient and out-patient activity.
- Translates case mix data into cost data and determines unit cost.
- Resource Intensity Weights (RIWs) are relative to the value of 1.0000. An RIW value of 4.0000 is expected to be  $4.0000/1.0000 = 4$  times as expensive as the “average” case. Similarly, a case with an RIW value of 2.0000 is expected to be 2 times as expensive as one with an RIW value of 1.0000.
- Key component in hospital budget allocation, strategic planning, new program planning, and evaluating program efficiencies.
- The average hospital-specific RIW is a measure of relative case mix of a facility’s patients.
- CIHI RIW is the currency of hospital service volumes and is adjusted for outliers and excessive lengths of stay.

### Limitations:

- Differences in results from year to year occur because of differences in consistencies in groupings and changes in the annual weighting methodology.
- Does not capture ambulatory care, complex continuing care or rehabilitation services.

### Sources:

Canadian Institute for Health Information.  
MOHLTC, Provincial Health Planning Database.

## 2.2a Average Resource Intensity Weight for Hospitals in Toronto

Total and Average Resource Intensity Weight (RIW) for In-patient Cases* in Toronto Hospitals, by Patient's Residence, 1995/96 to 1999/00									
	Toronto Residents			Non-Toronto Residents			Total		
	Total Separations	Total RIW	Avg. RIW	Total Cases	Total RIW	Avg. RIW	Total Cases	Total RIW	Avg. RIW
1995/96	256,372	327,004.43	1.28	88,466	124,195.72	1.40	344,838	451,200.15	1.31
1996/97	240,636	318,867.18	1.33	82,394	115,655.33	1.40	323,030	434,522.51	1.35
1997/98	232,584	311,547.39	1.34	82,771	122,394.49	1.48	315,355	433,941.88	1.38
1998/99	223,803	314,832.79	1.41	76,712	119,340.99	1.56	300,515	434,173.78	1.44
1999/00	214,303	313,391.70	1.46	74,161	120,539.18	1.63	288,464	433,930.88	1.50

\* includes both typical and atypical cases

Total and Average Resource Intensity Weight (RIW) for In-patient Cases in Toronto Hospitals, by Type of Case, 1995/96 to 1999/00									
	Typical			Atypical*			Total		
	Total Separations	Total RIW	Avg. RIW	Total Cases	Total RIW	Avg. RIW	Total Cases	Total RIW	Avg. RIW
1995/96	301,380	299,632.07	0.99	43,458	151,568.08	3.49	344,838	451,200.15	1.31
1996/97	283,176	295,550.29	1.04	39,854	138,972.22	3.49	323,030	434,522.51	1.35
1997/98	277,790	307,268.37	1.11	37,565	126,673.51	3.37	315,355	433,941.88	1.38
1998/99	263,691	309,200.37	1.17	36,824	124,973.41	3.39	300,515	434,173.78	1.44
1999/00	254,022	311,886.77	1.23	34,442	122,044.11	3.54	288,464	433,930.88	1.50

\* Atypical cases include deaths, transfers, sign outs, LOS outliers, CMG 910 and CMG 999

Total and Average DPG Weight for Day Surgeries Performed in Toronto Hospitals, by Patient's Residence, 1995/96 to 1999/00									
	Toronto Residents			Non-Toronto Residents			Total		
	Total Separations	Total DPG Weights	Avg. DPG Weights	Total Cases	Total DPG Weights	Avg. DPG Weights	Total Cases	Total DPG Weights	Avg. DPG Weights
1995/96	187,971	37,074.76	0.20	66,285	14,195.36	0.21	254,256	51,270.12	0.20
1996/97	195,690	39,232.41	0.20	72,774	15,788.49	0.22	268,464	55,020.90	0.20
1997/98	200,235	40,452.00	0.20	77,045	16,771.56	0.22	277,280	57,223.55	0.21
1998/99	194,277	39,761.68	0.20	76,211	16,902.44	0.22	270,488	56,664.12	0.21
1999/00	202,669	41,415.73	0.20	78,678	17,391.36	0.22	281,347	58,807.09	0.21

**Key Findings:**

- Between 1995/96 and 1999/00, the total Resource Intensity Weights (RIWs) for Toronto hospitals decreased from about 451,200 to 433,931 (a 3.8% decrease), and total cases declined more significantly (i.e. by 16%). The average RIW increased from 1.31 to 1.5 (a 15% increase). The increase in average RIW means that even though the resource volume is going down, the resource intensity of the cases is increasing (i.e. the average patient seen in 1999/00 required more resources than five years earlier).
- Although Toronto residents account for about 72% of the total RIW in Toronto hospitals, non-Toronto residents have slightly higher average RIW than the residents (1.63 vs. 1.46 in 1999/00). The higher average RIW for non-residents is probably due to many of these cases being transfers and atypical cases. The average RIW for Toronto residents increased by 14% and that for non-residents by 16% over the period of 1995/96 to 1999/00.
- Toronto has a high number of teaching and tertiary/quaternary hospitals. As a result, it receives a high number of atypical RIW cases. These atypical cases are more resource intensive. Between 1995/96 and 1999/00, atypical cases accounted for approximately 12% of total acute cases seen in Toronto hospitals. Average RIW for atypical cases is nearly three times that of the typical cases and has fluctuated between 3.39 to 3.54 for the five years compared to that of typical cases which increased from 0.99 to 1.23 during this period.
- Day Procedure Groups (DPG) weights measure resources required for day procedures. Day procedures are much less resource intensive than to acute in-patient procedures (approximately 5.5 times less). Between 1995/96 and 1999/00, the total number of day procedures performed in Toronto hospitals increased by 11% while the total DPG weight increased by 15%. Average DPG weights increased from 0.2 to 0.21. This may indicate that the resource intensity of the day surgery cases is increasing (i.e. the average day surgery procedure done in Toronto hospitals in 1999/00 required more resources than five years earlier), or that more serious surgical procedures are being done as day surgery cases (with the move from in-patient surgery to out-patient surgery).

**NB:** Please note that numbers presented in this report for this indicator may not be directly comparable to those presented in the 1999 *Toronto Health System Report Card* because of changes in the RIW and DPG grouping methodology which occurs from year to year.

## 2.2b Average Resource Intensity Weight for Toronto Residents in Ontario Hospitals

Total and Average Resource Intensity Weight (RIW) for Toronto Resident In-patient Cases* Seen in Ontario Hospitals, 1995/96 to 1999/00									
	Toronto Hospitals			Non-Toronto Hospitals			Total		
	Total Cases	Total RIW	Avg. RIW	Total Cases	Total RIW	Avg. RIW	Total Cases	Total RIW	Avg. RIW
1995/96	256,372	327,004.43	1.28	7,324	7,614.67	1.04	263,696	334,619.10	1.27
1996/97	240,636	318,867.18	1.33	7,367	8,250.15	1.12	248,003	327,117.32	1.32
1997/98	232,584	311,547.39	1.34	7,233	8,401.18	1.16	239,817	319,948.57	1.33
1998/99	223,803	314,832.79	1.41	10,802	11,501.60	1.06	234,605	326,334.39	1.39
1999/00	214,303	313,391.70	1.46	13,624	18,973.80	1.39	227,927	332,365.49	1.46

\* Includes both typical and atypical cases

Total and Average DPG Weight for Day Surgeries Received by Toronto Residents From Ontario Hospitals, 1995/96 to 1999/00									
	Toronto Hospitals			Non-Toronto Hospitals			Total		
	Total cases	Total DPG weights	Avg. DPG weights	Total Cases	Total DPG weights	Avg. DPG weights	Total Cases	Total DPG weights	Avg. DPG weights
1995/96	187,971	37,074.76	0.20	5501	1139.58	0.21	193,472	38,214.35	0.20
1996/97	195,690	39,232.41	0.20	6087	1279.84	0.21	201,777	40,512.25	0.20
1997/98	200,235	40,452.00	0.20	6610	1443.90	0.22	206,845	41,895.90	0.20
1998/99	194,277	39,761.68	0.20	6839	1443.83	0.21	201,116	41,205.51	0.20
1999/00	202,669	41,415.73	0.20	13250	2775.76	0.21	215,919	44,191.49	0.20

### Key Findings:

- Between 1995/96 and 1999/00, the total RIW for Toronto residents in Ontario hospitals decreased slightly (by 0.7%) from about 334,619 to 332,365. In addition, the total cases decreased by about 14%, while the average RIW increased from 1.27 to 1.46 (15%). The declining number of cases coupled with the increasing resource intensity may indicate that fewer people with more complex illnesses or conditions are being admitted to hospitals.
- Toronto residents who used hospitals outside Toronto had lower average RIW than those who used Toronto hospitals over the period of 1995/96 to 1999/00.
- Between 1995/96 and 1999/00, the total number of day surgery procedures performed for Toronto residents increased by 12% while the total DPG weight increased by 16%. The average DPG weights remained constant during this period at 0.20.

**NB:** Please note that numbers presented in this report for this indicator may not be directly comparable to those presented in the 1999 *Toronto Health System Report Card* because of changes in the RIW and DPG grouping methodology which occurs from year to year.

## 2.3 Acute In-patient Psychiatric Utilization

### Definition:

- 2.3a) Number of acute in-patient psychiatric separations, patient days, and average length of stay (ALOS) for hospitals in the City of Toronto.
- 2.3b) Number of acute in-patient psychiatric separations, patient days, and ALOS by Toronto residents from Ontario hospitals per 1,000 area resident population.

Information is based on identified psychiatric cases (using psychiatry program group), for all hospitals captured in the CIHI database.

### Significance/Uses:

- Indicator of level of in-patient acute psychiatric care provided to an area resident population.
- It provides direct comparison to the Ontario MOHLTC planning guidelines and HSRC guidelines.
- Comparison over time and place-to-place.

### Limitations:

- Working definitions of acute in-patient psychiatric care vary. Typical definition includes patients with mental disorders treated in designated acute care psychiatric units.
- For a) it is difficult to calculate the rate (e.g. number of separations/1,000 population), as there is no consensus regarding the population base to use for the denominator.
- Both a) and b) capture utilization patterns but do not capture population needs.
- Adjustments for factors such as age, sex, disease complexity, and length of stay are required to allow for a fair comparison to other areas for both a) and b).
- Lack of physician and community resources may affect use of hospitals and LOS.
- Does not include separations from Provincial Psychiatric Hospitals.

### Source:

MOHLTC, Provincial Health Planning Database.



### 2.3a Acute In-Patient Psychiatric Utilization of Toronto Hospitals

<b>In-Patient Psychiatric Utilization of Acute Hospitals in the City of Toronto, 1995/96 to 1999/00</b>			
	<b>Separations</b>	<b>Patient Days</b>	<b>ALOS</b>
<b>1995/96</b>	14,786	230,903	15.6
<b>1996/97</b>	15,145	224,588	14.8
<b>1997/98</b>	15,320	218,778	14.3
<b>1998/99</b>	13,481	191,505	14.2
<b>1999/00</b>	13,240	193,743	14.6

<b>In-Patient Psychiatric Utilization of Acute Hospitals in the City of Toronto by Patient Residence, 1995/96 to 1999/00</b>						
	<b>Toronto Residents</b>			<b>Non-Toronto Residents</b>		
	<b>Separations</b>	<b>Patient Days</b>	<b>ALOS</b>	<b>Separations</b>	<b>Patient Days</b>	<b>ALOS</b>
<b>1995/96</b>	12,469	195,134	15.6	2,317	35,769	15.4
<b>1996/97</b>	12,940	193,392	14.9	2,205	31,196	14.1
<b>1997/98</b>	12,884	182,961	14.2	2,436	35,817	14.7
<b>1998/99</b>	11,707	167,923	14.3	1,774	23,582	13.3
<b>1999/00</b>	11,523	170,434	14.8	1,717	23,309	13.6

#### Key Findings:

- Toronto residents accounted for about 84-87% of total acute in-patient separations between 1995/96 and 1999/00.
- The number of acute in-patient psychiatric separations increased from 1995/96 to 1996/97, however, since 1996/97, there has been a gradual decrease (i.e. 13%). The decrease was about 11% for Toronto residents as opposed to 22% for non-Toronto residents. During the period of 1996/97 to 1999/00, the total number of acute in-patient psychiatric days dropped by 14%. However, the decline was much greater for patient days of non-Toronto residents (35%) than for Toronto residents (13%).
- There was also a gradual decrease in the Average Length of Stay (ALOS) in acute in-patient psychiatric hospitals in Toronto.

The drop in acute psychiatric patient days and ALOS may indicate the trend towards “de-institutionalization” with alternative interventions being sought for the discharged patients. The HSRC recommended that more people should be served in the community. Currently there are not enough community supports for people with mental illness in Toronto. However, this is being addressed by the MOHLTC. In June 1998, the ministry announced a \$60-million funding infusion focused on increasing community supports for individuals with mental illness. This was allocated as follows: \$28 million community reinvestment (ACT, crisis teams, case management etc.); \$15 million institutional investment (children’s mental health, forensics); \$14.7 million the Homelessness Initiative (housing units and rent supplements); \$1.5 million eating disorders; \$1 million psychiatric sessionals and \$2.1

million Bill 68 (Brian's law).

**NB:** Please note that numbers presented in this report for this indicator may not be directly comparable those presented in the 1999 *Toronto Health System Report Card* because they are from a different source file (PHPD). Denominators may also differ as population files have been revised.

**2.3b Acute In-Patient Psychiatric Utilization of Ontario Hospitals by Toronto Residents**

<b>In-Patient Psychiatric Utilization of Acute Hospitals in Ontario by Residents of Toronto, 1995/96 to 1999/00</b>					
	<b>Separations</b>	<b>Patient Days</b>	<b>ALOS</b>	<b>Separations/ 1,000 Population</b>	<b>Patient Days/ 1,000 Population</b>
<b>1995/96</b>	12,870	199,878	15.5	5.3	82.2
<b>1996/97</b>	13,363	197,883	14.8	5.4	80.4
<b>1997/98</b>	13,343	187,864	14.1	5.4	75.4
<b>1998/99</b>	12,214	173,464	14.2	4.9	69.1
<b>1999/00</b>	12,253	179,926	14.7	4.9	71.3

<b>Acute In-Patient Psychiatric Separations by Toronto Residents from Toronto Hospitals and Other Hospitals in Ontario, 1995/96 to 1999/00</b>						
	<b>From Toronto Hospitals</b>		<b>From Non-Toronto Hospitals</b>		<b>Total</b>	
	<b>#</b>	<b>%</b>	<b>#</b>	<b>%</b>	<b>#</b>	<b>%</b>
<b>1995/96</b>	12,469	96.9	401	3.12	12,870	100
<b>1996/97</b>	12,940	96.8	423	3.17	13,363	100
<b>1997/98</b>	12,884	96.6	459	3.44	13,343	100
<b>1998/99</b>	11,707	95.8	507	4.15	12,214	100
<b>1999/00</b>	11,523	94.0	730	5.96	12,253	100

<b>Standardized Rates of Acute In-patient Psychiatric Utilization, for GTA Residents by Region, 1999/00</b>			
	<b>Acute In-patient Psychiatric S-Rate /1,000</b>	<b>Lower Confidence Interval</b>	<b>Upper Confidence Interval</b>
<b>Halton</b>	4.8	4.6	5.1
<b>Simcoe</b>	4.7	4.5	4.9
<b>Toronto</b>	4.6	4.5	4.7
<b>Peel</b>	3.2	3.1	3.3
<b>York</b>	3.0	2.9	3.2

**Key Findings:**

- Between 1995/96 and 1996/97, the total number of separations from acute psychiatric in-patient hospitals in Ontario by Toronto residents increased slightly by about 4% then gradually decreased to 1999/00 (by about 8%). A closer examination of data by location of hospitals indicates that the number of separations from acute hospitals in Toronto decreased by 11%, where as it increased by about 73% for non-Toronto hospitals in the period of 1996/97 to 1999/00.
- The rate of separations for Toronto residents per 1,000 population decreased minimally from 5.3

to 4.9 between 1995/96 and 1999/00, while patient days decreased from 82.2 to 71.3 per 1,000 (approximately 13%).

- In 1999/2000, Toronto residents ranked third in terms of acute in-patient psychiatric utilization among the five GTA regions (including York, Halton, Peel, and Durham). Halton had the highest acute in-patient psychiatric standardized rate followed by Simcoe.

**NB:** Please note that numbers presented in this report for this indicator may not be directly comparable those presented in the 1999 *Toronto Health System Report Card* because they are from a different source file (PHPD) and denominators may also differ as population files have been revised.

## 2.4 Over-all In-Patient Psychiatric Utilization (Mental Health Beds only)

### Definition:

- a) Number of staffed mental health beds (including Provincial Psychiatric Hospitals-PPHs) in Toronto.

**Due to the Mental Health System being in transition, it is difficult to interpret observed variations in data and trends of PPH utilization data, hence only data on mental health beds has been included in this report.**

### Significance/Uses:

- The mental health system is currently in transition. There were 10 Provincial Psychiatric Hospitals (PPHs) in Ontario in the early 1980s.
- In 1997, the HSRC directed the divestment of all PPHs. Depending on the receiving hospital, a divested PPH's hospital type was changed, also leading to change in total PPH bed numbers. However, this does not reflect changes in types of beds transferred. The receiving hospital that has taken on governance of a PPH is subject to providing the same types and level of service as per the Service Level Agreement and Transfer Agreement.
- Toronto had one PPH – Queen Street Mental Health Centre. This hospital was divested in March 1998 to the Centre for Addictions and Mental Health.
- PPHs used to report their utilization data to the Ministry of Health, Finance and Information Management Branch. The reporting system has changed.
- Indicator of mental health in-patient utilization that measures the level of in-patient psychiatric care provided in a hospital.
- It provides direct comparison to the Ontario MOHLTC planning guideline, which is an expression of need for mental health care.

### Limitations:

- Captures utilization patterns, does not capture population needs.
- Since PPHs were provincial hospitals, they served wide catchment areas beyond the counties they are located in. Hence, it is not possible to calculate utilization by county.
- Pre-divestment data may not be directly comparable to post-divestment data.
- It is not possible to calculate exact rates comparable to the HSRC benchmarks (adults and children), as data on beds are not available by age breakdown.

### Source:

MOHLTC.

### HSRC Benchmarks

Mental Health beds (adults): 35 beds per 100,000 Resident Population (by 2003)  
 - 21 beds/100,000 for acute mental health  
 - 14 beds/100,000 for longer-term mental health

Mental health (child/adolescents): 7/100,000 0-17 years.

## 2.4a In-Patient Psychiatric Utilization (Mental Health Beds including PPH beds) in Toronto

Staffed Mental Health Beds in the City of Toronto, Rest of Ontario and Ontario, 1998 - 2001				
Toronto				
Hospital Type	1998	1999	2000	2001
General Hospital with Psych unit (AP)	N/A	507	453	457
Speciality Psych (MP)	N/A	579	574	594
Provincial Psych (OP)	436	0	0	0
Total Mental Health Beds	N/A	1,086	1,027	1,051
Ontario				
General Hospital with Psych unit (AP)	N/A	1,964	1,708	2,424
Speciality Psych (MP)	N/A	1,114	1,109	1,567
Provincial Psych (OP)	2,803	2,011	2,225	1,055
Total Mental Health Beds	N/A	5,089	5,042	5,046

### Key Findings:

- Toronto was the site of one of the 10 provincial psychiatric hospitals (Queen Street Mental Health Centre) when the Health Services Restructuring Commission (HSRC) was created in the mid-1990s. The HSRC directed the divestment of the hospital, which occurred in March 1998 when it became part of the new Centre for Addiction and Mental Health, which also integrated the Clarke Institute, the Addiction Research Foundation and the Donwood Institute. In 1998, QSMH had 436 beds.
- Toronto residents are also served by PPHs in bordering municipalities (i.e. Penetanguishene in York-Simcoe region and Whitby Mental Health Centre in Durham Region).
- Toronto hospitals also serve patients from bordering municipalities. Some beds in QSMHC were formerly allocated for non-Toronto residents.
- In 1999, Toronto had a total of 1,086 mental health beds. 47% of these were in acute care hospitals and the rest (53%) in specialty hospitals. The proportions have changed to 43% and 57% respectively as of 2001.
- In the period before divestment (1991 to 1996), the number of separations from QSMHC decreased greatly from 1,956 in 1991/92 to 680 in 1996/97 and the patient days dropped from 197,318 to 188,730. However average lengths of stay had been increasing during that period. Toronto residents accounted for approximately 80% of separations from this center. (See *First Annual Toronto Health System Report Card* for details).
- Toronto has 21% of the total mental health beds in Ontario. There was a decrease in the total number of mental health beds in Toronto from 1999 to 2000. The decrease (59 beds) was concentrated mainly in the acute care hospitals. In 2001, Toronto gained back 24 of those beds –

mainly in specialty hospitals.

- Ontario as a whole experienced a decrease in the number of mental health beds between 1999 and 2001 (43 beds). A breakdown by hospital type shows there was an increase in beds in acute and specialty hospitals, while the PPHs experienced a decrease.

## 2.5 Rehabilitation In-Patient Utilization

### Definition:

- 2.5a) Number of rehabilitation in-patient separations, patient days, and average length of stay (ALOS) from Toronto hospitals.
- 2.5b) Number of rehabilitation in-patient separations, patient days, and ALOS by Toronto residents from Ontario hospitals per 1,000 area resident population.

### Significance/Uses:

- Indicator of rehabilitation in-patient utilization provided in a hospital.
- It provides direct comparison to Ontario MOHLTC planning guidelines, which are an expression of estimated need for rehabilitation care.
- Permits comparisons over time.

### Limitations:

- For 2.5a) it is difficult to calculate the rate, as there is no consensus regarding the population base to be used for the denominator.
- Only captures rehabilitation cases in rehab beds.
- Captures utilization patterns, does not capture population needs.
- Focus is on physical rehabilitation.

### Source:

MOHLTC, Provincial Health Planning Database.

### Benchmarks

Benchmarks are under review by the MOHLTC.



## 2.5a Rehabilitation In-Patient Utilization for Hospitals in Toronto

Utilization of Rehabilitation Beds in Acute and Rehabilitation Hospitals in Toronto, 1995/96 to 1999/00			
	Separations	Patient Days	ALOS
<b>1995/96</b>	9,335	323,219	34.6
<b>1996/97</b>	9,256	295,875	32.0
<b>1997/98</b>	9,638	288,841	30.0
<b>1998/99</b>	9,721	288,700	29.7
<b>1999/00</b>	8,778	264,135	30.1

Utilization of Rehabilitation Beds in Acute and Rehabilitation Hospitals in Toronto by Patient Residence, 1995/96 to 1999/00						
	Toronto Residents			Non-Toronto Residents		
	Separations	Patient Days	ALOS	Separations	Patient Days	ALOS
<b>1995/96</b>	6,436	235,471	36.6	2,899	87,748	30.3
<b>1996/97</b>	6,291	209,880	33.4	2,965	85,995	29.0
<b>1997/98</b>	6,592	205,204	31.1	3,046	83,637	27.5
<b>1998/99</b>	6,549	200,762	30.7	3,172	87,938	27.7
<b>1999/00</b>	5,759	183,882	31.9	3,019	80,253	26.6

### Key Findings:

- The total number of separations from rehabilitation hospitals in Toronto fluctuated between 1995/96 and 1999/00. However, the number of patient days decreased by about 18%.
- Between 1995/96 and 1999/00, the total number of separations from rehab hospitals in Toronto by residents of Toronto also fluctuated while that of non-residents increased by 4%. The number of patient days for both residents and non-residents decreased (22% and 9% respectively).
- The ALOS in rehabilitation hospitals in Toronto for residents of Toronto was longer than that for non-residents. Average length of stay for both residents and non-residents decreased between 1995/96 and 1999/00.

**2.5b Rehabilitation In-Patient Utilization of Ontario Hospitals by Toronto Residents**

<b>Utilization of Rehabilitation Beds in Acute and Rehabilitation Hospitals in Ontario by Residents of Toronto, 1995/96 to 1999/00</b>					
	<b>Separations</b>	<b>Patient Days</b>	<b>ALOS</b>	<b>Separations/1,000 Population</b>	<b>Patient Days/ 1,000 Population</b>
<b>1995/96</b>	6,472	236,596	36.6	2.7	97.3
<b>1996/97</b>	6,340	211,788	33.4	2.6	86.0
<b>1997/98</b>	6,683	207,388	31.0	2.7	83.3
<b>1998/99</b>	6,655	203,542	30.6	2.7	81.1
<b>1999/00</b>	5,935	187,513	31.6	2.4	74.3

<b>Separations by Toronto Residents from Rehabilitation Beds in Acute and Rehabilitation Hospitals in Ontario by Hospital Location, 1995/96 to 1999/00</b>						
	<b>From Toronto Hospitals</b>		<b>From Non-Toronto Hospitals</b>		<b>Total</b>	
	<b>#</b>	<b>%</b>	<b>#</b>	<b>%</b>	<b>#</b>	<b>%</b>
<b>1995/96</b>	6,436	99.4	36	0.6	6,472	100
<b>1996/97</b>	6,291	99.2	49	0.8	6,340	100
<b>1997/98</b>	6,592	98.6	91	1.4	6,683	100
<b>1998/99</b>	6,549	98.4	106	1.6	6,655	100
<b>1999/00</b>	5,759	97.0	176	3.0	5,935	100

<b>Standardized Rates of Rehabilitation Separations, for GTA Residents by Region, 1999/00</b>			
	<b>Rehab S Rate/1,000</b>	<b>Lower Confidence Interval</b>	<b>Upper Confidence Interval</b>
<b>Simcoe</b>	2.5	2.4	2.7
<b>York</b>	2.3	2.2	2.4
<b>Toronto</b>	2.1	2.0	2.1
<b>Halton</b>	2.0	1.8	2.1
<b>Peel</b>	1.8	1.7	1.9

**Key Findings:**

- Between 1995/96 and 1999/00, the total number of rehabilitation separations by Toronto residents fluctuated while the patient days decreased by 21%.
- The majority of Toronto residents received rehabilitation care from Toronto hospitals.
- In 1999/2000, Toronto residents ranked third in terms of rehabilitation utilization among the five GTA regions (York, Halton, Peel, and Durham). Simcoe had the highest rehabilitation S-rate followed by York region.



## **II) Long-Term Care**

### **2.6 Long-Term Care (LTC) Facility Utilization**

*NB: The indicator of Chronic Care Utilization which was included in the First Annual Toronto Health System Report Card has not been included in this report because the data system is under development at the MOHLTC.*

## 2.6 Long-Term Care (LTC) Facility Utilization

### Definition:

Number of long-term care (LTC) beds per 1,000 population 75 years and older.

Long-term care facilities provide accommodation, food, nursing care, therapeutic and recreational activities, as well as assistance with activities of daily living.

### Significance/Uses:

- Indicator of long-term care utilization that measures level of in-resident care an area population is receiving, specifically targeted to population 75 years of age and older.
- Long-Term Care utilization in facilities can be analysed by the number of beds per 1,000 people over 75 years of age. Number of cases is equal to the number of beds as people admitted to LTC facilities stay there until they die or are transferred to other facilities. The average length of stay in LTC facilities is more than a year.
- Provides comparison to the HSRC guidelines.
- Comparisons over time (extended and residential care) and place.

### Limitations:

- Indicator is calculated for population 75 years of age and older, although some long-term care beds and spaces are used by patients younger than 75 years. For more information on LTC users, a report produced by the Ministry annually, "1998 Levels of Care classification, Report on aging and gender for (County name) Facilities" is available.
- The system captures only limited demographic data for the residents.
- Each DHC area and/or County may have bed numbers based on local circumstances that are not reflected in the Ministry data at this time. For example, some facilities may purchase beds from other places but not through the RFP process, or they may close beds for renovation, or may close due to violations found by inspectors. These fluctuations will not be captured in the total bed numbers from the Ministry.

Note: Planned beds for 2002 includes all new beds awarded through the RFP process as well as any beds awarded prior to April 1998 but unopened. Also includes any new beds awarded through "Direct Ministerial Award." All new beds are to be operational as of 2004.

### Sources:

MOHLTC, Long-Term Care Division.

### HSRC Benchmarks for Toronto (2003)

Beds: 99.1 beds/1,000 75 +

<b>Total Number of LTC Facilities and beds in Toronto May 1994 - July 2004</b>			
<b>As of:</b>	<b>Total # of Facilities</b>	<b>Total # of Beds</b>	<b>Beds/ 1,000 75 +</b>
<b>May-94</b>	65	11,425	89.3
<b>Apr-95</b>	68	11,625	87.1
<b>Apr-96</b>	69	11,676	89.1
<b>Apr-97</b>	69	11,693	85.2
<b>Jul-98</b>	69	11,675	81.4
<b>Jul-99</b>	68	11,580	77.4
<b>March-00*</b>	68	11,498	75.5
<b>March 2004 (including planned)**</b>		16,853	95.6

\* Beds in operation as of March 2000 do not include any interim beds (above and beyond the RFP process), temporarily opened to accommodate the new beds being awarded, as these beds will be discontinued as the new beds are opened.

\*\* The year 2004 was chosen since all new beds are to be operational as of 2004.

### Key Findings:

- Long-term care utilization in facilities can be analysed by the number of beds per 1,000 people over 75 years of age. Number of cases is equal to the number of beds as people admitted to LTC facilities stay there until they die or are transferred to other facilities. The average length of stay in LTC facilities is more than a year. In 1998, the average length of stay in a long-term care facility in Toronto was 34.2 months or 2.9 years.
- Between 1994-1997, the number of LTC beds in Toronto increased by 2.3%. Since then, the number of beds decreased to 11,498 in 2000. Between 1994-1996, the number of long-term care facilities increased from 65 to 69 and remained constant until 1998. However, in 1999, the number of LTC facilities decreased to 68.
- Despite the increase in beds, the rate of beds per 1,000 population over 75 years of age has been decreasing over time. In 1994, there were 89.3 beds per 1,000 people over 75 years compared to only 75.5 beds per 1,000 in 2000. This is much lower than the target set by HSRC for the year 2003 (i.e. 99.1/1,000 pop 75+). It should be noted that in Toronto, the population of 75 and older is expected to grow by 32% by the year 2003. The number of beds may not be sufficient to meet the growing need of this population.
- The number of beds/1,000 population aged 75 and over is higher for Ontario than in Toronto. The provincial average in 2000 was 87.1 beds per 1,000, compared to 75.5 beds per 1,000 in Toronto.
- The low bed-to-population ratio is also reflected in the length of the waiting list for long-term care facilities which has been increasing steadily since 1994 (see section 1.2 - Waiting lists for LTC facilities).
- The Ontario MOHLTC announced that a total of 5,355 additional LTC beds will be added to the Toronto system over the next few years, to be operational by 2004, bringing the total to 16,853 beds. As well, 20 additional facilities would be added, making a total of 88 LTC facilities in

Toronto. However, even with the addition of new beds, the bed rate per 1,000 population 75 and over of 95.6 will still be below the HSRC target by the year 2003.

In addition, it should be noted that interim LTC facility beds in Toronto will be closing over the same time period that the new beds will be opened. (Currently there are about 466 interim beds in Toronto). Hence this will affect the final bed-to-population ratio.

### **III) Out-Patient Hospital Care**

#### **2.7 Day Surgery Utilization**



## 2.7 Day Surgery Utilization

### **Definition:**

- 2.7a) Number of day surgery cases (patients with surgery performed in a hospital day surgery department) in Toronto hospitals.
- 2.7b) Number of day surgery cases (patients with surgery performed in a hospital day surgery department) by Toronto residents from Ontario hospitals per 1,000 area resident population.

### **Significance/Uses:**

- Indicator of cost-efficient delivery of surgical care for procedures that can be preformed on ambulatory basis.
- Use of day surgery allows reduction in number of acute hospital beds without compromising elective surgical care.
- Ratio of day surgery cases to number of surgical cases that are potential for day surgery can be compared to the Ontario Ministry of Health benchmark of 70%.

### **Limitations:**

- For 2.8a) it is difficult to calculate the rate as there is no consensus regarding the population base to be used for the denominator. This is confounded especially in urban areas with significant inflow and outflows.
- Adjustments for factors such as age, sex are required to allow for a fair comparison to other areas.

### **Sources:**

MOHLTC, Provincial Health planning Database.

## 2.7a Day Surgery Utilization in Hospitals in Toronto

Total Day Procedures and Day Surgery Procedures in Toronto Hospitals 1995/96 - 1999/00		
Fiscal Year	Total Day Procedures	Day Surgery Procedures
1995/96	254,256	204,464
1996/97	268,461	231,157
1997/98	277,280	244,556
1998/99	270,488	241,123
1999/00	281,347	249,369

Day Procedures Performed in Hospitals in Toronto by Patient Residence 1995/96 - 1999/00		
Fiscal Year	Toronto Residents	Non- Toronto Residents
1995/96	187,971	66,285
1996/97	195,690	72,774
1997/98	200,235	77,045
1998/99	194,277	76,211
1999/00	202,669	78,678

Day Surgery Procedures Performed in Hospitals in Toronto by Patient Residence 1995/96 - 1999/00					
Fiscal Year	All Day Surgery Procedures	Toronto Residents	%	Non-Residents	%
1995/96	204,464	149,802	73.3%	54,662	26.7%
1996/97	231,157	167,447	72.4%	63,710	27.6%
1997/98	244,556	176,822	72.3%	67,734	27.7%
1998/99	241,123	173,871	72.1%	67,252	27.9%
1999/00	249,369	180,295	72.3%	69,074	27.7%

### Key Findings:

- Between 1995/96 and 1999/00, the total number of day procedures performed in hospitals in Toronto increased by about 11%.
- Surgical procedures account for more than 80% of all day procedures.
- Between 1995/96 and 1999/00, the total number of day surgery procedures performed in hospitals in Toronto increased by about 22%.
- Between 1995/96 and 1999/00, the total day procedures performed on Toronto residents increased by 8% as opposed to 19% for non-residents.
- The majority of day surgery procedures performed in Toronto hospitals are for residents (72% vs. 28% for non-residents).

- Between 1995/96 and 1999/00, the total number of day surgery procedures performed in Toronto hospitals for Toronto residents increased by about 20% as opposed to 26% for non-Toronto residents.

The large in-flow of patients to Toronto hospitals for out-patient surgery requires planning. This would require some co-ordination with GTA hospitals to determine their capacity to provide day surgery, and any planned program changes. As the GTA hospitals may not achieve 100% of their own resident volumes, the inflow for day procedures will continue for Toronto hospitals.

**2.7b Day Surgery Utilization of Ontario Hospitals by Toronto Residents**

<b>Total Day Procedures and Day Surgery Procedures Undergone by Toronto Residents in Ontario Hospitals 1995/96 - 1999/00</b>				
<b>Fiscal Year</b>	<b>Total Day Procedures</b>	<b>Day Surgery Procedures</b>	<b>Rate of Day Procedures/1,000 pop</b>	<b>Rate of Day Surgery/1,000 pop</b>
<b>1995/96</b>	193,472	154,144	80	63
<b>1996/97</b>	201,777	172,624	82	70
<b>1997/98</b>	206,845	182,495	83	73
<b>1998/99</b>	201,116	179,736	80	72
<b>1999/00</b>	215,919	192,057	86	76

<b>Day Procedures Undergone by Toronto Residents in Ontario Hospitals, by Hospital Location 1995/96 - 1999/00</b>		
<b>Fiscal Year</b>	<b>Toronto Hospitals</b>	<b>Non-Toronto Hospitals</b>
<b>1995/96</b>	187,971	5,501
<b>1996/97</b>	195,690	6,087
<b>1997/98</b>	200,235	6,610
<b>1998/99</b>	194,277	6,839
<b>1999/00</b>	202,669	13,250

<b>Day Surgery Undergone by Toronto Residents in Ontario Hospitals, by Hospital Location 1995/96 - 1999/00</b>					
<b>Fiscal Year</b>	<b>Total Day Surgery</b>	<b>Toronto Hospitals</b>	<b>%</b>	<b>Non-Toronto Hospitals</b>	<b>%</b>
<b>1995/96</b>	154,144	149,802	97.2%	4,342	2.8%
<b>1996/97</b>	172,624	167,447	97.0%	5,177	3.0%
<b>1997/98</b>	182,495	176,822	96.9%	5,673	3.1%
<b>1998/99</b>	179,736	173,871	96.7%	5,865	3.3%
<b>1999/00</b>	192,057	180,295	93.9%	11,762	6.1%

<b>Day Surgery Standardized Rate for GTA Residents by Region, 1999/00</b>			
<b>Fiscal Year</b>	<b>Day Surgery S Rate</b>	<b>Lower CI</b>	<b>Upper CI</b>
<b>Durham</b>	99.7	98.2	100.5
<b>Halton</b>	99.5	98.5	100.4
<b>York</b>	89.2	88.6	89.9
<b>Peel</b>	83.0	82.4	83.5
<b>Toronto</b>	80.5	80.2	80.8

**Key Findings:**

- Between 1995/96 and 1999/00, the total number of day procedures performed on Toronto residents in all hospitals in Ontario increased by about 12%.
- The majority of Toronto residents who underwent day surgery did so in Toronto hospitals.
- Between 1995/96 and 1999/00, the rate of day surgery procedures for Toronto residents per 1,000 population increased.
- The rate of day procedures for Toronto residents per 1,000 population increased by 7.5%, while that of day surgeries increased by 20.0% between 1995/96 and 1999/00.
- In 1999/2000, Toronto residents' day surgery standardized rate was the lowest in comparison to other GTA residents (York, Halton, Peel, and Durham). Durham and Halton had the highest day surgery S-rate, followed by York and Peel.

## **IV) Community Care**

### **2.8 In-Home Care Utilization**

## 2.8 In-Home Care Utilization (CCACs, Community Support and Supportive Housing)

### Definition:

2.8a) Number of clients, units of service and average service units per CCAC (formerly Home Care and Placement Coordination Services (PCS) client by type of home care service, and per 1,000 resident population of a given area.

Updated information was not available for other indicators in this section, which have not been included in this report:

2.8b) Number of clients and units of service for community support services by type of service.

2.8c) Number of supportive housing clients.

2.8d) Number of LTC places per 1,000 population 75 years and older.

Please refer to the First Annual Toronto Health System Monitoring Report, 1999.

**Community Care Access Centres (CCACs)** are not-for-profit community agencies responsible for the direct provision of information and referral services, placement coordination and case management; and for the indirect delivery (through contracts) of professional services (e.g. nursing, occupational therapy, physiotherapy, social work, nutrition and speech and language therapy (SPLT), and personal support/homemaking services (e.g. bathing, dressing, laundry) on behalf of individuals living in the community.

**Community Support Services** are non-professional services provided to individuals in the community - in their own homes or in other places in the community. They include transportation, meals-on-wheels, diners club, adult day service, home maintenance and repair, friendly visiting, security checks, caregiver support, respite care, home help, foot care, emergency response systems, life skills services, intervention and assistance services. They are provided by not-for-profit and for-profit community agencies.

**Supportive Housing Service** (as funded by the MOHLTC) is a support service which provides homemaking, personal support and/or attendant service to individuals who live in congregate settings. The personal support/attendant component of the service is available 24 hours a day.

### Significance/Uses:

- With the move away from institutionalization and shorter lengths of stay in hospital, more people are receiving care in the community.
- Indicator of the various types of in-home care services that measures level of support care (funded by the government) an area resident population is receiving, and changes in those service levels over time.

### Limitations:

- The data does not reflect service performance or the outcome of service, which is the stated goal of the MOHLTC. Work is currently in progress to move to that approach.
- Indicator does not capture provision of informal and family support provided as in-home care support.
- The quality and stability of the In-Home Care information system needs to be confirmed.
- There have been numerous program changes and changes in service definition, since 1995.

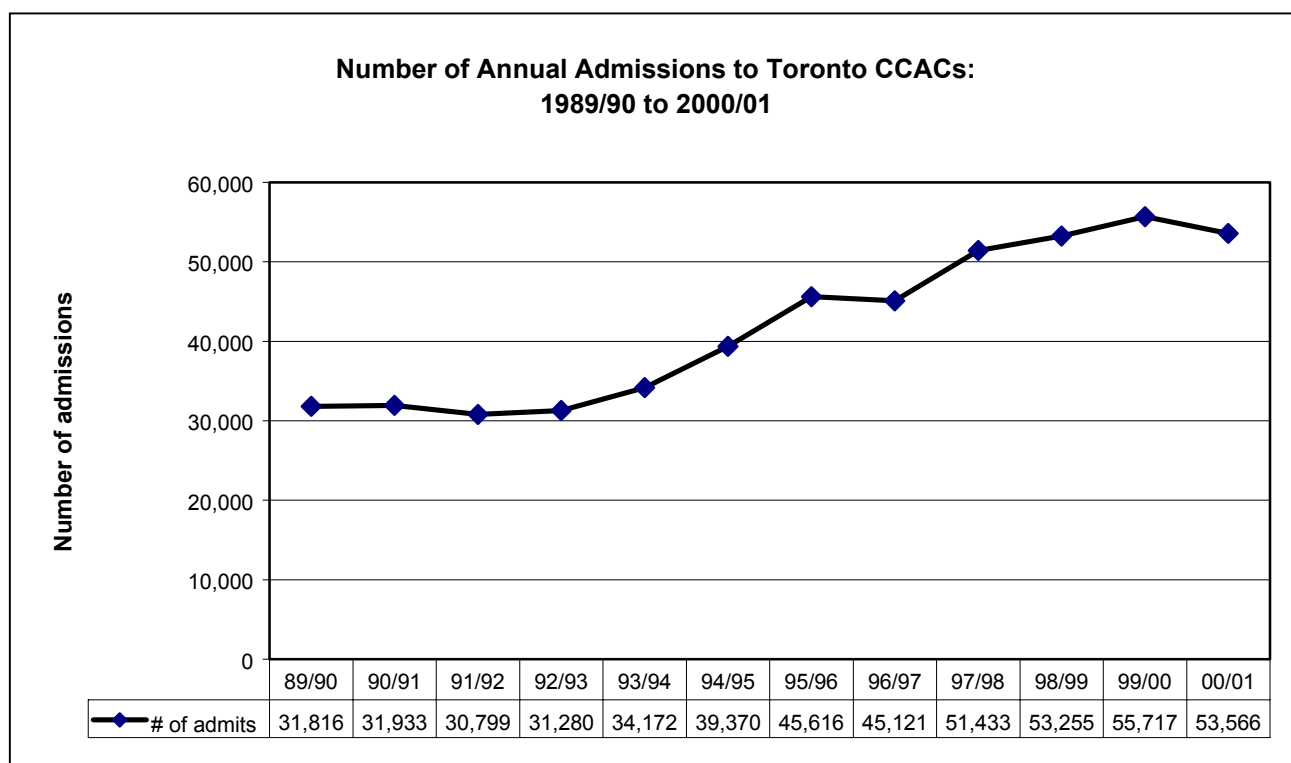
### Sources:

MOHLTC, Long-Term Care Division.

### HSRC Benchmarks:

LTC Places: 215.3 places/1,000 population 75 +

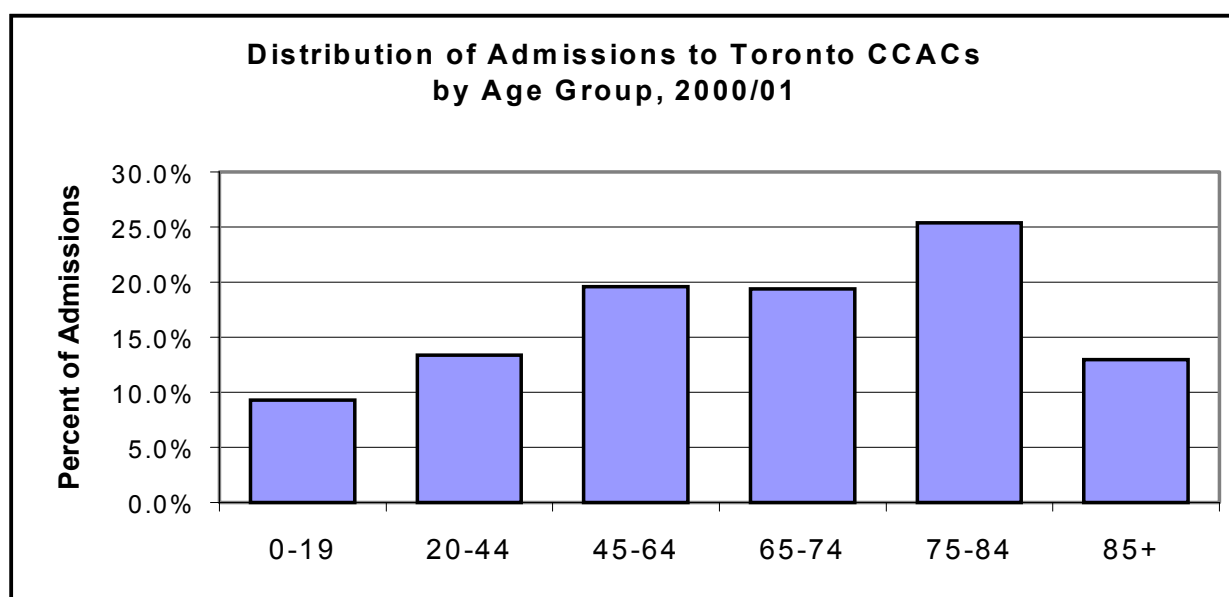
## 2.8a Utilization of CCACs (formerly Home Care) in Toronto



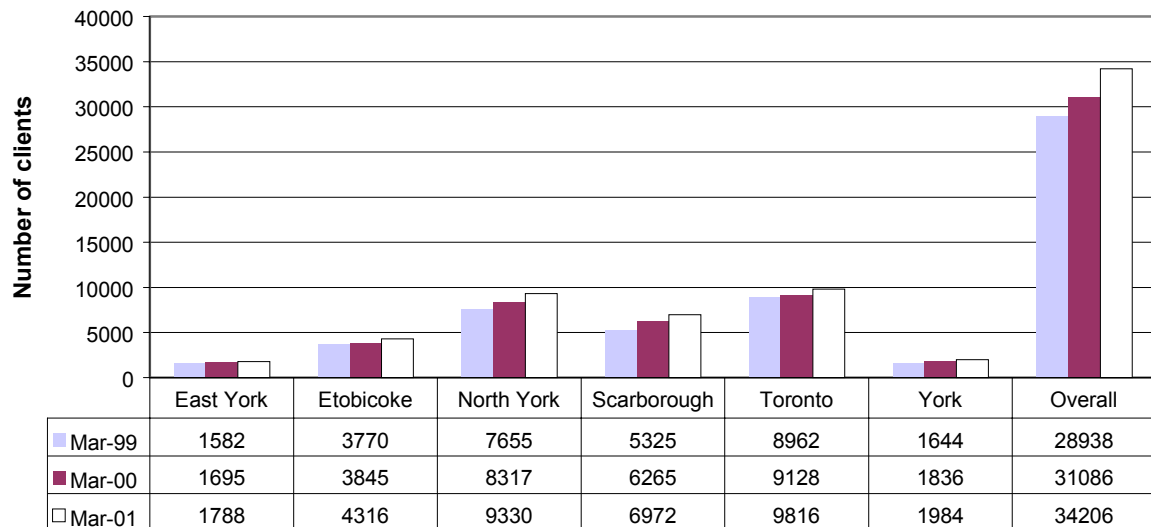
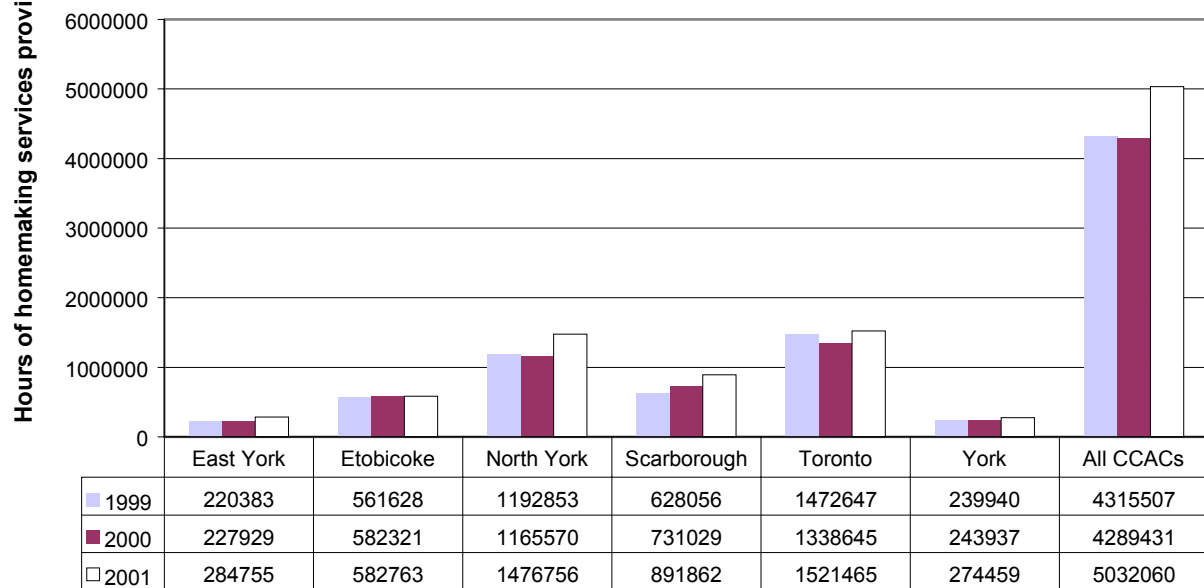
Number and Rate of Homecare Admissions for the City of Toronto, 1992/93 - 2000/01		
	#	Rate/1,000 Pop
1992/93	31,280	13.2
1993/94	34,172	14.3
1994/95	39,313	16.5
1995/96	45,616	16.8
1996/97	45,121	18.3
1997/98	51,433	20.6
1998/99	53,067	20.9
1999/00	55,717	21.1
2000/01	53,566	21.3

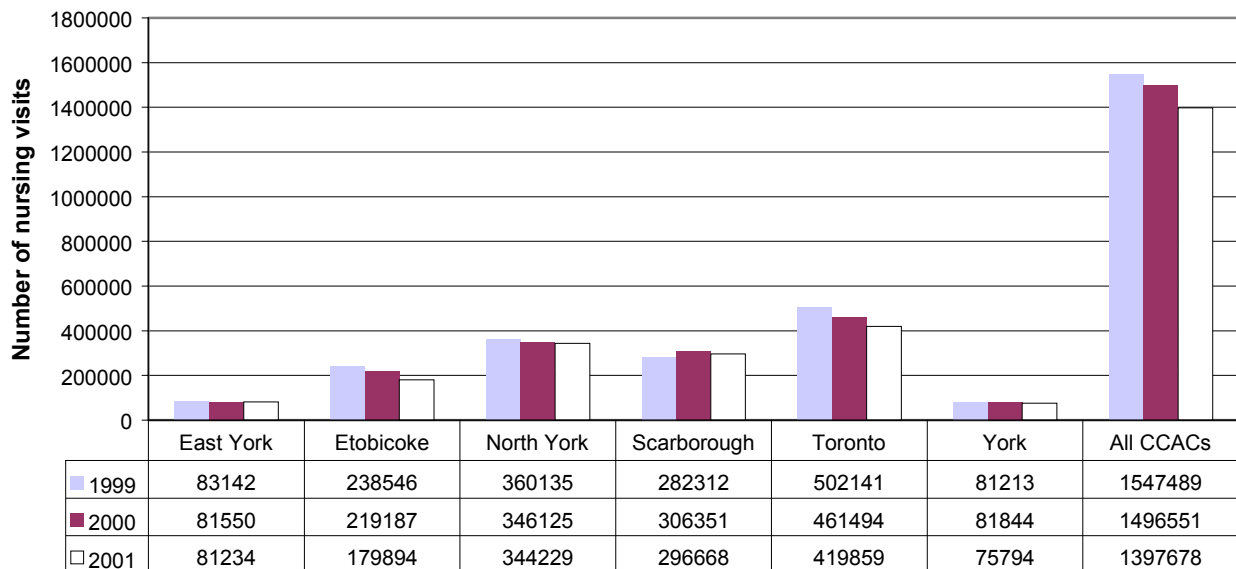
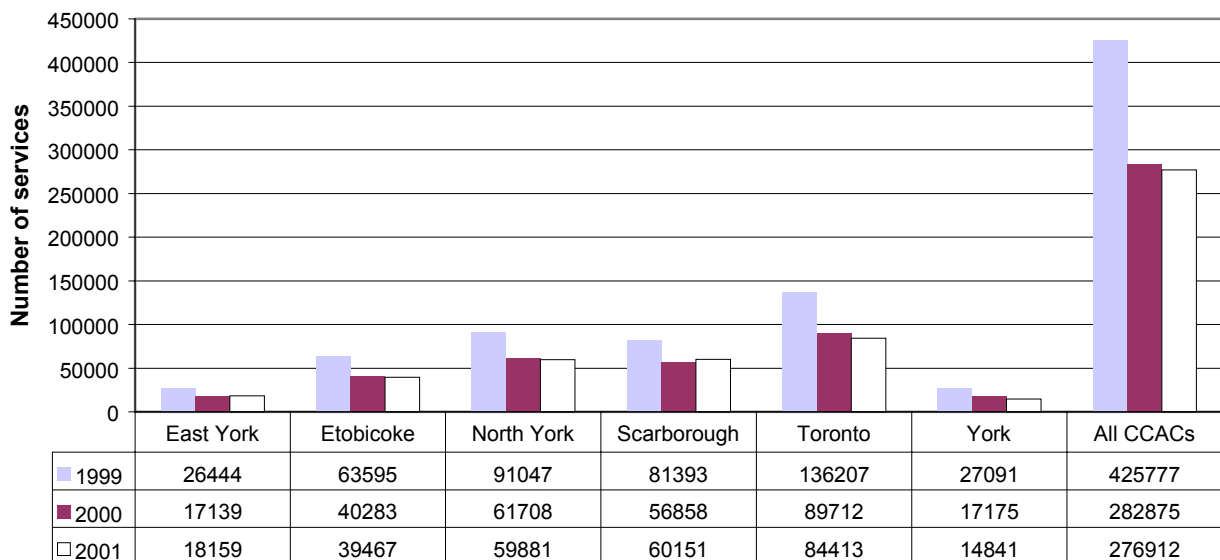
Percentage of Admissions to CCACs by Gender						
	Female		Male		Total	
	#	%	#	%	#	%
1998/99	30726	57.7%	22529	42.3%	53255	100%
1999/00	32199	57.8%	23511	42.2%	55710	100%
2000/01	31120	58.1%	22443	41.9%	53563	100%





Percentage of 1999/00 Admissions to Toronto CCACs by Age Group, 1998/99 to 2000/01			
Age group	1998/99	1999/00	2000/01
0-19	9.4%	9.7%	9.3%
20-44	14.3%	14.0%	13.4%
45-64	19.2%	19.8%	19.6%
65-74	20.3%	20.0%	19.4%
75-84	24.6%	24.2%	25.4%
85 +	12.1%	12.3%	13.0%
Unknown	0.0%	0.0%	0.0%
Total # of Admissions	53,255	55,717	53,566

**Snapshot of active clients in March 1999, 2000 and 2001: Toronto CCACs**

**Hours of Homemaking services provided by CCACs: Fiscal 1999 - 2001**


**Number of nursing visits: Fiscal 1999 - 2001**

**Number of non-homemaking, non-nursing services provided by CCACs: Fiscal 1999 - 2001**


## **Key Findings:**

### ***Admissions***

- The number of admissions to Toronto CCAC case-loads shows a marked increase over the past 10 years. Although the trend shows an increase of 71.3% (between 1992/93 and 2000/01 from 31,280 clients to 53,566), there was a slight decrease in the number of clients between 1999/00 and 2000/01. The increase in numbers also translated to an increase in the rate of admissions per 1,000 persons. Admission rates increased from 13.2 admissions per 1,000 total population in 1992/93 to 21.0 per 1,000 in 2000/01. It should be noted that the data collection process changed when home care services were transferred to the CCACs in 1997 and information is no longer collected in the same way. The observed increase in admissions may be a reflection of the impact of changes which have occurred in the hospital sector (such as hospital closures and mergers, the significant reduction in length of stay, as well as the increased use of day surgery). These changes mean that people discharged from hospitals may require more home care services and other kind of services in the community sector.
- From 1998/99 to 1999/00, there was a 4.6% increase in the admission rate for Toronto CCACs. However, during 1999/00 to 00/01, there was a 4% drop in the rate. Several major changes have occurred in the CCAC area in terms of funding since 1998. There has been a decrease in funding to the CCACs resulting in decreased admissions and services. However, it is too early to tell whether the decline in admissions observed in 2000/01 will be sustained over time.

### ***Gender Distribution***

- More women than men are admitted to CCACs. Women account for almost 60% of all admissions to CCACs for the years 1999/00 to 2001/02. The slightly higher admission rates amongst women may be attributable to the larger number of women living alone without spouses because of the higher mortality rate among males (the higher mortality rate results in a shorter lifespan for males).

### ***Age Distribution***

- An examination of CCAC admissions broken down by age breakdown shows that approximately 77% of new CCAC clients are 45 years of age or older while about 57% of new CCAC clients are 65 years of age or older. Just under 10% of new clients are children and young adults, and another 14% are under the age of 45. The proportions for the different age groups have remained fairly constant over the three years for which data were available broken down by age.

### ***Number of Active Clients and Service Type***

- Active clients are those clients who are actually using in-home service programs, and includes both new admissions to CCAC programs as well as those who have continued with services. Data on active clients were only available for three fiscal years (1999, 2000 and 2001). The data provides a “snapshot” of the number of clients using CCACs in a particular month. However, it does not capture month-to-month variations.
- Between 1999 and 2001, there was an 18% increase in the number of active clients for Toronto CCACs, from 28,938 to 34,206. All the six CCACs experienced increases during this period.

- An examination of utilization focused mainly on homemaking and nursing because these account for the majority of services provided by CCACs. The type of services used by clients varied slightly during this period\*.
- From 1998/99 to 2000/01, the number of homemaking hours delivered to clients in the community increased from approximately 4.3 million to just over 5 million. By contrast, the number of nursing visits provided by the CCACs to clients in the community has decreased from 1998/99 to 2000/01: from approximately 1.5 million visits to 1.4 million visits. This trend of increasing homemaking hours and decreasing nursing visits is consistent with that observed in analysis of earlier data captured in the *First Annual Toronto Health System Monitoring Report*.

This may be related to changes in the type of clients requiring home care services. It is interesting to note that although the portion of clients using nursing services declined, the average number of nursing visits/client increased during this period (i.e. 1992/93-1995/96). With shorter lengths of hospital stay, and earlier discharge, patients in the home or community may require more complex care.

---

\* It is difficult to compare homemaking with all other services because figures on homemaking are measured in hours while all other services are recorded in terms of number of visits.

## 2.8b Long-Term Care Community Utilization

The Health Service Restructuring Commission (HSRC) attempted to articulate a methodology for estimating the need for community-based services in Ontario. In Toronto the methodology was used to identify the need for 4,182 new places consisting of home care, adult day programs, attendant care outreach and supportive housing. However, benchmarks for these individual services were not identified.

While laudable as a first attempt at benchmarking long-term care community services, this approach requires considerable refinement for application at the local level. Currently, this methodology, if used at all, is being applied with great caution.

**Please Note:** We only have the information available for one year as reported by HSRC which is reported in the following section. More work is needed in this area.

MOHLTC Funded LTC Places per 1,000 Population 75 + Toronto and Ontario, 1995/96				
	Supportive Housing	LTC Home Care	Community Supportive Housing	Total Long-Term Care
	Places	Equivalent places	Equivalent places	Places
<b>Toronto</b>	17.2	65.2	5.6	88 (186.7)
<b>Ontario</b>	15.2	81.8	7.7	104.7 (221.8)

Source: HSRC, Change and Transition: Planning Guidelines and Implementation Strategies for Home Care, Long-Term Care, Mental Health, Rehabilitation, and Sub-acute Care, 1998

The HSRC converted total units of service to equivalent places as follows:

- a) Adult Day Care: The unit of service is one full day equivalent. An assumption was made that an adult day service client received an average of 3 units of service per week. An adult day service equivalent place is equal to 156 units of service.
- b) Attendant care: The unit of service is one hour of service. An assumption was made that an attendant service client will receive an average of 14 units of service per week. An adult day service equivalent place equals 728 units of service.



## **V) Ambulatory Care**

### **2.9 Emergency Department Utilization**



## 2.9 Emergency Department Utilization

**Definition:**

Number of visits to hospital emergency department(s) in Toronto in each year.

**NB:** Rates could not be calculated because emergency departments are used by both Toronto residents and non-residents, and the data is not broken down by place of residence.

**Significance/Uses:**

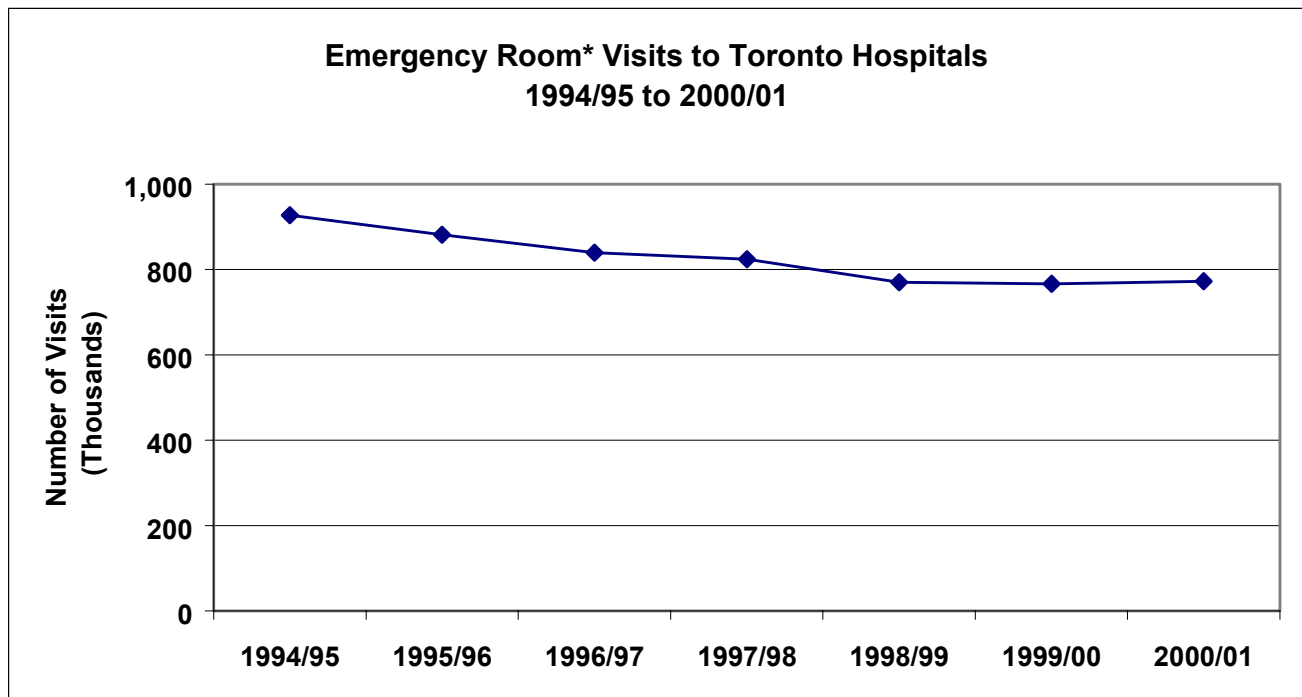
- Indicator of in-hospital emergency care available to a given area population.
- Comparisons over time and place-to-place.
- Indicator of emergency department services provided to a given area population.
- Indicator of case workload handled by hospital emergency departments.

**Limitations:**

- Indicator does not capture the waiting time in emergency departments.
- It does not measure volume of patients awaiting admission to hospital in-patient care.
- It does not measure times when the emergency department does not accept new critical care cases or goes on re-direct status for ambulance transfers.
- Major trauma centres handle emergency cases from outside of their local area, so this will over/under estimate area utilization rates based on resident population.
- Data for smaller hospitals may also include out-patient clinic visits; however, this is not believed to be a factor in Toronto.
- Does not capture severity or urgency of visit.
- Data included treatments for in-patients needing urgent care during physician off-hours.

**Sources:**

MOHLTC, Management Information System (MIS).



\*The number of ER visits may include clinic visits at small hospitals that do not have a separate area for out-patient clinics.

### Key Findings:

- From 1994/95 to 1999/00, there were 20 hospitals with emergency rooms in Toronto. The number decreased to 12 (15 sites) in 1999/00. However, one hospital outside Toronto has an emergency department in Toronto (William Osler Health Centre-Etobicoke site).
- It should be noted that due to recent hospital mergers and amalgamations, the hospital corporations report only the total number of emergency visits and do not provide a break-down by site, which may lead to overestimation/underestimation of actual emergency visits in the respective area. For instance, the number of emergency visits to William Osler Health Centre-Etobicoke site was captured as data within the Peel region. On the other hand, the number of emergency visits to Rouge Valley Health System was captured under Toronto region, even though it includes visits to the Ajax and Pickering site which is located in Durham county.
- The number of visits to emergency departments in Toronto hospitals decreased from approximately 927,000 in 1994/95 to 772,000 in 2000/01, or 17% over the seven years. The decrease in number of visits to emergency departments might be related to the decrease in number of hospitals with emergency departments.



## **VI) Public Health**

### **2.10 Teen Pregnancy Rate**

## 2.10 Teen Pregnancy Rate

### **Definition:**

The total number of known pregnancies (i.e. live births, still births and therapeutic abortions) during a specified time period per 1,000 women aged 15-19.

### **Significance/Uses:**

- This indicator describes the reproductive activity among teenagers.
- This age-group is at risk of having premature and low birth weight (LBW) babies.
- There are concerns that access to birth control services may be affected by changes in the public health sector.
- Access to abortion services may be affected by changes to hospital policies resulting from mergers.
- Comparison over time and place-to-place.

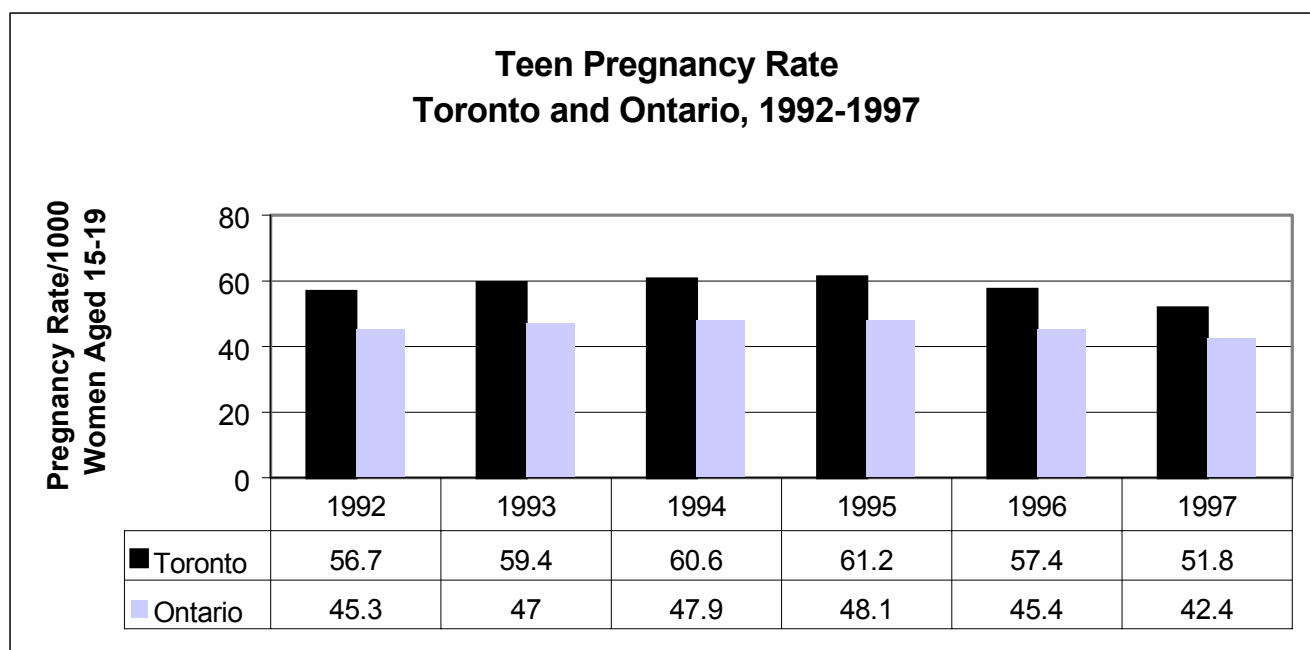
### **Limitations:**

- Multiple births are counted as one birth for each baby born alive during a given delivery.
- Clinic data for therapeutic abortions may not be accurate because addresses may not be captured adequately.
- Does not capture spontaneous miscarriages, which are very high in this age group.
- Users should be aware that there are data quality issues with the 1996 and 1997 abortion statistics. This may affect teen pregnancy rates for some DHC areas. The Public Health Branch advises that a single year's abortion data not be used. Instead, a centered moving average should be considered.

### **Sources:**

MOHLTC, Provincial Health Planning Database.

Health Planning System (HELPS) Database, MOHLTC, Public Health Branch (Therapeutic abortion data).



### Key Findings:

- Between 1992 and 1995, the teen pregnancy rate increased from 56.7 to 61.2 per 1,000 women age 15-19 in Toronto. However, the teen pregnancy rate decreased gradually to 51.8 per 1,000 in 1997. The decline observed in 1996 and 1997 may be partly due to data quality issues related to abortion data.
- The teen pregnancy rate for residents of Toronto is higher than Ontario.
- The pregnancy rate for Toronto teenagers in 1997 (i.e. 51.8 per 1,000 women 15-19) was 30% higher than the mandatory health programs target for the year 2005 (i.e. 40 per 1,000 women 15-19).
- The teen birth rate is approximately three times higher in the lowest income areas of Toronto than the highest income areas<sup>2</sup>.

### Public Health Initiatives

The following are selected activities carried out by Toronto Public Health to address the high rate of teen pregnancy in Toronto:

- There are 11 Sexual Health Clinics across Toronto, funded or provided in partnership with TPH which provide a total of 177.5 hours of clinical service per week. There were 40,062 visits for sexual health clinic services in 2000. Of these visits, 4,454 were made by 15-to 19-year-olds.

<sup>2</sup> Day, N., Fleischer, P., Basrur, S.V. (2001), Toronto's Health Status: A Profile of Public Health in 2001, Toronto Public Health

- These 11 clinics offer birth control education and low-cost or free contraceptives (including the emergency contraceptive pill, free male and female condoms), pregnancy testing and counseling, sexually transmitted disease testing and free treatment, as well as counseling related to relationships, sexual orientation, etc.
- Clinic services have undergone redesign to provide greater accessibility in areas of Toronto with high teen pregnancy rates.
- A city-wide adolescent peer-led pilot program in schools provides information and skill-building activities through an interactive sexual health fair. Clinic staff provide support to teachers in implementing the sexual health curriculum, and consultation to the school community re sexual health (i.e. referral to clinics).
- Distribute condoms and lubricant to community groups and are involved in researching the benefits of the female condom with particular populations.
- Social marketing is used in buses and subway cars to raise awareness about the use of *Emergency Contraceptive Pill (ECP)* in preventing unplanned pregnancy. “*What’s The Rush,*” a social marketing campaign for teens 15 and under, was designed to promote the postponement of sexual intercourse. TPH has collaborated with *The Toronto Star* to place over 40 sexual health messages on its telephone access system “*Starphone*” Messages:, with links back to the “AIDS and Sexual Health Infoline” – a counseling and information hotline.

## **B) Health Human Resources**

- 2.11 Health Human Resources
- 2.11a Physicians
- 2.11b Nurses
- 2.11c Physiotherapists/Occupational Therapists



## 2.11a Health Human Resources - Physicians

### Definition:

Number and rate of active specialists and non-specialists per 100,000 resident population.

The Ontario Physicians Human Resources Data Centre (OPHRDC) maintains an active registry of all licensed physicians practicing in Ontario. **Specialists** refers to physicians who meet the criteria set by the College of Physicians and Surgeons (CPSO) for the most recent specialty of Royal College of Physicians and Surgeons of Canada (RCPSC) certification. Remaining physicians billing OHIP in “general practice” are classified as general practitioners (GPs) and are labelled here as “non-specialists”. **Location** has been derived from the practice address as published in the Canadian Medical Directory, supplemented with information from the CPSO and data derived from the OPHRDC survey. Physician Age is calculated using (age on December 31 of the report year – birthdate)/365.2422

### Significance/Uses:

- Indicator of physicians as health care resources available to an area resident population.
- Comparison over time and across regions.
- Can be used to compare number of physicians to other estimates of physician supply, such as those billing OHIP.
- Useful for health human resources and physician planning.

### Limitations:

- Physician supply is measured using headcounts. These data do not capture all physician activity, such as worked hours per week, or volume of patients seen.
- These data may reflect a physician’s last acquired specialty certificate rather than current field of practice, and multiple specialties of practice are not captured.
- Individuals seeking care often use physicians whose activity is captured in another county, and likewise, physicians provide care to individuals who reside in a different county (inflow – outflow).
- Age, sex and morbidity profiles, which drive utilization, vary by county.
- These data do not reflect the differences in time spent in clinical practice vs. academic or administrative responsibilities.

### Source:

Active Physician Registries 1995-2000, Ontario Physician Human Resources Data Centre (OPHRDC): Prepared Population Estimates 1991-2000, prepared by Statistics Canada, Demography division, under contract for the Ontario Ministry of Finance and Ontario MOHLTC. Presented in CEHIP Population Cube, May 2001.

### Methodology Notes:

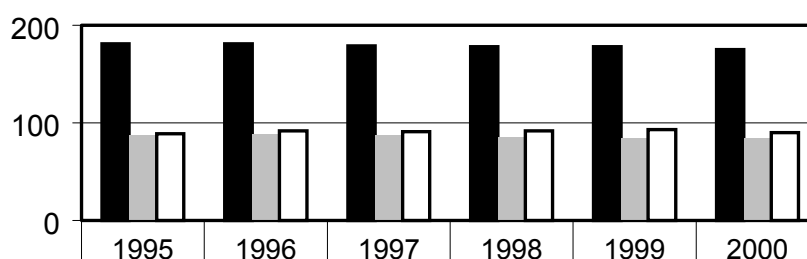
1. Rates use MOHLTC population estimates for the calendar years 1995-2000.
2. Please note that the population estimates used to calculate physician to population ratios are different than those used by OPHRDC for the denominator, and therefore, the rates are different. More information can be found at: <http://ophrdc.mcmaster.ca/>
3. Physicians are licensed by the College of Physicians and Surgeons of Ontario.

## Active Physicians in Toronto and Ontario

Total Active Physicians, Toronto and Ontario, 1995 - 2000						
	1995	1996	1997	1998	1999	2000
<b>Toronto</b>	6,588	6,717	6,754	6,787	6,742	6,684
<b>Ontario</b>	19,810	20,053	20,133	20,265	20,480	20,370

### Active Physicians per 100,000 Population Ontario, 1995-2000

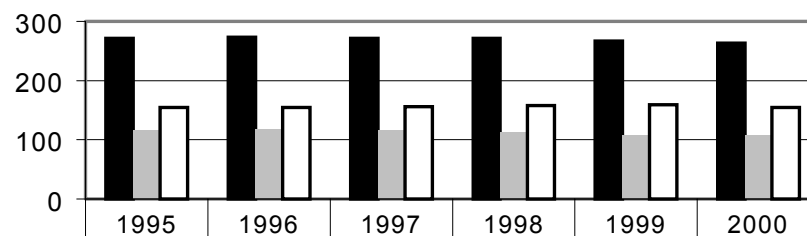
# of Active Physicians  
Per 100,000 Pop.



■ Total Physicians	181	181	179	178	178	175
■ Non Specialists	88	89	87	86	85	84
□ Specialists	89	92	91	92	93	90

### Active Physicians per 100,000 Population Toronto, 1995-2000

# of Active Physicians  
Per 100,000 Pop.



■ Total Physicians	271	273	271	271	267	263
■ Non Specialists	116	117	115	113	108	107
□ Specialists	155	155	156	158	159	155

<b>Total Active Physicians by Age Group - Toronto, 2000</b>					
	<b>25-39</b>	<b>40-54</b>	<b>55-64</b>	<b>65-85</b>	<b>Total</b>
<b>Non-Specialists</b>	656 (24%)	1,212 (44%)	543 (20%)	319 (12%)	2,730 (100%)
<b>Specialists</b>	779 (20%)	1,820 (46%)	833 (21%)	522 (13%)	3,954 (100%)
<b>Total</b>	1,435 (22%)	3,032 (45%)	1,376 (21%)	841 (13%)	6,684 (100%)

**Key Findings:**

- Between 1995 and 2000, the total number of active physicians in the City of Toronto represented about one-third (33%) of the total active physicians in Ontario. It should be noted that the City of Toronto accounts for less than 25% of Ontario's population.
- Toronto has a higher physician-to-population ratio than Ontario. Between 1995 and 2000, the total number of active physicians per 100,000 population in Toronto gradually decreased from 271 per 100,000 to 263/100,000 which was similar to the pattern for Ontario which went from 181/100,000 to 175/100,000.
- In 2000, approximately one-third of active physicians were in the retirement age range (i.e. 55-85 years). This was true for both specialists and non-specialists.
- Although the physician-to-population ratio is higher in Toronto, there is one major caveat. A considerable number of patients receiving care in Toronto are non-residents, making effective catchment area much larger than Toronto. This is not taken into account when discussing human resources per 100,000 resident population.

## 2.11b Health Human Resources - Nurses

### Definition:

- a) Number of registered nurses (RNs), registered practical nurses (RPNs), and registered nurses, extended class (RNECs), by status of employment and place of employment by county.
- b) Number of total RNs, RPNs and RNECs employed in Toronto, per 100,000 area resident population.

### The Extended Class RN:

These are RNs who have received specific education in the provision of primary care and are able to perform some of the diagnostic and treatment functions that were previously the exclusive domain of physicians. Although nurse practitioners (NPs) have existed for some time, their status has only recently been recognized and clarified in provincial legislation. The Expanded Nursing Services for Patients Act was passed in 1997 and proclaimed as law in 1998. Soon after, the College of Nurses of Ontario (CNO) began registering RNs in a new class – the Extended Class (EC) - acknowledging the advanced knowledge and decision-making skills of RNECs. At present, only primary health care nurses are eligible for registration in the Extended Class, although work is underway to develop an Extended Class role in acute care. RNECs offer comprehensive health services encompassing health promotion, prevention of diseases and injury, cure, rehabilitation and support services. They have an extended scope of practice in the areas of assessment, diagnosis, prescription of drugs and treatments, and health promotion. Accordingly, they are often seen in community health centres and remote nursing stations.

### Significance/Uses:

- Indicator of nurses as health care resources available to an area resident population.
- Comparison over time and across regions.
- Compare number of nurses to other estimates of nursing supply.
- Useful for health human resources planning.

### Limitations:

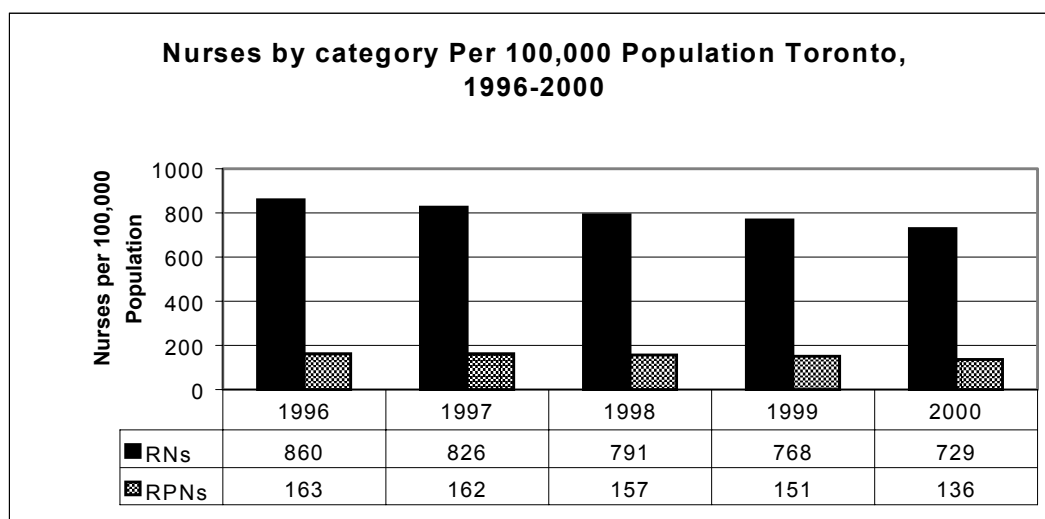
- The CNO statistical database is created from information collected from individual member annual forms. This information is self-reported by members and there is minimal editing or verification of the data. It is important to note that for each year there are a number of members who do not provide employment information or members who are employed in nursing but do not provide their business address. This group is comprised of members who do not provide any employment information and those individuals registering for the first time (initial members). Hence there may be individuals from this group who are employed/not employed in nursing in or outside of Ontario who are not represented in the employment data.

### Source:

College of Nurses of Ontario.

Population Estimates 1991-2000, Statistics Canada, Demography division, under contract for the Ontario Ministry of Finance and MOHLTC. Presented in CEHIP Population Cube, May 2001.

## Nurses Employed in Toronto Health Care Sector



Nurses Employed in Toronto, by Category and Status of Employment 1996 and 2000*								
Employment Status	Registered Nurses				Registered Practical Nurses			
	1996		2000		1996		2000	
	#	%	#	%	#	%	#	%
Regular full-time	12,318	58.2%	11,509	62.1%	2,349	58.5%	1,940	56.2%
Regular part-time	5,260	24.8%	5,179	27.9%	951	23.7%	1,035	30.0%
Casual	3,194	15.1%	1,804	9.7%	579	14.4%	465	13.5%
Not specified	399	1.9%	54	0.3%	138	3.4%	14	0.4%
<b>Total nurses</b>	<b>21,171</b>	<b>100.0%</b>	<b>18,546</b>	<b>100.0%</b>	<b>4,017</b>	<b>100.0%</b>	<b>3,454</b>	<b>100.0%</b>

\*RNEC not included

Registered Nurses Employed in City of Toronto, by Employing Institution 1996 – 2000*										
Employing Institution	1996		1997		1998		1999		2000	
	#	%	#	%	#	%	#	%	#	%
Hospitals	14,544	68.7	13,779	67.0	12,991	65.5	12,697	65.5	12,533	67.6
LTC facilities	1,363	6.4	1,435	7.0	1,338	6.7	1,316	6.8	1,201	6.5
Community*	1,804	8.5	1,945	9.5	1,833	9.2	1,891	9.8	1,744	9.4
Other**	3,072	14.5	3,299	16.0	3,371	17.0	3,376	17.4	3,021	16.3
Not specified	388	1.8	114	0.6	314	1.6	101	0.5	47	0.3
<b>Total</b>	<b>21,171</b>	<b>100</b>	<b>20,572</b>	<b>100</b>	<b>19,847</b>	<b>100</b>	<b>19,381</b>	<b>100</b>	<b>18,546</b>	

\* Community includes: (public health, home care, visiting nursing, community health centres, community care access centres and community agencies).

\*\*Other includes: (physicians office, educator, government or association, self-employed or independent practice, employment agency, nursing station, mental health or telemedicine).

\*\*\*RNEC not included

Registered Practical Nurses Employed in City of Toronto, by Employing Institution 1996 – 2000***										
	1996		1997		1998		1999		2000	
Employing Institution	#	%	#	%	#	%	#	%	#	%
Hospitals	2,727	67.9	2,715	67.4	2,463	62.5	2,314	60.9	2,122	61.4
LTC facilities	606	15.1	652	16.2	624	15.8	725	19.1	709	20.5
Community*	248	6.2	267	6.6	245	6.2	254	6.7	235	6.8
Other**	284	7.1	342	8.5	454	11.5	469	12.3	365	10.6
Not specified	152	3.8	55	1.4	154	3.9	37	1.0	23	0.7
Total	4,017	100	4,031	100	3,940	100	3,799	100	3,454	100

\* Community includes: (public health, home care, visiting nursing, community health centres, community care access centres and community agencies).

\*\*Other includes: (physicians office, educator, government or association, self-employed or independent practice, employment agency, nursing station, mental health or telemedicine).

\*\*\*RNEC not included.

### Key Findings:

- Between 1996 and 2000, the total number of nurses employed in Toronto decreased by 12% (from 25,188 to 22,065).
- The nurse-to-population ratio in Toronto decreased from 860/100,000 in 1996 to 729/100,000 in 2000. Similarly registered nurses in Toronto experienced a steady decline from a rate of 724/100,000 in 1996 to 630/100,000 in 2000.
- The majority of nurses employed in Toronto are Registered Nurses (RNs) (i.e. 84% vs. 16% for RPNs in 1996). Between 1996 and 2000, the number of RNs decreased by approximately 12% compared to 14% for RPNs. In 2000, the proportion of RNs was 84.1%. This proportion is higher than the provincial average of 76-77%. The higher proportion of RNs in the City of Toronto may be due to the higher proportion of tertiary care facilities in Toronto compared to other areas in the province.
- Registered nurses (extended class) (RNEC) or Nurse Practitioners were officially recognized in Ontario in 1998. In 1999, there were 60 RNEC in Ontario, increasing to 65 in 2000 (representing 0.3% of the total nurses).
- A trend observed in the nursing field in recent years has been the increase in the proportion of nurses employed full-time and part-time and decrease in the proportion of casual and not specified status. A comparison of 1996 and 2000 employment status for nurses showed that for RNs the proportion of regular full-time and part-time nurses increased (from 58% to 62% for full-time, and 25% to 28% for part-time). However, the proportion of casual nurses decreased from 15% to 10% and the not specified status from 2% to 0.3%. An opposite trend was observed for the RPNs with respect to regular full-time, however, the part-time increased and the casual proportion decreased slightly. For the RNEC, the majority (71%) were employed full-time, 25% were part-time and 0.5% were casual.
- The majority of RNs and RPNs in Toronto are employed in the hospital sector. Between 1996 and 2000, the proportion of nurses employed in the hospital sector decreased slightly, while that for the community sector and "other" sectors increased slightly. The changes were greater for RPNs

than the RNs. Nearly 70% of RNECs in Toronto were employed in the community, while 18% were in hospitals and 12% in other areas.

- The College of Nurses of Ontario (CNO) annual database does not completely capture information on unemployed nurses since only nurses who are employed in nursing are required to maintain current membership in order to practice in Ontario. Unemployed nurses may choose to pay annual fees, but are not obligated to do so until they practice nursing, at which time they may reinstate their membership. This means that the database on nursing unemployment is likely to underestimate true numbers. In addition, as many of Toronto's nurses live outside the Toronto area, the total unemployed nursing pool cannot be predicted from the number of unemployed nurses living in Toronto and who decide to voluntarily maintain active membership in the CNO.

## 2.11c Health Human Resources - Physiotherapists and Occupational Therapists

**Definition:**

- a) Number and rate of hospital physiotherapist FTEs/100,000 population, in Toronto.
- b) Number and rate of hospital occupational therapist FTEs/100,000 population, in Toronto.

**Significance/Uses:**

- Estimate FTEs by DHC.
- Planning for health needs and services.
- Comparison over time and place-to-place.

**Limitations:**

- Only three years available.
- Only shows hospital-based human resources.
- Hours worked includes direct patient care, indirect care, and non-patient care.

**Source:**

Ontario Hospital Reporting System (MIS) Version 3.

Workload hours are from Ontario Hospital Resources System (MIS data). FTEs are hours divided by 1950. Population data are from Statistics Canada and MOHLTC.



Number and Rate of Hospital Physiotherapist FTEs per 100,000, Toronto and Ontario, 1996/97 to 1998/99				
	Toronto		Ontario	
	FTE	FTE/1,000 Population	FTE	FTE/1,000 Population
1996/97	471.45	19.15	1,544.94	13.92
1997/98	435.98	17.50	1,444.29	12.84
1998/99	364.85	14.54	1,304.97	11.46

Number and Rate of Hospital Occupational Therapist FTEs per 100,000, Toronto and Ontario, 1996/97 to 1998/99				
	Toronto		Ontario	
	FTE	FTE/1,000 Population	FTE	FTE/1,000 Population
1996/97	257.68	10.46	706.22	6.36
1997/98	243.62	9.78	659.60	5.86
1998/99	210.79	8.40	627.69	5.51

### Key Findings:

The number of FTEs for physiotherapists and occupational therapists working in hospitals is available from the Ontario Hospital Resources System (MIS data). Although these numbers do not give the complete picture of the total physiotherapists and occupational therapists in the members of health care system, they are an important component as the hospital sector employs a large number of these two allied professional groups.

#### *Physiotherapists*

- Between 1996/97 and 1998/99, there was a 23% decrease in the number of physiotherapist FTEs for Toronto hospitals (from 471.4 to 364.9). This was also associated with a decrease in the FTE rate (from 19.2 to 14.5/100,000 population).
- A similar trend of declining FTE numbers and rates was observed in Ontario hospitals as a whole between 1996/97 and 1998/99. However, the decrease in numbers for Ontario as a whole was less than that for Toronto (16% vs. 23%).

#### *Occupational therapists*

- Similar to the trend for physiotherapists, there was a declining trend in the number of occupational therapist FTEs in the Toronto hospital sector. Between 1996/97 and 1998/99, there was an 18% decrease in the number of occupational therapist FTEs for Toronto hospitals (from 258 to 211). This was also associated with a decrease in the FTE rate (from 10.5 to 8.4/100,000 population).
- During this period, there was also a declining trend in occupational therapist FTE numbers and rates in Ontario hospitals as a whole. However, the decrease in numbers for Ontario as a whole was less than that for Toronto (11% vs. 18%).

**Please Note:** Other allied health care professions have been excluded from this report because of lack of comprehensive data. The total lack of data for some health care professions (e.g. audiologists only keep an active list of their members and are not able to provide historical information at all) and partial data for others such as medical radiation technologists, occupational therapists and social workers (the available data represents approximately 30% of total number employed in Toronto), highlights the poor quality of available data on health human resources. This problem should be addressed since human resources account for a major portion of the health care budget and the information is crucial in planning for health care services in an area.

In 2002, the District Health Councils of Ontario received funding to conduct a province-wide Health Care Labour Market Survey. The study is intended to provide a snapshot of the current status of health human resources in Ontario and by DHC catchment area, focused on the experiences of provider agencies with recruitment and retention, factors affecting labour shortages in occupations, and perceived consequences of shortages.



## **C) Health Care Funding by Sector**

- 2.12 Health Care Expenditure by Sector
- 2.13 Health Care Expenditures – Public Health Care
- 2.14 Physician Claims

## 2.12 Health Care Expenditures by Sector

### Definition:

- a) Amount and proportion of Ministry of Health and Long-Term Care (MOHLTC) expenditures allocated by health care sectors, during a given fiscal year.

MOHLTC - funded health care sectors include:

- i) Hospitals (excluding provincial psychiatric hospitals)\*
- ii) Ontario Health Insurance Plan (OHIP) - (Fee-for-Service to Physicians/Practitioners, Alternate Payments and Others)
- iii) Long-Term Care (LTC) - (Community Based and Residential)\*
- iv) Mental Health (MH) - (Provincial Psychiatric Hospitals, Community MH agencies, Alcohol and Drug Dependency, Addiction Research Foundation, Homes for Special Care)
- v) Public Health (selected programs)\*
- vi) Drug programs (Ontario Drug Benefit Plan, Special Drug Program and Trillium Drug Program)
- vii) Emergency Services
- viii) Community Care Access Centres (CCACs)\*

Municipal government funded health sectors include:

- i) Public Health Programs
- ii) Ambulance services

NB: Data were only available for the sectors marked\*

- b) Per capita measure of expenditure for health care sectors, for a given fiscal year.

### Significance/Uses:

- Indicator of level of funding by the major health care sectors.
- Indicator of distribution of funding for health care to resident population of a given area.
- Useful in planning for different health sectors.
- Useful for monitoring the planned redistribution of health care resources as prescribed by health reform directives.
- Comparison over time and place-to-place.

### Limitations:

- The distribution of provincial health expenditure is generally done on the basis of the geographical location of the institution or service provider and is subject to assumptions contained in the health expenditure distribution model.
- Toronto health services cater not only to Toronto residents but also to residents of surrounding catchment areas. Hence, it is difficult to report per capita information for the City of Toronto as demographic data pertaining to non-Toronto residents cannot easily be determined.
- Some costs are assigned to geography regardless of place of actual expenditure.

### Source:

MOHLTC, Information, Planning and Evaluation Branch, MOHLTC Annual Report: Ontario Health Expenditures. Analysis of Expenditures by Major Programs, Counties and Health Districts. Fiscal Years 1989/90 - 1993/94.

Regional Offices, Ministry of Health and Long-Term Care for Fiscal Years 1999/00 – 2000/01.

MOH, Public Health Branch, Funding and Staffing Report for Ontario Boards of Health, 1994-1997.

<b>Ministry of Health and Long-Term Care Operating Expenditure (\$), Provincial and City of Toronto, 1991/92 – 1998/99</b>		
<b>Fiscal Year</b>	<b>Provincial (in millions)</b>	<b>City of Toronto (in millions)</b>
<b>1991/92</b>	16,525.2	5,063.7
<b>1992/93</b>	16,681.3	5,162.1
<b>1993/94</b>	17,147.7	5,278.1
<b>1994/95</b>	17,371.0	5,381.2
<b>1995/96</b>	17,607	N/A
<b>1996/97</b>	17,760	N/A
<b>1997/98*</b>	18,340	N/A
<b>1998/99**</b>	18,682	N/A

\* Interim Actual

\*\*Plan

Sources: 1991/92 to 1994/95 data from MOHLTC Annual Report: Ontario Health Expenditures. Analysis of Expenditures by Major Programs, Counties and Health Districts; 1995/96 to 1998/99 provincial data from Ontario MOHLTC, Ontario Health Report to Taxpayers, Vol. 1. No. 1, Summer 1998.

<b>Ministry of Health and Long-Term Care Expenditure by Major Programs for Toronto, 1999/00 to 2000/01</b>				
	<b>1999/00</b>		<b>2000/01</b>	
	<b>\$</b>	<b>%</b>	<b>\$</b>	<b>%</b>
<b>Hospitals</b>	\$2,473.9	73.0%	\$2,733.9	72.8%
<b>Total LTC</b>	\$401.9	11.9%	\$434.0	11.6%
LTC Agencies	\$101.9	3.0%	\$116.1	3.1%
LTC Facilities	\$300.0	8.9%	\$317.9	8.5%
<b>Community MH Agencies</b>	\$300.7	8.9%	\$345.2	9.2%
<b>CCAC</b>	\$212.8	6.3%	\$242.4	6.5%
<b>Total</b>	\$3,389.3	100.0%	\$3,755.5	100.0%

### Key Findings:

Timely data regarding health expenditure is not available in our 1999 report (*First Annual Toronto Health System Monitoring Report Card*). We presented the data available at that time for expenditure breakdowns in Toronto up to 1994/95 and tried to capture whatever was available to present a comprehensive picture of expenditures for different health sectors; therefore varying years were presented in that report. For more recent years only provincial level data was provided. For this report, consistent updated data were not available, hence some of the historic data have not been included in this report and we have presented only the two years of data (1999/00 and 2000/01) provided.

Information on per capita utilization is not shown, as health services are provided in the City of Toronto not only to Toronto residents but also to residents of surrounding catchment areas (e.g. 905 GTA). Hence, the figure for total population that is required for the calculation of health expenditure per person is unknown.

- Health expenditures in the City of Toronto represent approximately 30% of the provincial health operating expenditures. Provincial health spending has increased by \$1 billion since 1995/96,

with the biggest increase occurring in fiscal years 1997/98 and 1998/99 for which data were available. Toronto was scheduled to receive a proportionally increase, especially in the long-term sector.

Updated information was only available for selected sectors: hospitals, LTC, community MH agencies and CCACs.

An examination of health expenditures by health sector indicates the following:

- Funding for all health care sectors increased between 1999/00 and 2000/01.
- Hospitals (excluding psychiatric hospitals) constitute the largest proportion of health care spending (73%). From 1999/00 to 2000/01, there was an 11% increase (\$260 million) in provincial funding for the hospital sector. This trend of increased hospital funding has been apparent since 1996. For several years prior to 1996, there had been a gradual decrease in hospital expenditure, (6.3% between 1992/93 and 1996/97).
- With respect to the long-term care sector (including community agencies and residential), there was minimal change in terms of the proportion of health care budget spent between 1999/00 and 2000/01. This sector experienced an 8% increase between those two years (14% for community agencies and 7% for LTC facilities). The increase in the percentage for Long-Term Care may be attributed, for the most part, to the implementation of Long-Term Care Reform. However, there is not enough information to determine whether this is sufficient to meet the targets set by HSRC.
- Community mental health agencies experienced a 15% (\$45 million) increase in funding between 1999/00 and 2000/01.
- Community Care Access Centres (CCACs) have the lowest amount of funding among the health care sectors for which information was available. Funding for CCACs increased by 14% between 1999/00 to 2000/01, from \$212.8 million to \$242.4 million.

## 2.13 Health Care Expenditures - Public Health Care

### Definition:

Amount of MOHLTC funding for Public Health Care, during a given calendar/fiscal year.

- a) Mandatory Health Programs shared expenditure 50/50 by MOHLTC and Municipal government
- b) Special Health Public Health Programs funded 100% by MOHLTC:
  - Public Health Research and Development Program
  - Unorganized Programs
  - Preschool and Language program
  - Speech and Audiology program

### Significance/History:

- Prior to 1998, expenditure for public health branch funded programs was reported in the “MOH Public Health Branch, Funding and Staffing Report for Ontario Boards of Health.” The last report produced was for the 1997 calendar year. Production of these reports ceased in 1998, after public health funding was transferred to municipalities and the 50/50 cost sharing between government and municipalities for public health care began.
- Currently, total expenditure data for the years 1998 to 2001 is available for those cost-shared programs by county; however, it cannot be broken down by program.

### Uses:

- Indicator of level of MOHLTC funding for public health care sector.
- Indicator of equitable distribution of funding for health care to an area resident population.
- Useful in planning for public health care sector.
- Useful for monitoring the planned redistribution of health care resources as prescribed by health reform directives.
- Comparison over time and place-to-place.

### Limitations:

- Captures MOHLTC funding pattern, does not capture all Public Health Unit Expenditure, since individual municipalities may decide to increase funding for a particular program and use funds from other sources.
- Captures utilization pattern, does not capture population need.
- Pre-1998 data may not be directly comparable to post-1998 data.
- Data cannot be broken down by program.

### Source :

MOHLTC, Public Health Branch,

Source of denominators is Ministry of Finance population projections, 2001.

### Methodological Notes:

- Per capita rates for Public Health Units (PHUs) have been calculated for the base budget only (NB: there was no base budget for 1998). No rates have been calculated for other programs (e.g. PHRED, speech and audiology, etc, because not all PHUs have these services. Some PHUs are use services located in neighboring PHUs. Hence it is difficult to determine the denominator population at PHU level.
- Totals for MOHLTC expenditure on public health care were not calculated because of the above reason, as well as the fact that Base budget, Public Health Research and Development Program, and Unorganized programs funding is by calendar year while that for speech and audiology, and preschool speech and language programs is by fiscal year.



There have been several changes in public health care sector funding in the last few years due to restructuring of the health care system. Prior to 1998, the Ministry of Health was the major funder of public health care. In 1998, public health funding was transferred to municipalities and 50/50 cost sharing between the province and municipalities for many of the programs was implemented. The province only funds certain special programs 100%. The data on funding is captured differently for time periods before and after the downloading to municipalities, hence it is difficult to interpret funding trends for this sector. For this report, the data for these two time periods are reported separately.

<b>Public Health Branch Funded Programs (\$), City of Toronto, 1994 – 1997</b>				
<b>Programs</b>	<b>1994</b>	<b>1995</b>	<b>1996</b>	<b>1997</b>
<b>Healthy Growth and Development</b>	44,755,447	42,913,903	39,622,159	38,477,357
<b>Healthy Life Styles</b>	9,334,885	9,969,114	10,217,651	10,010,418
<b>Communicable Disease Control</b>	20,421,179	20,745,096	21,169,618	21,190,320
<b>Healthy Environment</b>	1,683,855	1,989,387	1,590,377	1,598,115
<b>General Standards</b>	2,339,501	2,492,727	2,369,360	2,360,154
<b>Other</b>	4,670,866	6,035,809	4,712,556	2,509,858
<b>Total Public Health Program Budget</b>	<b>\$83,205,733</b>	<b>\$84,146,036</b>	<b>\$79,681,721</b>	<b>\$76,146,222</b>

Source: MOH, Public Health Branch, Funding and Staffing Report for Ontario Boards of Health, 1994-1997.

<b>Official Local Health Agencies (Board of Health) Budget *(\$ for Programs Funded 50/50, City of Toronto and Ontario, 1999 – 2000</b>				
	<b>Toronto City Health Unit</b>		<b>Ontario</b>	
<b>Year</b>	<b>\$</b>	<b>Per Capita Rate</b>	<b>\$</b>	<b>Per Capita Rate</b>
<b>1999</b>	45,011,550	17.8	167,684,772	14.6
<b>2000</b>	47,263,494	18.5	176,283,607	15.1

NB: \*Ontario total includes base budget, PHRED and Unorganized programs.

Toronto does not receive funding for PHRED or Unorganized programs.

<b>Public Health Branch –Pre-school Speech and Language Budget (\$) (100% Funded), City of Toronto and Ontario, 1998/99 - 2000/01</b>					
	<b>1998/99 Approved Budget (\$)</b>	<b>1999/00 Approved Budget (\$)</b>	<b>2000/01 Approved Budget (\$)</b>	<b>Special one-time (\$)</b>	<b>Total 2000/01 Budget (\$)</b>
<b>Toronto City Health Unit</b>	4,010,412	4,010,412	4,010,412	1,688,986	5,699,398
<b>Total Ontario \$</b>	17,014,695	17,014,695	16,963,465	8,653,467	25,616,932

**Key Findings:**

- Between 1994 and 1997, there was a gradual decrease of 8.5% in public health expenditure.
- For those programs funded jointly with the municipalities on a 50/50 basis, Toronto accounted for 27% of Ontario's total funding to public health units. In 1999, the MOHLTC budget for Toronto public health was \$45 million. Including the municipal portion, this would make a total budget of \$90 million. This represents an increase in the budget for public health from previous years.
- Between 1999 and 2000, the MOHLTC funding for public health care for Toronto City Health Unit increased by 5% (approximately \$2.3 million). This proportion is similar to that for Ontario health units as a whole.
- Approved funding for the pre-school speech and language program remained constant between 1998/99 and 2000/01 (this was true for both Toronto and Ontario as a whole). However, in 2000/01, there was a special one-time allocation that increased total funding.

## 2.14 Physician Claims

### Definition:

- a) Number and rate of physicians claims and service units per 100 population billed by physicians in Toronto for a given year.
- b) OHIP gross payments to licensed physicians by (i) physician location (ii) patient location.

Physician claims shows the number of physicians submitting claims, the number of services and service units billed, and the gross amount paid before threshold reductions. County indicates the location used by the physician for billing purposes or the patient's residential address as identified by the Registered Persons Database. Lab fees ('L' Codes) are not included. Non fee-for-service physician transactions are not included.

### Significance/Uses:

- Estimate physician expenditure by county of physician and patient residence.
- Estimate expenditures associated with resident county of patient.
- Compare number of physicians billing OHIP to other estimates showing physician supply.
- Compare physician and patient activity within a county.
- Estimate physician activity by county.
- Planning for health needs and services.
- Comparison over time and place-to-place.
- Positive value in the variance column indicates that billing related to patient county is greater than billing of physician county.

### Limitations:

- Does not capture all physician activity.
- Does not capture all expenditure for physician services.
- Some counties have far greater numbers of salaried physicians.
- Individuals seeking care often use physicians whose activity is captured in another county.
- Residence of patient is based on information that only partially updates resident re-locations.
- Information for residence of patient is not available for 1997/98.
- Physicians often provide care to individuals who reside in a different county.
- Age, sex and morbidity profiles vary by county.
- Physician-billed service volumes do not show type or appropriateness of care.
- Comparisons over time and place will be influenced by changes in fee schedules, and service mix.
- Physicians billing address may not be the location where a service was provided.
- Physician's may use more than one address.
- Variance is calculated by (patient pay per 100K divided by physician pay per 100K) minus 1.

### Source:

MOHLTC.

1998-1999 and 1999-2000 Claims Prototype.

1997-1998 OHIP Statistical Reporting System – OSRS.

Ontario Population Estimates 1991-2000, MOHLTC, CEHIP Population Cube, May 2001.

### Methodology Notes:

1. Rates use population estimates for 1997, and 1999 calendar years.
2. Services billed and units billed are combined. Units includes anesthesia and assistant fees and IHF fees for diagnostic services that are billed as basic units and units of time.
3. Lab fees billed to OHIP are excluded as such services are often provided in other communities.
4. 1997-1998 services and units reported to nearest 100.
5. Expenditures are gross amounts before any threshold reductions.

<b>OHIP Activity For Ontario Licensed Physicians Excluding "L" Codes, Physicians located in Toronto 1997/98 to 1999/00</b>			
	<b>1997/98</b>	<b>1998/99</b>	<b>1999/00</b>
# of Physicians	6,570	6,573	6,589
Services and Units	56,943,900	55,246,397	55,090,072
1998 Population	2,490,914	2,508,948	2523,556
Phys/100 Population	264	262	261
S&U/100 Population	23	22	22

<b>OHIP Activity For Ontario Licensed Physicians Excluding "L" Codes Physicians in Ontario, 1997/98 to 1999/00</b>			
	<b>1997/98</b>	<b>1998/99</b>	<b>1999/00</b>
# of Physicians	20,263	20322	20,513
Services and Units	174,368,700	170,253,290	171,001,149
1998 Population	11,249,490	113,86,133	11517304
Phys/100 Population	180	178	178.1
S&U/100 Population	16	15	14.8

<b>OHIP Gross Payments To Ontario Licensed Physicians Excluding "L" Codes Toronto, 1997/98 to 1999/00</b>				
		<b>1997/98</b>	<b>1998/99</b>	<b>1999/00</b>
By County of Physician	Payments	1,428,238,700	1,390,585,068	1,439,170,790
	Pay/100 pop	573	554	570
By County of Patient	Payments	NA	1,132,177,599	1,172,334,524
	Pay/100 pop	NA	451	465
	Variance	NA	-18.6%	-18.6%

<b>OHIP Gross Payments To Ontario Licensed Physicians Excluding "L" Codes Ontario, 1997/98 to 1999/00</b>				
		<b>1997/98</b>	<b>1998/99</b>	<b>1999/00</b>
By County of Physician	Payments	4,341,301,364	4,265,935,158	4,424,385,276
	Pay/100 pop	368	375	384
By County of Patient	Payments	NA	4,265,935,158	4,242,385,276
	Pay/100 pop	NA	375	384
	Variance	NA	0.0%	0.0%

**Key Findings:**

OHIP payments to physicians are among the top health care expenditures. Although the available data on OHIP activity and gross payments does not capture all physician activity or expenditure, they provides a good sense of the magnitude of the expenditure.

**OHIP activity**

- In 1997/98, there were a total of 6,570 physicians in Toronto billing OHIP (excluding lab fees). This represents approximately one-third of the total number of physicians billing in Ontario. This number increased marginally, by less than 1%, between 1997/98 and 1999/00.
- In 1997/98, Toronto-based physicians billed for a total of nearly 57 million services and units. This also represents approximately one-third of the total services and units billed by Ontario physicians. There was a decrease (3%) in the number of services and units billed by physicians from Toronto between 1997/98 and 1999/00.
- The rate of physicians billing in Toronto per 100 population is 1.5 times that for Ontario (261 vs. 178 in 1999/00). Similarly, the rate of services and units billed by Toronto based physicians per 100 population is 1.5 times that of Ontario physicians as whole (22 vs. 15 in 1999/00).

**OHIP Gross Payments**

- OHIP gross payments (excluding lab fees) to Toronto-based physicians in 1997/98 amounted to approximately \$1,428.2 million (\$573 per 100 population). There was a small decrease in 1998/99 followed by an increase in 1999/00. This represents approximately one-third of the total number of gross payments to physicians in Ontario. This number fluctuated between 1997/98 and 1999/00.
- Gross OHIP payments to physicians who treated Ontario patients are less than those to physicians based in Toronto. In 1998/99, a total of approximately \$1,132.2 million was paid to physicians who provided services for Toronto residents. This amount was \$258.4 million less than the total billed by physicians in Toronto (creating a variance of –18.6%) in the same fiscal year. Gross OHIP payments for Toronto residents increased by 3.5% between 1998/99 and 1999/00. This proportion is similar to that for Ontario residents.
- OHIP gross payments for Toronto patients represent 26% of the total payments to physicians for Ontario residents.
- The rate of OHIP payments to Toronto-based physicians per 100 population is 1.5 times that for Ontario (570 vs. 384 in 1999/00). However, the rate of OHIP payments for Toronto residents per 100 population is 1.2 times that for Ontario (465 vs. 384 in 1999/00).

## **D) Health Status**

### **2.15 Leading Causes of Hospitalization**

## 2.15 Leading Causes of Hospitalization

**Definition:**

Number of hospital separations (discharges, transfers, and deaths) during a given year for a specific cause, by gender, per 1,000 population.

**Significance/Uses:**

- The cause of hospitalization is the diagnosis which is considered by the physician as the most responsible for the patient's stay in hospital.
- Leading causes of morbidity vary by age, gender, marital status, socioeconomic status etc.
- Useful in planning health services and programs.
- Comparison over time and place-to-place.

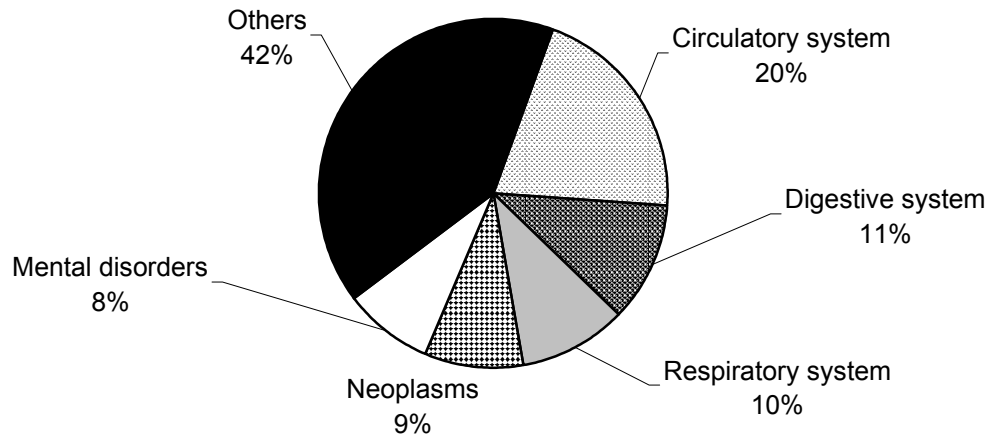
**Limitations:**

- Morbidity as measured by hospitalization does not provide information about the number of sick people or diseases that do not lead to hospitalization.
- Rates should be standardized (e.g. by age and gender) to enable comparisons over time or among different populations.

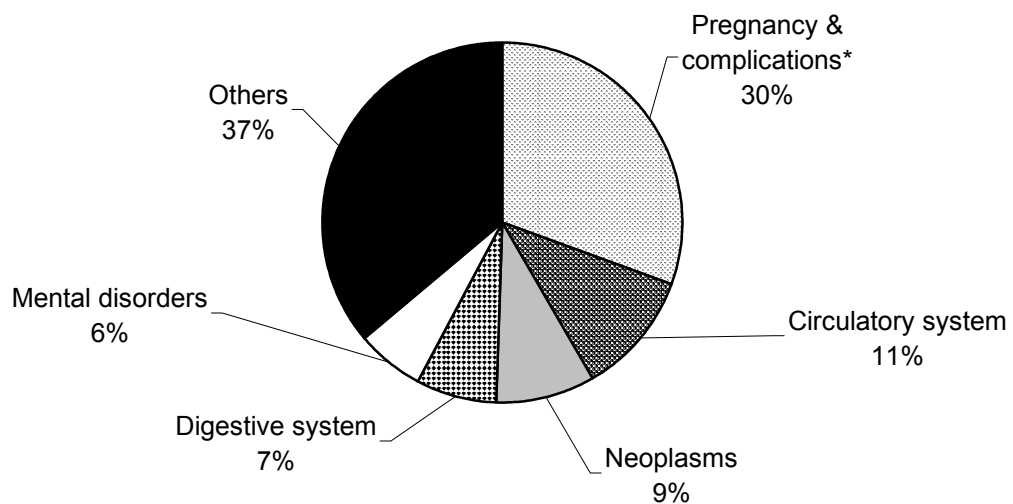
**Source:**

MOHLTC, Provincial Health Planning Database.

### Hospital Separations, Leading Categories for Males, Toronto, 1999



### Hospital Separations, Leading Categories for Females, Toronto, 1999



\* "Pregnancy and complications" includes abortions and miscarriages.



Hospitalization for Toronto Males, by ICD9 Chapter, 1995 and 1999				
	1995		1999	
ICD9 Chapter	#	Crude Rate/1,000	#	Crude Rate/1,000
Circulatory system diseases	18,470	15.6	16,845	13.7
Digestive system diseases	11,545	9.8	9,324	7.6
Respiratory system diseases	10,197	8.6	8,239	6.7
Neoplasms	8,499	7.2	7,442	6.0
Injury and poisoning	7,988	6.8	6,801	5.5
Mental disorders	6,582	5.6	6,901	5.6
Genitourinary system diseases	5,872	5.0	4,440	3.6
Certain conditions originating in perinatal period	4,822	4.1	5,799	4.7
Symptoms/Signs/Ill-Defined conditions	4,805	4.1	4,535	3.7
Musculoskeletal system and connective tissue diseases	3,894	3.3	3,268	2.7
Infectious and parasitic diseases	2,920	2.5	1,902	1.5
Nervous system diseases	2,511	2.1	1,921	1.6
Endocrine, nutritional and metabolic diseases and immunity disorders	2,033	1.7	1,967	1.6
Skin/subcutaneous tissue diseases	1,490	1.3	1,077	0.9
Congenital anomalies	1,239	1.0	1,000	0.8
Diseases of blood and blood-forming organs	1,007	0.9	878	0.7
All causes	93,874		82,339	

Hospitalization for Toronto Females, by ICD Chapter, 1995 and 1999				
	1995		1999	
ICD9 chapter	#	Crude Rate/1,000	#	Crude Rate/1,000
Pregnancy, childbirth and the puerperium and complications	44,480	35.6	37,163	28.6
Circulatory system diseases	15,293	12.2	13,683	10.5
Digestive system diseases	12,107	9.7	8,946	6.9
Neoplasms	11,299	9.0	10,705	8.2
Respiratory system diseases	8,485	6.8	7,338	5.7
Genitourinary system diseases	8,244	6.6	6,476	5.0
Injury and poisoning	8,101	6.5	7,144	5.5
Mental disorders	7,593	6.1	7,357	5.7
Musculoskeletal system and connective tissue diseases	5,505	4.4	4,481	3.5
Symptoms/Signs/Ill-Defined conditions	5,041	4.0	4,956	3.8
Certain conditions originating in perinatal period	4,030	3.2	4,749	3.7
Nervous system diseases	2,827	2.3	2,014	1.6
Endocrine, nutritional and metabolic diseases and immunity disorders	2,690	2.2	2,508	1.9
Infectious and parasitic diseases	1,881	1.5	1,624	1.3
Skin/subcutaneous tissue diseases	1,317	1.1	884	0.7
Diseases of blood and blood-forming organs	1,212	1.0	1,051	0.8
Congenital anomalies	1,042	0.8	881	0.7
All causes	141,147		121,960	

### **Key Findings:**

The International Classification of Disease (ICD) is used to assign codes for the diagnosis which the admitting physician indicates is most responsible for a patient's hospitalization. For data in this report, version 9 of the ICD (ICD-9) was used.

- There were 235,021 hospital separations (discharge transfers on deaths) for Toronto residents reported in 1995, compared to 204,299 in 1999.
- More hospital separations for women were reported in 1999 than for males, consistent with the pattern for Ontario. Hospitalization by ICD-9 category of both women and men declined from 1995 to 1999 in Toronto.
- Hospitalization of men for all causes in Toronto dropped from 93,874 to 82,339 (12%) between 1995 and 1999, while hospitalization of women for all causes in Toronto dropped from 141,147 to 121,960 (14%). It is not clear the extent to which increased use of out-patient and ambulatory care accounts for this trend.
- Leading categories of hospital separations (based on ICD-9 chapters) for Toronto males in 1999 were: circulatory diseases, 20% of all cases; digestive diseases, 11% of cases; respiratory diseases, 10%; neoplasms, 9%; and mental disorders, 8%.
- Leading categories of hospitals separations (based on ICD-9) chapters) for Toronto females were: pregnancy (including normal delivery and complications), 30% of all cases; circulatory system, 11% of cases; neoplasms, 9%; digestive diseases, 7%; and mental disorders, 6%.
- Separations due to pregnancy, childbirth and the puerperium and complications declined between 1995 and 1999.
- While separations for most leading causes decreased, the number of separations among both males and females in Toronto for certain conditions originating in the perinatal period (immediately before and after birth) increased.
- Separations for mental disorders among Toronto males increased from 1995 to 1999, while separations for mental disorders among females declined.



## **E) CIHI Indicators**

- 2.16 CIHI Indicators
- 2.16a Regional Profile
- 2.16b Health System Characteristics
- 2.16c Health System Performance

The Canadian Institute for Health Information (CIHI) released its second annual report on health care in Canada on May 8, 2001. This report contained comparative data on key measures of health and health care for 63 health regions in Canada. According to the CIHI report, there is considerable variation among the indicators for the various health planning regions of Canada. The following is a brief analysis of Toronto's performance with respect to the various health indicators and how it compares to other Ontario District Health Councils (DHCs).

The Regional Profile is supplemented with information (regarding life expectancy at birth and at age 65) summarized from the *Maclean's Health Report* published in October 2001 in conjunction with CIHI and Statistics Canada.

## 2.16 CIHI Indicators

### Definition:

- a) Regional Profile Indicators.
- b) Health System Characteristics Indicators.
- c) Health System Performance Indicators (see table on next page for details of the indicators).

### Background Information:

- On May 8, 2001, CIHI released its second annual edition of health indicators (*Health Indicators 2001*) for the 63 largest regions in Canada. These regions, which include the 16 district health council areas in Ontario, represent 90% of the population of Canada. The indicators were developed through a series of regional consultations held across Canada in 1999.

### Significance/Uses:

These indicators reflect the key strategic directions endorsed by the Conference of Deputy Ministers of Health (1999):

- Ensuring positive and supportive living and working conditions in all our communities.
- Ensuring a safe, high quality physical environment.
- Ensuring individuals have opportunities for healthy development and supports to make choices that enhance their health and foster their independence.
- Ensuring appropriateness and affordable health services, acceptable to all.
- Reducing preventable illness, injury, and premature death.
- The indicators are primarily intended to support regional health authorities (e.g. DHCs in Ontario) in monitoring progress in improving and maintaining population health and the functioning of the health system.
- In addition, they should be useful to governing bodies, the public, and health professional groups.

Indicators were chosen to be:

- Relevant to established health goals or strategic directions.
- Based on agreed upon benchmarks, guidelines or standards.
- Collected using standardized data definitions and elements to ensure the resulting data meet technical quality criteria.
- Available electronically across Canada to a regional or local level, as well as provincially or nationally.

### Limitations:

- The methodology used for these indicators was designed to maximize inter-regional and inter-provincial comparability given the characteristics of available datasets. For this reason, and because the data presented include the latest updates available at the time of publication, there may be differences with definitions and data sources used in other reports.

### Sources:

All spreadsheet's are reproduced from **2001 Health Indicators**, Canadian Institute for Health Information and Statistics Canada, 2001.

For more information and detailed technical notes: [www.cihi.ca](http://www.cihi.ca) or:

Canadian Institute for Health Information

377 Dalhousie Street, Suite 200

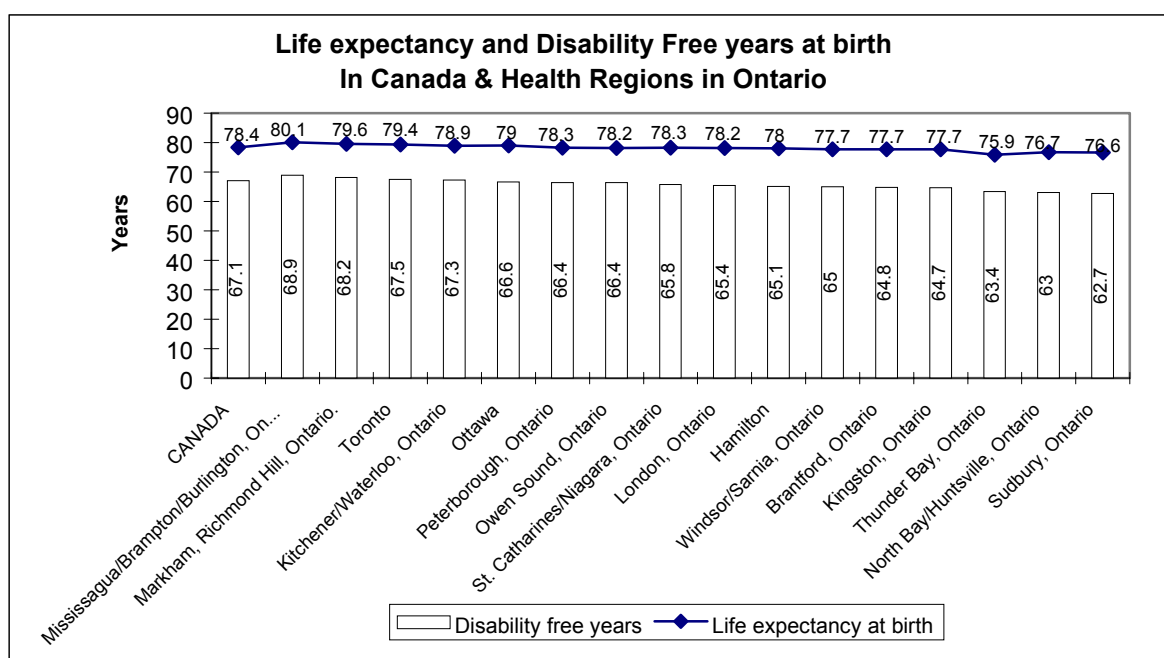
Ottawa, Ontario K1N 9N8

Indicator	Definition	Data Source
<b>Regional Profile</b>		
<b>Population Estimates</b>	Updated adjusted population estimates produced by Statistics Canada using demography data available at the census subdivision level.	<i>Statistics Canada</i>
<b>Life Expectancy</b>	An estimate of the number of years that a person born in that year is expected to live, based on current mortality rates.	<i>Health Statistics Division, Statistics Canada</i>
<b>Health System Characteristics Indicators</b>		
<b>General/Family Practitioners per Capita</b>	Active civilian general practitioners or family practitioners per 100,000 population,	<i>Southam Medical Database, CIHI</i>
<b>Medical Specialists per Capita</b>	Active civilian medical specialists per 100,000 population.	<i>Southam Medical Database, CIHI</i>
<b>Bypass Surgery</b>	Age standardized rate of coronary artery bypass graft surgery performed on in-patients in acute care hospitals per 100,000 population age 20 and older.	<i>Hospital Morbidity Database, CIHI</i>
<b>Total Hip Replacement Rate</b>	Age standardized rate of total hip replacement surgery (unilateral or bilateral) performed on in-patients in acute care hospitals per 100,000 population age 20 and older.	<i>Hospital Morbidity Database, CIHI</i>
<b>Total Knee Replacement Rate</b>	Age standardized rate of total knee replacement surgery (unilateral or bilateral) performed on in-patients in acute care hospitals per 100,000 population age 20 and older.	<i>Hospital Morbidity Database, CIHI</i>
<b>Hysterectomy</b>	Age standardized rate for hysterectomies provided to in-patients in acute care hospitals, per 100,000 women age 20 and older.	<i>Hospital Morbidity Database, CIHI</i>
<b>Inflow/Outflow Ratio</b>	The ratio of the number of hospitalizations for in-patients in acute care hospitals located in a given region divided by the number of in-patient acute care hospitalizations generated by residents of that region. Separate indicators are calculated for all hospitalizations (overall), bypass graft surgery, hip replacement, knee replacement, and hysterectomy.	<i>Hospital Morbidity Database, CIHI</i>
<b>Health System Performance Indicators</b>		
<b>Hip Fractures</b>	Age standardized hospitalization rates for fracture of the hip, per 100,000 population age 65 and older.	<i>Hospital Morbidity Database, CIHI</i>
<b>Ambulatory Care Sensitive Conditions</b>	Age standardized in-patient acute care hospitalization rate for conditions where appropriate ambulatory care prevents or reduces the need for hospitalization.	<i>Hospital Morbidity Database, CIHI</i>
<b>Cesarean Sections</b>	Proportion of women delivering babies in acute care hospitals who received Cesarean sections. Due to the characteristics of the database, stillbirths are excluded from the denominator.	<i>Hospital Morbidity Database, CIHI</i>

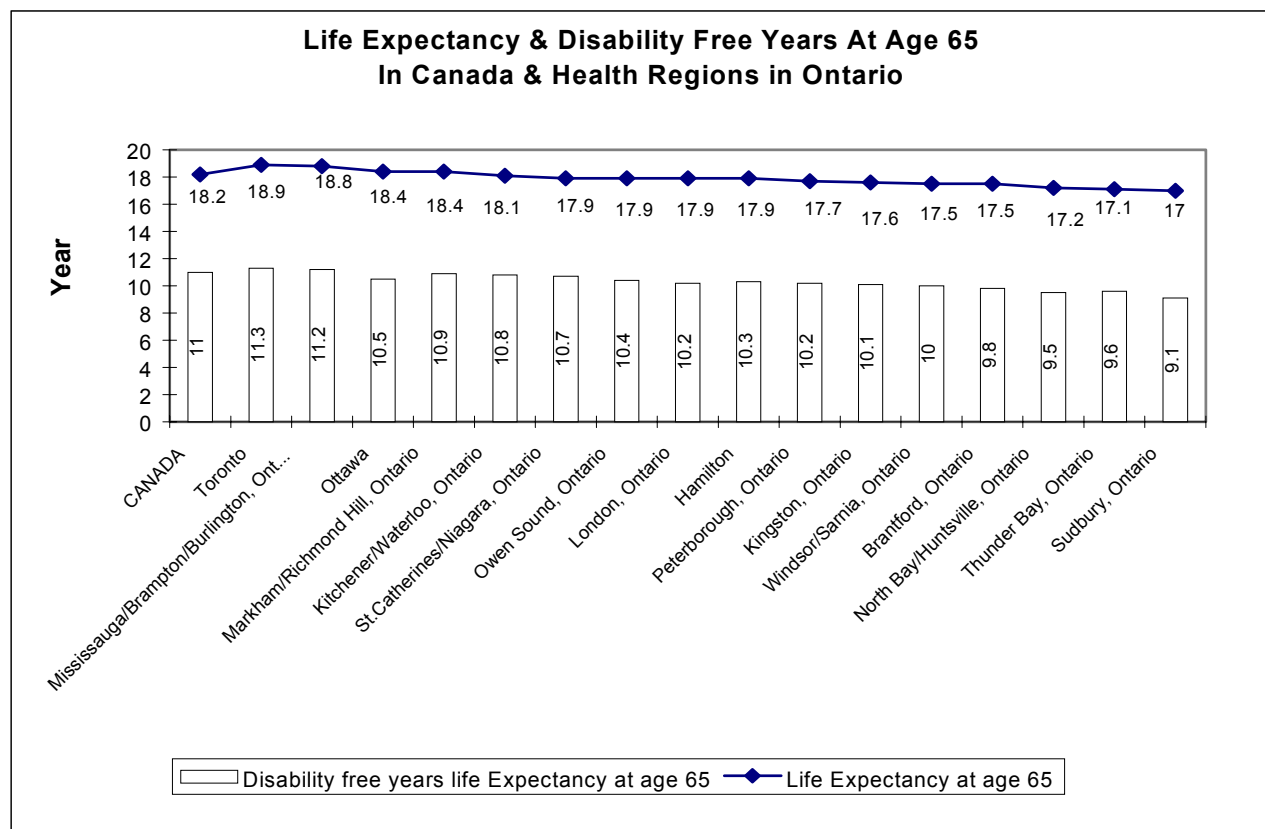
Indicator	Definition	Data Source
<b>Vaginal Births after Cesarean Section</b>	Proportion of women who have previously received a Cesarean section, who give birth via a vaginal delivery in an acute care hospital.	<i>Hospital Morbidity Database, CIHI</i>
<b>Low Birthweight</b>	Proportion of live births with a birthweight less than 2500 grams per 1,000 live births (excluding births with unknown birth weight).	<i>Canadian Vital Statistics, Statistics Canada</i>
<b>Hospitalizations due to Pneumonia and Influenza</b>	Age standardized acute care hospitalization rates for pneumonia and influenza, per 100,000 population aged 65 and older.	<i>Hospital Morbidity Database, CIHI</i>
<b>Average Stay Over/Under Expected</b>	Average days for "typical" acute care in-patients over/under the Expected Length of Stay (ELOS). Typical cases exclude deaths, transfers, voluntary sign-outs, and cases where actual length of stay is greater than the "trim point" established by CIHI. ELOS is calculated for each admission taking into account the reason for hospitalization, age, other existing medical conditions, and complications. A positive value indicates the average actual days stay was longer than expected while a negative value suggests the average actual stay was shorter than expected.	<i>Discharge Abstract Database, CIHI</i>
<b>May Not Require Hospitalization</b>	Percentage of acute care hospitalizations for conditions or procedures that often allow ambulatory treatment not requiring admission. These hospitalizations are derived from the Case Mix Group methodology.	<i>Discharge Abstract Database, CIHI</i>
<b>30 day Acute Myocardial Infarction (AMI) In-hospital Mortality Rate</b>	Risk adjusted rate of all cause in-hospital death within 30 days of first admission to an acute care hospital with a diagnosis of AMI. The rate is estimated to be within the upper and lower confidence interval 19 times out of 20 (95% confidence interval). The width of the confidence interval illustrates the degree of variability associated with the rate.	<i>Hospital Morbidity Database, CIHI</i>

## 2.16a Regional Profile

Regional Profile of Toronto Health Care System			
	Indicator value	Range from highest to lowest for all Ontario regions	Provincial Ranking (among DHC planning regions)
Population in thousands in 1998	2,509	218 – 2,509	1 of 16
% of population 65 +	13.3	16.1-8.5	8 of 16
Life expectancy	79	76-80	---







### Key Findings:

A report by *Maclean's* magazine created in conjunction with CIHI and Statistics Canada (*Maclean's Health Report* October 2001) reported findings related to life expectancy and years of disability-free life expectancy at birth and for seniors 65 and over by gender. This information was reported for 54 Canadian health regions with populations over 125,000.

- Toronto is the most populous district health council in Ontario and ranks in the mid-range in terms of percentage of population who are seniors.
- Toronto along with two other DHCs, had the second-highest life expectancy among Ontario DHCs. Simcoe-York and Peel-Halton DHCs had the highest life expectancy, while Northwestern DHC had the lowest.
- Life expectancy at birth in Toronto was higher than the national level (79.4 years), the proportion of disability free life is 85% (i.e. to 67.5 years of age), which is similar to the national proportion.
- Toronto ranked 8<sup>th</sup> out of 54 health regions in Canada with respect to life expectancy at birth. In Ontario, Toronto had the 3<sup>rd</sup> highest life expectancy at birth as well as years of disability-free life after Mississauga/ Brampton/Burlington and Markham/Richmond Hill.

- With respect to seniors, the life expectancy at age 65 in Toronto was slightly higher than the national level (18.9 years), and the proportion of disability-free life of 60% (i.e. 11.3 years) was similar to the national proportion.
- Toronto ranked 4<sup>th</sup> out of 54 health regions in Canada with respect to life expectancy at age 65, and ranked 17<sup>th</sup> for years of disability-free life expectancy.
- Toronto had the highest life expectancy and years of disability free life expectancy at age 65 in Ontario, followed by Mississauga/ Brampton/ Burlington.

## 2.16b Health System Characteristics

Inflow/Outflow Ratio of Selected Contextual Variables			
Characteristics Indicators and Health System	Toronto's Ratio	Range for all Ontario regions highest to lowest	Provincial Ranking (among DHC planning regions)
GP/FP per 100,000 population	114	114 -56	1 of 16 (highest)
Specialists per 100,000 population	164	165 -32	1 of 16 (highest)
Cardiac bypass surgery rate	84.5	146 -77.4	13 of 16
Hip replacement rate	54.7	78.6 - 54.7	16 of 16 (lowest)
Knee replacement rate	58.2	97.9 -58.2	16 of 16 (lowest)
Hysterectomy rate	299	732-299	16 of 16 (lowest)
I/O Overall	1.3	1.31- 0.75	2 of 16
I/O Bypass surgery	2.39	3.55- 0	3 of 16
I/O Hip replacement	1.66	1.66 – 0.22	1 of 16
I/O Knee replacement	1.62	1.62 – 0.34	1 of 16
I/O Hysterectomy	1.4	1.4 – 0.69	1 of 16

### Key Findings:

- Toronto had the highest supply of general physicians and specialists per 100,000 population among the 16 DHCs in Ontario. Possible explanations for this high rate may include: 1) Toronto being a large urban teaching centre, 2) Toronto having a high inflow of patients most of whom require specialized care. Hence, a considerable number of patients receiving care in Toronto are non-residents. The effective catchment area is thus much larger than Toronto, a factor not taken into account in discussions of human resources based on physicians per 100,000 resident population.
- Toronto ranked the lowest among Ontario DHCs for hip replacements, total knee replacements, and hysterectomies. However Toronto had the highest inflow/outflow ratio for all these three conditions. The inflow /outflow ratio indicator is defined by CIHI as: the ratio of the number of hospitalizations for in-patients in acute care hospitals located in a given region divided by the number of in-patient acute care hospitalizations generated by residents of that region. A ratio of greater than one indicates that a large proportion of patients admitted to acute care hospitals are from outside that region.
- The low rates of total knee replacement appear to extend to the communities around Toronto, with York Region and Halton also being low outliers. This could be due to differences in the prevalence and severity of osteoarthritis. Past studies by the Institute for Clinical Evaluation Sciences (ICES) have shown that ecological correlations based on self-reported musculoskeletal disability from the Ontario Health Survey do not appear to explain the observed variations in hip and knee arthroplasty. Other possible explanations for the observed differences in rates across Ontario DHCs include variation in practice styles (clinical decision-making). As well, budgets and budgeting processes for hip and knee prosthesis purchasing vary from one hospital to the next. These factors create a situation whereby it is difficult to address variations in hip and knee replacement rates across DHCs because there is no regional or provincial planning framework.

## 2.16c Health System Performance

Performance of Toronto Health Care System			
I) Health System Performance Indicators	Indicator value	Range from highest to lowest for All Ontario regions	Provincial Ranking (among DHC planning regions)
<b>A) Scored Well</b>			
Ambulatory care sensitive hospitalizations (ACSH) standardized rate	273	625-253	13 of 16
% May Not Require Hospitalization	5.7	8 – 5	13 of 16
Avg. Stay over/under expected length of stay (ELOS)	-0.37	-0.01- -1.02	8 of 16
30 day acute Myocardial Infarction (MI) in-hospital mortality rate	12	16 - 12	lowest
Pneumonia and Influenza rates per 100,000 pop. 65 +	961	1,689-860	15 of 16
Vaginal birth after C/S	32	46 - 22	9 out of 16
Hip fractures rate per 100,000 pop. 65 + pop.	543	811-507	15 out of 16
<b>B) Scored Poorly</b>			
Low birth weight rate*	6.8	6.8 – 4.9	1 of 16 (worst)
Caesarian Section rates	20.4	24.8 -15	7 of 16

\*Includes all live births (i.e. singletons, multiples)

### Key Findings:

The CIHI findings regarding Toronto are consistent with those presented in other Toronto District Health Council (TDHC) reports which have examined health status of Toronto residents and Toronto health care system performance (e.g. *The Toronto Health System Monitoring Report Card*, *Toronto Health System Monitoring: Equity Analysis*, and *Torontoprofile III*). The results indicate that Toronto, which is the most populous health planning region in Ontario, is doing well although there are areas where performance and/or health status could be improved.

### ***The areas where Toronto's health care system is performing well include:***

- Ambulatory Care Sensitive Hospitalizations (ACSH), where Toronto had the 4<sup>th</sup> lowest rate among the 16 Ontario DHCs. ACSH hospitalizations are admissions for conditions which can more effectively be managed in a primary care setting. Hospitalization may be avoided if the conditions are well managed in the community.
- Toronto also scored well for the indicator of May Not Require Hospitalization (MNRH). It ranked 13<sup>th</sup> out of 16, indicating a lower rate of unnecessary hospitalizations compared to other DHCs in Ontario.
- The hospital length of stay (LOS) in all 16 DHCs including Toronto was lower than expected (i.e. discharged patients earlier than expected). Toronto ranked 8<sup>th</sup> out of 16. The early discharge to

community, where required health services may be limited, may place patients' health and well-being in jeopardy. At the same time, it can be regarded as an indicator for efficiency.

- Toronto was one of the five DHCs with the lowest 30-day acute myocardial infarction in-hospital mortality rate. This indicates that patients seen in Toronto hospitals have a better chance of surviving a heart attack. This is particularly important because heart disease is the leading cause of death for Canadians.
- Toronto scored well on some indicators relating to seniors 65 and over. For example, it had the second-lowest rate for pneumonia and influenza and the lowest rate of hip fractures among this population. This is important in view of the fact that Toronto has one of the highest proportions of resident aged 65 and over (13.3%). These conditions are particularly debilitating problems for seniors, who have slower recovery and higher rates of complications, which can result in prolonged disability and even death.
- The rate of vaginal births after C-section in Toronto was in the lower 50<sup>th</sup> percentile. This may indicate better obstetric practices since there were fewer unnecessary repeat C-sections performed in Toronto. When a C-section is performed appropriately, it can be life-saving for mother and/or baby. However, if used inappropriately it can put mother and child at risk.

***Areas where improvement is required included:***

- Toronto has the highest low birth weight rate (LBW) among the 16 Ontario DHCs. Some major risk factors for LBW are prematurity, maternal age, maternal smoking, poor maternal nutrition, absent or poor prenatal care, and certain types of infectious diseases. This highlights a need to target prenatal services to high-risk mothers residing in Toronto.
- Toronto reported a rate of 20% and ranked 7<sup>th</sup> out of 16 for caesarian section (C-section) rate. The national average was 19%. According to the World Health Organization, no more than 10-15% of mothers and their babies could benefit from C-sections.

---

## **Section III: Context Data**

---

- A) Population Data**
- B) Structure of Health Care System**

## **A) Population Data**

- 3.1 Toronto Resident Population by Age and Sex
- 3.2 Toronto Resident Population Projections
- 3.3 Ethnic Origin in Toronto
- 3.4 Period of Immigration in Toronto
- 3.5 Knowledge of Official Languages
- 3.6 Low Income Incidence
- 3.7 Proportion of Population 15 and over with less than Grade 9 Education

### 3.1 Toronto Resident Population by Age, Sex

**Definition:**

Proportion of people in a given age group and sex, in a given year, relative to the total population in that year.

**Significance/Uses:**

- Shows the basic characteristics of the population structure of a given area, (i.e. age and sex at a point in time).
- Composition is affected by factors such as fertility and aging.
- As a descriptor it is combined with health data to calculate population health needs and services.
- Population age distribution can be used in calculation of age standardization in order to compare health related data over time and place-to-place.

**Limitations:**

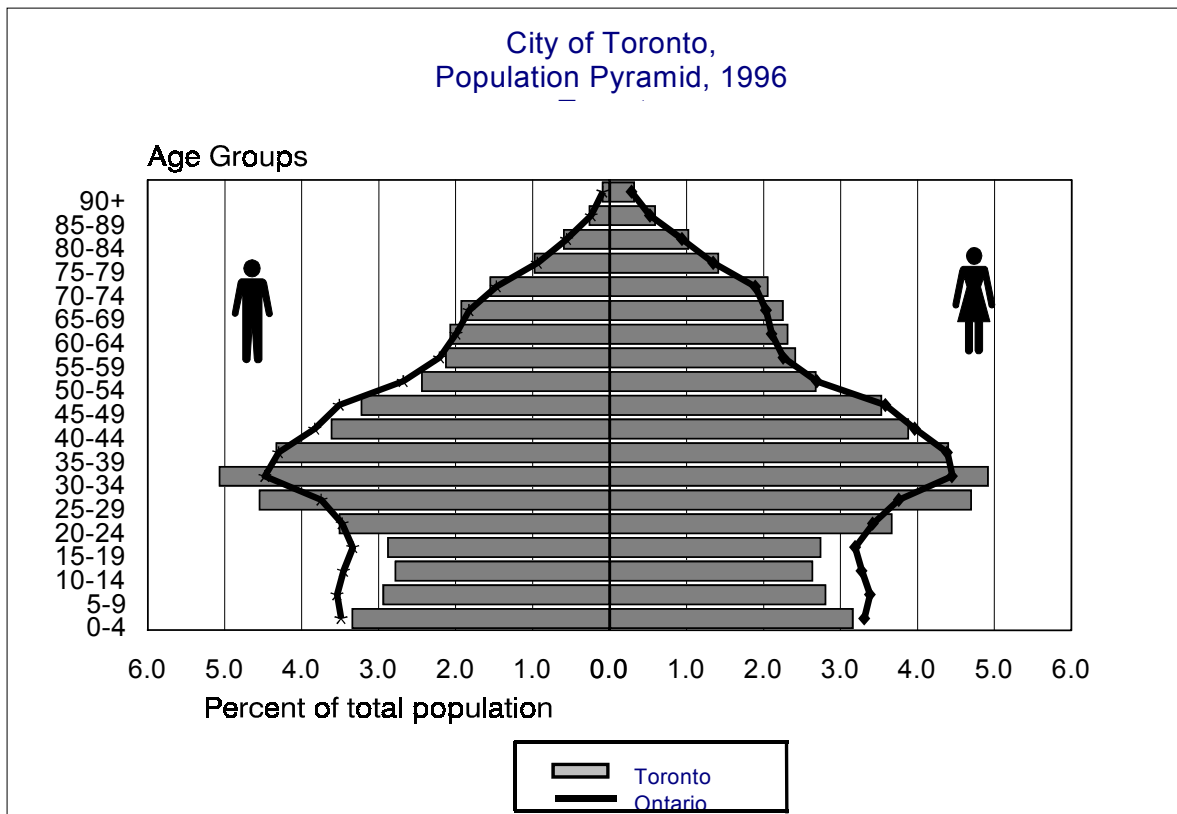
- There may be under-counting of some subgroups such as the homeless and young adults. This under-count has been estimated by adjusting for under-coverage.

**Sources:**

1996 Census data adjusted using 1991 under-coverage rates, Statistics Canada.

1991 Census (adjusted data), Statistics Canada.





Growth Rate and Dependency Ratio for the City of Toronto and Ontario, 1996						
	1991	1996	Growth Rate 1991-1996 (%)	Dependency Ratio*, 1996		
				Child (%)	Aged (%)	Total (%)
<b>City of Toronto</b>	2,362,431	2,468,266	4.5	25.6	19	44.6
<b>Rest of Ontario**</b>	8,109,035	8,647,425	6.6	31.8	17.8	49.5
<b>Ontario</b>	10,471,466	11,115,691	6.1	30.4	18	48.4

\* "Dependency Ratio" is the number of people in the dependent groups (i.e. children 0-14 years, and elderly (65 years and over) to the total number of people 15-64 (adults/economically active people).

\*\* "Rest of Ontario" refers to Ontario without the City of Toronto

### Key Findings:

- The City of Toronto is the most densely populated area in Ontario. In 1991, approximately 2.4 million people lived in Toronto. The number increased to nearly 2.5 million (a 4.5% increase) in 1996. The population of Toronto represents 22% of the total provincial population.
- Toronto's population is aging. Between 1991-1996, the proportion of seniors (i.e. 65 years and older) increased from 12.5% to 13.1%. In the same period, the proportion of the population aged 20-64 decreased from 65.5% to 63.5%.

- The total dependency ratio in Toronto is slightly lower than that of the rest of Ontario and Ontario as a whole. However, the dependency ratio specifically for seniors in Toronto is slightly greater than that in the rest of Ontario and all of Ontario.

### 3.2 Toronto Residents Population Projections

**Definition:**

Population projections are forecasts of growth over the 25 years following a census year, assuming varying degrees of change within the three major factors affecting population growth: fertility, mortality, and migration.

**Significance/Uses:**

- Predicts future changes in the age-sex composition of a population.
- Can be used to assess and plan for the future health needs of a community.

**Limitations:**

- The underlying assumptions on which the projections are based may not hold true for the entire 25-year period, which would affect accuracy of projections. Projections beyond 5-7 years should be viewed with caution.

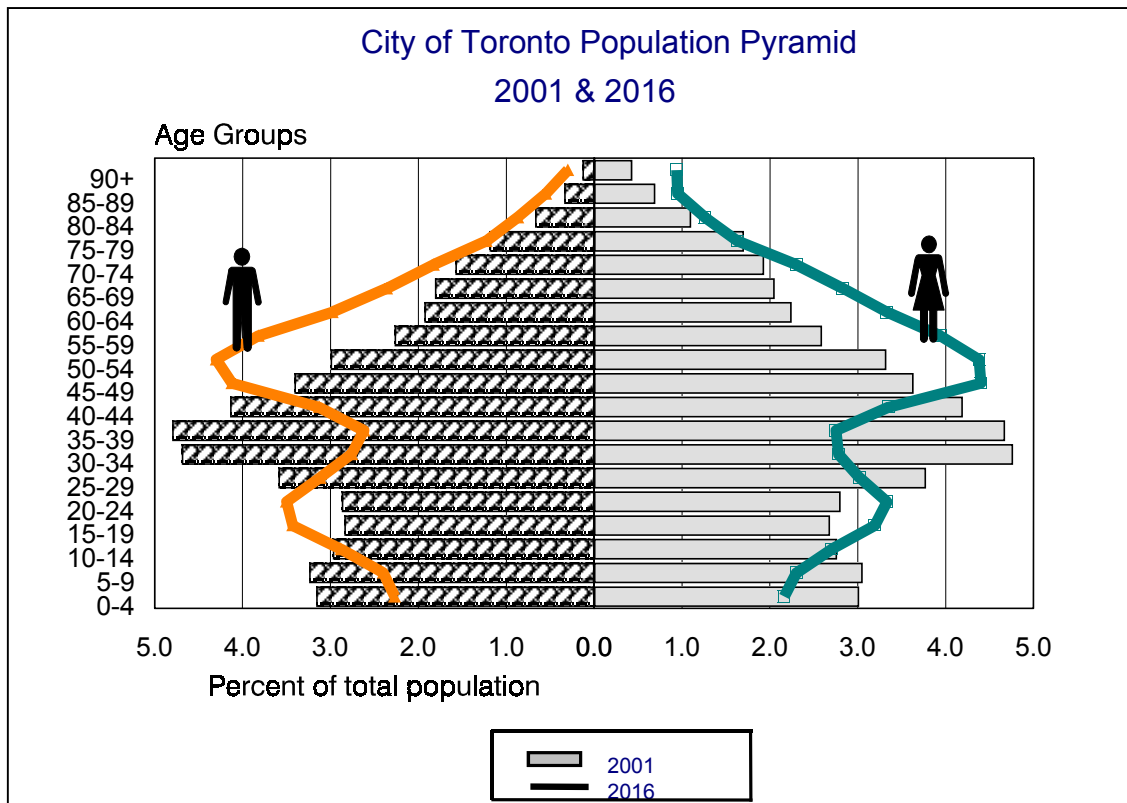
**Source:**

MOHLTC, Provincial Health Planning Database.

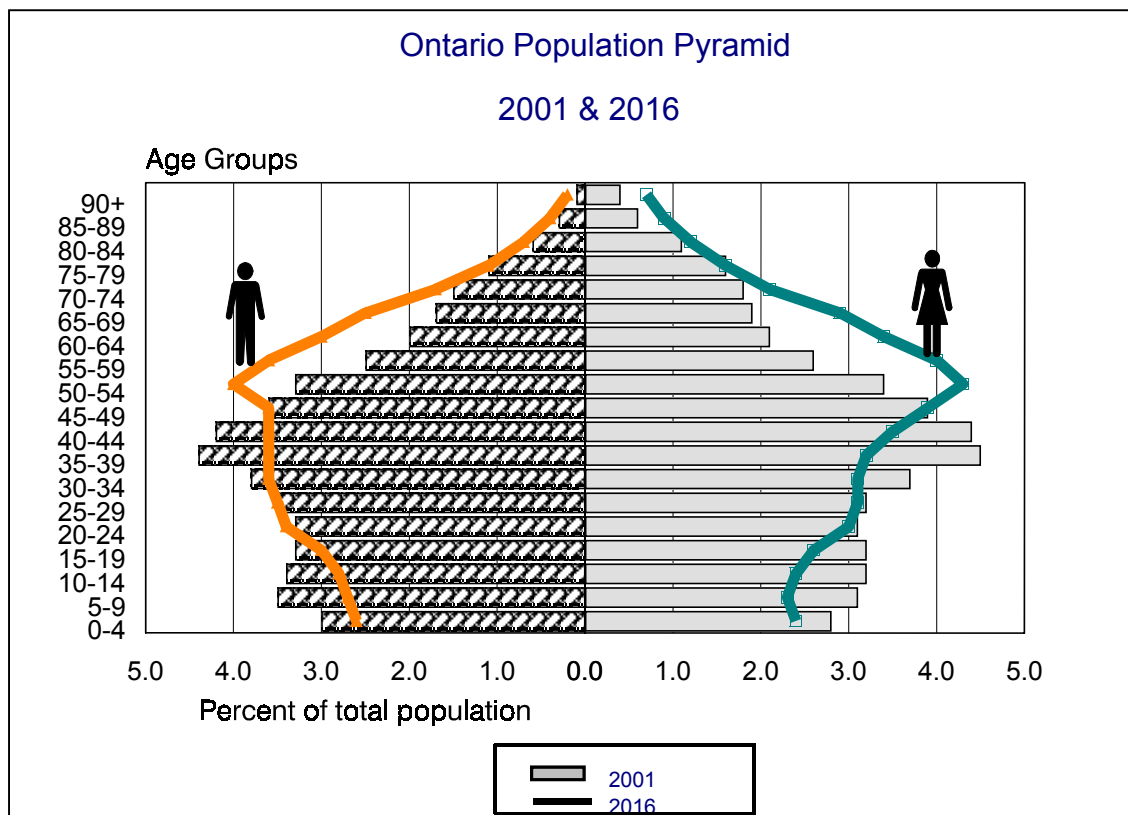
Ministry of Finance population projections based on 1996 Census, May 2001.

Projected Growth for Toronto and Ontario, 1996 to 2016				
	Toronto		Ontario	
	Population	Growth Rate	Population	Growth Rate
<b>1996</b>	2,462,510		11,513,800	
<b>2001</b>	2,576,470	4.6%	11,816,100	6.4%
<b>2008</b>	2,728,539	5.9%	12,797,400	8.3%
<b>2016</b>	2,848,760	4.4%	13,860,100	8.3%

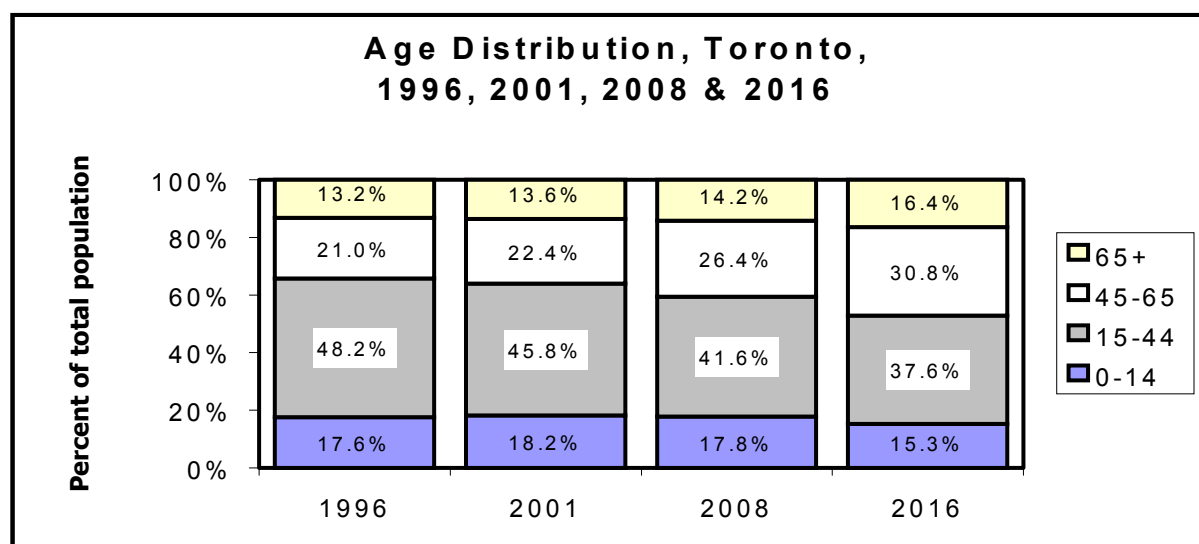
Projected Share of Ontario Population by Census Division			
	2001	2016	2026
<b>Toronto</b>	21.8%	20.6%	19.4%
<b>Durham</b>	4.4%	5%	5.5%
<b>HKPR</b>	2.6%	2.5%	2.5%
<b>Halton</b>	3.2%	3.8%	4.1%
<b>Peel</b>	8.9%	10.2%	10.9%
<b>York</b>	6.2%	7.7%	8.6%
<b>Simcoe</b>	3.2%	3.8%	4.1%
<b>Ontario minus GTA DHCs</b>	49.6%	46.5%	44.9%



Source: MOHLTC Population Projections, May 2001



Source: MOHLTC Population Projections, May 2001



Projected Growth Rate by Age Groups for City of Toronto, 1996 to 2016											
	All Age Groups	0-14	%	15-44	%	45-65	%	65-74	%	75+	%
<b>1996</b>	2,462,510	433,780	17.6%	1,186,121	48.2%	517,854	21.0%	192,910	7.8%	131,845	5.4%
<b>2001</b>	2,576,468	468,892	18.2%	1,180,094	45.8%	576,897	22.4%	189,778	7.4%	160,807	6.2%
<b>Growth Rate 1996-2001</b>	4.6%		8.1%		-0.5%		11.4%		-1.6%		22.0%
<b>2008</b>	2,728,539	484,902	17.8%	1,135,248	41.6%	719,942	26.4%	194,232	7.1%	194,215	7.1%
<b>Growth Rate 2001-2008</b>	5.9%		3.4%		-3.8%		24.8%		2.3%		20.8%
<b>2016</b>	2,848,758	434,633	15.3%	1,070,212	37.6%	877,205	30.8%	251,246	8.8%	215,462	7.6%
<b>Growth Rate 2008-2016</b>	4.4%		-10.4%		-5.7%		21.8%		29.4%		10.9%

### Key Findings:

- In terms of population, Toronto is the largest planning district in the province of Ontario. Over the 20-year period between 1996 and 2016, the population of Toronto is projected to grow by 16%, or 386,250 people, from 2.46 million people in 1996 to 2.85 million in 2016. This growth rate is lower than the provincial average of 25%. As shown in the above table, according to the projections, the population of Toronto was expected to reach 2,576,470 in 2001 (a 4.6% increase). However, the rate of growth will start slowing by 2008. It is expected that between 2001 and 2008, there will be an additional 152,100 people in Toronto (5.9% increase) and between 2008 and 2016, the population will increase by 120,220 or 4.4%.

- It should be noted that projections beyond 5-7 years should be treated with caution. Hence is important to focus on a shorter period of time (i.e. 1996-2008).
- Between 1996-2016 Toronto will experience the lowest growth rate compared to the other DHCs in GTA. Simcoe-York DHC will have the highest growth rate, followed by Halton-Peel DHC.
- The population of seniors, especially those 75+, is the fastest growing segment of Toronto's population. The number of people over 65 will grow significantly from 350,585 or 13.6% of the population in 2001 to 466,708 or 16.4% in 2016. The population age 75 and over will increase by 34% from 160,807 or 6.2% to 215,462 or 7.6% over the same period. The growth in seniors as a population of the population will accelerate after 2011 as baby boomers begin to turn age 65. This same cohort will begin to turn age 75 a decade later, in 2021. The increase in senior's population is a significant trend since there is a direct relationship between age and utilization of health care services.
- Toronto has a slightly larger proportion of seniors than Ontario (13.2% vs. 12.3% in 1996 and 16.4% vs. 15.9% in 2016).
- In contrast to seniors, projections (over the 20-year period) show that there will be a decline in the proportion of pediatric population. In 1996, children less than 15 years of age made up 17.6% of Toronto's population. The number of children under age 15 will rise gradually from 468,892 (or 18.2%) in 2001 to peak at 484,902 in 2008, after which it will fall to 434,633 (15.3%) in 2016.
- Compared to Ontario, Toronto has a smaller proportion of children (0-14). However, both areas will experience a decrease in the pediatric population.
- The working-age population in Toronto, ages 15-64, is expected to increase by 10.8%, from nearly 1.76 million in 2001 to approximately 1.95 million by 2016. The overall share of the population that is of working age will remain fairly stable at about 68% for the period between 2001 and 2016. However, within this group, the 15-44 age group will experience a decline in numbers as well as in the proportion of the total population. The proportion of this population is projected to decrease from 48.2% in 1996, to 45.8% in 2001 and 37.6% in 2016. In contrast, those over 45 will experience a significant increase, growing from 22% in 2001 to 31% in 2016.
- The proportion of adults 15-64 in Toronto is similar to that of Ontario (i.e. 68%). The population aged 15-44 in Toronto will experience a similar growth pattern over the years to that of Ontario, however, the total number of people will increase slightly.

### 3.3 Ethnic Origin in Toronto

**Definition:**

- 1) Number of people who report belonging to a given ethnic or cultural group per 100 population.  
Ethnic origin refers to the ethnic or cultural group(s) to which a person's ancestors belong.
- 2) Number of people who report belonging to a given visible minority group per 100 population.  
Visible minority refers to persons (other than aboriginal persons), who are non-Caucasian in race or non-white in colour.

**Significance/Uses:**

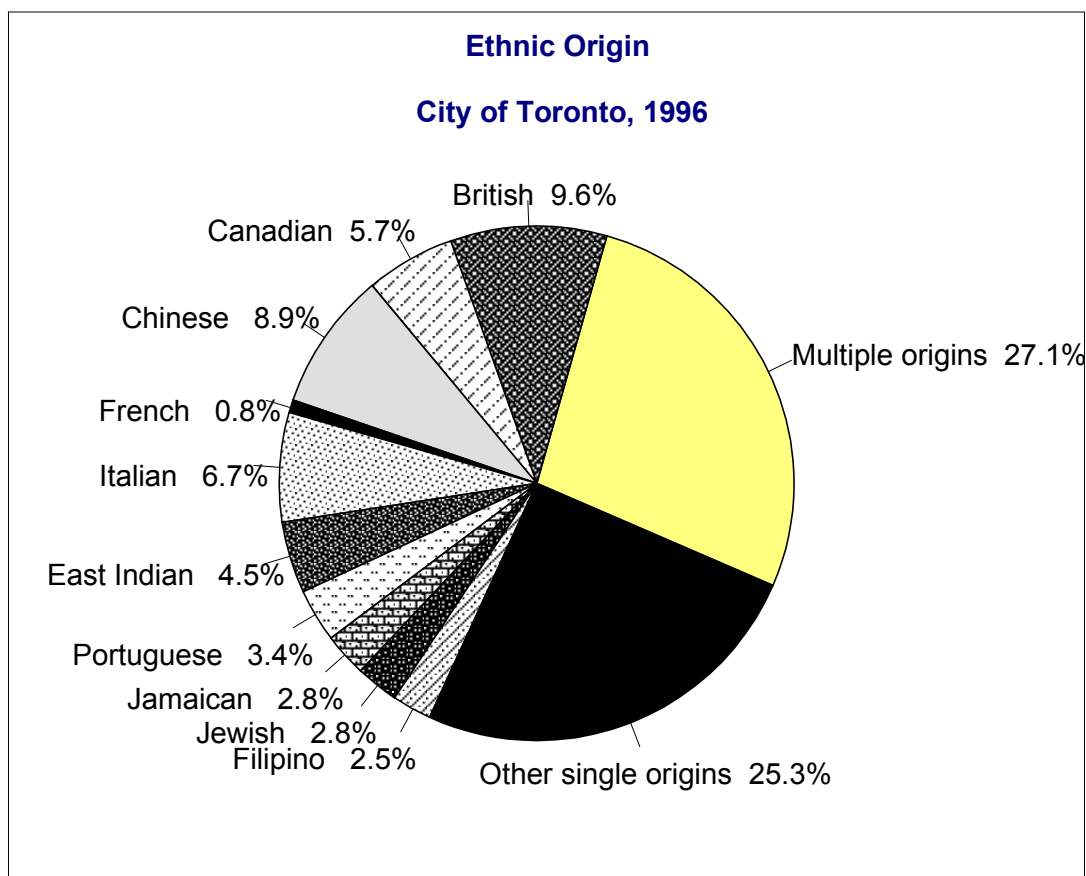
- Cultural values and beliefs greatly influence people's health seeking behaviours and utilization of health services.
- Useful in planning culturally sensitive services for communities with diverse ethnic groups.

**Limitations:**

- Reporting may not be accurate as ethnicity may be misinterpreted to be citizenship, nationality, language or mother tongue.
- A person's ethnicity may not directly reflect their home language or mother tongue.
- Changes of ethnic composition over time may be due to changes in collection methods during different censuses.

**Source:**

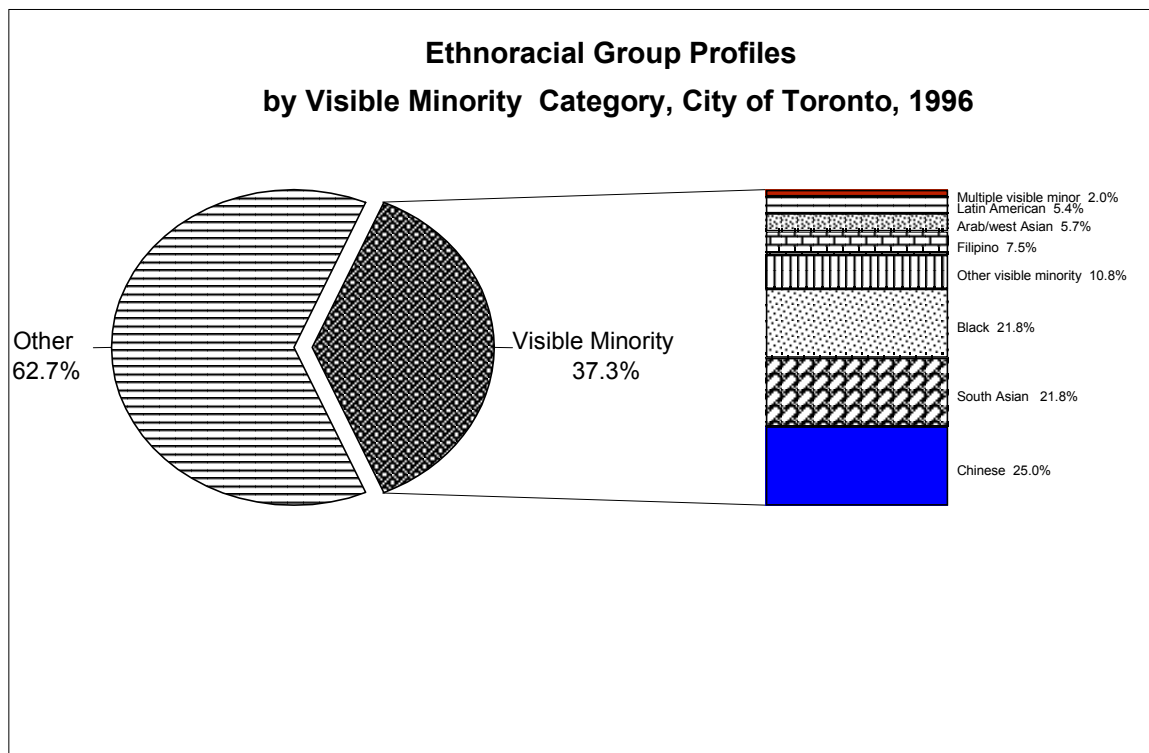
1996 Census, Statistics Canada.



Population by Ethnic Origin, Toronto, Rest of Ontario and Ontario, 1996								
Toronto City			Rest of Ontario			Ontario		
	#	%		#	%		#	%
<b>Total pop. By ethnic origin</b>	2,363,870	100	<b>Total pop. by ethnic origin</b>	8,278,920	100	<b>Total pop. by ethnic origin</b>	10,642,790	100
<b>Multiple origins*</b>	641,870	27	<b>Multiple origins</b>	3,543,805	42.8	<b>Multiple origins</b>	4,185,675	39.3
<b>Single origins</b>	1,722,005	73	<b>Single origins</b>	4,735,110	57.2	<b>Single origins</b>	6,457,115	60.7
<b>Ranking of Single Origins</b>			<b>Ranking of Single Origins</b>			<b>Ranking of Single Origins</b>		
<b>British</b>	226,305	9.6	<b>British</b>	1,252,130	15.1	<b>British</b>	1,478,435	13.9
<b>Canadian</b>	133,735	5.7	<b>Canadian</b>	1,155,400	14	<b>Canadian</b>	1,289,135	12.1
<b>Chinese</b>	209,395	8.9	<b>Italian</b>	324,020	3.9	<b>Italian</b>	482,830	4.5
<b>Italian</b>	158,810	6.7	<b>French</b>	283,160	3.4	<b>Chinese</b>	365,420	3.4
<b>East Indian</b>	107,220	4.5	<b>German</b>	206,800	2.5	<b>French</b>	301,635	2.8
<b>Portuguese</b>	79,875	3.4	<b>Dutch</b>	159,380	1.9	<b>East Indian</b>	242,255	2.3
<b>Jamaican</b>	65,495	2.8	<b>Chinese</b>	156,025	1.9	<b>German</b>	234,590	2.2
<b>Jewish</b>	64,985	2.8	<b>East Indian</b>	135,035	1.6	<b>Portuguese</b>	181,470	1.7
<b>Filipino</b>	58,295	2.5	<b>Polish</b>	114,940	1.4	<b>Dutch</b>	168,215	1.6
<b>French</b>	18,475	0.8	<b>Portuguese</b>	101,595	1.2	<b>Polish</b>	164,085	1.5
<b>Other single origins</b>	599,415	25.36	<b>Other single origins</b>	846,625	10.2	<b>Other single origins</b>	1,549,045	14.6

\* Multiple ethnic origins refers to a person who belongs to more than one ethnic group.





### Key Findings:

- In 1996, about 58% of the residents in the City of Toronto indicated a single ethnic origin other than British or Canadian. Approximately 27% of the residents had multiple ethnic origins. The most common single ethnic origins identified were Chinese, Italian, East Indian, Portuguese, Jamaican and Jewish.
- Another way of examining ethnic composition of a community is by using visible minority categories. According to the 1996 Census, 37% of non-institutionalized Toronto residents identified themselves as visible minorities compared to 30% in 1991. In 1991 as well as 1996, the largest visible minority groups were Chinese, South Asian and Blacks.
- The City of Toronto is more culturally diverse than Ontario. In 1996, the proportion of visible minorities was much higher in Toronto (37%) when compared to Ontario, which had only 15.8%. Visible minorities make up 9.7% of the population of the rest of Ontario.

### 3.4 Period since Immigration in Toronto

**Definition:**

Number of people by their period of immigration (the year landed immigrant status was first obtained) per 100 population.

Immigrants refers to people who have been granted the right to live in Canada permanently by immigration authorities. Many have become Canadian citizens.

The category excludes non-permanent residents (e.g. refugee claimants and holders of employment authorizations, student visas, or Minister's permits and their families).

External migrants (place of residence one year earlier, or five years earlier was outside Canada) is also an indicator of high immigration settlement areas.

**Significance/Uses:**

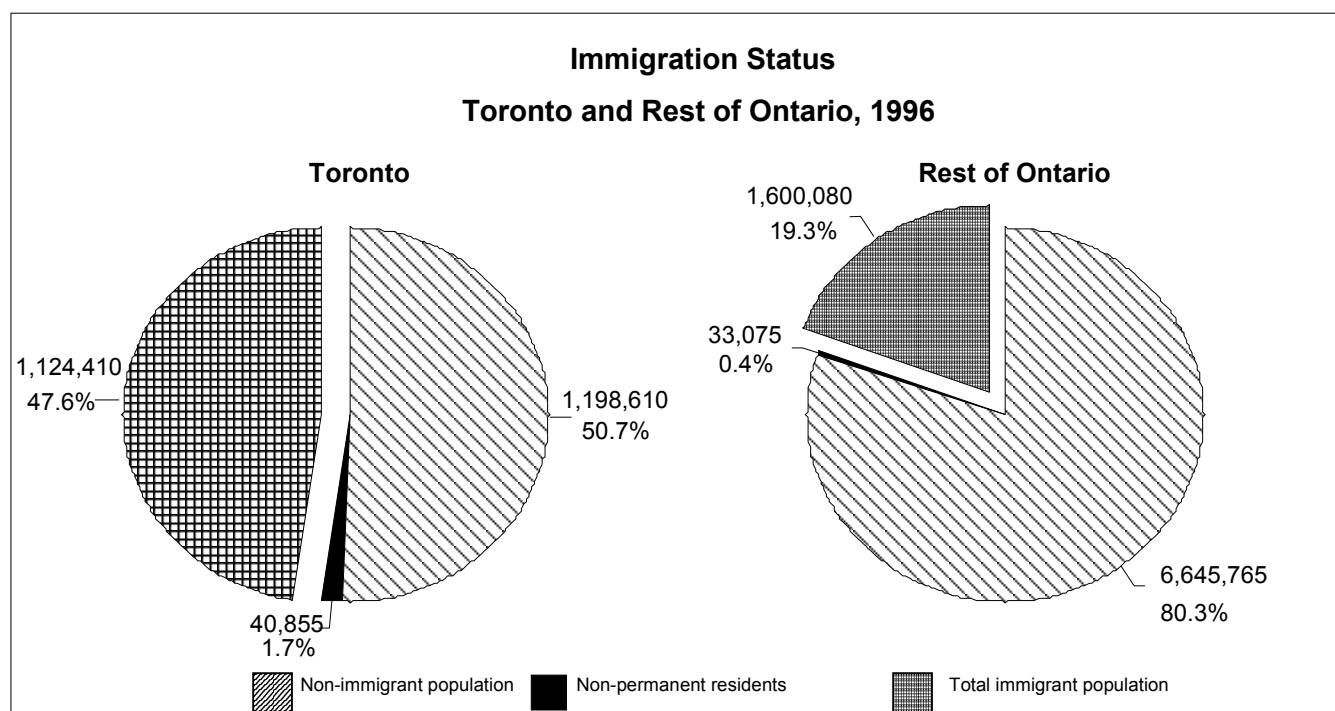
- Non-immigrants are people who are Canadian citizens by birth.
- Some immigrants have resided in Canada for a number of years, while others are recent arrivals.
- Period of immigration may be an indication of acculturation into mainstream culture.
- New immigrants may have different health care needs and levels of utilization of health care services from those who lived in Canada longer.
- Useful in planning culturally sensitive services for communities with diverse ethnic groups.
- Recent immigrants is one of the sub groups which will be used for equity analysis.

**Limitations:**

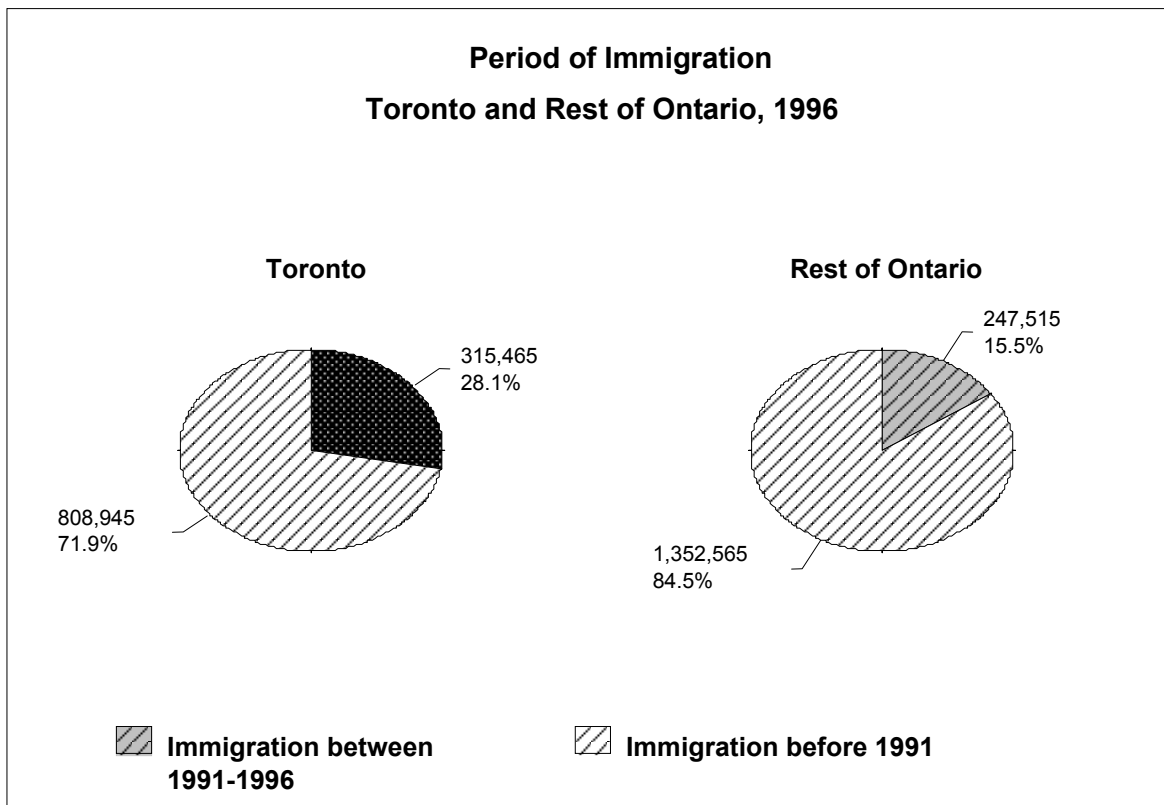
- Period of immigration may vary between different censuses, thus affecting comparability of data.

**Sources:**

1996 Census, Statistics Canada.



Immigrant Population by Period of Immigration, Toronto, Rest of Ontario and Ontario, 1996						
Period of Immigration	Toronto		Rest of Ontario		Ontario	
	#	%	#	%	#	%
<b>Before 1961</b>	165,660	14.7	423,140	26.4	588,800	21.6
<b>1961-1970</b>	151,935	13.5	298,490	18.7	450,425	16.5
<b>1971-1980</b>	210,425	18.7	312,525	19.5	522,950	19.2
<b>1981-1990</b>	280,925	25	318,405	19.9	599,330	22
<b>1991-1996</b>	315,465	28.1	247,515	15.5	562,980	20.1
<b>Total Immigrant Population</b>	1,124,410	100	1,600,080	100	2,724,490	100



### Key Findings:

- In 1996, almost half of the population in the City of Toronto consisted of immigrants, as opposed to 19% in the rest of Ontario and 26% in the province as a whole.
- Of those immigrants living in Toronto, 28% were recent immigrants (i.e. immigrated into Canada between 1991-1996) as opposed to 16% in the rest of Ontario and 21% in Ontario.

A lack of familiarity with Canada's health care system and its delivery may be a barrier to appropriate utilization of these services by immigrants, particularly recent immigrants. For this reason, recent immigration is one of the subgroups used in equity analysis.

### 3.5 Knowledge of Official Languages

**Definition:**

Proportion of people by their ability to speak the official languages (English and French).

Knowledge of official languages refers to the ability to conduct a conversation in English only, in French only, in both English and French or neither of the official languages of Canada.

**Significance/Uses:**

- People who do not know either English or French may have reduced access to health information and services.
- Useful in identifying the people most in need of translation or cultural interpreter services.
- Useful in planning for population-based services.
- Comparisons over time and place-to-place.

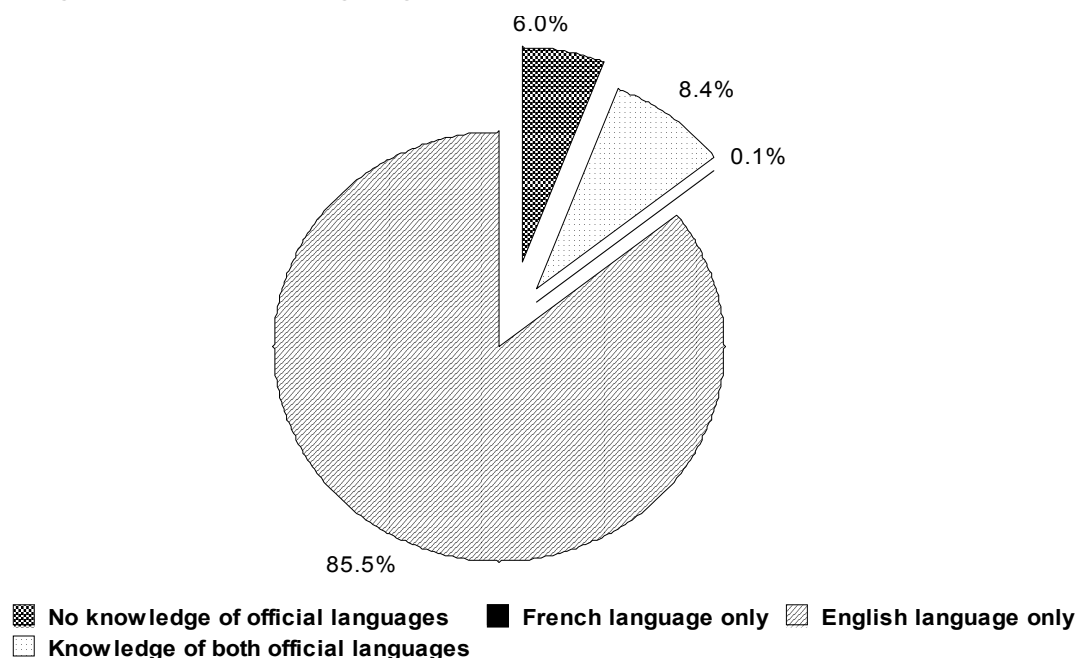
**Limitations:**

- Knowledge of official languages is self-reported and thus may be inaccurate. It is based on respondent's assessment of his or her ability to speak the official languages.

**Source:**

1996 Census, Statistics Canada.

### Knowledge of Official Languages Toronto, 1996



Knowledge of Official Languages, 1996						
	Toronto		Rest of Ontario		Ontario	
	#	%	#	%	#	%
Neither English nor French	142,635	6	102,150	1.2	244,785	2.3
Both English and French	197,610	8.4	1,037,285	12.5	1,234,895	11.6
English only	2,021,290	85.5	7,094,875	85.7	9,116,165	85.7
French only	2,340	0.1	44,600	0.5	46,940	0.4
Total	2,363,875	100	8,278,915	100	10,642,790	100

#### Key Findings:

- In 1996, almost 6% of the Toronto population could not converse in either English or French as opposed to 1% in the rest of Ontario and 2% in the province as a whole.

### 3.6 Low Income Incidence

**Definition:**

The proportion of economic families, unattached individuals (age 15 and over) and total population in private households living below the low income cut-offs (LICOs).

Statistics Canada sets the low income cut-offs at 20% higher than what the average family spends on basic necessities (food, shelter and clothing). National family expenditure data indicate that families spent, on average, 36.2% of their income in 1986 and 34.7% in 1992 for basic necessities. Respective low income cut-offs were 56.2% (using the 1986 base) and 54.7% (using the 1992 base). Low income cut-offs are updated annually by changes in the consumer price index and are set for unattached individuals, and five different sizes of families. The cut-offs vary according to urbanization and size of area of residence. The highest cut-off points are in urban areas with population of 500,000 or more.

Low income incidence was calculated based on 1990 incomes for the 1991 Census and 1995 incomes for the 1996 Census. Examples of low income cutoffs for residents of Toronto are:

	1990 income	1995 Income
Unattached individual:	\$14,155	\$16,874
Family of four:	\$28,081	\$31,753

**Significance/Uses:**

- Studies show a relationship between income and health. People with low income have increased risk of illness and mortality, as well as utilization of health services.
- Useful in planning for population-based services.
- The low income cut-off point for Toronto is higher than for other areas because of rural/urban differences.
- Low income is one of the sub-groups, which will be used for equity analysis.

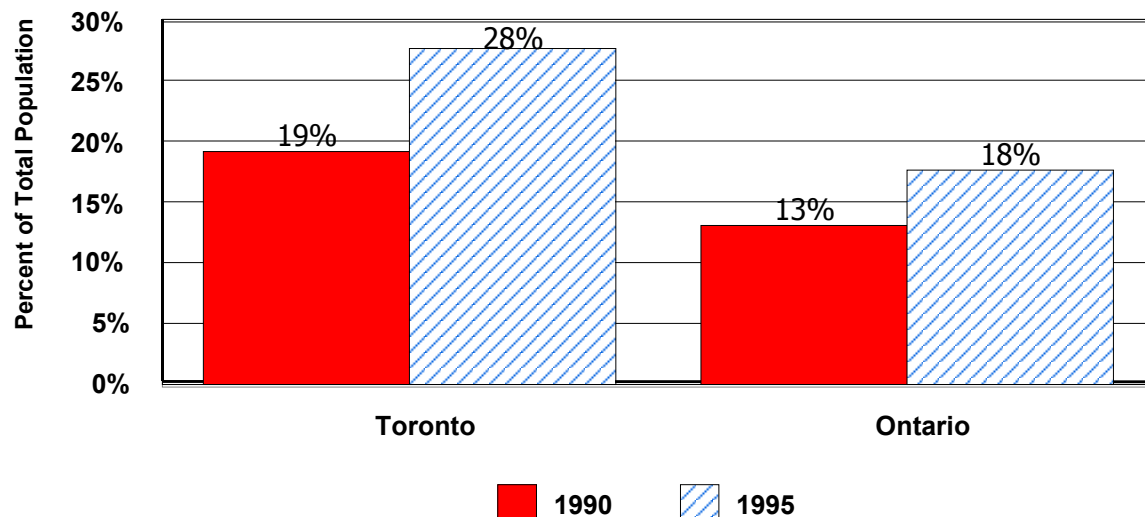
**Limitations:**

- Reporting of income is subject to under-reporting bias.
- Certain sub-groups are less well counted than others (e.g. young adults and the homeless).
- The 1991 Census used cut-offs based on updating 1986 family expenditures while the 1996 Census uses revisions to 1992 expenditure estimates. This affects comparability between the two Census years.

**Source:**

1991 and 1996 Census, Statistics Canada.

**POPULATION LIVING BELOW THE  
LOW INCOME CUT-OFF POINT  
TORONTO & ONTARIO, 1990 and 1995**



Source: 1996 Census & 1991 Census

Incidence of Low Income in Toronto and Ontario, 1990 and 1995						
	1990			1995		
	Economic Families %	Unattached Individuals %	Total Pop. in Private Households %	Economic Families %	Unattached Individuals %	Total Pop. in Private Households %
<b>Toronto</b>	16.3	33.5	19.1	24.4	41.7	27.6
<b>Ontario</b>	10.9	31.4	13.1	14.8	37.9	17.7

**Key Findings:**

- In 1990, nearly one-fifth (19.1%) of the population in the City of Toronto lived below the low income cut-off point. This proportion increased to 27.6% in 1995.
- Toronto has a higher proportion of low income individuals and families compared to Ontario (which had 13.1% in 1990 and 17.7% in 1995). The incidence of low income among Toronto families is 1.6 times that of Ontario, while the incidence among unattached individuals is 1.1 times.



### 3.7 Proportion of Population 15 and Over With Less Than 9 Years Education

**Definition:**

Proportion of people 15 and over who left school before the ninth grade to the total non-institutionalized population 15 years and over.

**Significance/Uses:**

- Education together with income form an indicator of socioeconomic status. Studies have demonstrated a relationship between lower levels of education and the following conditions: unskilled jobs, high unemployment, unfavourable living conditions, and greater prevalence of disability and health problems.
- People with lower education have reduced access to health information.
- Useful in assessing the required reading level for preparation of educational materials.
- Useful in planning for population-based services.
- Comparisons over time and place-to-place.

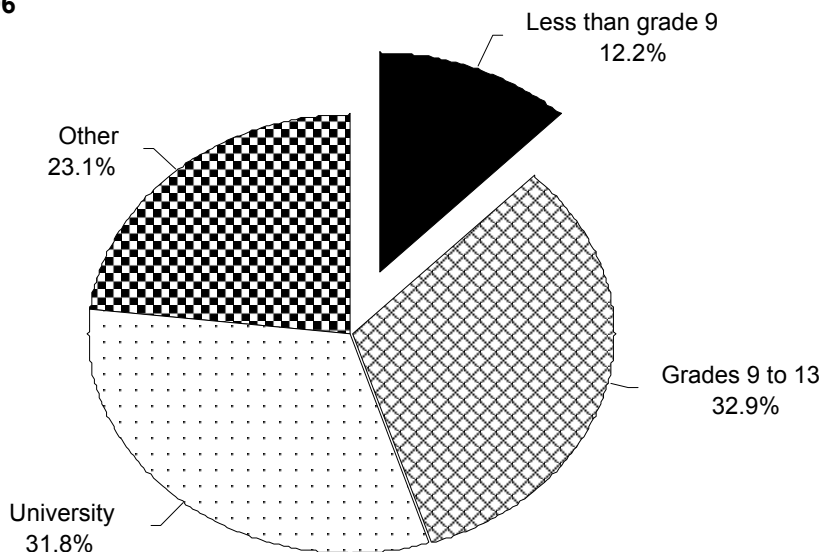
**Limitations:**

- Education levels vary by age group. An older population may show a higher percentage of lower education than a younger population.

**Source:**

1991 and 1996 Census, Statistics Canada.

**EDUCATION LEVEL OF POPULATION 15 & OVER  
TORONTO, 1996**



Source: 1996 Census

Educational Level of Population 15 and Over, Toronto, Rest of Ontario, Ontario, 1996						
	Toronto		Rest of Ontario		Ontario	
	#	%	#	%	#	%
<b>Less than grade 9</b>	236,105	12.2	609,280	9.4	845,385	10.0
<b>Grades 9 to 13</b>	638,585	32.9	2,532,250	39.0	3,170,835	37.6
<b>University (with or without degree)</b>	616,390	31.8	1,434,225	22.1	2,050,615	24.3
<b>Other</b>	447,265	23.1	1,915,105	29.5	2,362,370	28.0
<b>Total</b>	1,938,345	100	6,490,860	100	8,429,205	100

**Key Findings:**

- In 1996, about 12% of the population age 15 years and over in Toronto reported having less than grade 9 education as opposed to 9% in the rest of Ontario and 10% in the province as a whole. At the same time, the proportion of people with university degree is higher in Toronto than the rest of Ontario.



## **B) Structure of the Health Care System**

- 3.8 Utilization of Toronto Hospital System by Patient's Residence and Level of Care
- 3.9 Inventory of Health Services in the City of Toronto
- 3.10 Hospital Beds by Category
- 3.11 Health Planning Target and Benchmarks
- 3.12 Health Reform Implementation Progress Report

### 3.8 Utilization of Toronto Hospital System by Patient's Residence and Level of Care

#### Definitions:

- A) Number and proportion of separations from acute hospitals in Toronto by patient residence (Toronto residents vs. non-Toronto residents).
- B) Number and proportion of separations from acute hospitals in Toronto by level of care (primary, secondary and tertiary) and by patient residence.

#### Levels of care:

- (1) **Primary** – medical care provided by general practitioners or specialists that can be provided by any hospital because there is not a great deal of specialization required.  
**Secondary** – includes surgical procedures and services provided by medical specialists.  
**Tertiary** – specialized services provided to seriously ill patients in a small number of hospitals that serve as regional referral centres (includes care previously defined as either tertiary or quaternary).
- (2) The level of care methodology adapted for use here was the Hay Level of Care Methodology currently being used by the Joint Policy and Planning Committee (JPPC). The iteration of the Level of Care Methodology utilized is based on CMG 99 coincident with the data currently residing in the Provincial Health Planning Database (PHPD). Details of the Hay-JPPC level of care methodology are available on the JPPC website: [www.jppc.org](http://www.jppc.org)

#### Significance/Uses:

- Toronto hospitals not only serve residents of Toronto but also provide different levels of care (primary, secondary and tertiary) to residents of surrounding districts and regions. In addition, some Toronto hospitals are also a provincial resource for selected services (e.g. Cardiac Care). NB: Level of care captured in this report is based on patient CMGs (Case Mix Grouping).
- Reflects changes occurring in the delivery of health care services.
- Portrays useful information on local county capacity to provide acute in-patient hospital services versus the proportion of care provided outside of the local county.
- Useful in planning health services and programs.
- Permits comparisons over time and place-to-place.
- There is no age standardization to permit comparisons from one jurisdiction to another.
- Analysis of local hospital system capacity requires further analysis that can be provided here.
- There is no accounting for out-patient or ambulatory care capacity in this analysis.

#### Limitations:

- Areas with excess capacity will capture a higher share of acute separations which, in turn, translates into higher referral populations.
- Conversely, “under serviced” areas will show lower referral populations.
- The referral population and referral population based indicators are limited to short-term planning, (i.e. five-year planning horizon).

#### Source:

MOHLTC, Provincial Health Planning Database.

## a) Toronto Hospitals and Residents

Number of Separations from Toronto Hospitals by Level of Care, 1995/96 - 1999/00								
Year	Primary		Secondary		Tertiary		Total	
	#	%	#	%	#	%	#	%
1995/96	172,893	50.2%	135,093	39.3%	36,175	10.5%	344,161	100.0%
1996/97	158,074	48.9%	127,801	39.6%	37,155	11.5%	323,030	100.0%
1997/98	149,977	47.6%	125,674	39.9%	39,704	12.6%	315,355	100.0%
1998/99	137,578	45.8%	121,291	40.4%	41,646	13.9%	300,515	100.0%
1999/00	129,016	44.7%	116,352	40.3%	43,096	14.9%	288,464	100.0%

Number of Hospital Separations of Toronto Residents by Level of Care, 1995/96 - 1999/00								
Year	Primary		Secondary		Tertiary		Total	
	#	%	#	%	#	%	#	%
1995/96	143,093	54.3%	100,070	38.0%	20,322	7.7%	263,485	100.0%
1996/97	131,332	53.0%	95,668	38.6%	21,003	8.5%	248,003	100.0%
1997/98	124,231	51.8%	93,697	39.1%	21,889	9.1%	239,817	100.0%
1998/99	118,764	50.6%	92,498	39.4%	23,343	9.9%	234,605	100.0%
1999/00	112,395	49.3%	91,378	40.1%	24,154	10.6%	227,927	100.0%

Number and Proportion of Separations of Toronto Residents from Toronto Hospitals, by Level of Care, 1995/96 - 1999/00								
Year	Primary		Secondary		Tertiary		Total	
	#	%	#	%	#	%	#	%
1995/96	139,103	80.5%	97,170	71.9%	19,888	55.0%	256,161	74.4%
1996/97	127,429	80.6%	92,721	72.6%	20,486	55.1%	240,636	74.5%
1997/98	120,448	80.3%	90,789	72.2%	21,347	53.8%	232,584	73.8%
1998/99	111,996	81.4%	89,104	73.5%	22,703	54.5%	223,803	74.5%
1999/00	105,112	81.5%	86,035	73.9%	23,156	53.7%	214,303	74.3%

Number and Proportion of Separations of Non-Toronto Residents from Toronto Hospitals (Inflow), by Level of Care, 1995/96 - 1999/00								
Year	Primary		Secondary		Tertiary		Total	
	#	%	#	%	#	%	#	%
1995/96	33,790	19.5%	37,923	28.1%	16,287	45.0%	88,000	25.6%
1996/97	30,645	19.4%	35,080	27.4%	16,669	44.9%	82,394	25.5%
1997/98	29,529	19.7%	34,885	27.8%	18,357	46.2%	82,771	26.2%
1998/99	25,582	18.6%	32,187	26.5%	18,943	45.5%	76,712	25.5%
1999/00	23,904	18.5%	30,317	26.1%	19,940	46.3%	74,161	25.7%

Number and Proportion of Separations of Toronto Residents from Non-Toronto Hospitals (Outflow), by Level of Care, 1995/96 - 1999/00								
Year	Primary		Secondary		Tertiary		Total	
	#	%	#	%	#	%	#	%
1995/96	3,990	2.8%	2,900	2.9%	434	2.1%	7,324	2.8%
1996/97	3,903	3.0%	2,947	3.1%	517	2.5%	7,367	3.0%
1997/98	3,783	3.0%	2,908	3.1%	542	2.5%	7,233	3.0%
1998/99	6,768	5.7%	3,394	3.7%	640	2.7%	10,802	4.6%
1999/00	7,283	6.5%	5,343	5.8%	998	4.1%	13,624	6.0%

## b) Ontario Hospitals and Residents

Number of Separations from Ontario Hospitals by Level of Care, 1995/96 - 1999/00								
Year	Primary		Secondary		Tertiary		Total	
	#	%	#	%	#	%	#	%
1995/96	713,340	54.9%	488,884	37.6%	97,080	7.5%	1,299,304	100.0%
1996/97	652,068	53.4%	469,160	38.4%	99,767	8.2%	1,220,995	100.0%
1997/98	613,625	52.1%	458,465	39.0%	104,655	8.9%	1,176,745	100.0%
1998/99	597,578	51.4%	454,873	39.1%	109,600	9.4%	1,162,051	100.0%
1999/00	574,342	50.1%	456,627	39.8%	116,342	10.1%	1,147,311	100.0%

Number of Hospital Separations of Ontario Residents by Level of Care, 1995/96 - 1999/00								
Year	Primary		Secondary		Tertiary		Total	
	#	%	#	%	#	%	#	%
1995/96	705,554	55.0%	482,318	37.6%	94,512	7.4%	1,282,384	100.0%
1996/97	645,672	53.5%	463,509	38.4%	97,233	8.1%	1,206,414	100.0%
1997/98	607,564	52.2%	453,348	39.0%	102,316	8.8%	1,163,228	100.0%
1998/99	591,109	51.5%	449,699	39.2%	107,310	9.3%	1,148,118	100.0%
1999/00	568,694	50.1%	451,477	39.8%	113,979	10.0%	1,134,150	100.0%

Number and Proportion of Separations of Ontario Residents from Ontario Hospitals by Level of Care, 1995/96 - 1999/00								
Year	Primary		Secondary		Tertiary		Total	
	#	%	#	%	#	%	#	%
1995/96	607,400	85.1%	381,471	78.0%	56,998	58.7%	1,045,869	80.5%
1996/97	555,422	85.2%	367,366	78.3%	58,582	58.7%	981,370	80.4%
1997/98	521,882	85.0%	360,710	78.7%	60,593	57.9%	943,185	80.2%
1998/99	504,570	84.4%	359,711	79.1%	64,442	58.8%	928,723	79.9%
1999/00	486,034	84.6%	360,938	79.0%	68,398	58.8%	915,370	79.8%

Number and Proportion of Separations of Non-Ontario Residents from Ontario Hospitals (Inflow), by Level of Care, 1995/96 - 1999/00								
Year	Primary		Secondary		Tertiary		Total	
	#	%	#	%	#	%	#	%
1995/96	105,940	14.9%	107,413	22.0%	40,082	41.3%	253,435	19.5%
1996/97	96,646	14.8%	101,794	21.7%	41,185	41.3%	239,625	19.6%
1997/98	91,743	15.0%	97,755	21.3%	44,062	42.1%	233,560	19.8%
1998/99	93,008	15.6%	95,162	20.9%	45,158	41.2%	233,328	20.1%
1999/00	88,308	15.4%	95,689	21.0%	47,944	41.2%	231,941	20.2%

Number and Proportion of Separations of Ontario Residents from Non-Ontario Hospitals (Outflow), by Level of Care, 1995 – 1999								
Year	Primary		Secondary		Tertiary		Total	
	#	%	#	%	#	%	#	%
1995/96	98,154	13.9%	100,847	20.9%	37,514	39.7%	236,515	18.4%
1996/97	90,250	14.0%	96,143	20.7%	38,651	39.8%	225,044	18.7%
1997/98	85,682	14.1%	92,638	20.4%	41,723	40.8%	220,043	18.9%
1998/99	86,539	14.6%	89,988	20.0%	42,868	39.9%	219,395	19.1%
1999/00	82,660	14.5%	90,539	20.1%	45,581	40.0%	218,780	19.3%

### Key Findings:

- In 1995, there were a total of 344,160 separations from acute hospitals in Toronto. Half of these were for primary level of care, nearly 40% for secondary care and 11% for tertiary care. The proportion of tertiary separations from Toronto acute hospitals is higher than that for Ontario as a whole (7.5%).
- There was a 16% decrease in total acute separations from Toronto hospitals between 1995/96 and 1999/00. The change affected the levels of care differently. Separations for primary and secondary levels of care decreased by 25% and 14% respectively, while those for tertiary care increased by 19%. This pattern is similar to that seen for Ontario. However, the decrease observed in the primary and secondary levels of care for Toronto was much greater than for Ontario as a whole.
- In 1995, there were a total of 263,485 separations from acute care hospitals for Toronto residents. 54% of these were for primary care, 38% for secondary care and 8% for tertiary care. This pattern is similar to that observed in Ontario as a whole.
- There was a 14% decrease in total acute separations from Toronto hospitals between 1995/96 and 1999/00. The change affected the levels of care differently. Separations for primary and secondary levels of care decreased by 22% and 9% respectively, while those for tertiary care increased by 19%.
- Further examination of acute separations from Toronto hospitals by level of care (1995/96 to 1999/00) indicates that non-Toronto residents received approximately 19% of total primary care,



26-28% of secondary care and 45% of the tertiary care. There has been little change in these proportions over the five- year period.

- Very few Toronto residents receive acute care from hospitals outside Toronto. In 1995/96, less than 3% of acute separations for Toronto residents were from hospitals outside Toronto. This was true for all three levels of care. However, between 1995/96 and 1999/00, there was an increase in the number of Torontonians receiving acute care outside Toronto. In 1999/00, the proportions reached approximately 7% for primary care, 6% for secondary care and 4% for tertiary care.

The decline in separations from Toronto hospitals occurred mainly for primary/secondary care, while the complex cases (tertiary/quaternary) increased. This indicates that the decline largely reflects reductions in social admissions. Another cause of the decline might be related to the conversions of in-patient surgery to day surgery. This is clear from the hospital data presented earlier in the report which demonstrates a breakdown of acute in-patient separations by medical specialty. It is likely that we will not be able to sustain the trend of declining separations without significant advances in treatment. In other words, we may well be close to attaining the most “efficient” rates of in-patient acute care.

### 3.9 Inventory of Health Services in the City of Toronto

**Definition:**

List and maps of hospitals, health programs and service organizations providing health and support care located in a given area.

**Significance/Uses:**

- Provides basic information on availability of different types of services for a given area.
- Indicator of distribution and accessibility of health programs and services to an area population.
- Comparison over time.
- Helps to identify whether restructuring changes are being implemented.

**Limitations:**

- Inventory of hospitals, health programs and services does not measure their capacity or the volume of services they provide.

**Sources:**

MOHLTC.

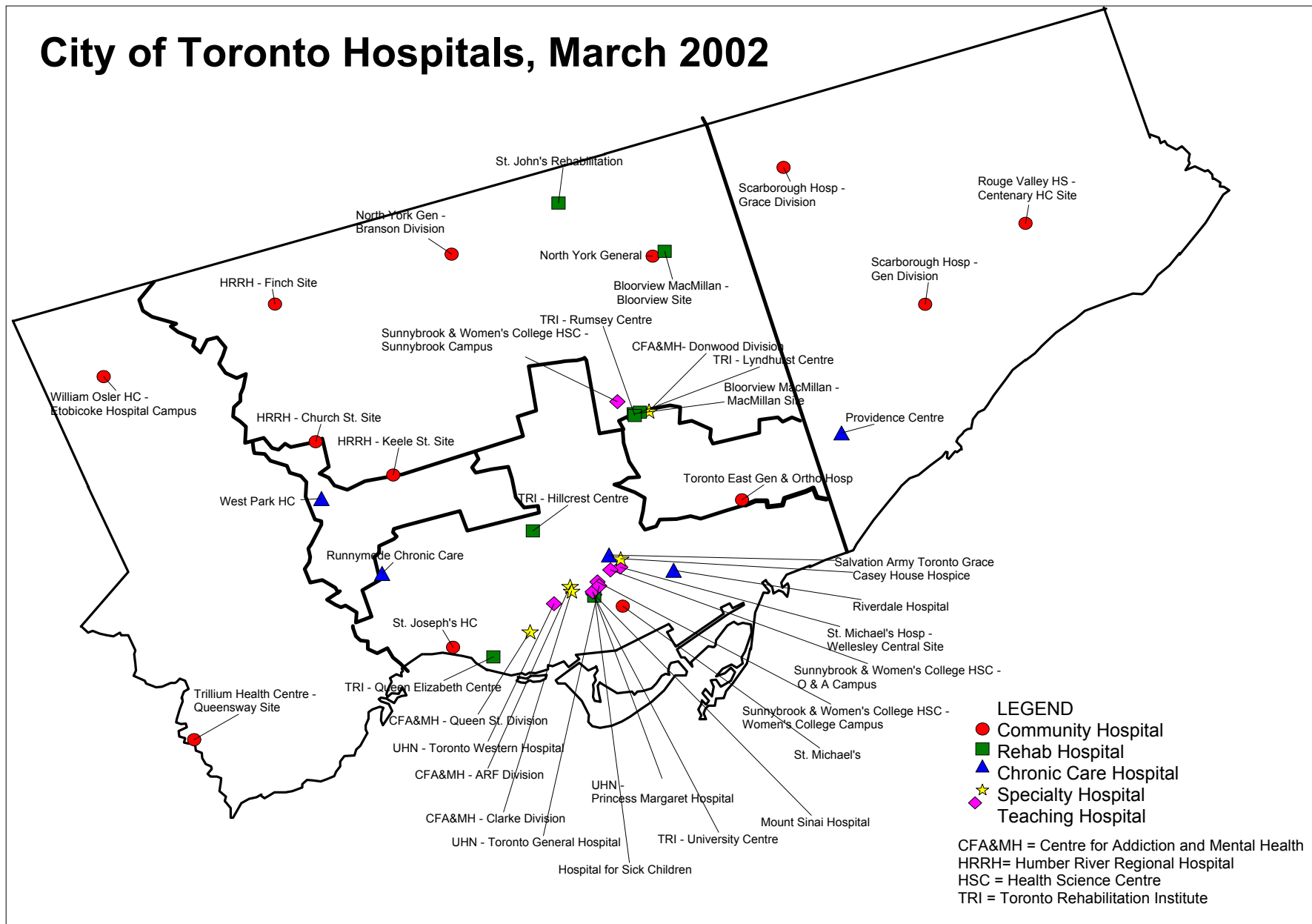
Ontario Hospital Association.

The following table shows pre- and post- restructuring of the health care system in Toronto.

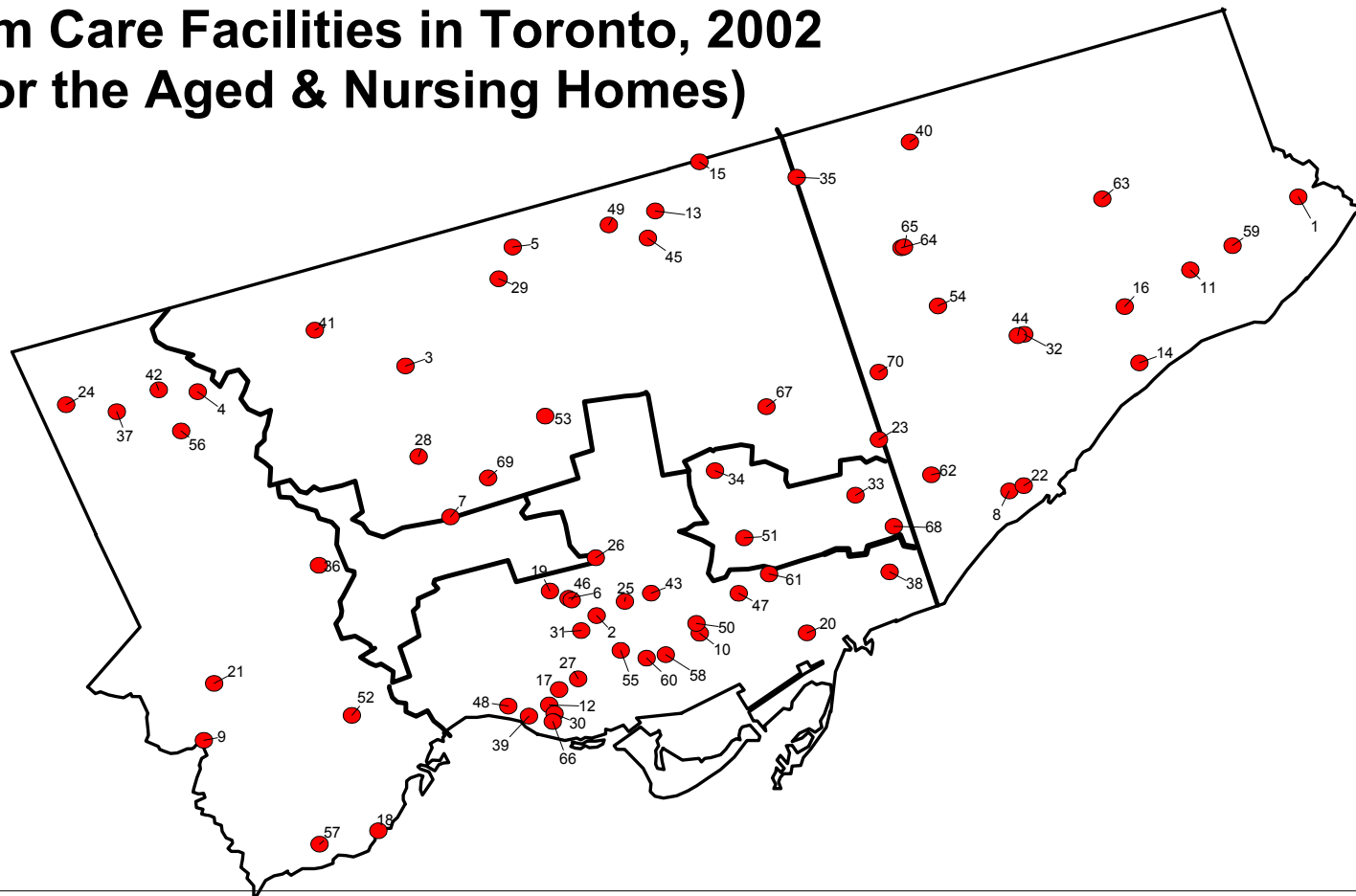
	Pre Restructuring (1996)	March 2002
<b>Acute Care Facilities:</b>		
Teaching Hospitals	6 on 8 sites	5 on 10 sites
Speciality Hospitals	3 on 3 sites	2 on 4 sites
Community Hospitals	11 on 13 sites	8 on 11 sites
<b>Mental Health and Addiction Services</b>	5 on 5 sites	Included under specialty hospitals
<b>Rehabilitation and Complex Continuing Care</b>	14 on 17 sites	9 on 14 sites
<b>LTC Facilities:</b>		
Nursing Homes	42	41
Homes for the Aged	27	27
<b>Hospice Programs</b>	11	11
<b>Community Health Centres</b>	22	22
<b>HSOs (Health Service Organizations)</b>	5	4
<b>Public Health Units</b>	6 on multiple sites	1 on multiple sites

Maps on the following pages show the geographical distribution of the current health services in the City of Toronto.

# City of Toronto Hospitals, March 2002



## Long-Term Care Facilities in Toronto, 2002 (Homes for the Aged & Nursing Homes)



### NURSING HOMES

1. Altamont
2. Barton Place
3. Casa Verde HC
4. Central Park Lodges
5. Cheltenham
6. Christie Gardens
7. COT-H&G Baker
8. Craiglee
9. Dom Lipa
10. Rehai Centre
11. Ehatare
12. Elm Grove

### NURSING HOMES

13. Extendicare/Bayview
14. Extendicare/Guildwood
15. Extendicare/N York
16. Extendicare/Scarb
17. Fairview
18. Garden Court
19. Hellenic Home
20. Heritage
21. Highbourne Lifecare
22. Leisureworld-Scar
23. Leisureworld-East
24. Leisurew-Eto

### NURSING HOMES

25. Leisureworld-Tor
26. Lincoln Place
27. Maynard
28. North Park
29. NY Gen-Branson
30. Norwood
31. O'Neill Centre
32. Rockcliffe
33. St. Clair O'Connor
34. Suomi Koti Tor
35. Tendercare
36. Ukrainian Can

### NURSING HOMES

37. Versa Care-Etob
38. Versa Care-Tor
39. White Eagle
40. Yee Hong
41. Yorkview Lifecare

### HOMES FOR THE AGED

42. Albion Lodge
43. Belmont House
44. Bendale Acres
45. Carefree Lodge
46. Castleview Wychwood

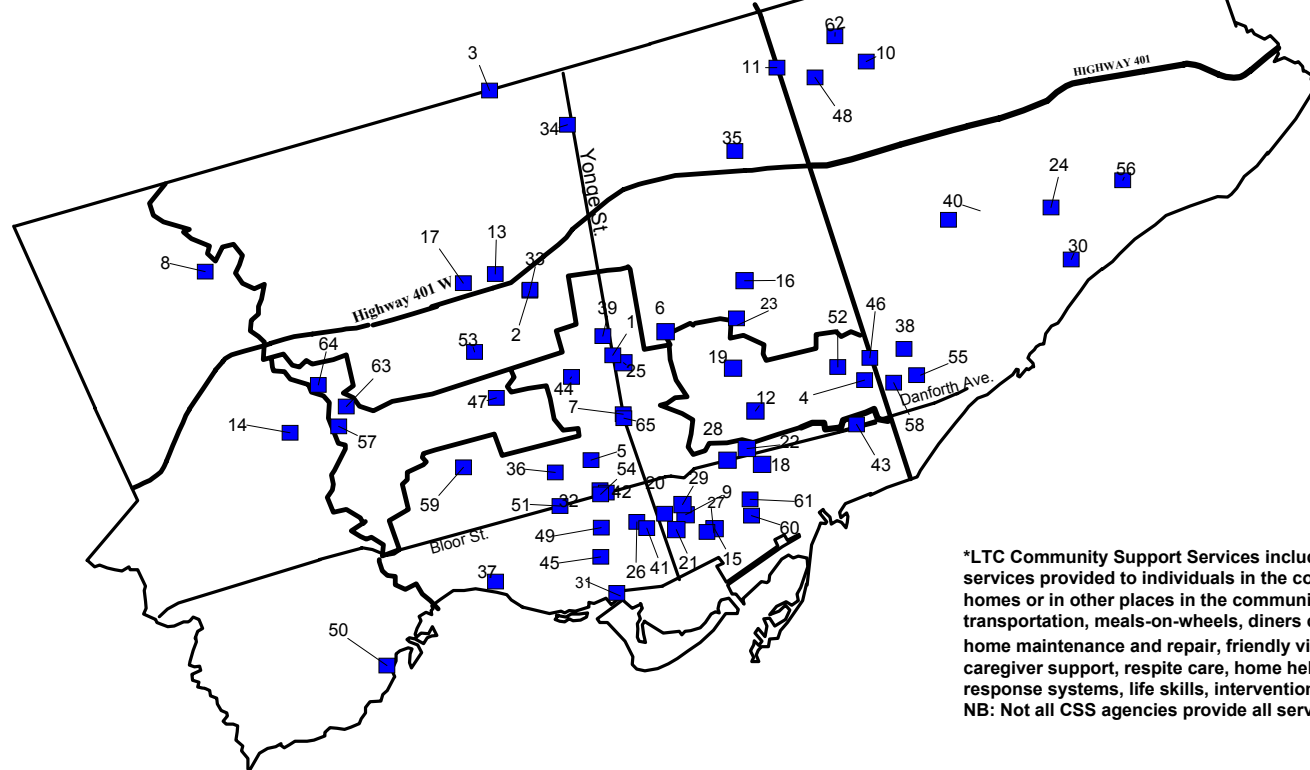
### HOMES FOR THE AGED

47. Chester Village
48. Copernicus Lodge
49. Cumber Lodge
50. Fudger House
51. Ina Grafton Gage
52. Ivan Fanko
53. Jewish Home
54. Kennedy Lodge
55. Kensington HC
56. Kipling Acres
57. Lakeshore Lodge
58. Laughlen Lodge

### HOMES FOR THE AGED

59. Metro Tor Legion
60. Mon Sheong
61. Nisbet Lodge
62. Providence Centre
63. Seven Oaks
64. Shepherd Village
65. Shepherd Village
66. Spencer House
67. Thompson House
68. True Davidson Acres
69. Villa Columbo
70. The Wexford

# Long Term Care Community Support Services\* (CSS) in Toronto, 2002



1. Anne Johnston HS  
2. Baycrest Centre  
3. Bernard Bertel  
4. Call-A-Service Inc.  
5. Can. Hearing Soc.  
6. Can. N Inst. for Blind  
7. Can. Red Cross  
8. C & N Etobicoke Home SS  
9. Central Neighbourhood  
10. Chinese Info & Com. Serv.  
11. Chinese Seniors

12. Comm. Care EYork  
13. CSJE (Senior Care)  
14. Day Centre & Visit Serv.  
15. Dixon Hall  
16. Don Mills Found.  
17. Downsview Services  
18. E Toronto Family Serv.  
19. EYork MOW  
20. Family Service Assn  
21. Good Neighbours  
22. Greek Community

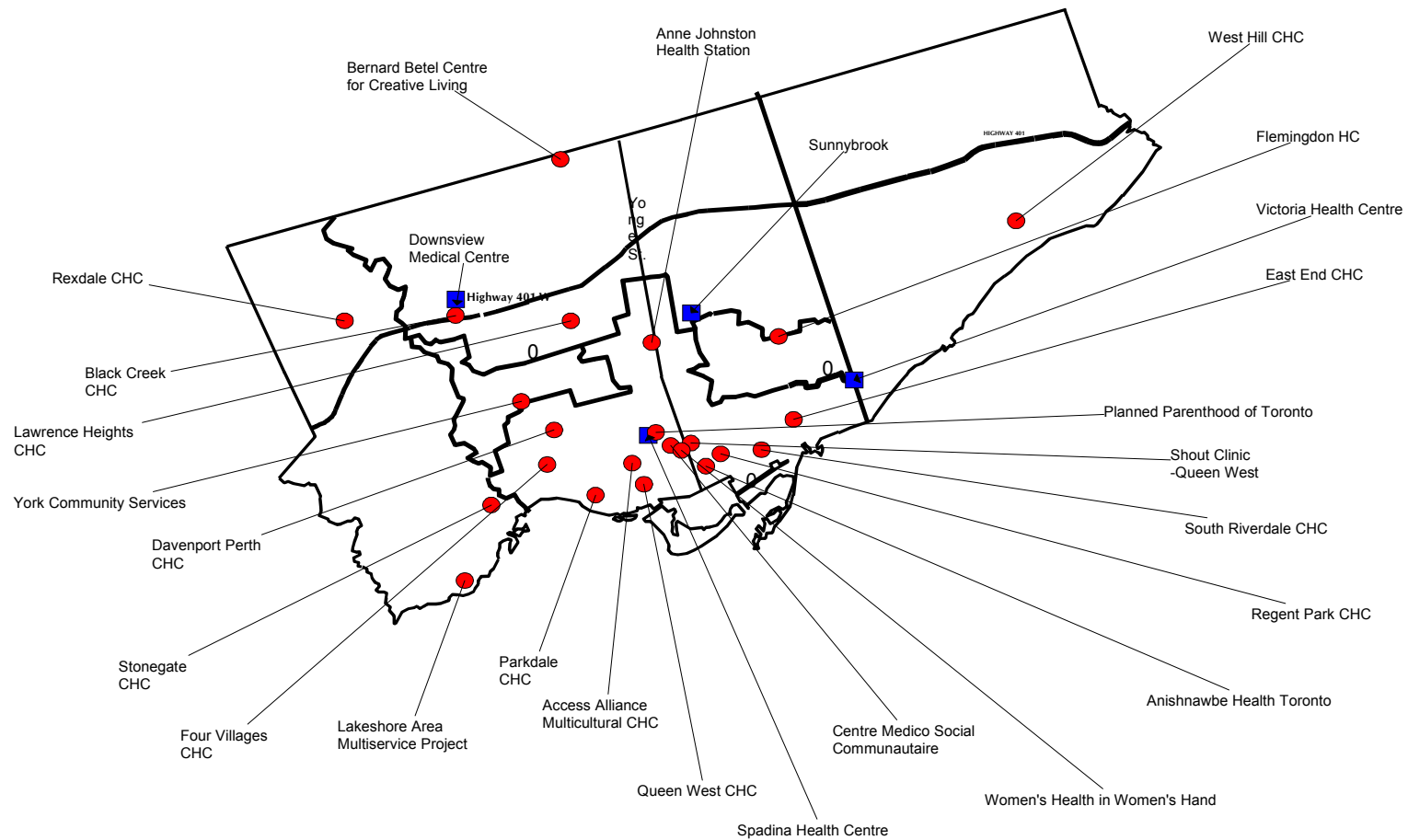
23. Hospital Special Needs  
24. Human Serv. of Scarb.  
25. Info & Referral Serv.  
26. Interlink  
27. Les Centres d'Accueil  
28. Meals Here & There  
29. Mid-Toronto Comm Serv.  
30. Momji Health Care  
31. Toronto Municip.  
32. Native Can. Centre  
33. New Horizons

34. N York Central MOW  
35. N York Sen. Ctr.  
36. Ont. Assn. of Res. Council  
37. Parkdale Golden Age  
38. Providence Centre  
39. SAINTS  
40. Scarb. Supp. Serv.  
41. Second Mile Club  
42. Sen. Adult Serv.  
43. Senior Link

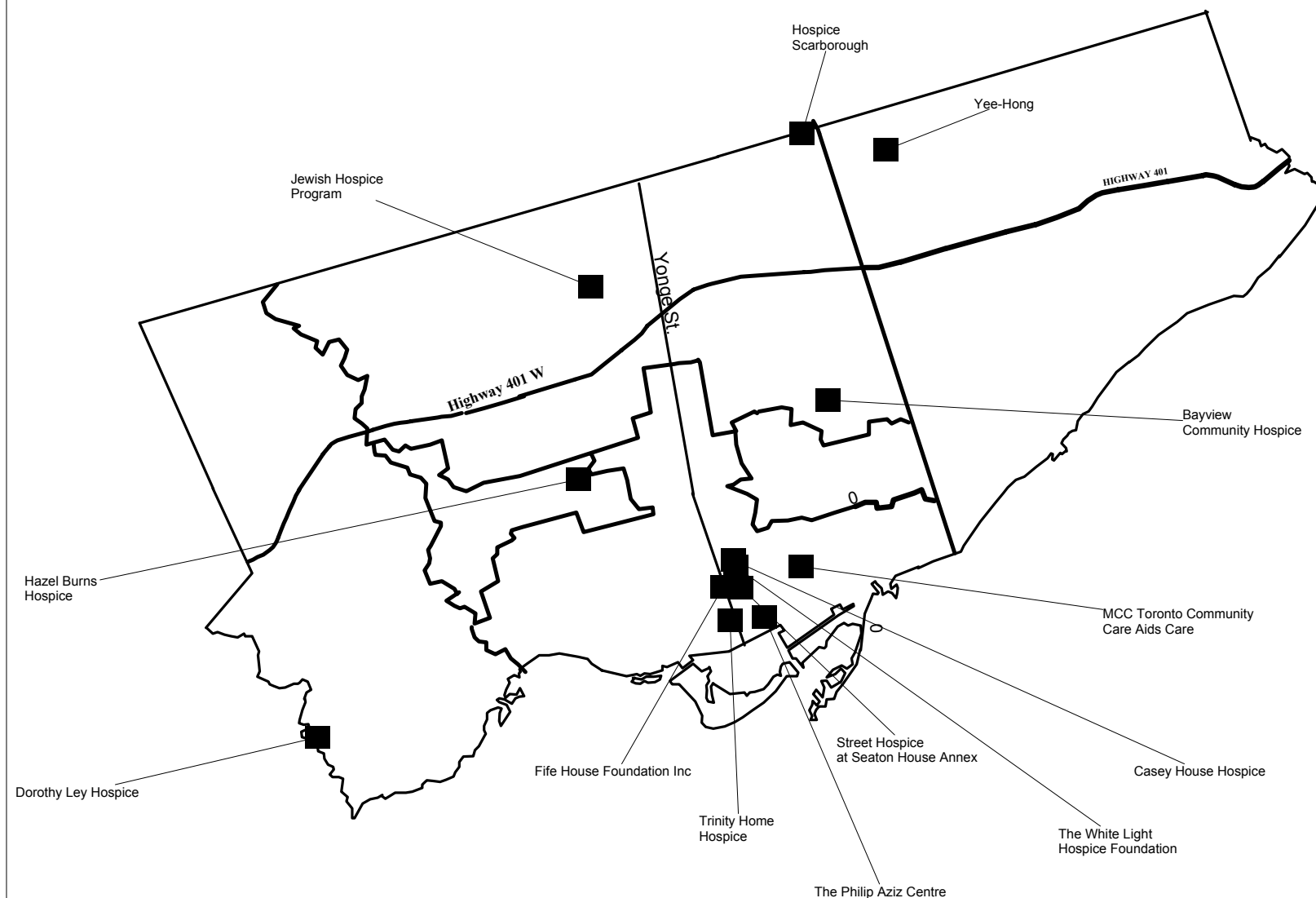
44. SPRINT  
45. St. Christopher House  
46. St. Clair O'Connor  
47. St. Clair W Services  
48. St. Paul's L'Amoreaux  
49. St. Stephen's Comm.  
50. Storefront Humber  
51. Toronto Intergenerational  
52. True Davidson MOW  
53. Villa Columbo  
54. Volunteer Centre

55. Warden Woods Ctre.  
56. West Hill Serv.  
57. West Park Hosp.  
58. W Scarb. Neighbour.  
59. W Toronto Services  
60. Woodgreen Ctr.  
61. Woodgreen Towers  
62. Yee Hong Centre  
63. York West MOW  
64. York West Seniors  
65. Yorkminster Park MOW

# Community Health Centres (CHCs) & Health Service Organizations (HSOs) In City of Toronto, 2002



## Hospice Programs, City of Toronto, 2002





**Key Findings:**

- Prior to hospital restructuring, there were 39 hospitals on 46 sites in the City of Toronto. The HSRC directed that Toronto's hospital system be reduced to 24 hospitals on 35 sites. The intent was to reduce unnecessary duplication in infrastructure and services, and to make more efficient use of available resources.
- Except for public health units, which amalgamated to form one on six sites, there has been no change in the number of other facilities/services in Toronto between 1996 and 2002. There is concern that the community and LTC resources required to support HSRC acute care objectives are lagging, and insufficient. To address this problem, the MOHLTC has announced funding for additional beds and LTC facilities (see Section 2.6). However, it is difficult to determine the adequacy of these facilities/services based just on the numbers. Other sections of this report try to determine capacity of these services (e.g. long-term care utilization and beds in the descriptor section).
- According to maps showing the distribution of LTC CSSA, CHC and Hospice programs in Toronto, most services are located within the former (pre-amalgamation) City of Toronto, with few in the surrounding municipalities especially Etobicoke and Scarborough. Etobicoke has only three LTC CSSAs, three CHCs and one hospice, while Scarborough has only one CHC and one hospice.

### 3.10 Hospital Beds by Category

**Definition:**

Beds reported staffed and in operation by hospitals in a given area, and by type of care, as reported by MOHLTC.

**Significance/Uses:**

- Provides information on hospital in-patient system capacity.
- Beds per population ratio is an indicator of provision of in-patient hospital care.
- For some levels of care, beds per 1,000 population rates can be compared to the Ontario MOHLTC planning guidelines or HSRC guidelines.
- Comparisons over time and place for number of beds, bed/population rates and bed occupancy by type of care.

**Limitations:**

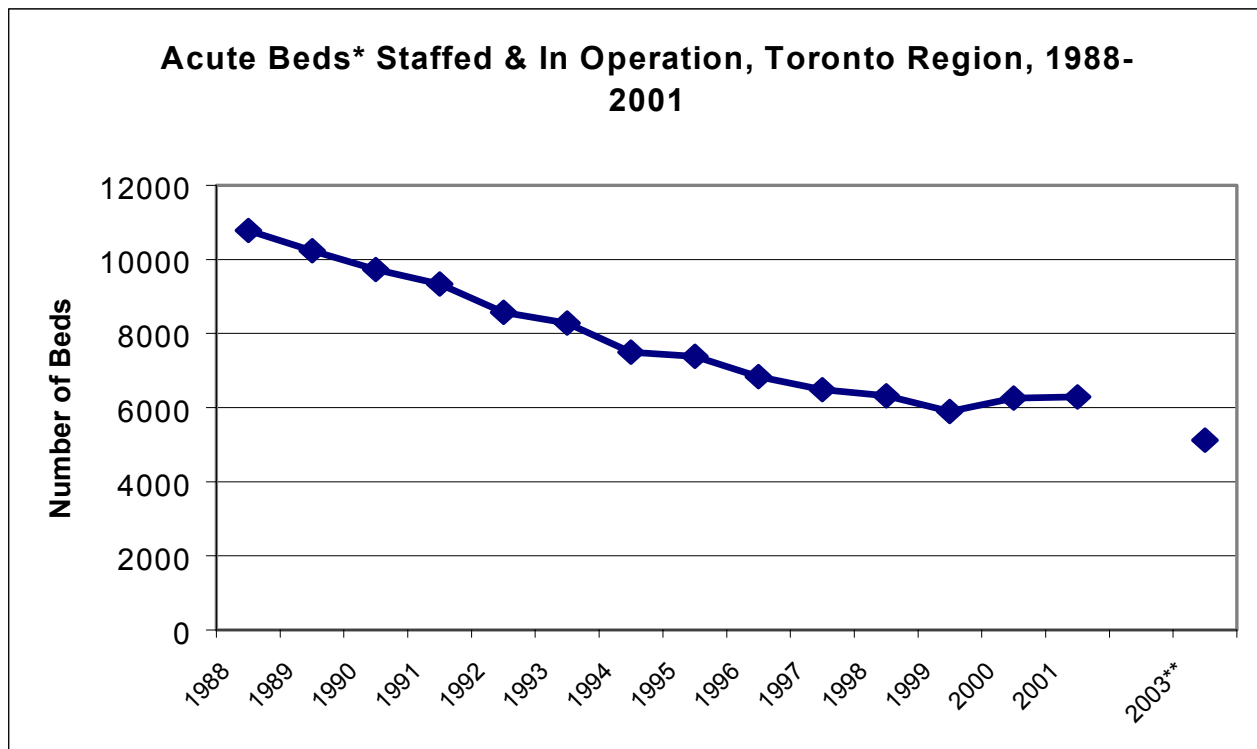
- As a measure of capacity, it does not provide information on efficient use of this resource.

**Source:**

Daily Census Summary of Beds Staffed and in Operation as of March 31.  
MOHLTC Institutional Services Branch, Planning and Operations.

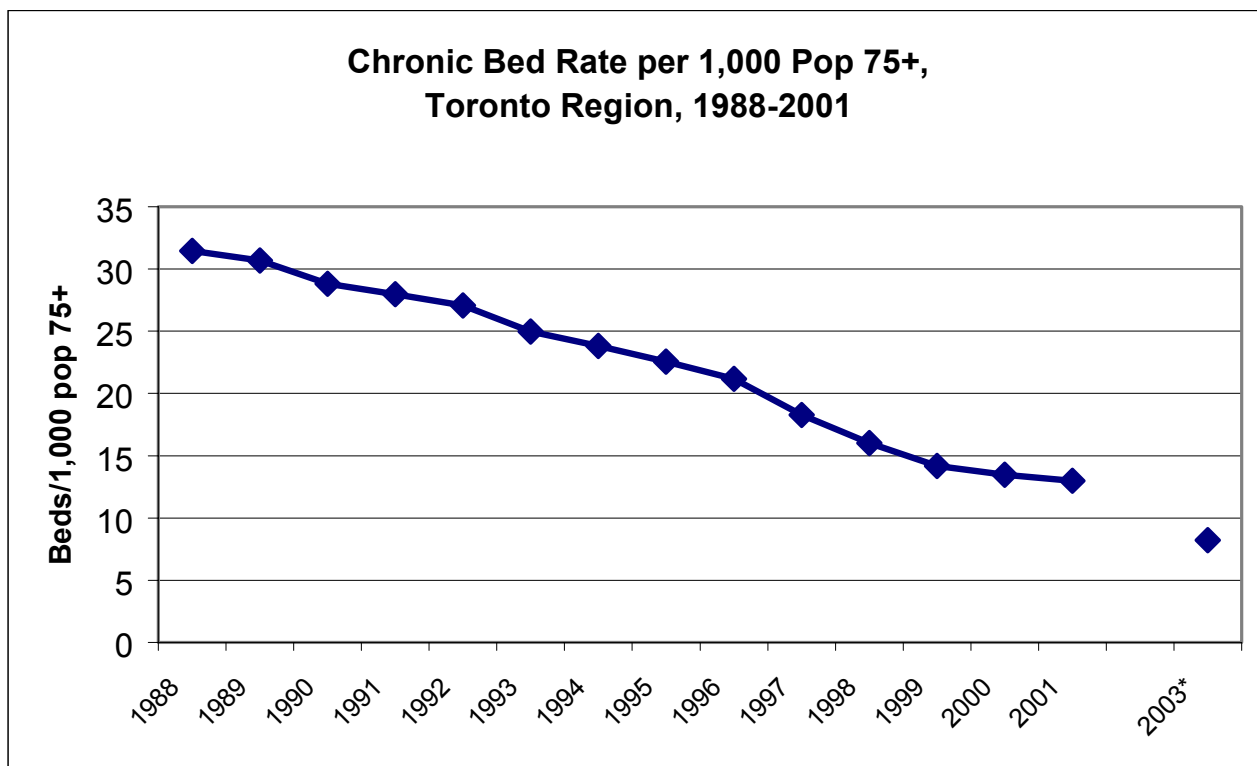
**HSRC Benchmarks for Toronto (2003):**

Acute care:	5,125 beds
Sub-acute care:	13 beds/100,000 pop
Rehabilitation:	25 beds/100,000 pop
Complex continuing care: (i.e. Chronic care)	8.23 beds/1,000 75 + 7.62 - Complex; 0.20 - Respite; 0.41 - Palliative
Mental Health beds (adults)	35 beds per 100,000 Resident Population (by 2003) 21 beds/100,000 for acute mental health; 14 beds/100,000 for longer-term mental health;
Mental health (child/adolescents):	7/100,000 0-17 years
Long-term care beds:	99.1 beds /1,000 75 +
Long-term care places:	215.3 places/1,000 75 +

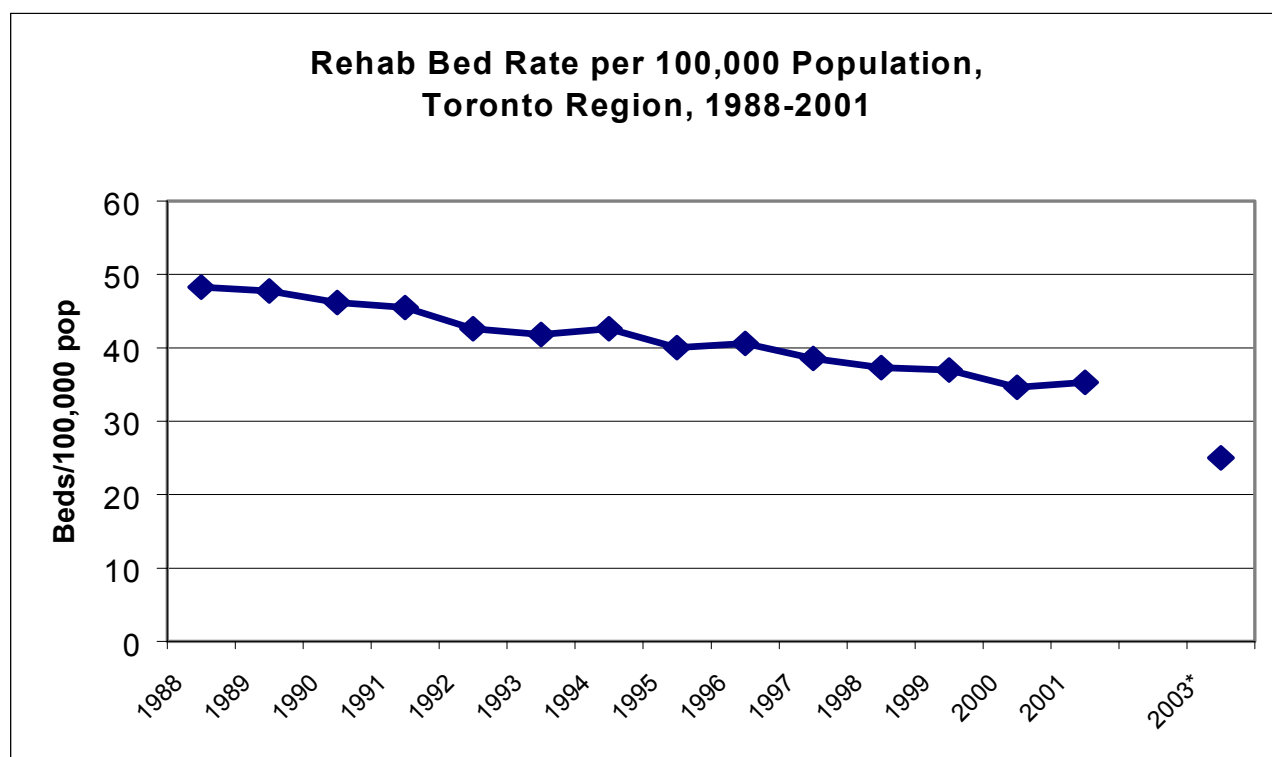


\* Also includes psychiatric beds

\*\* HSRC Benchmark



\* HSRC Benchmark



\* HSRC Benchmark

Number of Beds Staffed and In Operation as of March 31, by Type of Bed Toronto 1991 – 2001				
Year	Acute*	Chronic**	Rehab	Total
1991	9,337	3,337	1,075	13,749
1992	8,576	3,301	1,009	12,886
1993	8,283	3,118	998	12,399
1994	7,499	3,048	1,018	11,565
1995	7,383	3,014	969	11,366
1996	6,837	2,777	1,003	10,617
1997	6,482	2,507	965	9,954
1998	6,324	2,299	946	9,569
1999	5,894	2,101	934	8,929
2000	6,254	2,084	880	9,218
2001	6,284	2,086	909	9,279

\* Acute beds also include Acute Psychiatric beds

\*\* Chronic beds include complex, respite and palliative care

Rates of Beds Staffed and In Operation as of March 31, by Type of Bed Toronto 1991 – 2001				
Year	Acute Rate/100,000 pop	Chronic bed Rate/1,000 pop 75 +	Rehab bed rate/100,000 pop	Total beds Rate/100,000 pop
1991	397.3	27.9	45.7	585.1
1992	364.0	27.3	42.8	546.9
1993	350.4	25.5	42.2	524.5
1994	313.0	24.6	42.5	482.6
1995	303.7	23.6	39.9	467.5
1996	277.6	21.1	40.7	431.1
1997	260.2	18.3	38.7	399.6
1998	252.1	16.2	37.7	381.4
1999	233.6	14.2	37.0	353.8
2000	245.9	13.5	34.6	362.5
2001	243.9	13.0	35.3	360.1

### Key Findings:

- There has been a significant decrease in the total number of hospital beds in the last 10 years.
- The acute care sector experienced a large reduction (i.e. 33% or 3,053 beds) between 1991 and 2001. The current acute care bed capacity of 5,233 (excluding psychiatric beds) as of March 2001 needs to be reduced by a further 2% to attain the HSRC benchmark of 5,125 beds by the year 2003. However, it is misleading to apply these benchmarks to the current bed types since the HSRC analysis factored in new bed categories (e.g. sub-acute care) which do not currently exist.

- The number of chronic beds decreased by 37% (i.e. from 3,337 to 2,086) between 1991 and 2001. The current chronic bed rate (i.e. 13 per 1,000 people age 75 and over) is 58% higher than the HSRC target of 8.23 in the year 2003. Before these beds rates are brought down to reach the HSRC targets, there must be expansion of LTC facility services able to deliver intense levels of care for complex but stable medical conditions. To this end, the MOHLTC has announced increased funding for LTC beds and new facilities (see section 2.6 - Long-Term Care Facilities Utilization). The development of supportive housing services for people with physical disabilities will also allow for further chronic care bed closures.
- The rehabilitation sector experienced the smallest loss of beds (i.e., 166 beds, or a 15% reduction). The current rehab bed rate of 35.3 per 100,000 population is about 41% higher than the HSRC target of 25 beds per 100,000 population by the year 2003. However, the HSRC target was based on the assumption that sub-acute care beds would be introduced in Ontario, which has not happened.

### 3.11 Health Planning Target and Benchmarks

#### Ontario Ministry of Health Planning Target and Benchmarks

Health Guidelines/Benchmarks	Description of Guidelines (Some guidelines under review).
Utilization Rate (under review)	550 acute days per 1,000 hospital referral population.  100 acute separations per 1,000 hospital referral population.
Acute Occupancy Rates	Benchmarks are calculated by hospital size (number of acute care beds) and applied to categories of beds, for example: 95% for medical surgical beds in hospitals with over 200 beds.
Acute Length of Stay	Length of Stay in Days by Category of Beds and Hospital Type; for example: 6.0 days for acute care beds.
In-patient and Out-patient Ratio of Surgery	Out-patient surgery as % of total surgery (including endoscopy). 70% of surgery to be performed as out-patient.

#### HSRC Planning Guidelines and Implementation Strategies for 2003

Acute Care Beds Guideline	5,125 beds in Toronto
Sub-acute Care Beds	13 beds per 100,000 resident population
Rehabilitation Beds	25 beds per 100,000 resident population: - 21 beds/100,000 for short-term, long-term and transition rehabilitation, - 4 beds/100,000 for regional rehabilitation services
Complex Continuing Care (i.e. chronic care)	8.23 beds per 1,000 resident population 75 years and older: - 7.62 - Complex - 0.20 - Respite - 0.41 - Palliative
Mental Health beds (adults)	35 beds per 100,000 Resident Population (by 2003): - 21 beds/100,000 for acute mental health - 14 beds/100,000 for longer-term mental health
Mental Health beds (Child/adolescents)	7 beds per 100,000 Population aged 0-17 years
Long-Term Care Beds	99.1 beds per 1,000 population 75 +
Long-Term Care Places	215.3 places per 1,000 population 75 +

### 3.12 Health Reform Implementation Progress Report

**Definition:**

Extent to which HSRC directives have been adhered to by different health care sectors in a given year. Changes (as directed by HSRC) which have occurred in different health care sectors in a given year.

**Significance/Uses:**

- Provides an update of progress of health reform implementation.
- Helps to monitor rate of health system reforms.

**Sources:**

MOHLTC, Reform Implementation Team.



## **Status of Hospital Restructuring Initiatives**

Appendix 3 has details regarding the status as of May 2001, of implementation of the HSRC's directions for Toronto hospitals. These included mergers and closures for Toronto's hospitals.

- In general, most of the directions of the HSRC are "underway" or "ongoing" especially those that require capital investment or construction work or the acquisition of new equipment.
- Most mergers were completed as of March 2001.
- Most program transfers are "underway" or "ongoing". Those which are not well underway at this time are due to awaiting the completion of construction, the availability of new/additional space, or additional funding for the transfer of programs or services, or the implementation of new programs.
- Where the directives called for a plan to be developed or a Task Force to be struck, most plans have been completed. Where actions or implementation was required, these items are generally "underway".

## **CONCLUSION**

The purpose of monitoring the functioning of the health care system is to evaluate whether services are meeting the needs of the population. In monitoring the changes to Toronto's Health system and trying to analyze their impact, many questions emerge. For example, are changes such as reduced reliance on institutional care helping or hindering access? Are changes such as the introduction of CCACs achieving the intended outcomes in terms of bringing services closer to home? What has been the impact of hospital restructuring? Is the community capacity to respond to need and change improving?

Answers to these questions provide insights as to what needs to be done to improve our health care system and how to optimize use of our health care resources.

### **Health Care Changes**

In general, Toronto's population measures up reasonably well on variables related to morbidity and mortality. As well, utilization of services is in line with other parts of Ontario and other jurisdictions.

This report describes the many dramatic changes - both reforms and restructuring - that have been made to Toronto's health services, as well as some of the consequences of these changes. Demand for services has continued to increase, and these demands are being met with a vastly different configuration of services - fewer hospitals, hospitals with changed roles, shorter lengths of stay, more surgery and other procedures performed on an out-patient basis, and more services provided at home. Toronto has gone a long way towards meeting the HSRC targets and benchmarks. The Ontario government has made commitments that will alleviate some of the pressures arising from hospital restructuring; (i.e. facility redevelopment, program transfers, increased short-term and long-term supply of long-term care beds, and increased funding for CCACs). While pleased by these commitments, the TDHC has ongoing concerns regarding the timing and coordination of the changes.

The shift of services from in-patient to day procedures and, particularly, the reduction of acute care and complex continuing care with a corresponding increase in rehabilitation, home care, community support services, are all consistent with health reform targets. However, there is reason to be concerned that the current dramatic pace of these shifts is not necessarily consistent with the system's capacity for change. The resources are not necessarily in place as they are required and, in the transition, there is worry about the various system components learning to manage the hand-offs rapidly enough to maintain the critical continuum of care.

### **Impact of Changes**

Acute in-patient utilization has decreased rapidly, with a correspondingly large increase in ambulatory activity and in-home services. Chronic care utilization has also decreased rapidly. Because of the complex relationships among the many factors that are all undergoing dramatic change, it is very difficult to monitor what is happening overall. The expected increase in temporary and permanent long-term care beds should be of considerable assistance in reducing wait times for placement from hospitals and the community.

## Other Factors

Toronto mirrors the general nation-wide trend of an aging population. Increased life expectancy and the growing seniors population with its changing health needs will have a significant impact on the health care system.

Research shows that factors such as age, income level, education and housing are all important determinants of health. They have a direct impact on health status, and affect the use of health care services. In this regard, Toronto is significantly different from the rest of Ontario because of its socio-demographic composition. The TDHC's March 2001 report, *Toronto Health System Monitoring: Equity Analysis* found early warning signs of problems that will become increasingly evident in the future. It stressed the need to reduce disparities and conditions that are more common for certain groups, which evidence shows increase health needs. This document reinforces the realization that special efforts are required to improve access to health services for recent immigrants and people with low socio-economic status. Without such efforts, windows of opportunity for achievable reduction of health risks will close. The consequences for failing to capitalize on the current opportunities for preventative interventions are likely to include increased burden of disease, increased demand for services and increased costs.

The Toronto District Health Council is developing an Urban Health Framework to better understand the health impact of Toronto's unique concentrated blend of incredibly diverse socio-economic circumstances and countries of origin. This work promises to bring some fresh insights to the examination of the health implications of population density and diversity.

## FINAL THOUGHT

This report is complemented by the *First Annual Toronto Health System Report Card*, *Toronto Health System Monitoring: Equity Analysis*, *TorontoProfile III*, and other TDHC studies. Readers are encouraged to seek out these additional sources of planning information on the TDHC website at <http://www.tdhc.org>

Health care restructuring and reform have had a profound impact on the distribution of health human resources, but the supply is also affected by demographics; like the population in general, the workforce is aging. A good understanding of the current state and future trends in the labour markets of health professions is critical. However, there is a paucity of reliable information on how many health professionals are currently working in Toronto. It is hoped that the current review of the Regulated Health Professions Act will lead to consistent data gathering-among the various professions. As well, to truly monitor the system successfully, considerable investment is required for new information systems as well as to support research into better outcome measures.

The health care system is data rich and information poor. Data is crude information that must be analyzed and monitored for change before it becomes useful information that can inform decisions. It is the hope of the TDHC that this and subsequent Local Health System Monitoring reports will contribute to improving the health system, population health, and ultimately the health status of individuals and the care and services that they receive so that appropriate, quality services are available when they are needed.

## APPENDIX 1

Indicators/Variables from Original Report that Were NOT Included in this Report and Reason	
Indicator/Variable	Source
<b>Redirect Consideration Hours (RDC) And Critical Care Bypass (CCB) – Annual Data Only</b> <i>Lack of confidence in available data.</i>	Critical
<b>In-patient Psychiatric Utilization of PPHs In Ontario By Residents</b> <i>Data not available from MOHLTC.</i>	MOHLTC
<b>Chronic In-patient Utilization for Toronto Hospitals</b> <i>Data system under development at MOHLTC. Will likely be available for future iterations.</i>	CIHI/PHPD
<b>Chronic In-patient Utilization of Ontario Hospitals By Residents</b> <i>Data system under development at MOHLTC. Will likely be available for future iterations.</i>	CIHI/PHPD
<b>Utilization Of Community Support Services in Toronto.</b> <i>Lack of confidence in available data.</i>	MOHLTC
<b>Utilization Of Supportive Housing Services in Toronto.</b> <i>Lack of confidence in available data.</i>	MOHLTC
<b>Ambulance Service Utilization</b> <i>Data not available from MOHLTC.</i>	Local Ambulance
<b>Midwives Employed in Toronto</b> <i>Lack of confidence in limited available data.</i>	Associations
<b>Allied Health Professionals in Toronto and Ontario.</b> <i>Lack of confidence in limited available data.</i>	Associations
<b>Private Health Care Expenditures</b> <i>Lack of confidence in limited available data.</i>	MOHLTC

**APPENDIX 2:**

Sentinel Events for the Year 2000						
	CONDITION	ICD Code	Unnecessary Disease	Unnecessary Disability	Unnecessary Untimely Death	Notes
INFECTIOUS DISEASES/ INFECTIONS					# of Deaths	
1	Enteric pathogens (salmonella, campylobacter)	3 008.43	P*		P,T**	
2	Botulism	5.1	P		P	
3	Tuberculosis (all forms)	010-018			T	
4	Invasive group A streptococcal disease: - Septicemia - Infections of skin and subcutaneous tissue (Flesh eating disease),	038.0 041.0			T	partly New - No ICD 9 category for flesh-eating disease, just streptococcus
5	Congenital HIV	42	P	P	P	New - no specific section for congenital HIV. Congenital HIV can be prevented if proper maternal services are provided.
6	Malaria	84			P,T	Early treatment of falciparum infection
7	Bacteria meningitis (pneumococcus, streptococcus group A, Meningococcus), not including Haemophilus influenza Group B	320.1 320.2 320.3			P	only case fatality

\* P denotes prevention,

\*\* T denotes Treatment

Sentinel Events for the Year 2000						
	CONDITION	ICD Code	Unnecessary Disease	Unnecessary Disability	Unnecessary Untimely Death	Notes
INFECTIOUS DISEASES/ INFECTIONS					# of Deaths	
8	Acute respiratory infections, influenza, pneumonia, and bronchitis (excluding AIDS related)	460M-466M	P		T	Deaths < age 70 unless associated with immunologic defects or neoplasm's
9	Ulcer of stomach or duodenum with or without hemorrhage or perforation	531M-532M		P	T	
VACCINE PREVENTABLE DISEASES						
10	Diphtheria	32	P		P/T	
11	Whooping Cough	33	P		P	
12	Tetanus	37	P		P	Including neonatal tetanus
13	Polio	45	P	P	P	
14	Measles	55	P		P	
15	Mumps	72	P		P	New - sign of vaccine failure
16	Congenital rubella (Congenital anomalies associated w/rubella)	771.0	P	P	P	Disability in offspring Including cataract, patent ductus arteriosus, deafness and mental deficiency
17	Hemophilus Influenza type b (Hib)	320.0	P	T	T	New - can result in chronic meningitis
18	Hepatitis B	070.2 070.3	P	P	T	New - 10% of people end up with chronic hepatitis
19	Influenza	487	P	P		New - among seniors (over 65)
SEXUALLY TRANSMITTED DISEASES						
20	Congenital syphilis	90	P	P	P/T	

Sentinel Events for the Year 2000						
	CONDITION	ICD Code	Unnecessary Disease	Unnecessary Disability	Unnecessary Untimely Death	Notes
INFECTIOUS DISEASES/ INFECTIONS					# of Deaths	
21	Early syphilis, symptomatic	91			T	
22	Major complications of syphilis	093M-094M	P/T	P/T	P/T	
23	Gonococcal infections	98			T	Rates of PID
24	Chlamydia	099.41, 099.5			T 0	Conjunctivitis due to chlamydia not included
TOBACCO ATTRIBUTABLE CANCERS AND DISEASES						
25	Malignant neoplasm of dorsal and ventral surfaces, borders and tip (not base) of tongue, floor of mouth, or buccal mucosa	141.1 141.2 141.3 144 145.0	P		P/T	P - Tobacco smokers - partially attributable to smoking. Also related to alcohol
26	Malignant neoplasm of larynx	161	P		P/T	P- Cigar and cigarette smokers
27	Malignant neoplasm of trachea, bronchus, and lung	162	P		P	P - Cigarette smoking, occupational exposures
28	Chronic bronchitis, emphysema, or chronic obstructive lung disease	490-496, excluding 493	P	P	P	P - Cigarettes and other environmental risks
OTHER CANCER RELATED CONDITIONS						
29	Malignant neoplasm of lip, external	140	P		P/T	P - sun exposure
30	Malignant neoplasm of pleura	163	P		P	P - Asbestos exposure
31	Malignant neoplasm of cervix uteri	180			T	
32	Hodgkin's disease	201			T	Lower stages of malignancy in young people
33	Lymphatic leukemia, acute	204			T	

Sentinel Events for the Year 2000						
	CONDITION	ICD Code	Unnecessary Disease	Unnecessary Disability	Unnecessary Untimely Death	Notes
INFECTIOUS DISEASES/ INFECTIONS					# of Deaths	
CONGENITAL CONDITIONS						
34	Cretinism of congenital origin	243		T	T	
ANEMIC CONDITIONS						
35	Iron –deficiency anemias and Pernicious anemias	280 281.0	P	T	T	Good public-health index Pernicious anemia Iron-deficiency anemias
36	Other vitamin B12 deficiency anemias and Folic acid deficiency anemia	281.1 281.2		P/T	P/T	Folic acid deficiency anemia vitamin B12 deficiency anemia
OTHER HEALTH CONDITIONS						
37	Diabetes mellitus w/mention of acidosis or coma	250.1 250.2 250.3			T	Above specified death rate and hypoglycemic death due to overtreatment
38	Glaucoma, chronic (primary)	365.11		T		Problem of how to get data on blindness
39	Mastoiditis	383		P		Problem of how to get data on deafness
40	Active rheumatic fever	390-392	P	P	T	
41	Hypertensive disease	401-405		T	T	Above specified rates
42	Asthma	493			T	T - Self-inhalations therapy deaths < 50
43	Dental caries	521	P			P-Adequate fluorides and reduced sugar intake
44	Appendicitis	541			T	Appendectomy rates
45	Inguinal or other hernia of abdominal cavity with or without	550-553			T	Deaths < age 65



Sentinel Events for the Year 2000						
	CONDITION	ICD Code	Unnecessary Disease	Unnecessary Disability	Unnecessary Untimely Death	Notes
INFECTIOUS DISEASES/ INFECTIONS					# of Deaths	
	obstruction					
46	Pelvic inflammatory disease (PID)	614-616		P		New - Major cause of infertility in women
47	RH incompatibility	773.0 656.1 999.7	P	P/T	P/T	Fetus Pregnancy Transfusion
48	All maternal deaths (including abortion), Complications of pregnancy, childbirth and the puerperium	630-676			P	
49	Mental retardation induced by: Phenylketonuria	270.1		P	T	

**APPENDIX 3:**

<b>Status as of May 2001 of Implementation of the HSRC Directives for Toronto Hospitals</b>		
<b>HOSPITAL</b>	<b>HSRC DIRECTIVES</b>	<b>STATUS</b>
<b>Baycrest Centre for Geriatric Care</b>	No Change.	
<ul style="list-style-type: none"> <li>- <b>Bloorview site</b></li> <li>- <b>MacMillan Centre site</b></li> </ul>	<ol style="list-style-type: none"> <li>1. Find new site for redevelopment on one site.</li> <li>2. Maintain 55 rehabilitation beds and 20 complex continuing care beds.</li> </ol>	<p>Hospital reviewing options. Capital planning and program planning underway.</p> <p>Not reported.</p>
<b>Casey House Hospice</b>	HSRC Directives status not provided.	
<b>Centre for Addiction and Mental Health</b> <ul style="list-style-type: none"> <li>- <b>Queen Street Div.</b></li> <li>- <b>Clarke Div.</b></li> <li>- <b>Donwood Div.</b></li> </ul>	<ol style="list-style-type: none"> <li>1. Merge with Queen St. Mental Health Centre, Donwoods Institute, Clarke Institute of Psychiatry to create "Addiction and Mental Health Services Corporation.</li> <li>2. Mandate of the Centre for Addiction and Mental Health.</li> <li>3. Human Resources Plan.</li> <li>4. Accommodate Academic Activities.</li> <li>5. French Language Services.</li> <li>6. Consolidation and Rationalization of Addiction and Mental Health Services.</li> </ol>	<p>Completed. Formed the Centre for Addiction and Mental Health in 9/3/98</p> <p>Implementation of recommendations for program planning across four program areas – clinical, community health and education, and research to occur in 2000/01 fiscal year.</p> <p>Collective bargaining process began in 2000 to be completed within fiscal year. Implementing pay equity plan will take place.</p> <p>Joint Hospital-University Relations Committee established.</p> <p>The Centre continues to prepare for designation under the French Language Services Act.</p> <p>Consolidation and rationalization of clinical programs is a priority area for the Centre and an ongoing activity.</p>

Status as of May 2001 of Implementation of the HSRC Directives for Toronto Hospitals		
HOSPITAL	HSRC DIRECTIVES	STATUS
	<p>7. Develop and implement a plan to operate a total of 400 longer term mental health beds by 2000, 366 longer term mental health beds by 2003, and continue to provide 43 forensic mental health beds and 47 addiction services beds.</p> <p>8. Longer-term mental health services to residents of Scarborough.</p> <p>9. Monitor access to longer-term mental health services by Peel region.</p>	<p>In 1999/00 established capacity to admit new clients to the longer-term mental health beds. However, recent resignation of several medical staff resulting in restricted ability to admit - situation would likely persist at least until the fall of 2000. The Law and Mental Health program received funding for an additional 30 bed secure rehab unit plus 5 triage beds. Exploring how best to meet the needs of women with medium secure needs and how to support the planned additional beds for Toronto.</p> <p>Ongoing meetings with Whitby Mental Health Centre. To address issues – in particular, limited availability of housing in Scarborough, which may restrict the ability of the Scarborough ACT teams to accept CAMH clients. This situation will be monitored.</p> <p>Peel stakeholders have endorsed the proposed plan for expanding Geriatric Psychiatry Outreach Services to Peel. The service should be operational early in fiscal 2000/01. The actual level of need for in-patient access to CAMH beds by Peel residents will continue to be monitored.</p>
<b>Hospital for Sick Children</b>	<p>1. Lead Child Health Network.</p> <p>2. Participate in University Avenue Task Force.</p> <p>3. Governance.</p> <p>4. Program Transfers – no transfer of human resources.</p>	<p>Planning underway.</p> <p>No details available.</p> <p>No comment.</p> <p>Redistribution of general peads and general surgery to begin 1999/00 – process to be continued through 2000/01.</p> <p>Transfer of secondary activity from HSC to regions will follow redistribution of peadiatrics in-patient activity from the community hospitals to Regional Peadiatric Centres (RPC)</p>

Status as of May 2001 of Implementation of the HSRC Directives for Toronto Hospitals		
HOSPITAL	HSRC DIRECTIVES	STATUS
		<p>once the RPCs are functioning in the defined role within the region. Number of secondary level cases that will move from tertiary centre to any of the RPCs will not result in sufficient volume or resources to enable any centre to achieve the critical mass envisioned for RPCs.</p> <p>Continue to provide secondary care for downtown community</p> <ul style="list-style-type: none"> <li>- will work to triage and transfer secondary care to appropriate region</li> <li>- incremental case funding to accompany transfer of secondary activity from HSC.</li> <li>- 100% repatriation not realistic, looking at 75% for most patient populations</li> <li>- transfer of equipment not possible.</li> </ul> <p>No details available.</p>
<b>Humber River Regional</b> <ul style="list-style-type: none"> <li>- <b>Finch site</b></li> <li>- <b>Church site</b></li> <li>- <b>Northwestern site</b></li> </ul>	<ol style="list-style-type: none"> <li>1. Transfer of Programs (Emergency and Medicine, Surgery, Obstetrics, Pediatrics) from North York Branson Hospital to North York General Hospital, York Central Hospital and Humber/Northwestern/York-Finch Hospital.</li> <li>2. Develop and Implement a plan to close the Northwestern site by June 30, 1999.</li> <li>3. Child Health Network – Humber is operating as part of the Network and has a Level II nursery.</li> <li>4. Disposal of Keele site delayed due to use for interim long-term care beds.</li> </ol>	<p>Completed.</p> <p>St. Joseph's Hospital and HRRH share a joint Chief of Laboratory Medicine and are working together to rationalize services.</p> <p>Continuing to address issues of emergency services and access to in-patient beds.</p> <p>Continues to work with MOHLTC on capital redevelopment plan.</p> <p>Completed.</p> <p>Delayed 4-5 years.</p>

Status as of May 2001 of Implementation of the HSRC Directives for Toronto Hospitals		
HOSPITAL	HSRC DIRECTIVES	STATUS
	5. Transfer of dialysis program from Wellesley.	Completed and volumes increasing.
<b>Mount Sinai Hospital</b>	<ol style="list-style-type: none"> <li>1. Establish the Joint University Task Force with Toronto Hospital and Princess Margaret Hospital.</li> <li>2. One representative to Child Health Network.</li> <li>3. Relocation of services from the Wellesley Central Hospital to Toronto Hospital and Mount Sinai Hospital.</li> <li>4. Intensive planning is currently underway to finalize the permanent facilities for the transfer of the Obstetrics and Gynecology Program, including the ambulatory offices and clinics, cytogenetics and all other ancillary services.</li> </ol>	<p>Supplementary report submitted in Aug 1998.</p> <p>Programs transfers completed for thoracic, operative gynecology and retinal surgery from Sinai to Toronto Hospital Operative general gynecology has been transferred from Toronto Hospital to Mount Sinai.</p> <p>Ongoing.</p>
<b>North York General Hospital</b> - General Div. - Branson ACC (Ambulatory Care Centre)	<ol style="list-style-type: none"> <li>1. Transfer of programs from North York Branson Hospital.</li> <li>2. Transfer of management and operations from North York Branson Hospital.</li> <li>3. One representative to Child Health Network.</li> <li>4. Capital Construction Project for additional operating rooms, surgical day care, MRI, etc.</li> <li>5. Ensure governance structure representative.</li> <li>6. For Branson site, develop management plan, plan for transfer of programs and conversion to ambulatory care centre.</li> </ol>	<p>Under discussion.</p> <p>Completed.</p> <p>Completed.</p> <p>Management and operations transfers completed May 1998, interim lease of site arranged, long-term sale/lease still under negotiation.</p>

Status as of May 2001 of Implementation of the HSRC Directives for Toronto Hospitals		
HOSPITAL	HSRC DIRECTIVES	STATUS
	<p>7. Transfer of medicine/surgery, obstetrics and pediatrics programs to North York General, Humber River Regional Hospital and York Central Hospitals by June 30, 1999.</p> <p>8. Conversion of Branson to ambulatory care centre.</p> <p>9. Operate Peadiatric programs as Level II regional Program.</p> <p>10. Implement a plan to operate 285 acute care beds, including 32 Peadiatric beds, 6 child adolescent mental health beds and 40 acute mental health beds.</p> <p>11. Human resources plan for Toronto.</p> <p>12. Maximize efficiency and deliver of administrative, support and diagnostic services with Scarborough Grace, Scarborough General, Centenary and Toronto East General Hospitals.</p> <p>13. Implement plan for laboratory and pathology services.</p> <p>14. Capital construction plan to be submitted to</p>	<p>Peadiatric transfer completed September 1998, obstetrics transfers completed by June 1999. Issue: medicine/surgery transfers delayed until redevelopment at receiving hospitals; Humber River Regional will require an additional 4-5 years; planning continues.</p> <p>Plan submitted to MOHLTC, discussions continue.</p> <p>Operating as regional centre as per guidelines of Child Health Network.</p> <p>Updated target beds will be achieved by end of transition period.</p> <p>Completed.</p> <p>In process.</p> <p>Plan submitted and approved, first phase of construction almost complete, second phase underway.</p> <p>In process.</p> <p>In process.</p>

Status as of May 2001 of Implementation of the HSRC Directives for Toronto Hospitals		
HOSPITAL	HSRC DIRECTIVES	STATUS
	MOHLTC.  15. Appoint representatives to regional implementation team and work with team.	
<b>Providence Centre</b>	1. Capital Project.  2. 284 beds for CCC /palliative and respite care.  3. 87 beds for long-term rehab.  4. Capital plan for renovating space for the above.	Functional program approved March 1999.  241 beds.  39 beds.  MOH approval received 1999/00.

Status as of May 2001 of Implementation of the HSRC Directives for Toronto Hospitals		
HOSPITAL	HSRC DIRECTIVES	STATUS
<b>The Riverdale Hospital</b>	<p>Transfer of programs from the Salvation Army Toronto Grace Hospital to the Riverdale Hospital.</p> <p>Transfer of patients from the Salvation Army Toronto Grace to other areas of the long-term care system, including both long-term care facilities and the Riverdale Hospital.</p> <p>Close by March 30, 2000. Transfer Rehab to St. John's and RIT. <b>Revoked</b></p>	<p>Will develop 2 new 200 bed LTC facilities on existing site.</p> <p>Chronic care beds to remain open in 2001/02.</p>
<b>Runnymede Chronic Care</b>	<p>Close by March 30, 2000. <b>Revoked</b></p>	<p>Will develop 2 new 200 bed LTC facilities on existing site.</p> <p>Chronic care beds to remain open in 2001/02.</p>
<b>Rouge Valley Health System</b> - Centenary site - Ajax-Pickering site	<p>Merge Centenary Health Centre and Ajax Pickering Hospital by Aug/98.</p> <p><b>RVHS presented the following summary in place of template Form HSRC-1:</b></p> <p>The HSRC Report contained specific directions to develop a plan for the reconfiguration of hospital services at both the Centenary and Ajax sites. The corporation was requested to submit a Clinical Services Plan that, as a minimum, met the following requirements:</p> <ul style="list-style-type: none"> <li>Preserves and strengthens the range of diagnostic and in-patient Acute Care, Mental Health, Rehabilitation and Complex Continuing Care services at the Ajax site, to ensure access to service by the residents of Ajax Pickering;</li> </ul>	<p>Completed. Formed Rouge Valley Health Centre in August 1998.</p> <p>RVHS submitted the following report on its current status in place of the template Form HSRC-1:</p> <p>A Clinical Services Plan, "Moving Forward ...with Care" was submitted to the Ministry on December 31, 1998.</p> <p>Master Plans and Functional Programs for both sites of RVHS were submitted to the Ministry in March 2000. Approvals are pending.</p> <p>The Rehabilitation directions have been met and RVHS is now operating 40 beds – 20 at the Ajax site are located in interim space until the redevelopment project is completed. Complex Continuing Care beds will not be available until the redevelopment project is completed. The beds at the</p>



Status as of May 2001 of Implementation of the HSRC Directives for Toronto Hospitals		
HOSPITAL	HSRC DIRECTIVES	STATUS
	<ul style="list-style-type: none"> <li>Ensures Obstetrical, Neonatal, and Peadiatric services consistent with the guidelines established by the Child health Network;</li> <li>Optimizes the use of available capacity at both sites</li> </ul> <p>RVHS was directed to work with the East Durham Health Corporation (Lakeridge Health Corporation) to implement a plan for the transfer of services at the Whitby General Hospital site to Lakeridge Oshawa site and the Ajax site using a 74:26 split for activity.</p> <p>RVHS was directed to provide 298 acute beds, 60 Mental Health beds for adult patients, 6 Child and Adolescent Mental Health beds, 40 Rehabilitation beds, 111 Complex Continuing Care beds and 39 sub-acute beds.</p> <p>RVHS was also asked to submit a plan for a capital construction project at the Ajax site to the Ministry of Health that included new construction for Complex Continuing Care beds, Rehabilitation beds and Emergency and Ambulatory Care expansion and renovations for Mental Health.</p>	<p>Centenary site will be available as the funding model for the beds is determined.</p> <p>Expansion of the Emergency Department at the Ajax site to accommodate 60,000 visits will not occur until construction is completed for this area as part of the redevelopment project.</p> <p>Provision of Diagnostic Services requires new construction and is contained in the Master Plan.</p> <p>Provision of space for Ambulatory Care Services is also included in the Master Plan and the proposed redevelopment.</p> <p>The Whitby transfer has been completed.</p> <p>Regional Pediatrics and perinatal care has continued and RVHS is working towards implementation of several program elements in the current fiscal year.</p> <p>Enhanced diagnostic services are being implemented at Ajax as funding permits. Installation of a CT Scanner and diagnostic services has occurred. Planning is underway for an open MRI at the site and a proposal is before MOHLTC for Nuclear Medicine.</p>
<b>St. John's Rehabilitation Hospital</b>	<ol style="list-style-type: none"> <li>Assumed responsibility for the operations and management of St. Bernard's Hospital and implemented the transfer of the hospital's rehabilitation programs. St. John's efforts enabled the smooth and orderly closure of St. Bernard's Hospital on December 21, 1999.</li> </ol>	<p>Program planning underway.</p>

<b>Status as of May 2001 of Implementation of the HSRC Directives for Toronto Hospitals</b>		
<b>HOSPITAL</b>	<b>HSRC DIRECTIVES</b>	<b>STATUS</b>
	2. The amputee rehabilitation program at Riverdale Hospital has been transferred to St. John's.	No program funding related to this activity has been received.
<b>Salvation Army Toronto Grace</b>	Toronto Grace Hospital to close by March 2000. <b>Revoked</b>	Awarded LTC beds.  Chronic care beds to remain open in 2001/02.
<b>St. Joseph's Health Centre</b>	1. Transfer of acute in-patient hospital services from the Queensway General Hospital.  2. Transfer of the Chronic care programs to the Rehabilitation Teaching and Research Centre.  3. Capital Construction Project for renovations for a birthing suite, operating rooms, new MRI suite, etc.  4. Our Lady of Mercy Pavilion (OLM) close by March 31/00.  5. Structure representative of community served.  6. Program transfers in conjunction with Mississauga/Queens and Etobicoke develop and implement. See also 11 and 12.  7. Provide Level II regional Peadiatric program.  8. Appoint representative to Child Health Network.  9. Per Child Health Network receive peadiatrics program from Humber River, Church Street site and North Western Hospital.	Under discussion.          Done July 97.  Transfer proposals submitted to Ministry of health in Spring 1999.  10 beds opened in April 98 from reinvested funds from closure of OLM.  Completed.  No formal process in place. Volume relatively small (441 cases or 253 Wt cases).

Status as of May 2001 of Implementation of the HSRC Directives for Toronto Hospitals		
HOSPITAL	HSRC DIRECTIVES	STATUS
	<p>10. Implement Bed Plans.</p> <p>11. Metro Human Resource Plan.</p> <p>12. Identify efficiencies administrative and supportive and diagnostic with HRRH and EGH.</p> <p>13. Lab restructuring with HRRH and Etobicoke.</p> <p>14. Prepare capital plan for HSRC Directions.</p> <p><b>Chronic Report</b></p> <p>1. Cease Our Lady of Mercy Pavilion (OLM) chronic and transfer patients with CCACs help.</p> <p>2. Appoint representative to Rehab Network. Implement plan for 10 rehab beds, &amp; 28 sub acute beds.</p>	<p>284 Adult available, including Sub Acute Up to 14 paed. (January. 99) 27 Mental Health and 8 in negotiation 0 Child/adolescent Mental Health Sub Acute including above.</p> <p>Signed in January 98. Adopted for use.</p> <p>Discussion held with HRRH. HRRH Merger has restricted process with St. Joseph's.</p> <p>Joint Lab Director for HRRH and SJHC appointed. Agreed in principle to share services.</p> <p>Orientation meeting with HRIT , July 1998. Functional Program and Master Plan Completed.</p> <p>No new admissions. Last resident transferred in July 98.</p> <p>Completed. 28 Sub-Acute beds are currently included in existing Med/Surgical beds.</p>
<b>St. Michael's Hospital</b>	<p>1. Amend the by-laws of St. Michael's hospital to provide that one third of the members of the Board of Directors of St. Michael's will be appointed from nominees provided by the Wellesley Central Hospital.</p> <p>2. Develop and implement a plan to assume from the Wellesley Central Hospital the operation and management of the programs and services of the</p>	<p>Completed. Combined Board in place.</p> <p>Transfer plan signed April 6, 1998.</p>

Status as of May 2001 of Implementation of the HSRC Directives for Toronto Hospitals		
HOSPITAL	HSRC DIRECTIVES	STATUS
	<p>Wellesley Central Hospital.</p> <p>3. Determine what services should be relocated from the Wellesley central Hospital to the Toronto Hospital and Mt. Sinai Hospital.</p> <p>4. Develop and submit to the Minister of Health a plan to incorporate a new corporation by November 30, 1997 "Sherbourne Hospital Corporation" (SHC) to establish and assume the ownership and Governance of an ambulatory care centre at the site of the Central hospital.</p> <p>5. In conjunction with the Sherbourne Hospital Corporation, develop and submit to the Minister of Health and Health Services Restructuring Commission by January 31, 1998, a plan for the provision of services at the ambulatory care centre at the site of the Central hospital.</p> <p>6. Upon establishment of the Sherbourne Hospital Corporation enter into an agreement with the new corporation to manage its operations.</p> <p>7. In conjunction with Toronto East General and Orthopaedic Hospital, develop and implement a plan for the transfer of acute care programs and services.</p> <p>8. In conjunction with other hospital members of the Teaching Academic Health Science Centres of academic activities within the restructured hospital system.</p>	<p>No planned transfers at this time.</p> <p>Incorporation approved April 1999.</p> <p>SHC Interim Chief Executive Officer in place and presently accommodated at the Wellesley site of SMH.</p> <p>The SHC and SMH have been involved in discussions with an external facilitator regarding the development of a management agreement under which SMH will manage the programs and services of the SHC, as per the HSRC directions. The parties have not been able to reach agreement on a letter of intent for a management agreement. In February 2000 each organization advised the HSRC of the status of discussions.</p> <p>\$3.6 million programs, services and annual funding transferred. Some MDs not transferring until 2000, so approximately \$700,000 will be returned to SMH from TEGH.</p> <p>Ongoing discussion at Teaching Academic Health Science Centres group.</p>

Status as of May 2001 of Implementation of the HSRC Directives for Toronto Hospitals		
HOSPITAL	HSRC DIRECTIVES	STATUS
	<p>9. Develop a plan to move Burn Unit to Sunnybrook.</p> <p>10. Develop and submit to the Minister of Health by December 31, 1997 a plan to transfer the resources of the Wellesley Central hospital dialysis program.</p> <p>11. Develop a plan for the movement of dialysis patients from the Wellesley central hospital and other hospitals in a manner that facilitates the transfer of patients.</p> <p>12. Appoint, by July 31, 1997, one representative to the Child Health Network.</p> <p>13. Develop and implement a plan to consolidate patient programs of the Wellesley Central Hospital and SMH on the SMH site, except the burn unit, ambulatory services at the Sherbourne Hospital Corporation, and the dialysis service.</p> <p>14. Plan and implement a community communications strategy to educate health care users and other stakeholders of the relocation of health services delivery from the Wellesley Central hospital to the Sherbourne Hospital Corporation and to SMH.</p> <p>15. Implement a plan to operate a maximum number of 452 acute care beds by March 31, 1999 and 36 mental health beds by 2003.</p>	<p>Burn Unit transferred December 6, 1998. Transfer of indirect staff to be determined.</p> <p>Resources transferred.</p> <p>Moved March 1998. Some indirect staff transferred April/May 2000. Ongoing discussion regarding transfer of balance of staff.</p> <p>Appointed.</p> <p>Construction is progressing on four new floors. Emergency renovation progressing well. Site management team in place at Wellesley site. Expected construction to complete in fiscal 2000.</p> <p>Expanded internal communications and revised Transition Newsletter. Will focus on communicating about job change and retraining. Will develop a Community Action Plan and communications plan.</p> <p>Ongoing work to establish "program sizing". In-patient bed targets established based on length of stay benchmarks. Participated in Framework Agreement. Local agreements developed with all outstanding groups except CUPE and Brewers Union.</p>

Status as of May 2001 of Implementation of the HSRC Directives for Toronto Hospitals		
HOSPITAL	HSRC DIRECTIVES	STATUS
	<p>16. Human resources (HR) plan that will address the impact of the HSRC.</p> <p>17. Develop and begin implementation by November 30, 1997 of a plan to maximize the efficiency of the delivery of administrative services, support services and diagnostic services. Work with the Wellesley Central Hospital pending the transfer of ownership, operation, management and control of the Wellesley Central Hospital.</p> <p>18. Led by a facilitator appointed by the Ministry of Health, develop and begin implementation by November 30, 1997 of a plan for the hospital's laboratory and pathology service that is consistent with the directions of the Ministry's "Laboratory Reform Strategy".</p> <p>19. Prepare and submit to the Minister of Health a plan that outlines the capital project for renovating space for increased capacity in the emergency department, birthing services.</p>	<p>Finance, HR and IT services consolidated. Food services to be consolidated on one site. Vendor administration and logistics to be consolidated on one site.</p> <p>On hold.</p> <p>Funding approved for four floors addition to Victoria Wing. Submitted funding requests for capital equipment, which cannot be moved.</p>
<b>The Scarborough Hospital</b> - Grace Div. - General Div.	<p>1. Amalgamation of the Salvation Army Scarborough Grace Hospital and the Scarborough General Hospital.</p> <p>2. Transfer of In-patient Pediatrics to Regional Centres  Transfer Burn Unit to Bayview Hospital Corp.  Transfer Renal Dialysis from Wellesley Hospital.  Transfer Renal Dialysis from Riverdale Hospital.</p>	<p>Amalgamation completed September 8, 1999.</p> <p>MOHLTC Expert Panel revised recommendations. Negotiations completed March 1999.  Completed April 1999.  Completed May 1999.</p>

Status as of May 2001 of Implementation of the HSRC Directives for Toronto Hospitals		
HOSPITAL	HSRC DIRECTIVES	STATUS
	<ol style="list-style-type: none"> <li>Achieve bed profile including 60 complex continuing care beds.</li> <li>Laboratory Restructuring.</li> <li>One representative to Child Health Network.</li> <li>Establish Joint East Metro Task Force with Scarborough General, Centenary Health Centre and Toronto East.</li> </ol>	<p>Progress delayed pending development of space for additional beds.</p> <p>Shared Hospital Laboratory Inc. established by Scarborough Grace, North York, and Scarborough General Hospitals.</p>
<b>Sunnybrook and Women's College</b>	<ol style="list-style-type: none"> <li>Consolidate all hospital services of the Sunnybrook Health Science Centre, Women's College Hospital, and Orthopaedic and Arthritis Hospital into Bayview Hospital Corporation.</li> <li>In conjunction with a U of T representative, implement a plan to operate 507 acute care beds (including 10-bed Burn Unit), 30 beds for short-term rehab services and 51 sub-acute care beds by March 31, 2000; 40 acute mental health beds for adult patients by 2003. Continue to provide 8 adolescent mental health beds.</li> <li>Implement a plan to provide 75 beds for complex continuing care, palliative care and respite services for the community by December 31, 1999.</li> <li>Prepare and submit to the Ministry of Health a plan for a Capital construction project for new</li> </ol>	<p>The planning process is well underway. The Board has approved construction of the phase 1 project; now awaiting approval from MOHLTC. Programming for all clinical and support activities has begun; Master Plan will be submitted fall 2000. Functional program and strategic planning for the Ambulatory Care Centre are well underway.</p> <p>Plans are under development 30 short-term rehabilitation beds; awaiting approval 10 bed Burn Unit In temporary space – Sunnybrook. MOHLTC sent plans for renovating F wing for MHP.</p> <p>In progress.</p> <p>Plans are under development.</p>

Status as of May 2001 of Implementation of the HSRC Directives for Toronto Hospitals		
HOSPITAL	HSRC DIRECTIVES	STATUS
	<p>construction and renovation at the Bayview and Greenville sites. Operate ambulatory care centre on Greenville site.</p> <p>5. Enter into contractual agreement with WCH for management of ambulatory care and sexual assault centres, by April 30,1999.</p> <p>6. Create a single medical-dental staff in accordance with the Sunnybrook and Women's College Health Science Centre Act.</p> <p>7. One representative to Child Health Network</p>	<p>The Ambulatory Care Centre Agreement was signed on August 17,1999.</p> <p>Medical-Dental-Midwifery Staff Bylaws, Including transition period were adopted by the Board; September 27,1999.</p>
<b>Toronto East General</b>	<p>1. Submit a plan to ensure a governance structure representative of communities served.</p> <p>2. Establish the "Joint East Metro Task Force with Salvation Army Scarborough Grace Hospital, Centenary Health Centre and Scarborough General Hospital.</p> <p>3. Provide Peadiatric programs as Level II regional programs.</p> <p>4. Appoint representative to Child Health Network.</p> <p>5. Develop and implement a plan for the transfer of portion of programs and services from Wellesley Central Hospital site.</p>	<p>Completed.</p> <p>Completed.</p> <p>At Feb. 01, 2000 meeting of Child Health Network for Toronto and the Greater Toronto Area, MOHLTC shared report of expert advisory panel and presented Ministry's policy framework in newborn and children's hospital board review. As a result, <u>directives will be re-issued</u> to the East Metro Hospitals.</p> <p>Completed.</p> <p>Not yet complete. Ongoing.</p>



Status as of May 2001 of Implementation of the HSRC Directives for Toronto Hospitals		
HOSPITAL	HSRC DIRECTIVES	STATUS
	<p>6. Receive from Scarborough General the programs and services for Level II pediatrics by March 31, 1998.</p> <p>7. Implement plan for acute and mental health services to operate 250 acute care beds, including 20 Pediatric beds by March 31, 1999, 38 acute mental health beds by 2003 and 6 child adolescent mental health beds by March 31, 1999.</p> <p>8. In conjunction with other hospitals, develop and begin implementation by Oct. 31, 1997 a human resources plan to address impact of HSRC's directives on hospital's employees.</p> <p>9. In conjunction with other hospitals, develop and begin implementation by Nov. 30, 1997 a plan to maximize efficiency of delivery of administrative services, support services and diagnostic services.</p> <p>10. In conjunction with other hospitals, develop a plan for laboratory and pathology service.</p> <p>11. Prepare and submit plan for capital construction.</p> <p>12. Participate in regional implementation team.</p> <p><b>HSRC Further Supplement Report and Directions</b></p> <p>1. Implement a plan to provide 75 CCC, palliative and respite beds.</p> <p>2. Implement a plan to provide 13 short-term rehab</p>	<p>Received from Scarborough General the programs and services for Level II pediatrics by March 31, 1998.</p> <p>Ongoing.</p> <p>Completed.</p> <p>Initially not successful. Ongoing.</p> <p>Awaiting response from MOHLTC re acceptance of report and plan.</p> <p>Ongoing.</p> <p>Completed.</p> <p>Ongoing.</p> <p>Ongoing.</p>

Status as of May 2001 of Implementation of the HSRC Directives for Toronto Hospitals		
HOSPITAL	HSRC DIRECTIVES	STATUS
	<p>beds and 25 sub-acute beds by March 31, 1999.</p> <p>3. In conjunction with other hospitals, appoint one representative to Rehabilitation Network.</p> <p>4. Ensure access to CCC for persons with HIV/AIDS in conjunction with Casey House, St. Michael's, and Toronto CCAC.</p>	<p>Completed.</p> <p>Completed.</p>
<b>Toronto Rehabilitation Institute</b> - Rumsey Centre - Queen Elizabeth Centre - Lyndhurst Centre - Hillcrest Centre - University Centre	<p>1. Merge with Toronto Rehabilitation Centre and Lyndhurst Hospital by Sept 30/98.</p> <p>2. Lead Rehabilitation Network.</p> <p>3. Preservation of Lyndhurst programs and prioritization of ABI, spinal cord injury and cardiac rehab programs.</p> <p>4. Develop plan to consolidate rehab services.</p> <p>5. Cease operations at Hillcrest site by March 31/2000 and submit plan re disposal of assets.</p> <p>6. Operate 272 rehab beds by March 1999, and 245 rehab beds by March 2003.</p> <p>7. Provide 301 beds at Dunn Avenue for complex continuing care, palliative and respite care.</p> <p>8. Transfer rehab programs (except amputee) from Riverdale</p>	<p>Completed November 98.</p> <p>Completed 98/99.</p> <p>Plan submitted to MOH in May 2000.</p> <p>Requested extension (May 2000) until renovations completed.</p> <p>Will go from 258 (1999/00) to 241 rehab beds in 2000/1.</p> <p>Currently 276 beds but plan for 301 complex continuing care beds (with additional funding).</p> <p>Awaiting decision on Riverdale closure.</p>

Status as of May 2001 of Implementation of the HSRC Directives for Toronto Hospitals		
HOSPITAL	HSRC DIRECTIVES	STATUS
<b>West Park Hospital</b>	<ol style="list-style-type: none"> <li>1. Transfer of patients from Runnymede Hospital to other areas of LTC system, including both long-term facilities and West Park Hospital.</li> <li>2. Provide 182 beds for complex continuing care, respite and palliative care.</li> <li>3. Operate 142 rehab beds by March 31, 1999 and 130 beds by March 31, 2003.</li> <li>4. Submit a plan to renovate space for TB services.</li> <li>5. Submit plan for renovation of in-patient rehab services.</li> </ol>	<p>174 beds for complex continuing care, respite and palliative care.</p> <p>140 beds by 1999 and 129 beds for 2000/1.</p> <p>Renovation of space completed.</p> <p>Renovation of in-patient rehab services being considered as part of hospital space plan (ongoing).</p> <p>Functional program for TB approved in November 98 Muscular skeletal functional program approved.</p>
<b>Trillium Health Centre</b> - Mississauga site - Queensway ACC	<ol style="list-style-type: none"> <li>1. Develop plan for amalgamation of Queensway General Hospital and The Mississauga Hospital into one corporation.</li> <li>2. Identify program priorities for the hospital, recognizing the expanded role in patient care, and include as one of the hospital's objectives the preservation of quality programs of the former Queensway General Hospital and the former Mississauga Hospital.</li> </ol>	<p>Completed. Amalgamation, including governance and management structure, into Mississauga Queensway Hospital Corporation effective April 1, 1998. New corporate identity, Trillium Health Centre, launched October 6, 1998.</p> <p>The hospital has structured its patient services around six health systems:</p> <ol style="list-style-type: none"> <li>1. Medicine</li> <li>2. Surgery</li> <li>3. Emergency</li> <li>4. Long-Term Care and Elder Health</li> <li>5. Mental Health</li> <li>6. Women's and Children's Health</li> </ol> <p>Each of these systems completed their clinical services integration plans by October 1998. Integration was completed 1999/00.</p>

Status as of May 2001 of Implementation of the HSRC Directives for Toronto Hospitals		
HOSPITAL	HSRC DIRECTIVES	STATUS
	<p>3. Develop and begin implementation of a human resources plan that will address the impact of restructuring.</p> <p>4. Develop and begin implementation of a plan to maximize the efficiency and delivery of administrative services, support services and diagnostic services.</p> <p>5. Develop and begin implementation of a plan for laboratory and pathology services that is consistent with the Ministry's Laboratory Reform Strategy.</p> <p>6. In conjunction with St. Joseph's Health Centre and Etobicoke General Hospital, develop and implement plan to transfer acute in-patient hospital services of Queensway site to the Mississauga Site, St. Joseph's Health Centre and Etobicoke General.</p> <p>Prepare and submit a plan that outlines the capital construction project which will consists of the emergency department and the operating renovations to the Queensway Site for ambulatory care.</p>	<p>Completed. This hospital was a signatory to the Human Resources Framework Plan. Concluded program transfers in accordance with Framework.</p> <p>Trillium has participated in the North and South Halton/Peel Hospitals Shared Services Organization since January 22, 1998. Project teams were established to undertake initiatives in response to HSRC directives in the following areas:</p> <ul style="list-style-type: none"> <li>- Materials Management</li> <li>- Laboratory</li> <li>- Human Resources</li> <li>- Food Services.</li> </ul> <p>Participated in the preparation of the GTA/905 West Region Laboratory Services Planning Report. Submitted to the Ministry's Laboratory Services Directorate in June 1998. Ongoing discussions with Ministry re this report.</p> <p>Transfers completed in 1999/00.</p> <p>Trillium submitted functional programs and received Ministry and Regional funding approval for its Phase I Capital Project, which included: Emergency care and Queensway Care, Ambulatory Clinics and Surgical Centre, and Cardiac Catheterization Lab.</p>

Status as of May 2001 of Implementation of the HSRC Directives for Toronto Hospitals		
HOSPITAL	HSRC DIRECTIVES	STATUS
<b>William Osler Health Centre</b> - Etobicoke campus - Georgetown campus - Brampton campus	1. Amalgamation of 3 hospitals: Etobicoke General Hospital; Georgetown District Memorial Hospital and Peel Memorial Hospital.	Essentially complete, some outstanding issues around standardization of wages and job classifications.
	2. Funds maintained in corporation.	Complete.
	3. Human resources plan.	Completed with exception of standardization of wages and realignment of unions.
	4. Regional perinatal and peadiatric program.	In process.
	5. Maximization of efficiency of delivery of administrative support and diagnostic services.	In process.
	6. Plan for laboratory and pathology.	Has been submitted.
	7. Plan for reconfiguration of three campuses.	Functional plan in development.
	8. Bed targets – plan to open CCC and rehab beds and increase acute beds.	In process – renovations to Etobicoke and Georgetown, new facility in Brampton.
	9. Plan for capital construction.	Under development.
	10. Medical manpower plan.	Completed, although transfer of (retroactive and prospective) funding still being negotiated.
	11. Program transfers from Queensway.	
	12. Network with Dufferin Caledon Health Care Corporation being explored.	

Status as of May 2001 of Implementation of the HSRC Directives for Toronto Hospitals		
HOSPITAL	HSRC DIRECTIVES	STATUS
<b>University Health Network (UHN)</b> - <b>Toronto General Hospital</b> - <b>Toronto Western Hospital</b> - <b>Princess Margaret Hospital</b>	1. Create obstetrics unit at TWH (provide for 2500 low risk births), transfer balance of obstetrics program to MSH and transfer Reproductive Biology Unit, Neonatology and Prenatal Screening Program to MSH.	Transfer of low risk births completed. Transfer date for obs., neonatology, and newborn program of June 30, 2000 finalized with Mount Sinai Hospital. IVF Lab, clinical cytogenetics and Maternal Serum Screening will be transferred to MSH.
	2. Establish a single women's health program between UNH and MSH.	Complete 99/00.
	3. TGH receive thoracic surgery program from MSH	Complete January/99.
	4. Transfer general gynecology to MSH with ambulatory clinics operated at TWH.	Complete January/99.
	5. Gyn. Oncology to be sited at PMH with major procedures provided by TGH.	Program in place at PMH.
	6. TWH to receive one retinal surgeon from MSH.	Transfer of activity to TWH completed January/99.
	7. Adjust UHN's 1998/99 annual operating funding by transferring funds to MSH to UHN as related to the transfer of thoracic surgery, obs/gyn and retinal surgery activity, respectively.	Operating fund adjustments to be implemented.

## APPENDIX 4

The populations used as denominators for rates calculated in this report are shown in the table below.

Year	Toronto	Rest of Ontario	Ontario
1991	2,349,931	8,077,690	10,427,621
1992	2,356,127	8,214,348	10,570,475
1993	2,363,842	8,326,605	10,690,447
1994	2,396,197	8,431,304	10,827,501
1995	2,431,330	8,533,595	10,964,925
1996	2,462,510	8,638,366	11,100,876
1997	2,490,914	8,758,576	11,249,490
1998	2,509,400	8,874,979	11,384,379
1999	2,529,280	8,984,528	11,513,808
2000	2,553,289	9,111,880	11,665,169
2001	2,576,468	9,239,714	11,816,182
2002	2,598,681	9,368,329	11,967,010
2003	2,620,228	9,491,934	12,112,162

Sources:

- 1991 to 2000 - Population estimates based on 1996 Census (adjusted) from MOHLTC, 2001
- 2001 to 2003 - Population projections based on 1996 Census (adjusted for Census undercount), from MOHLTC, 2001.

## APPENDIX 5

### GLOSSARY OF TERMS

**Age Standardized Mortality/ Morbidity Rates (ASMR)** - This is method for comparing death/disease rate patterns in populations, which have different distributions of ages. The observed mortality/morbidity rates for each group are used to calculate the number of deaths, which would occur in a “standard” population. The standardized rates can then be compared across years and communities without the distortion caused by non-comparable age distributions. Note that age-standardized rates are mathematically created numbers: they are not the actual (“crude”) rates which occurred in a given year and place. The 1991 Canadian population was used as the standard in this report.

**Alternate level of care (ALC)** - defined as: A patient who is considered a non-acute treatment patient but occupies an acute care bed, awaiting placement in a chronic care unit, home for the aged, nursing home, rehabilitation facility, other extended care institution or home care program etc. The patient is classified as an ALC patient when the patient’s physician gives an order to change the level of care from acute care and requests a transfer to another facility.

**Average Length of Stay (ALOS)** - measures the average number of days of care for in-patient hospitalizations.

**Case Mix Groups (CMG)** - Similar groupings of diagnoses that are used as a basis for statistical analysis of hospital activity in Canada. CMG is a trademark of the Canadian Institute for Health Information.

**CIHI** - Canadian Institute for Health Information.

**City of Toronto and Toronto** are used interchangeably throughout the report to refer to the six former municipalities of Metropolitan Toronto (East York, Etobicoke, City of Toronto, North York, York and Scarborough) which were amalgamated in 1998 as the City of Toronto.

**Complex Continuing Care** - a phrase developed as a replacement for “chronic care” in reference to the hospital-based care required by people with medically unstable chronic or long-term illnesses or conditions resulting in complex clinical needs. The MOHLTC continues to use the term “chronic care,” as well as the term “complex continuing care,” which was the term preferred by the HSRC.

**Confidence Interval** - Measurements of any kind usually have a degree of inherent error due to sampling errors, misclassification, missed events, etc. thus any rate is only an estimate of the “true” value. Confidence intervals are necessary when presenting data obtained from a sample of a population or when presenting rates for a population. A confidence interval can be calculated which indicates the range within which the true value will fall n times out of 100. By convention, that percentage certainty is usually set at 95%. This indicates that there is a 95 percent probability that the confidence interval includes the true rate and a 5 percent probability that it does not. For samples, the width of confidence intervals takes into account the sample size. Confidence intervals are wider if few persons are sampled and narrower if more persons are sampled.

**Critical Care Bypass (CCB)** - is defined as: A status that signifies that the Emergency Department has temporarily exceeded all routinely available critical care resources within the department. Physician, nursing and/or equipment resources are not immediately available. It is therefore, unsafe for this Emergency Department to receive any critically ill or injured patients, as patient care will be



compromised. During CCB, all ambulance patients, except scheduled transfers will be redirected to other emergency departments. This status can be maintained for a limited time only and must be renewed every 30 minutes or CCB will automatically downgrade to the status reported prior to CCB.

**Equity Analysis** - Analysis done on selected indicators to examine differential impacts on utilization of health services for specific sub-groups. The four major sub-groups include: age, gender, income (as a proxy for socioeconomic status) and immigration (as a proxy for ethnocultural composition).

**In-patient hospital care** - refers to a hospital admission to and discharge from an in-patient bed, for which an in-patient discharge abstract is prepared. Typically, the patient remains in hospital for more than 24 hours, but the stay may be less (for example, some sign-outs, transfers, on deaths may have a length of stay of zero days).

**Level of Care** - Categorization of care according to degree of medical and/or technological specialization normally required (e.g., primary, secondary or tertiary. Tertiary has been expanded to include what was formerly considered quaternary care).

**Low Birth Weight (LBW)** - defined as an infant with a birth weight less than 2,500 grams.

**Patient days** - the total number of days spent in hospital by patients. It provides a useful estimate of the total resources used to provide in-patient hospital care during one year versus another.

**Population-based rates** - a population-based perspective used when calculating rates for the hospital utilization data in this report. The numerator for rates was calculated by counting or summarizing events (i.e. separations or patient days) over each fiscal year for individuals identified as residents of Toronto regardless of where the hospitalization took place. Denominators were based on counts of individuals resident in Toronto in that year (population estimates). Rates such as numbers of separations or total number of hospital days were developed by dividing numerator information by population denominators, measured in thousands.

**Proportion** - is an expression in which the numerator is always included in the denominator, and the base is equal to 100. Therefore a proportion is always expressed as a percent.

**Rates** - They are a measure of the probability of occurrence of some particular event. They are the number of events divided by the number of population at risk.

**Redirect Consideration (RDC)** - defined as: "A status, which signifies that the Emergency Department is experiencing a level of activity, which would allow it to accept only a critically ill or injured patient. All other ambulance patients, except scheduled transfers, should be referred where possible by ambulance dispatcher to emergency departments indicating a Normal status. This status can be maintained for up to two hours and must then be renewed or RDC will automatically downgrade to NORM".

**Recommended Maximum Waiting Time (RMWT)** - The estimated maximum recommended waiting period for bypass surgery; a guideline for surgeons which may supplement, but does not replace, surgeons' clinical judgment when they are scheduling surgery; also used by the Cardiac Care Network of Ontario (CCN) to monitor access to surgery; based on the seriousness of the patient's medical condition; counted from the date a patient is accepted for surgery by a cardiac surgeon. This guideline was originally developed as the result of a consensus panel of cardiologists and cardiac surgeons. Each patient has his/her own RMWT within a category. RMWTs are grouped as follows:

Emergency:	surgery without delay
Urgent:	within 14 days
Semi - urgent:	within 42 days
Elective:	within 180 days

**Separations** - include hospital discharges, transfers and deaths from hospitals. A person can be admitted to hospital more than once a year.