

# HEALTHY BRITISH COLUMBIA



NOVEMBER  
2004

BRITISH COLUMBIA'S REPORT  
ON NATIONALLY COMPARABLE  
PERFORMANCE INDICATORS



## Letter From the Minister of Health Services

In the 2003 Health Accord, First Ministers reaffirmed their goal to build a health care system that is accountable to all Canadians. This accountability can only be achieved if provincial and territorial governments provide Canadians with access to information about how the system is performing relative to their own needs.

The concept of a “report card” requires a national approach to the development of system benchmarks and performance indicators. As a result, the national Performance Indicator Working Group was formed in Spring 2003. I am pleased to present, *Healthy British Columbia* which is British Columbia’s second report on nationally comparable performance indicators. This document updates the 2002 report, *How Healthy Are We?*



Some of the indicators evaluated include:

- Primary health care
- Access to drug coverage
- Pharmaceutical management
- Access to diagnostic equipment
- Health and wellness

Access to quality health care services is a primary concern of all British Columbians, as they navigate themselves and their loved ones through the health care system. As we move through the various stages of health reform, the Ministry of Health Services can use these indicators to evaluate the effectiveness and efficiency of programs, services and overall spending patterns between and among facilities, communities and regions.

We know there are still challenges facing our health care system, but this report reflects the successes of our current programs and strategies. All British Columbians can be confident that we have an accessible, first-rate health care system that provides British Columbians with better than average health outcomes.

Colin Hansen  
**Minister of Health Services**

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## **Report of the Auditor General of British Columbia**

British Columbia's Report on Nationally Comparable Performance Indicators  
November 2004

*To the Legislative Assembly of the Province of British Columbia*

I have audited the 18 national health indicators presented in the Ministry of Health Services' report on Nationally Comparable Health Indicators dated November 2004, as prepared by the ministry. The report is published pursuant to the 2003 First Ministers' Accord on Health Care Renewal, which builds on the 2000 First Ministers' Meeting Communiqué on Health. The Conference of Deputy Ministers of Health identified and defined the specific indicators to be reported to Canadians. The Ministry of Health Services is responsible for reporting the national health indicators.

My responsibility is to express an opinion on the completeness, accuracy and adequacy of disclosure of the 18 health indicators presented in the 2004 Ministry of Health Services' report on comparable health indicators, based on my audit. However, my responsibility does not extend to assessing the performance achieved, nor the relevance or sufficiency of the health indicators selected for reporting. My work on the analysis and discussion of the health indicators presented in this report was limited to reading such information to ensure that it was not inconsistent with the result of the audited indicators. As well, my audit was limited to information related to the most recent year for which each indicator was reported.

I conducted my audit in accordance with the standards for assurance engagements established by the Canadian Institute of Chartered Accountants. Those standards require that I plan and perform an audit to obtain reasonable assurance whether the British Columbia indicators presented are free of significant misstatement. To this end, I audited these health indicators to determine whether they meet the criteria of completeness, accuracy and adequate disclosure, as presented in Annex A of my report. My audit includes examining, on a test basis, evidence supporting the health indicators and disclosures.

In my opinion the health indicators included in the Ministry of Health Services' report presents fairly, in all significant respects, the information required based on the audit criteria outlined in Annex A.

I am encouraged by the work undertaken by the Ministry of Health Services in preparing this report. I look forward to working with the Ministry to ensure such reporting continues and strengthens.

Wayne Strelieff, FCA  
Auditor General  
December 1, 2004

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# **ANNEX A**

## **Audit criteria**

### **Complete**

According to the 2003 First Ministers' Accord on Health Care Renewal, the Conference of Deputy Ministers approved 70 indicators, including a subset of 18 indicators that all jurisdictions are to feature in their 2004 reports. All health indicators reported comply with the definitions, technical specifications and standards of presentation as approved. All 18 featured health indicators are reported.

### **Accurate**

The health indicators reported adequately reflect the facts, to an appropriate and consistent level of accuracy, including the ability to make comparisons between jurisdictions and between the 2002 and 2004 reports within each jurisdiction, where applicable.

### **Adequate disclosure**

The health indicators are defined and their significance and limitations on the data are explained. The report states and properly describes departures from what was approved by the Conference of Deputy Ministers and explains plans for the future resolution of the departures.



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## Introduction

*Healthy British Columbia* is B.C.'s second report on nationally comparable health and health system indicators. In September 2000, the provincial premiers and the Prime Minister agreed to provide clear accountability reporting to Canadians on the public health system. This agreement was reaffirmed in the February 2003 First Ministers' Accord on Health Care Renewal.

British Columbia's first report included data on 62 of 67 indicators. *How Healthy Are We? September 2002* demonstrated that British Columbians were generally healthy and the public health care system was doing a good job of meeting patient needs.

In the 2003 Health Accord, provincial premiers and the Prime Minister agreed to further develop health indicators to focus on specific program and service areas. To facilitate the process, a Performance Indicator Working Group was established in April 2003. In addition to the provinces and territories, Statistics Canada, the Canadian Institute for Health Information (CIHI) and Health Canada participated in the development process. Using an invitational workshop, the acceptance of written submissions and a web site for comments, the working group also undertook direct consultation with stakeholders. Focus group testing was performed in five major centres across Canada to obtain feedback from the general public regarding the indicators and the format of the presentation. The result has been the preparation of a list of 18 "Featured Indicators" to be reported by all jurisdictions and 52 "Non-featured Indicators" that are optional.

*This report presents 18 indicators and subindicators as mandated by the 2003 Health Accord.*

The 18 featured indicators are drawn from the following general categories:

- Access and Quality of Primary Health Care
- Quality of other Programs and Services (Hospital Care)
- Access to Catastrophic Drug Coverage and Pharmaceutical Management
- Access to Diagnostic and Medical Equipment (Access)
- Access to Health Human Resources
- Health and Wellness of the Population.

More information on the 18 Featured and 52 Non-Featured Indicators can be found at:

<http://www.cihi.ca/comparable-indicators> or

<http://www.statcan.ca/english/freepub/82-401-XIE/2002000/index.htm>.

## Data Sources and Quality

Each province and territory in Canada has its own method of collecting health data. As a result, it can be difficult to compare information between different regions. While the most recent data has been used where possible, in order to achieve a set of nationally comparable indicators there may be some cases where the most current B.C. data has not been used. Visit the B.C. Ministry of Health Services website to view publications and reports which may provide more up-to-date statistics.

The major data sources for this report are the Canadian Institute for Health Information (CIHI) and Statistics Canada (Stats Can). CIHI is an independent, pan-Canadian, not-for-profit organization whose mandate is to improve the health of Canadians and the health care system by providing reliable and timely health information. Stats Can is the national statistics agency for Canada, providing statistics and data on all aspects of Canadian life.

Most of the measures in this section of the report have been drawn from two related surveys, the Canadian Community Health Survey (CCHS) and the Health Services Access Survey (HSAS) conducted by Statistics Canada in 2001 and 2003. Both of these surveys sampled from individuals older than 15 years of age and living in private households. They excluded persons living on First Nation Reserves or Crown lands, residents of institutions, full-time members of Canadian Armed Forces, and residents of certain remote regions. Year 2003 refers to the 2003 survey and may include data from the 2002 calendar year. Year 2001 refers to the 2001 survey and may include data from the 2000 calendar year. For details on the sample coverage of other surveys and data sources please see the appendix.

The sample was further restricted for some of the indicators presented and in these cases the additional restriction has been noted in the text. There are also some important qualifications for some of the indicators used. This has also been noted in the text. Technical specifications for all indicators can be found in the appendix.

Most of the statistics presented in this report are age standardized. Age standardization accounts for the effect that different age structures of a population can have on various measures of health. For example, a population with a high proportion of females of childbearing age will have a higher birth rate, compared to a population with a lower proportion of females of childbearing age. Age standardization adjusts for the differences in age structure and allows for comparisons of different populations on an equal basis.

Where appropriate, confidence intervals for the estimated values are presented and appear as vertical lines. The confidence interval can be interpreted as a measure of the preciseness of an estimation. A very narrow confidence interval means that the statistic is likely estimated very precisely while a very wide confidence interval suggests a more imprecise estimate. These confidence intervals can also be used to test the statistical significance of differences between estimates for a given indicator at the Canadian level and the British Columbia level for a given period. Where possible, linear trends have been estimated and can be used as an indication of the significance of a time trend.

When considering the statistical significance of a reported difference it is important to recognize that the point estimate is the best estimate of the value and that statistical significance tells us how confident we are in that estimate. In particular, just because a difference is not statistically significant does not mean that the difference is zero or that we should treat the quantities as if they are the same.

To assure the public that information and analysis is accurate, each jurisdiction across Canada has arranged for an independent third party review. In British Columbia, the provincial Auditor General has reviewed the information and provided an opinion on the completeness, accuracy and data quality.

## **Alignment with Government Goals**

In the Government of British Columbia's Strategic Plan, the government stated "British Columbians will be healthy". One method of tracking progress towards this goal is to compare British Columbia against the national average. By monitoring our health care system and reporting on its performance, government and those who deliver health care services will be better equipped to identify key areas requiring improvement. The result will be improved services and a more sustainable health care system.

## Primary Health Care

Primary health care is the foundation of Canada's health care system. For most British Columbians, it is the first and most frequent point of contact with the health care system. It may include a checkup by the family doctor, a visit from a home care worker, or even a trip to the pharmacist or school nurse. Primary health care is where new health problems are addressed, and where patients and providers work together to manage ongoing problems. It has been one of the top priorities for reform in the province since 2001.

*Primary Health Care is described as comprehensive, coordinated and continuous care.*

Because identifying and treating health care concerns early can improve overall health outcomes of the population and reduce the need for hospital care, the health authorities are developing integrated primary health services with the help of \$74 million from the federal government's Primary Health Care Transition Fund.

The province's approach to primary health care renewal offers patients:

- 24/7 access to health professionals
- extended hours at family practices or clinics
- better health outcomes, especially for patients with chronic illnesses
- improved continuity of care
- appropriate care by the most appropriate provider
- better linkages between primary, home and community care

The goal of primary health care is to keep people healthier, longer, by preventing serious illness and injury through education and timely treatment of short-term or episodic problems. It also works to help patients manage chronic health illnesses appropriately, so they don't develop unnecessarily into medical crises. To achieve this goal, British Columbia has implemented many strategies, some of which include BC Nurseline, the BC HealthGuide, the Chronic Disease Management Toolkit and the planned implementation of nurse practitioners.

## **BC HealthGuide Program**

The BC HealthGuide Program is an innovative self-care/tele-care program aimed at enhancing consumer access to timely and accurate health information, expanding consumer knowledge, and reducing health system pressures and costs due to inappropriate use. The program supports health system redesign initiatives such as chronic disease management, primary health care, mitigation of demand for ambulance services, and improved access in rural and remote areas. BC HealthGuide's comprehensive approach to self-care is unique in Canada and is delivered in a variety of formats.

### **BC HealthGuide Handbook (French & English)**

- information on more than 190 common health concerns
- tips for prevention and early identification of illnesses
- advice on when to see a doctor
- self-care "home treatment" tips
- information on managing chronic disease

### **BC First Nations Health Handbook**

- developed in partnership with the BC First Nations Chiefs' Health Committee
- specific information on health services available to aboriginal communities

### **BC HealthGuide OnLine - [www.bchealthguide.org](http://www.bchealthguide.org)**

- more than 35,000 medically reviewed pages
- over 3,000 detailed health topics on symptoms and conditions
- updated quarterly

### **BC NurseLine & Pharmacist Line**

- toll-free nursing triage and health education
- available 24 hours a day, 7 days a week
- pharmacists available between 5:00pm and 9:00am, 7 days a week
- more than 130 languages available

Within Greater Vancouver, call 604-215-4700

Within BC, call toll free 1-866-215-4700

Deaf and hearing-impaired 1-866-889-4700

### **BC HealthFiles**

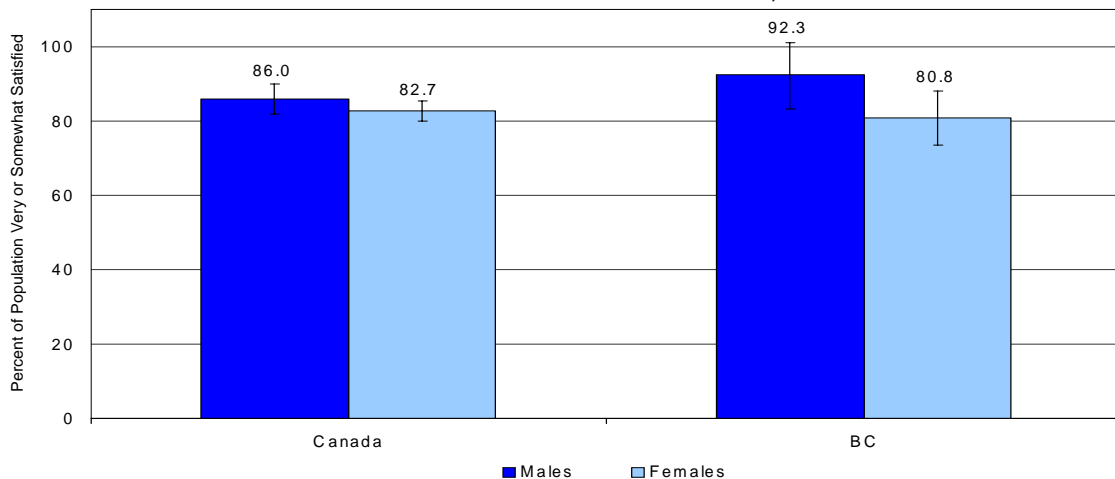
- 150 one-page, easy-to-understand fact sheets

## Telephone Health Line or Tele-Health Services

Ensuring all British Columbians have continuous access to needed health care services, no matter where they live, is an important part of primary health care. While access to doctors office's and acute care facilities is important, many British Columbians have simple questions or minor symptoms that do not necessarily require a visit to the hospital or doctor. To ensure British Columbians have the information they need to manage and direct their own health care, B.C. provides BC HealthGuide, a comprehensive self-care approach that is unique in Canada.

BC NurseLine is a 24/7 toll-free telephone health line, staffed by registered nurses. Pharmacists are also available between 5:00 pm and 9:00 am daily. The province's telephone health line ensures that professional, caring medical attention is never more than a phone call away.

**Chart 1**  
Patient Satisfaction, Telephone Health Line or Tele-health Services  
Received in Past 12 Months, Population\* Aged 15+,  
Canada and British Columbia, 2003



*The province's telephone health line helps people understand and manage health problems... and over 90% of B.C. male users are satisfied with it.*

Indicator: 9 - Patient satisfaction with telephone health line or tele-health  
Source: Statistics Canada, Canadian Community Health Survey: 2003  
\*Note: Age Standardized

As noted in Chart 1, satisfaction with the province's telephone health line or tele-health service is high. The age-standardized satisfaction rate for British Columbians who used a telephone health line or tele-health service in the 2003 CCHS Survey showed 92.3 per cent of males and 80.8 per cent of females were "very satisfied" or "somewhat satisfied". This compares to the rest of Canada which reported 86.0 per cent of males and 82.7 per cent of females were satisfied with telephone health line services. The differences in satisfaction rates between Canada and British Columbia are not statistically significant at the five per cent level.

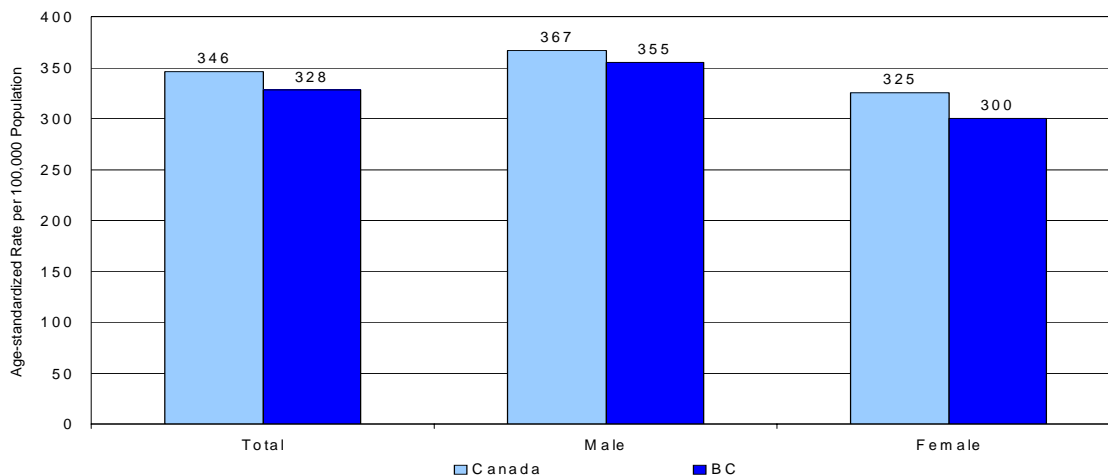
## Ambulatory Care Sensitive Conditions

The hospitalization rate for ambulatory care sensitive conditions is defined using an age-standardized inpatient acute care hospitalization rate for conditions where appropriate ambulatory care may prevent or reduce the need for admission to hospital.

Ambulatory conditions are long-term health conditions which can often be managed with timely and effective treatment in the community, rather than in hospital. These conditions include diabetes, asthma, alcohol and drug dependence/abuse, neuroses, depression, hypertensive disease, and others. Although preventive care, primary care, and community-based management of these conditions will not eliminate all hospitalizations, services such as these across the continuum could eliminate many of them.

One factor influencing the variation in rates is likely the extent to which preventative care and management within the community are available and accessible. Tracking hospitalization rates for these conditions over time can provide an indicator of the impact of community and home-based services. This is why hospitalization rates for ambulatory conditions are one indicator of appropriate access to community-based care.

**Chart 2**  
Hospitalization Rates\* for Ambulatory Care Sensitive Conditions,  
Canada and British Columbia, 2001/2002

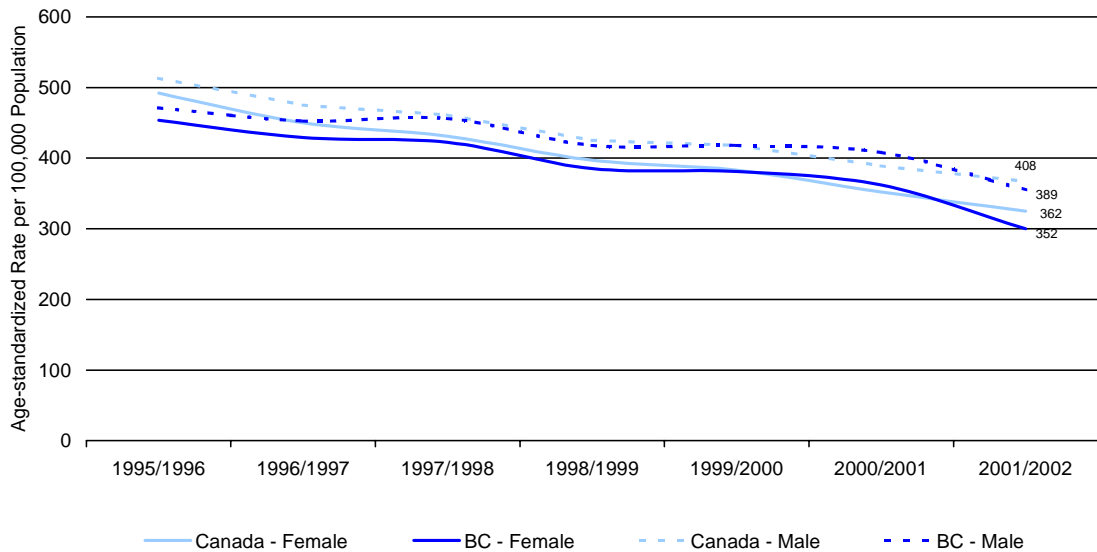


*The hospitalization rate for ambulatory care sensitive conditions is lower in British Columbia than in Canada...*

Indicator: 12 - Hospitalization rate for ambulatory care sensitive conditions  
Source: CIHI, Hospital Morbidity Database. Census, Statistics Canada, ISQ  
\*Note: Age Standardized

Chart 2 shows that for both males and females, the age standardized rate of hospitalization for ambulatory care sensitive conditions is slightly lower in British Columbia than in the rest of the country. The age standardized rate of hospitalization for ambulatory conditions is higher for males than it is for females in both British Columbia and Canada.

**Chart 3**  
 Hospitalization Rates\* for Ambulatory Care Sensitive Conditions,  
 Canada and British Columbia, 1995/1996 to 2001/2002



*...and there is a downward trend for both males and females.*

Indicator: 12 - Hospitalization rate for ambulatory care sensitive conditions  
 Source: CIHI, Hospital Morbidity Database. Census, Statistics Canada, ISQ  
 \*Note: Age Standardized

Chart 3 shows that based on a linear trend and statistical significance at the five per cent level, the hospitalization rate for ambulatory care sensitive conditions was on a statistically significant downward trend for men and women in Canada from 1995/96 to 2001/02. In British Columbia the rate was also on a downward trend for males and females. This trend was statistically significant. This may indicate more appropriate utilization of hospital resources and/or better preventative care and management within the community.

One of the ways B.C. is supporting physicians and patients to improve preventative and community managed care is with Chronic Disease Management Collaboratives. These collaboratives support family physicians to make practical, small-scale improvements in their clinical practice. Collaboratives develop targets for good management of chronic diseases based on the B.C. Care guidelines for specific diseases. As part of the collaborative process, patients set their own self-management goals.

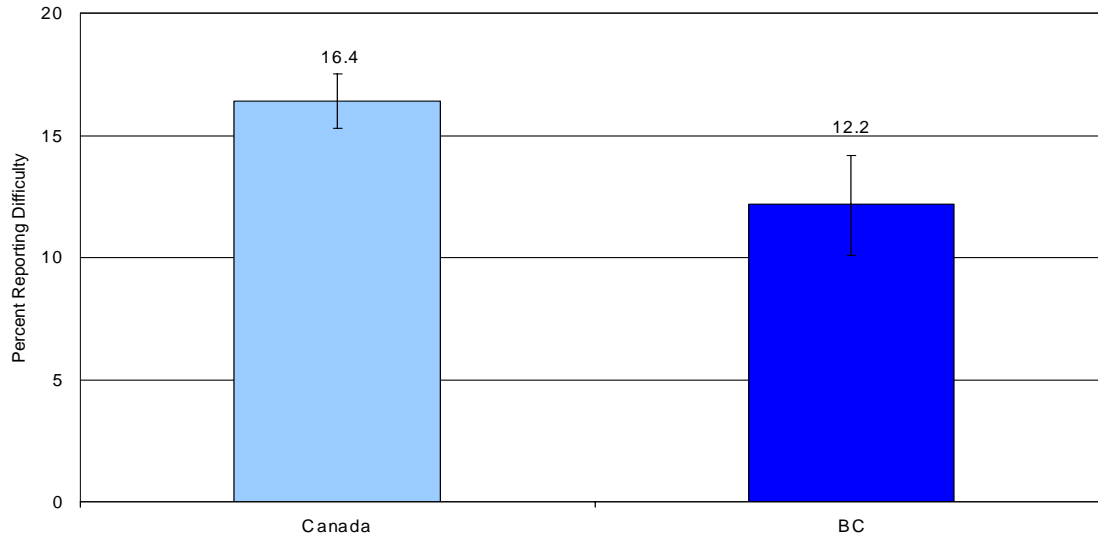


## Access to Primary Health Care

Routine care includes such things as getting help with chronic conditions such as diabetes. The ability to obtain routine care when needed is believed to be important in maintaining health, preventing health emergencies and avoiding the inappropriate use of services (e.g., use of hospital emergency rooms for non-emergencies).

**Chart 4**

Percent\* Who Experienced Difficulties Obtaining Routine or Ongoing Health Services for Self or Family Members, Canada and British Columbia, 2003



*A lower percentage of British Columbians than Canadians reported difficulty obtaining routine or ongoing health services.*

Indicator: 1 - Difficulty obtaining routine or on-going health services

Source: Statistics Canada, Health Services Access Survey, 2001 and Health Services Access Survey, Supplement to the Canadian Community Health Survey, 2003

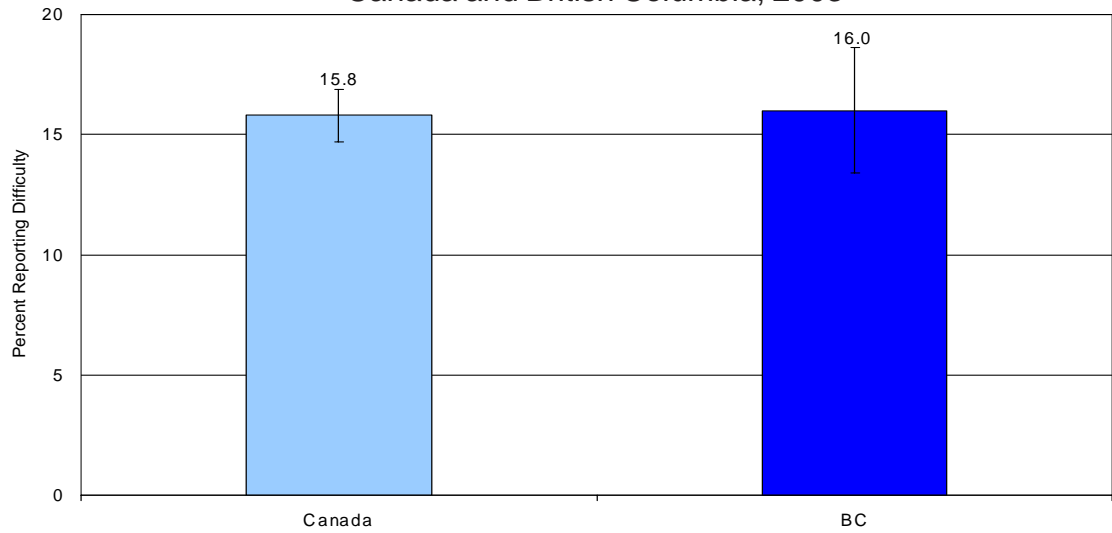
\*Note: Age Standardized

Chart 4 shows the age standardized per cent of people surveyed in the Stats Canada HSAS survey who required routine care and had difficulty obtaining it in Canada and in British Columbia. In 2003, 16.4 per cent of Canadians reported difficulty in obtaining routine care for self or family members. In British Columbia, the percentage that had difficulty obtaining care was lower at an estimated 12.2 per cent. This difference is statistically significant at the five per cent level.

Many British Columbians are choosing to take responsibility for their own health care decisions. For this reason, easy access to advice and information from qualified professionals is an integral part of our health care system. Appropriate advice and information can ensure patients are able to differentiate between conditions that warrant a medical appointment and those that do not.

**Chart 5**  
Percent\* Who Experienced Difficulties Obtaining Health Information or Advice for Self or Family Members, At Any Time of the Day, Canada and British Columbia, 2003

*Similar rates of difficulty exist in obtaining information or advice.*

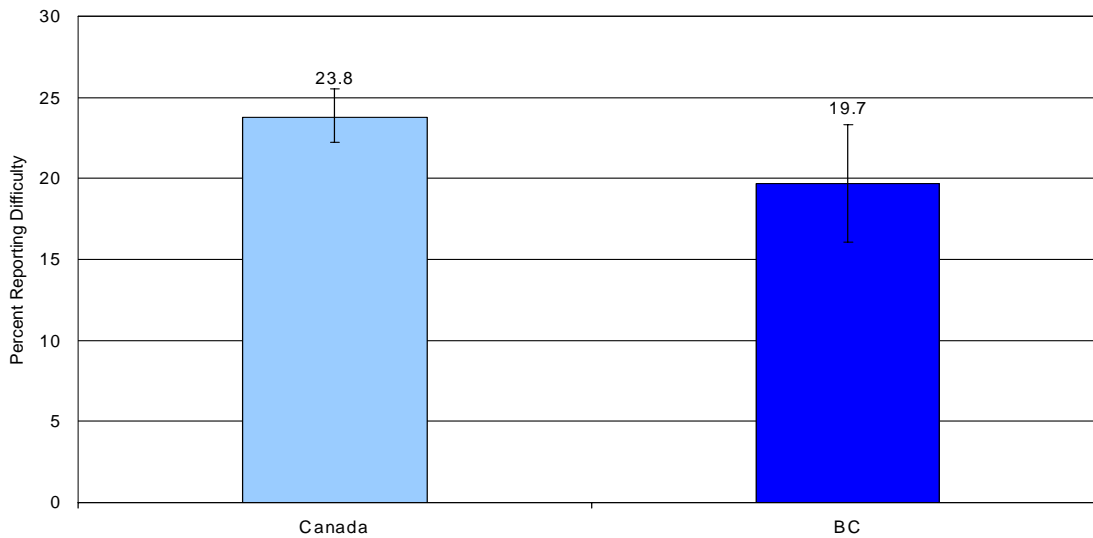


Indicator: 2 - Difficulty obtaining health information or advice  
Source: Statistics Canada, Health Services Access Survey, 2001 and Health Services Access Survey, Supplement to the Canadian Community Health Survey, 2003  
\*Note: Age Standardized

The age standardized percentage of individuals in the HSAS population who reported difficulty obtaining required advice or information about a medical condition is included in Chart 5. In 2003, an estimated 16.0 per cent of the B.C. population and 15.8 per cent of the Canadian sample population had difficulty obtaining advice. The estimated difference between British Columbia and Canada is not statistically significant at the five per cent level.

Sometimes relatively minor care cannot wait for a scheduled appointment and immediate care is required. Access to immediate care is an important measure in determining the appropriate use of services (i.e. hospital emergency rooms), restoring health, and preventing health emergencies.

**Chart 6**  
 Percent\* Who Experienced Difficulties Obtaining Immediate Care  
 for Minor Health Problems for Self or Family Members,  
 At Any Time of the Day, Canada and British Columbia, 2003



Indicator: 3 - Difficulty obtaining immediate care  
 Source: Statistics Canada, Health Services Access Survey, 2001 and Health Services Access Survey, Supplement to the Canadian Community Health Survey, 2003  
 \*Note: Age Standardized

*Proportionately fewer British Columbians had difficulty obtaining immediate care...*

Chart 6 indicates the age standardized percentage of the B.C. and Canadian HSAS population that required immediate care for self or family member but had difficulty obtaining it.

In 2003, an estimated 19.7 per cent of British Columbians in the HSAS population who required immediate care had trouble accessing it. In Canada the percentage was slightly higher at 23.8 per cent. However, the estimated difference between Canada and British Columbia is not statistically significant at the five per cent level.

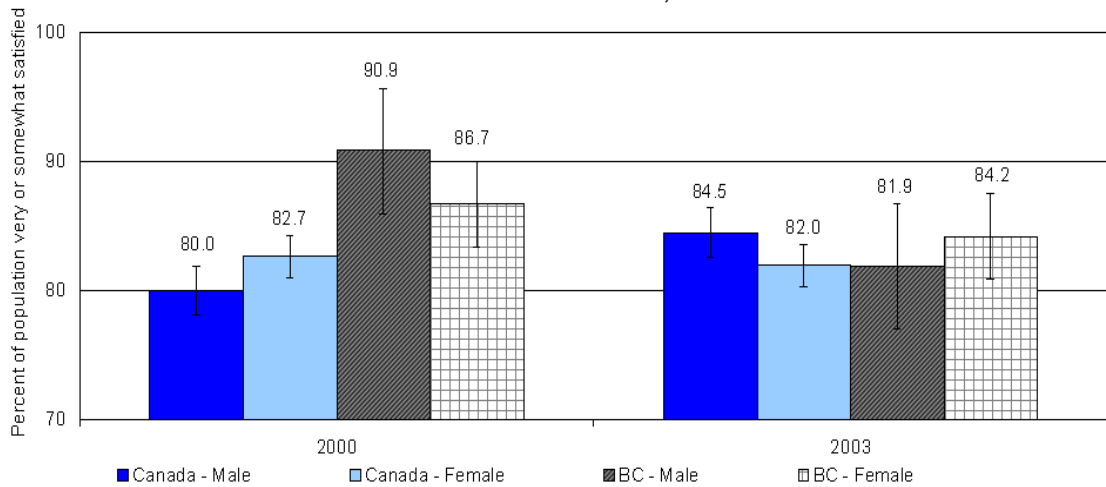
*... the difference is not statistically significant.*

## Community-Based Care

A significant amount of care is performed in the community. Community care includes any care provided outside of a hospital or physician's office including home care, home-based counseling or therapy, personal care and community walk in-clinics. Chart 7 shows the estimated age standardized satisfaction rate for patients in the CCHS population who received community care in the previous 12 months.

**Chart 7**  
**Patient Satisfaction, Community-based Health Care Services Received in Past 12 Months, Population\* Aged 15+ in private households, Canada and British Columbia, 2000 and 2003**

*British Columbians who received community-based health care services are generally satisfied with the services received.*



Indicator: 7 - Patient satisfaction with community-based services

Source: Statistics Canada, Canadian Community Health Survey: 2000/01, 2003

\*Note: Age Standardized

NOTE: This indicator measures satisfaction with the way the service was provided and not with the service as a whole.

In 2003, an age standardized 81.9 per cent of males and 84.2 per cent of females in British Columbia's CCHS population rated their satisfaction with community care as "very satisfied" or "somewhat satisfied". The corresponding rates for Canada are 84.5 per cent and 82.0 per cent. The difference between the British Columbia and Canada satisfaction levels is not statistically significant at the five per cent level.

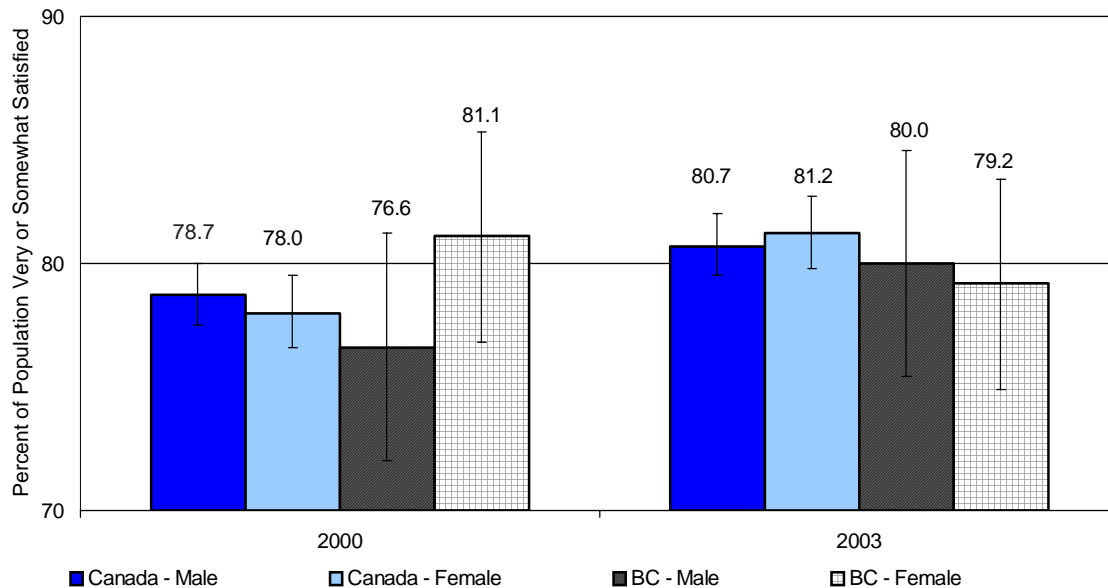
The satisfaction rate in British Columbia dropped between 2000 and 2003. For the country as a whole, the male satisfaction rate increased, while the female satisfaction rate dropped slightly.

## Hospital Care

Although one of the key goals of B.C.'s health care system is to reduce the need for advanced levels of care, the need for acute care is inevitable. Primary health care will continue to take the pressure off of hospitals, as more patients recognize the importance of preventive care and chronic disease management.

However, by looking at the level of patient satisfaction with hospital services, we can determine how hospitals are being used. Chart 8 shows the age standardized satisfaction rate among the CCHS population who received hospital services in the previous 12 months..

**Chart 8**  
Patient Satisfaction, Hospital Care Services Received in Past 12 Months,  
Population\* Aged 15+, Canada and British Columbia, 2000 and 2003



*There are no statistically significant differences in the rates of satisfaction with hospital care in British Columbia and Canada.*

Indicator: 28 - Patient satisfaction with hospital care

Source: Statistics Canada, Canadian Community Health Survey: 2000/01, 2003

\*Note: Age Standardized

NOTE: This indicator measures satisfaction with the way the service was provided and not with the service as a whole.

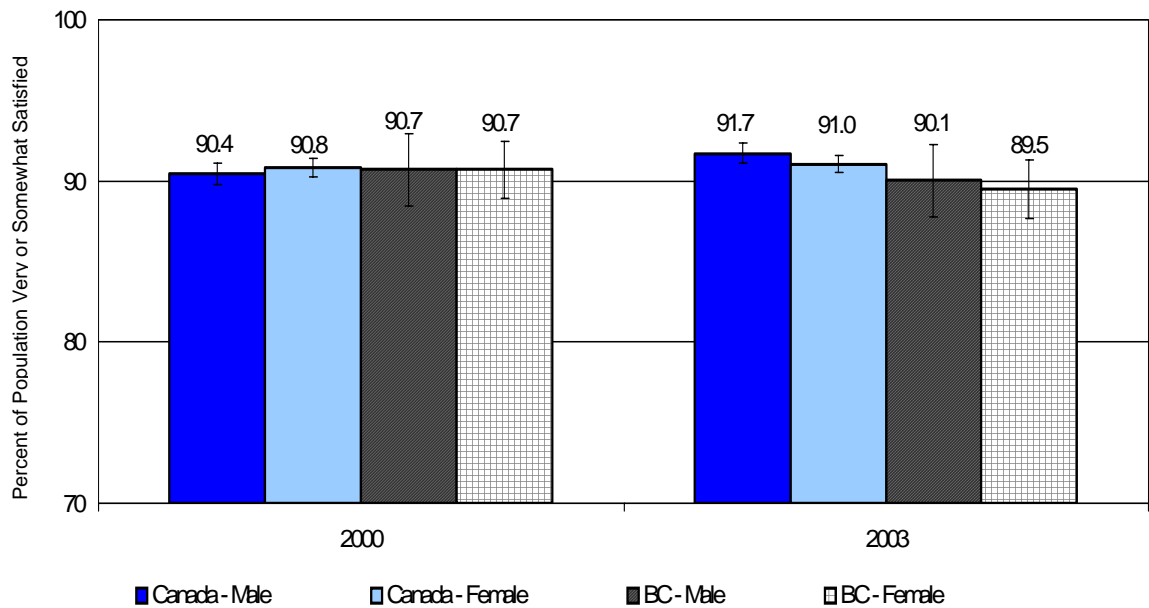
B.C. males in the 2003 CCHS population had an age standardized satisfaction rate of 80.0 per cent. Females had a satisfaction rate of 79.2 per cent. This difference is not significant at the five per cent level. Satisfaction among British Columbia males increased between 2000 and 2003 while the satisfaction rate for females dropped slightly.

In Canada as a whole the age standardized satisfaction rate in 2003 was very similar to B.C. at 80.7 per cent for males and 81.2 per cent for females. However, in contrast to British Columbia, the national satisfaction rate increased slightly between 2000 and 2003 for both males and females. The estimated difference between Canada and British Columbia is not statistically significant at the five per cent level in either time period. Due to changes in the way Statistics Canada collected data, readers should be cautious in the interpretation over time.

## Physician Services

More than 80 per cent of British Columbians received medical treatment of some sort in 2002/03<sup>1</sup>. Consequently, it is important to look at the satisfaction rate of patients with physicians when considering patients overall satisfaction with the health system.

**Chart 9**  
Patient Satisfaction, Physician Care Services Received in Past 12 Months, Population\* Aged 15+, Canada and British Columbia, 2000 and 2003



Indicator: 34 Patient satisfaction with physician care  
 Source: Statistics Canada, Canadian Community Health Survey: 2000/01, 2003  
 \*Note: Age Standardized  
 NOTE: This indicator measures satisfaction with the way the service was provided and not with the service as a whole.

*Patient satisfaction with physician care is similar in British Columbia and Canada.*

Chart 9 shows the age standardized satisfaction rates for the CCHS population who received care from a physician in 2000 and 2003. In British Columbia an estimated 90.1 per cent of males and 89.5 per cent of females rated their treatment as either very or somewhat satisfied. That compares to the rest of Canada where 91.7 per cent of males and 91.0 per cent of females rated their treatment as either very or somewhat satisfied. The estimated satisfaction rates are not significantly different in British Columbia and Canada at the five per cent level.

The estimated age standardized satisfaction rates in British Columbia slipped very slightly between the 2000 and 2003 survey while rates in the rest of Canada increased slightly. The estimated difference between Canada and British Columbia in the 2000 survey was also not significant at the five per cent level.

<sup>1</sup> Includes only Medical Service Plan, Fee-for-Service numbers. The total including Alternative Payments may be larger.

## Catastrophic Pharmaceutical Coverage

Worldwide the cost of pharmaceutical products has been steadily rising over time. According to the Canadian Institute for Health Information, combined public and private spending on pharmaceutical products rose 96 per cent in Canada and 114 per cent in British Columbia between 1992 and 2001<sup>2</sup>.

A person's medical condition may worsen if they are unable to obtain the prescription drugs they need. In May 2003, B.C. introduced the new Fair PharmaCare program to ensure that families who are on a lower income can get the drugs they need, when they need them. About 280,000 B.C. families are now paying less than in the past.

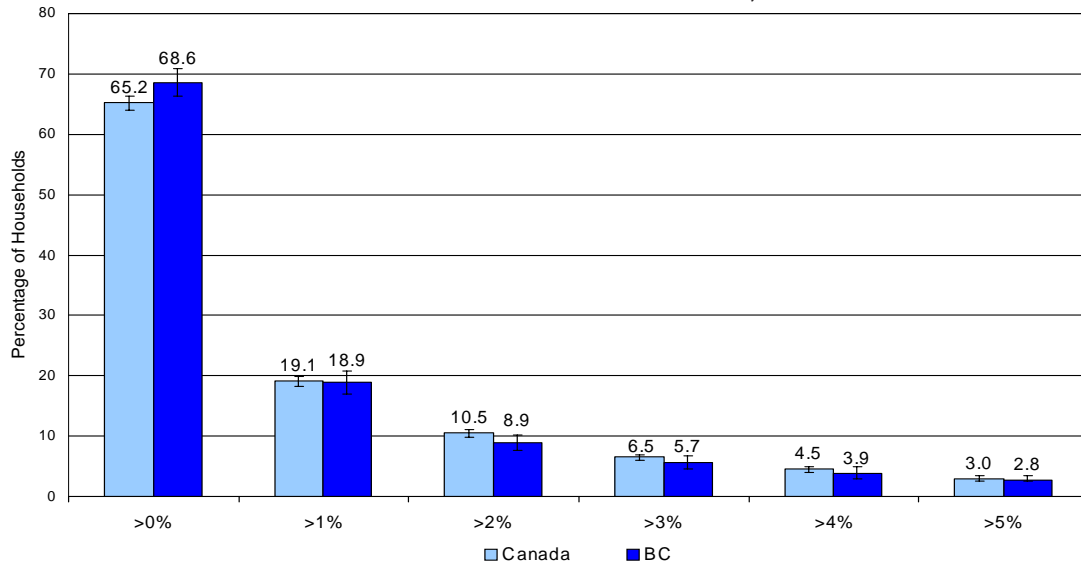
### Fair PharmaCare in British Columbia

Under British Columbia's Fair PharmaCare program, residents pay their full eligible prescription drug costs until they reach their deductible level. This level is determined by their family's net income. Once the deductible level is reached, the B.C. government will pay 70 per cent of the family's eligible drug costs (if a resident was born in 1939 or before, the payment is 75 per cent) up to a pre-determined family maximum. Once the family maximum is reached, the government will pay 100 per cent of all eligible drug costs. The absolute maximum any family would have to pay in eligible drug costs is \$10,000 per year, though most resident's maximum is considerably less (eg. an annual family net income of \$50,000 would have a family maximum of \$2,000).

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<sup>2</sup> Canadian Institute for Health Information, National Health Expenditure Trends, 1975-2003, Table A.3.1.1 and D.3.10.1.

**Chart 10**  
 Percent of Households Spending Over Given Percentages of Total After Tax Income (out-of-pocket) on Prescription Drugs, Canada and British Columbia, 2002



Indicator: 30 - Prescription drug spending as a percentage of income  
 Source: Statistics Canada, Survey of Household Spending 1997, 1998, 1999, 2000, 2001, 2002

*A lower percentage of British Columbians spent more than one percent of disposable income on prescription drugs...*

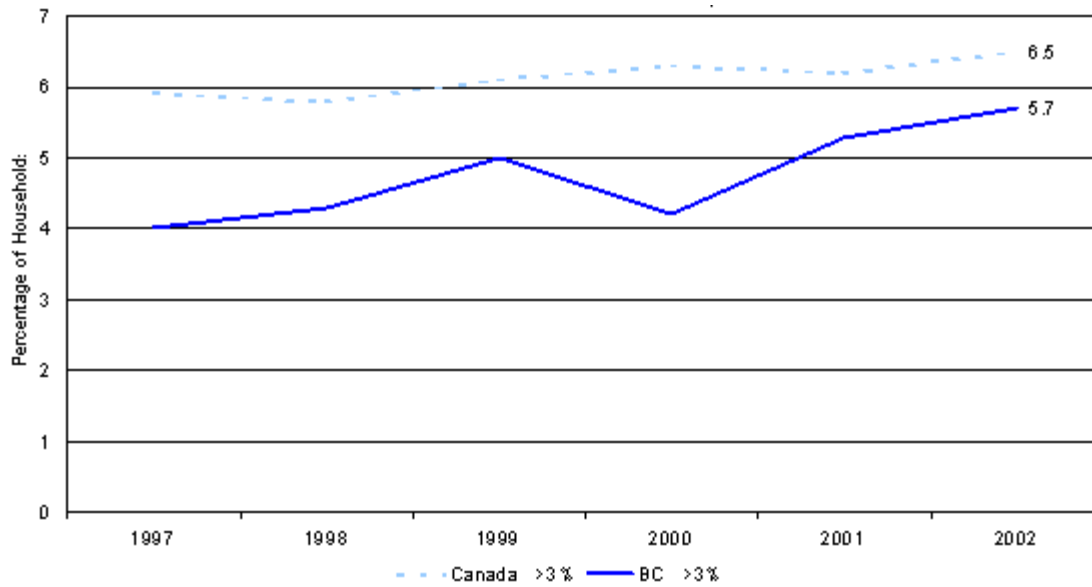
Chart 10 shows the percentage of households in Canada and British Columbia that spent more than given percentages (zero, one, two, three, four and five per cent) of total after-tax income (out-of-pocket) on prescription drugs. The percentages are non-exclusive. More than three per cent includes more than four per cent and more than five per cent, etc.

In 2002 a higher percentage of British Columbians paid some out-of-pocket amount for prescriptions than in the rest of Canada. However, residents of British Columbia were less likely than Canadians as a whole to pay more than one per cent of after tax income for prescription drugs.

The percentage of British Columbians who had to pay more than two, three, four and five per cent of after tax income on prescriptions was also lower than the percentage of Canadians as a whole. Since proportionately fewer British Columbia residents were required to spend one per cent or more of after tax income on prescriptions, there is a lower probability that British Columbians faced an extreme burden of drug costs. Possible reasons for varying out-of-pocket drug expenditures include differences in population health status, population age structures and pharmaceutical plan coverage.



**Chart 11**  
 Percent of Households Spending Over Three Percent of Total After Tax Income (out-of-pocket) on Prescription Drugs, Canada and British Columbia, 1997 to 2002



*....but the trend is upward both in British Columbia and Canada.*

Indicator: 30 - Prescription drug spending as a percentage of income  
 Source: Statistics Canada, Survey of Household Spending 1997, 1998, 1999, 2000, 2001, 2002

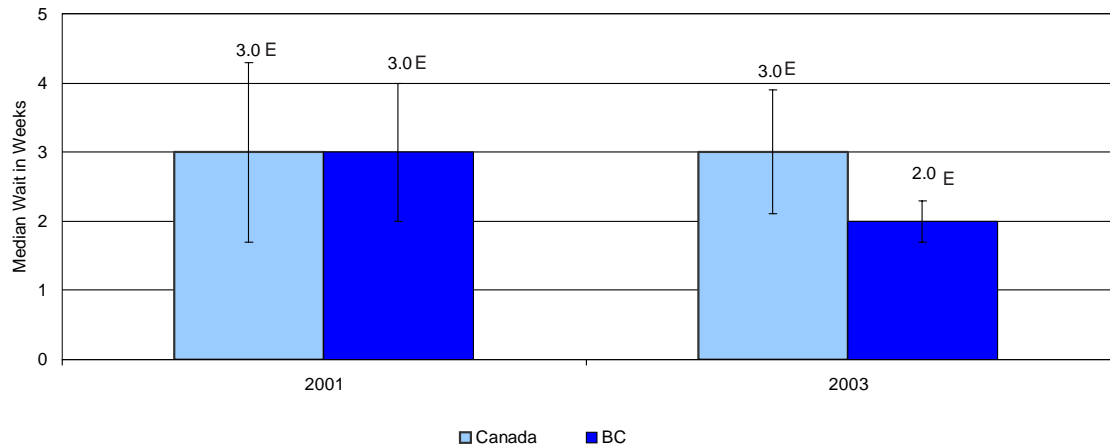
Chart 11 shows a time series for 1997-2002 of the percent of households who paid more than three per cent of after tax income on prescription drug costs. Throughout the period, proportionally fewer British Columbians than Canadians as a whole had to pay more than three per cent of their after-tax income for prescription drugs. For both Canada and British Columbia, however, this percentage is on a statistically significant upward trend (based on a linear trend and a significance level of five per cent).

## Diagnostic Services and Medical Equipment

When an examination by a medical practitioner indicates the need for further evaluation, the individual is referred for diagnostic services. Diagnostic services help to determine specific medical conditions and provide direction to patient- and condition- appropriate treatments. These services include MRI, angiographies and CT scans. Access to diagnostic services is important in ensuring access to appropriate care.

**Chart 12**  
**Median Self-Reported Wait Time in Weeks for Certain Diagnostic Tests, Canada and British Columbia, 2001 and 2003**

*Median wait times for diagnostic tests are lower in British Columbia than in Canada... the difference is not statistically significant.*



Indicator: 33a - Median wait time for diagnostic services (MRI, angiographies, CT scans)  
 Source: Statistics Canada, Health Services Access Survey, 2001 and Health Services Access Survey, supplement to the Canadian Community Health Survey, 2003  
 E - denotes numbers must be interpreted with caution

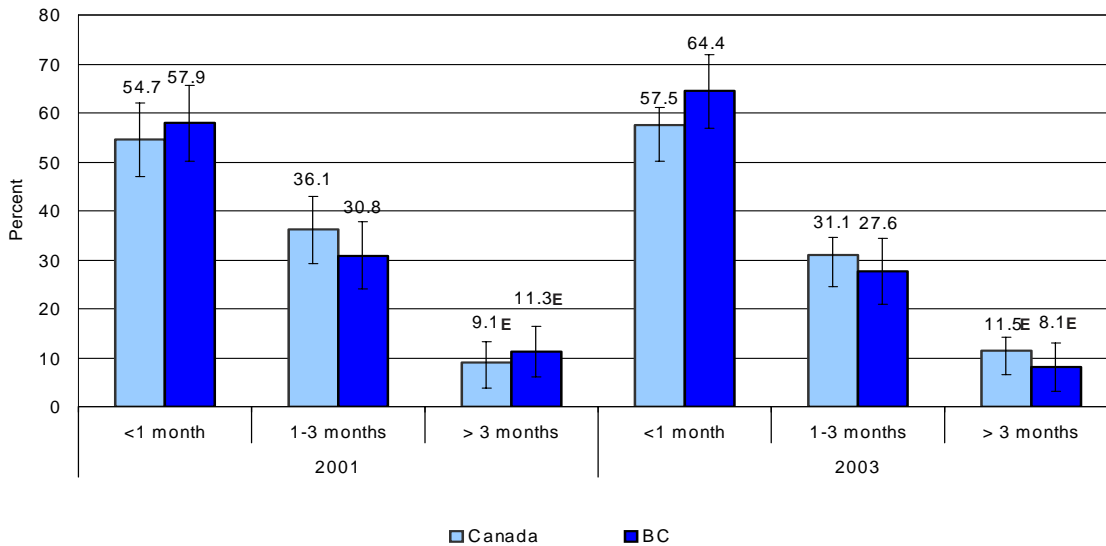
The median self-reported wait time for access to certain diagnostic tests for the HSAS population who received those services in Canada and British Columbia is shown in Chart 12. The median is the 50th percentile of the distribution of wait times, or the point where half the patients wait less and half wait longer than the median number of weeks. The population includes only those individuals who have received the service. Patients who are waiting but have not yet received the service are excluded from the indicator calculation. In the 2003 survey, the median self-reported wait time for certain diagnostic tests in British Columbia was 2.0 weeks. For the same tests, the median self-reported wait time for Canada as a whole was 3.0 weeks. The estimated difference in the median wait times is not statistically significant at the five per cent level.

*Wait times dropped in B.C. between 2001 and 2003.*

In the 2001 survey, the estimated median wait time was 3.0 weeks in Canada and British Columbia. Statistics Canada notes that small sample sizes in both the 2001 and 2003 surveys mean the results of this survey must be utilized with caution, at both the British Columbia and national level.

The median wait time tells only part of the story, although it is often included in wait list statistics. The median wait time may be insensitive to very long or very short wait times as it describes only a single point rather than the total distribution of wait times. A more complete picture of wait times can be produced by examining the percentage of people waiting a specific amount of time.

**Chart 13**  
**Distribution of Reported Wait Times for Selected Diagnostic Tests, Canada and British Columbia, 2001 and 2003**



Indicator: 33b - Distribution of wait times for diagnostic services (MRI, angiographies, CT scans)  
 Source: Statistics Canada, Health Services Access Survey, 2001 and Health Services Access Survey, supplement to the Canadian Community Health Survey, 2003  
 E - denotes numbers must be interpreted with caution

Chart 13 shows the proportion of people in the HSAS population who: received diagnostic treatment; waited less than one month for treatment; waited one to three months for treatment; and, waited greater than three months for treatment. These are exclusive.

In British Columbia the 2003 survey shows that 64.4 per cent of people who received selected diagnostic tests waited less than one month. This compares to 57.5 per cent of people who waited less than one month for the same tests in the rest of Canada. In British Columbia 27.6 per cent waited between one and three months and 8.1 per cent waited more than three months. This compares to 31.1 per cent and 11.5 per cent respectively for Canada as a whole. None of the estimated differences are statistically significant at the five per cent level. There is little evidence that the distributions of wait times as a whole are different in British Columbia than in the rest of Canada.

*Nearly two thirds of British Columbians waited less than one month for diagnostic tests in 2003.*

A higher proportion of diagnostic services in British Columbia and in Canada were completed within one month in 2003 than in 2001. In British Columbia the percentage of people waiting one to three months and the percentage waiting more than three months dropped. In Canada, however, the percentage of cases taking longer than three months increased between 2001 and 2003.

In 2004, the province has targeted reduction of wait times as a key goal. Since August, government has contributed more than \$25.7 million to improve patient access to surgeries and procedures. The Western Canada Waiting List Project, improved data management and additional educational seats for physicians and specialists will also reduce the wait lists over time.

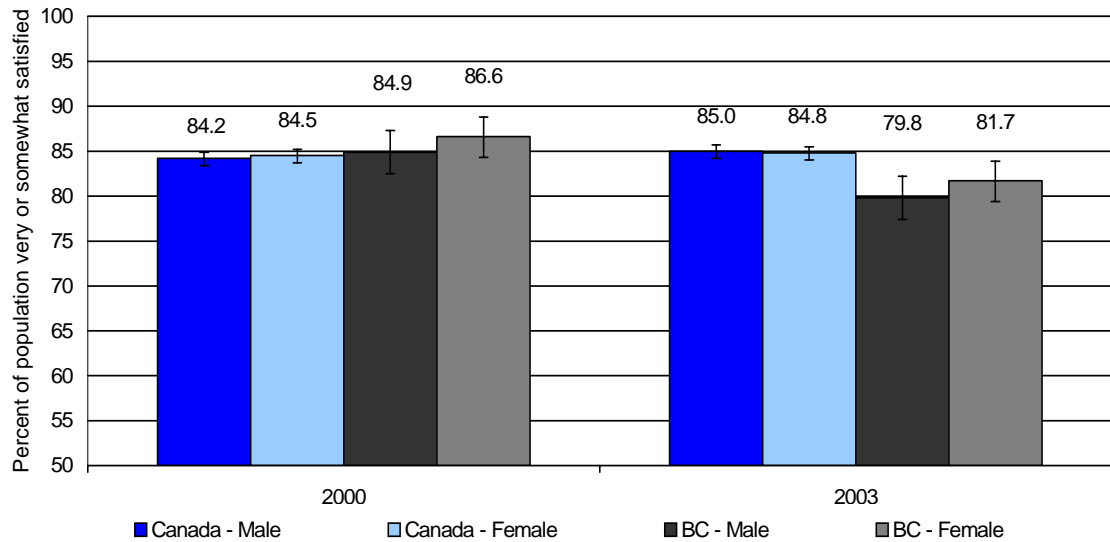
## Overall Health Service Satisfaction

As demonstrated, British Columbia's health status is strong and we are making progress in almost every part of the health care system. This reports indicates that when it comes to access to diagnostics, the use of hospitals, overall health of the population and other indicators measures of the system, we are steadily improving in health service delivery. Each indicator reports on just one part of the health care system. However, although indicators illustrated in Charts 1 - 13 suggest that British Columbians believe they have reasonable access to health care services, the overall satisfaction indicator is declining in British Columbia.

**Chart 14**

Patient Satisfaction, Any Health Care Services Received in Past 12 Months, Population\* Aged 15+, Canada and British Columbia, 2000 and 2003

*British Columbia estimated satisfaction rates with any health care service received, declined between 2000 and 2003.*



Indicator: 5 - Patient satisfaction with overall health care services  
 Source: Statistics Canada, Canadian Community Health Survey: 2000/01, 2003

\*Note: Age Standardized

NOTE: This indicator measures satisfaction with the way the service was provided and not with the service as a whole.

Chart 14 shows the estimated age standardized satisfaction rate for the CCHS sample population in British Columbia and Canada that have received health care services in the previous 12 months. Age standardization ensures that perceptions about quality do not vary because of the different treatments required by different age groups.

In 2003 the estimated age standardized satisfaction rate in British Columbia was 79.8 per cent for males and 81.7 per cent for females. The corresponding estimated satisfaction rates for Canada as a whole were 85.0 per cent and 84.8 per cent. The differences between the British Columbia satisfaction rates and the Canada satisfaction rates are statistically significant at the five per cent level.

This data suggests that although access is improving, public perception is lagging behind.

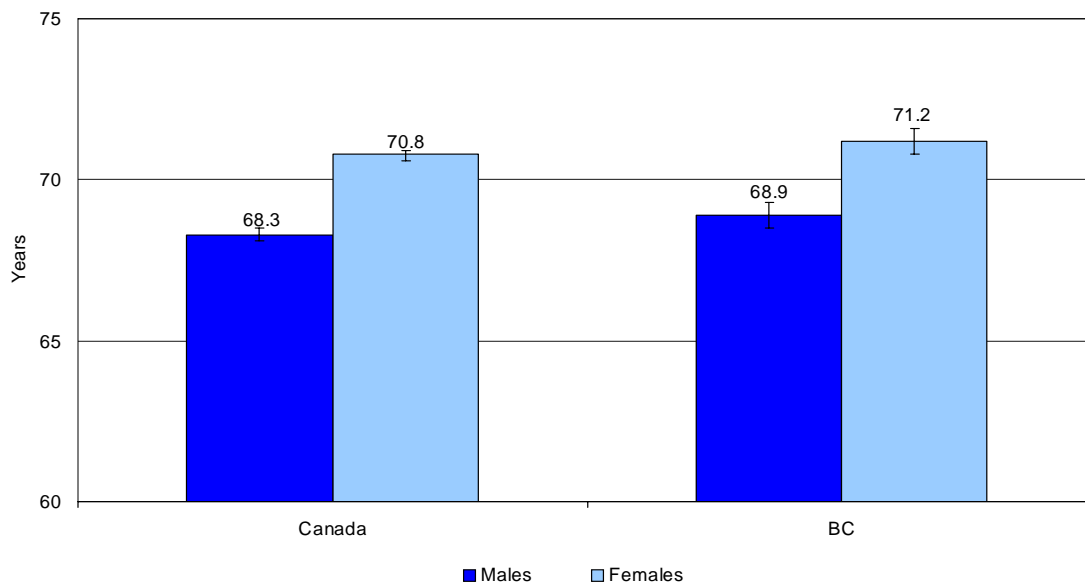
## Healthy British Columbians

British Columbians are living longer, healthier lives than ever before. The health status of the population is even more important than wait times or satisfaction rates, which primarily measure the quality and quantity of inputs into the system.

There has been debate surrounding whether or not increases in life expectancy have been accompanied by an increase in the years spent in poor health. Health Adjusted Life Expectancy (HALE) represents the number of expected years of life equivalent to years lived in full health based on the average experience of the population. HALE is an indicator of overall population health and a measure not only of quantity of life, but also quality of life.

*What is most important is the health status of the population.*

**Chart 15**  
Health Adjusted Life Expectancy (HALE), At Birth, All Income Groups, By Gender, Canada and British Columbia, 2001



*British Columbia's Health Adjusted Life Expectancy is longer than Canada's and...*

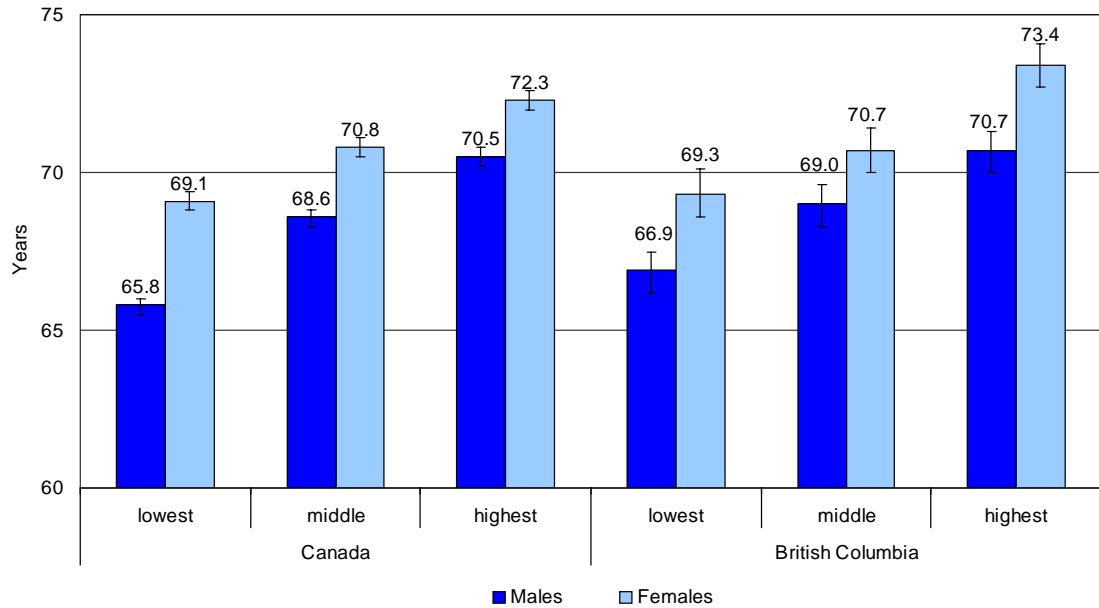
Indicator: 37a - Health adjusted life expectancy (HALE) for overall population

Source: Statistics Canada, NPHS, Institutional Component for HUI of persons living in institutions (1996-1997 cross-sectional sample), 2001 Census for counts of persons in long-term health care institutions (to match with sampling frame of the NPHS), CCHS Cycle 1.1 (common content) for HUI and counts of persons in households. 2000/2001 abridged life tables

Chart 15 shows the Health Adjusted Life Expectancy at birth for British Columbia and Canada in 2001. In 2001, HALE at birth was 71.2 years for females and 68.9 years for males in B.C. In Canada the HALE was slightly lower at 70.8 years for females and 68.3 for males. For males the estimated difference between British Columbia and Canada is statistically significant at the five per cent level.

**Chart 16**  
**Health Adjusted Life Expectancy (HALE), At Birth,**  
**By Gender and Income Group, Canada and British Columbia, 2001**

*...Health Adjusted Life Expectancy increases with income.*



Indicator: 37b - Health adjusted life expectancy (HALE) by income status

Source: Statistics Canada, NPHS, Institutional Component for HUI of persons living in institutions (1996-1997 cross-sectional sample), 2001 Census for counts of residents living in long-term health care institutions (to match with sampling frame of the NPHS), CCHS Cycle 1.1 (common content) for HUI and counts of persons in households. 2000/2001 abridged life tables adjusted to 1996 income terciles

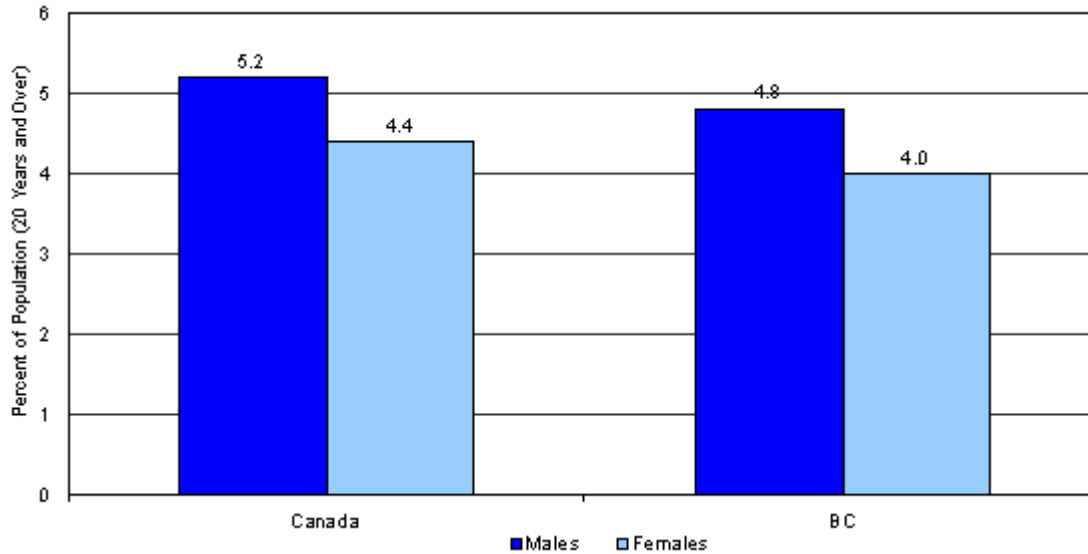
Health Adjusted Life Expectancy (HALE) increases with income in B.C and in the rest of Canada. Chart 16 shows how HALE varies depending on income distribution.

Health Adjusted Life Expectancy for females in B.C. was 73.4 years for those in the upper third of the income distribution, 70.7 years for those in the middle third and 69.3 for those in the bottom third. The values are slightly lower for males at 70.7 years, 69.0 years and 66.9 years for the high, middle and low thirds of the income distribution.

The estimates for Canadian Health Adjusted Life Expectancy by income group are slightly lower than the British Columbia values for the same group. These differences are significant at the five per cent level for females in the high-income group and males in the low-income group.

One of the factors that impacts HALE is diabetes. Diabetes refers to a group of metabolic disorders that affect how glucose (a blood sugar) is processed within the body. The period prevalence of diabetes demonstrates the magnitude of this disease at a given time. This is widely used in public health monitoring and planning.

**Chart 17**  
**Prevalence of Diabetes by Sex, Persons Aged 20 Years and Over,**  
**Canada and British Columbia, 1999/2000**



*The prevalence rate of diabetes is lower in British Columbia than in Canada.*

Indicator: 63 - Prevalence of diabetes

Source: Health Canada (2003), Responding to the Challenge of Diabetes in Canada. First Report of the National Diabetes Surveillance System (NDSS) Ottawa

Chart 17 shows the age standardized rate of diabetes by sex for Canada and British Columbia. The age standardized prevalence in B.C. was 4.8 per cent of males and 4.0 per cent of females in 1999/2000. Both of these values were slightly lower than the Canadian rates of 5.2 per cent of males and 4.4 per cent of females.

Diabetes is a condition in which a person's body cannot properly store or use glucose for energy. Glucose is a form of sugar that your body needs. It comes from foods such as fruit, milk, some vegetables, starchy foods and sugar. To control blood glucose, it is important to eat healthy foods and be active. In some cases a person may also need to take pills and/or insulin.

In addition to the primary physician, other health professionals may help care for and manage diabetes.

The diabetes team may include:

- |                                     |                                |
|-------------------------------------|--------------------------------|
| ◆ Diabetes nurse                    | ◆ Dietitian                    |
| ◆ Diabetes doctor (endocrinologist) | ◆ Eye doctor (ophthalmologist) |
| ◆ Foot doctor (podiatrist)          | ◆ Heart doctor (cardiologist)  |
| ◆ Community health nurse            | ◆ Pharmacist                   |
| ◆ Physiotherapist                   | ◆ Social worker                |

**Disclosure of Limitations:**

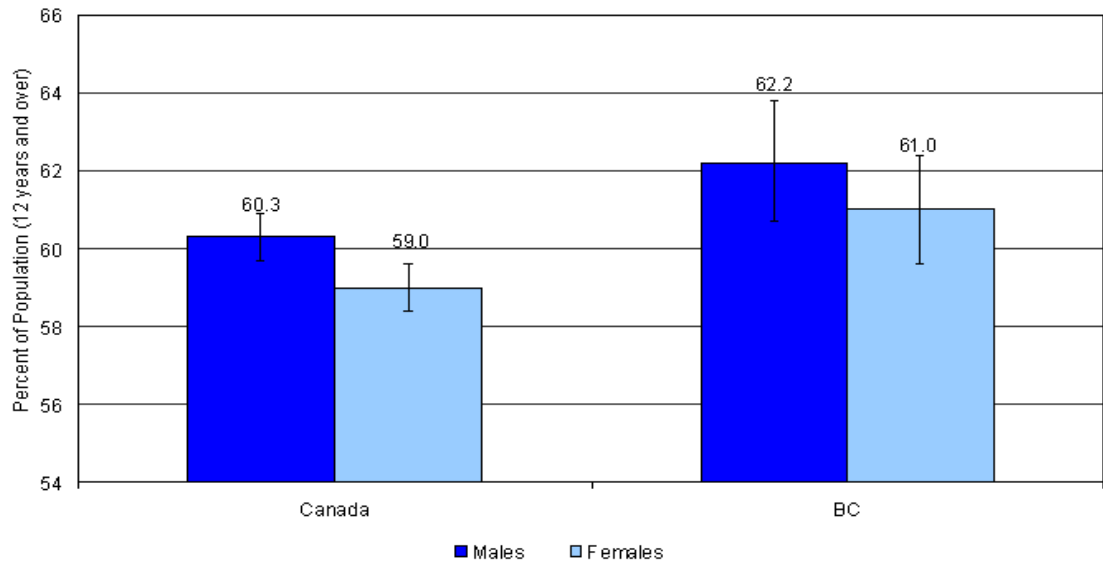
- Three types of diabetes are included in the database: Type 1, Type 2, and gestational diabetes. Note that gestational diabetes is only included when coded as diabetes mellitus (ICD9 code 250).
- A baseline error rate of 20% to 25% exists in the published (1999/2000) data;
- This level of error is accepted by Health Canada and by those national experts identified by Health Canada;
- Since 1997-98, these data have been accumulating false positives. For the data published here this may not have a significant impact. Health Canada plans to work to reduce these errors so that by the time it publishes the 2001-02 data, this accumulation will not become significant; and
- This "baseline error rate" is likely to vary by age and sex groups.

## Self-Reported Health

Another important measure of the health of a population is self-reported health. It is a general indicator of the overall health status of individuals. It may capture what other measures miss: incipient disease, disease severity and some aspects of relative health status.

*Self-reported health is higher in British Columbia than in Canada.*

**Chart 18**  
 Percentage of Population Living in Private Households, Aged 12 Years and Over, Self-reported Health To Be Very Good or Excellent, Canada and British Columbia, 2003

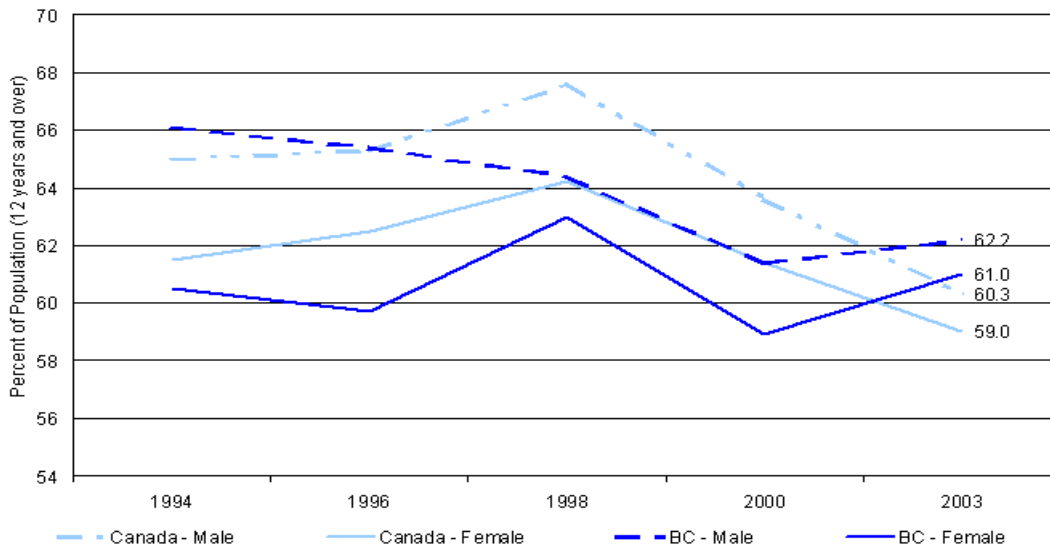


Indicator: 65 - Self-reported health  
 Source: Statistics Canada, Canadian Community Health Survey, 2003 and 2000/01; National Population Health Surveys (1994-95 to 1998-99)

Chart 18 shows the percentage of the CCHS population in British Columbia and Canada that report their own health to be very good or excellent. In British Columbia an estimated 62.2 per cent of males rate their own health as very good or excellent, compared to 60.3 per cent of Canadian males. An estimated 61.0 per cent of British Columbia females and an estimated 59.0 per cent of Canadian females have self-reported health that is very good or excellent. This latter difference between British Columbia and Canada is statistically significant at the five per cent level.



**Chart 19**  
 Percentage of Population, Aged 12 Years and Over, Self-reported Health To Be Very Good or Excellent, Canada and British Columbia, 1994, 1998, 2000, and 2003



Indicator: 65 - Self-reported health

Source: Statistics Canada, Canadian Community Health Survey, 2003 and 2000/01; National Population Health Surveys (1994-95 to 1998-99)

Chart 19 shows a time series of the same indicator for the period of 1994 to 2003. British Columbia males show a declining trend that is statistically significant at the five per cent level of significance. The other trends are not statistically significant at the five per cent level.

Government has made a point of developing and supporting programs such as *Action Schools! BC*, which is designed to keep elementary-aged children active. The goal of this program is to ensure that habits formed in early life will be carried on into adulthood. British Columbians take pride in their healthy lifestyle, and government has set an achievable goal to make B.C. one of the healthiest jurisdictions ever to hold an Olympic Games by the time the 2010 Winter Olympics roll around.

## Tobacco Use

*Tobacco use is the leading cause of preventable illness and death in Canada...*

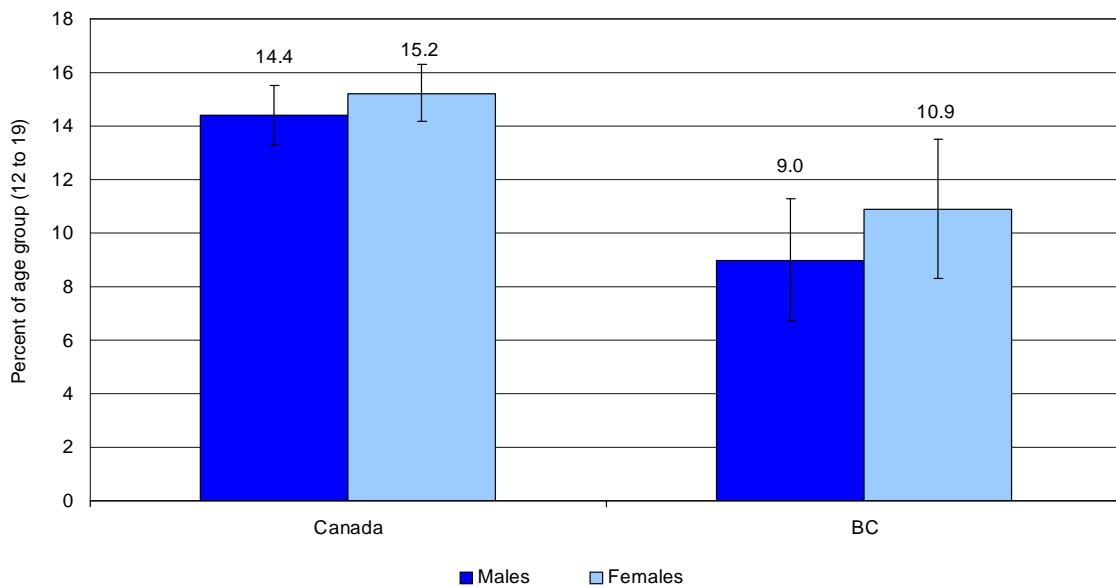
The use of tobacco in any form has negative economic and social consequences. Tobacco is a significant factor in many health problems, including lung cancer and heart disease. Tobacco use is the leading cause of preventable illness and death in Canada. The British Columbia Vital Statistics Agency estimates that smoking was responsible for more than 5,800 deaths in 2003<sup>3</sup> in British Columbia. The level of health of the population is directly related to the use of tobacco products. Because of the addictive nature of nicotine, youth smoking is of particular concern.

British Columbia's Tobacco Strategy integrates legislation, legal action, public education and a range of cessation and prevention programs to reduce tobacco use in the province. Although B.C. has the second lowest smoking rate in North America (after Utah), we know we can do better.

**Chart 20**

Percentage of Teenage Current Smokers, by Sex, Canada and British Columbia, 2003

*...but is substantially lower in British Columbia for both teenage males and females.*



Indicator: 66a - Teenage smoking rates: Proportion current teenage smokers

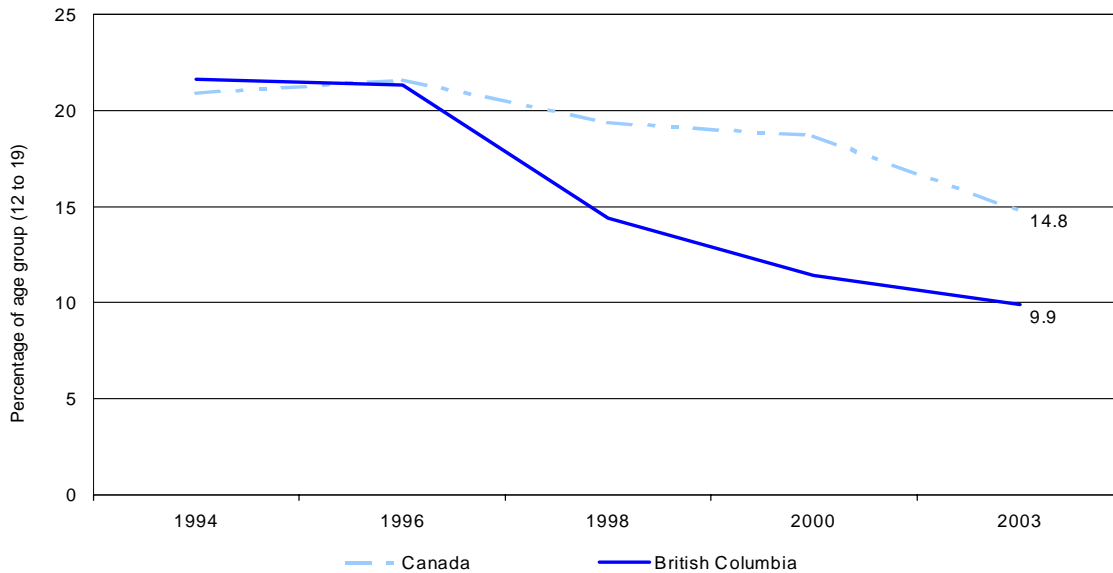
Source: Statistics Canada, Canadian Community Health Survey, 2003 and 2000/01; National Population Health Surveys (1994-95 to 1998-99)

The first indicator of tobacco use is the teenage smoking rate. The indicator is defined as the proportion of the CCHS population aged 12 - 19 who reported that they currently smoke on either a daily or occasional basis.

Chart 20 illustrates the proportion of teenagers in British Columbia and Canada who report that they are smokers. In B.C. an estimated 9.0 per cent of male teens and 10.9 per cent of female teens report current smoking habits. This is substantially lower than the 14.4 per cent of Canadian male teenagers and 15.2 per cent of Canadian female teenagers who report being current smokers. For both males and females the estimated difference between British Columbia and Canada is statistically significant at the five per cent level.

<sup>3</sup> British Columbia Vital Statistics Agency Annual Report, 2003

**Chart 21**  
 Percentage of Teenage Current Smokers, Both Sexes,  
 Canada and British Columbia, 1994, 1998, 2000, and 2003



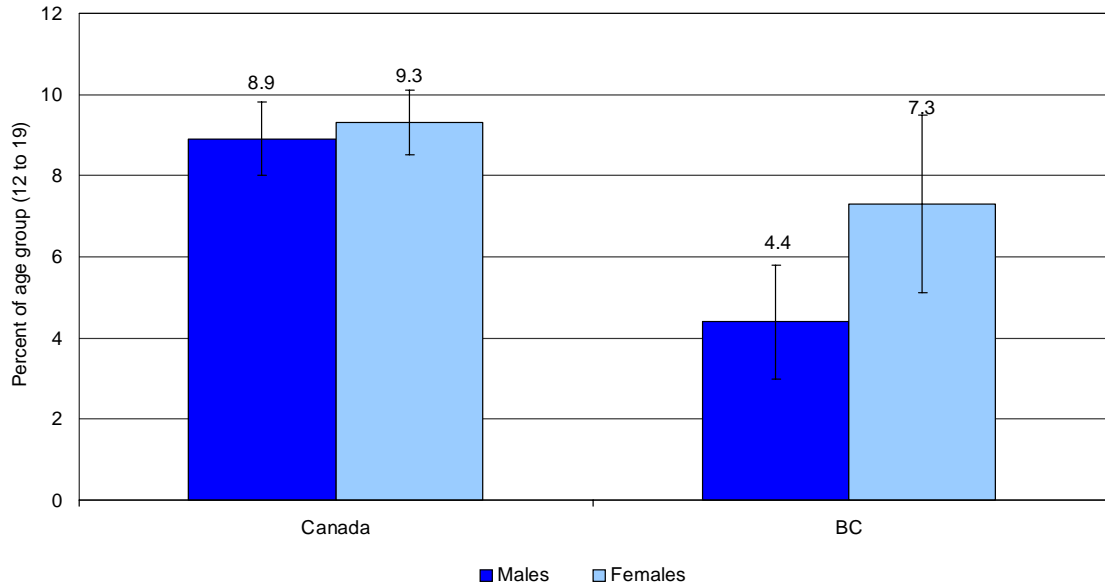
*The downward trend in the percentage of teenage smokers is statistically significant.*

Indicator: 66a - Teenage smoking rates: Proportion current teenage smokers  
 Source: Statistics Canada, Canadian Community Health Survey, 2003 and 2000/01; National Population Health Surveys (1994-95 to 1998-99)

Chart 21 shows the declining trend of total smoking rates for the period 1994 to 2003. For both Canada and British Columbia the downward trend is statistically significant at the five per cent level. Due to small samples in British Columbia, Statistics Canada notes that the British Columbia results should be used with caution.

**Chart 22**  
 Percent of Teenage Daily Smokers, by Sex,  
 Canada and British Columbia, 2003

*The rate of daily teen smokers in the rest of Canada is substantially higher than the rate of daily teen smokers in British Columbia.*

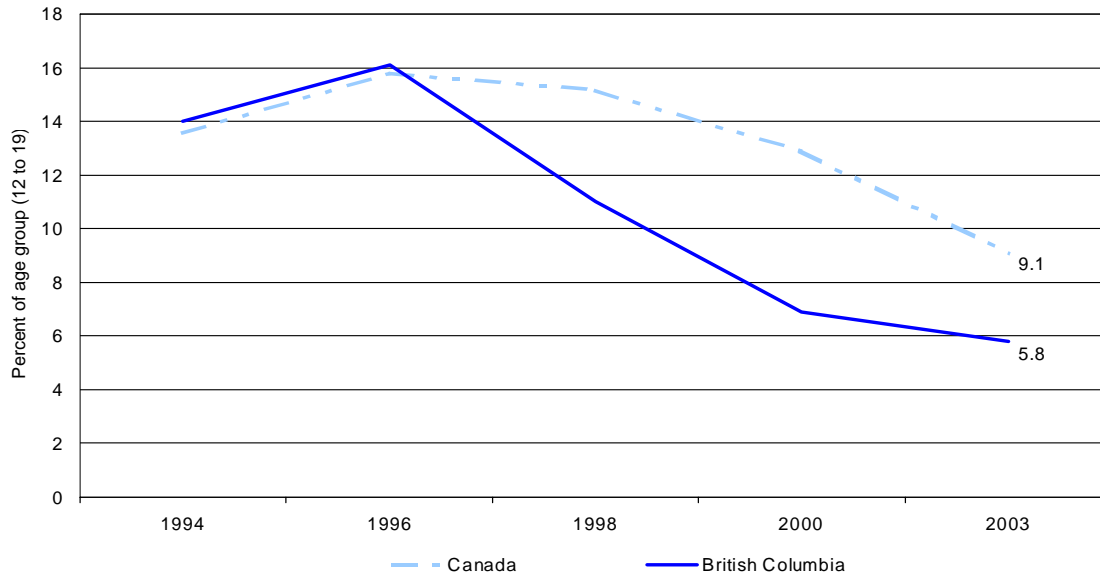


Indicator: 66b -Teenage smoking rate: Proportion current teenage smokers  
 Source: Statistics Canada, Canadian Community Health Survey, 2003 and 2000/01; National Population Health Surveys (1994-95 to 1998-99)

Because teenagers who smoke regularly are of particular concern to health care professionals, British Columbia continues to target this age group with programs like Nic the Stick and Tobacco-Free BC. Chart 22 presents the rate of male and female teens in British Columbia and Canada who report that they smoke daily.

An estimated 4.4 per cent of male teens in British Columbia report themselves as daily smokers. The rate in the rest of Canada is over twice as high at 8.9 per cent. In both British Columbia and Canada the rate of teenage female daily smokers is higher than the rate of teenage male daily smokers. In British Columbia an estimated 7.3 per cent of female teens smoke daily, compared to 9.3 per cent of female teens in Canada. The estimated difference between British Columbia and Canada is statistically significant at the five per cent level for males but not for females.

**Chart 23**  
Percent of Teenage Daily Smokers, Both Sexes,  
Canada and British Columbia, 1994, 1998, 2000, and 2003



Indicator: 66b - Teenage smoking rates: Proportion current teenage smokers  
Source: Statistics Canada, Canadian Community Health Survey, 2003 and 2000/01; National Population Health Surveys (1994-95 to 1998-99)

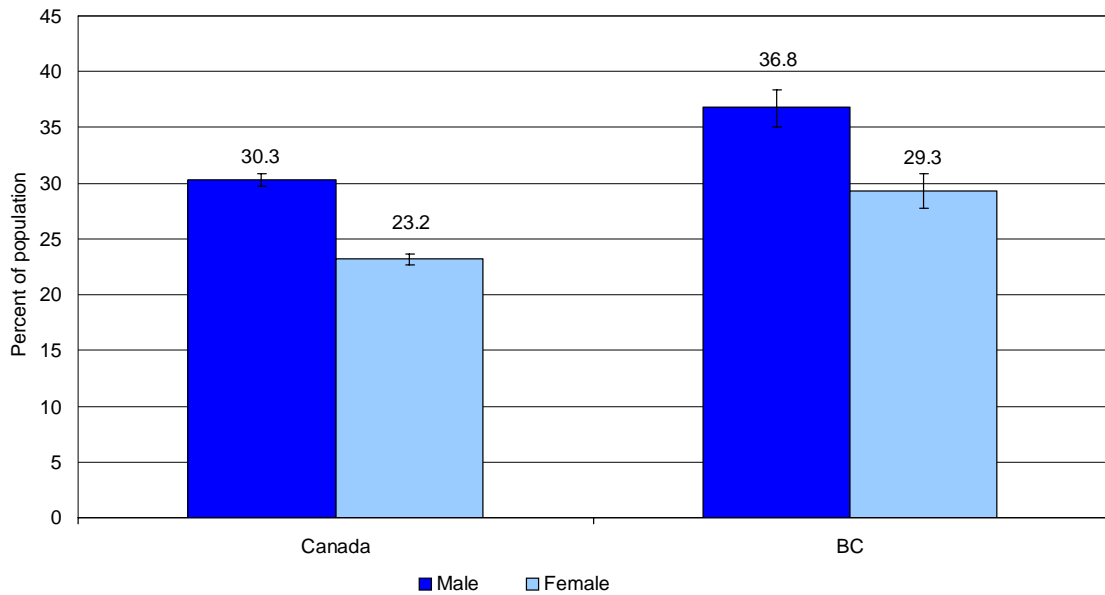
Chart 23 shows the proportion all teens that report being daily smokers for the period 1994 to 2003. Both Canada and British Columbia have declining trends, however the trend is significant at the five per cent level only for British Columbia. Statistics Canada notes that small sample sizes mean that these results must be utilized with caution at both the B.C and national levels.

## Physical Activity

*Physical activity is a major contributor to good health and...*

Physical activity helps to prevent chronic disease and promotes overall well-being. Numerous studies have shown that regular physical activity confers many health benefits and that inactivity is a major risk factor for heart disease. One way that physical activity is measured is on the basis of energy consumption. The estimated calorie consumption of an individual's reported activities is used to allocate that person into three categories of activity: active, moderately active and inactive.

**Chart 24**  
 Percentage of Population Aged 12 and Over Who Report a Physical Activity Index of "Active", by Sex, Canada and British Columbia, 2003

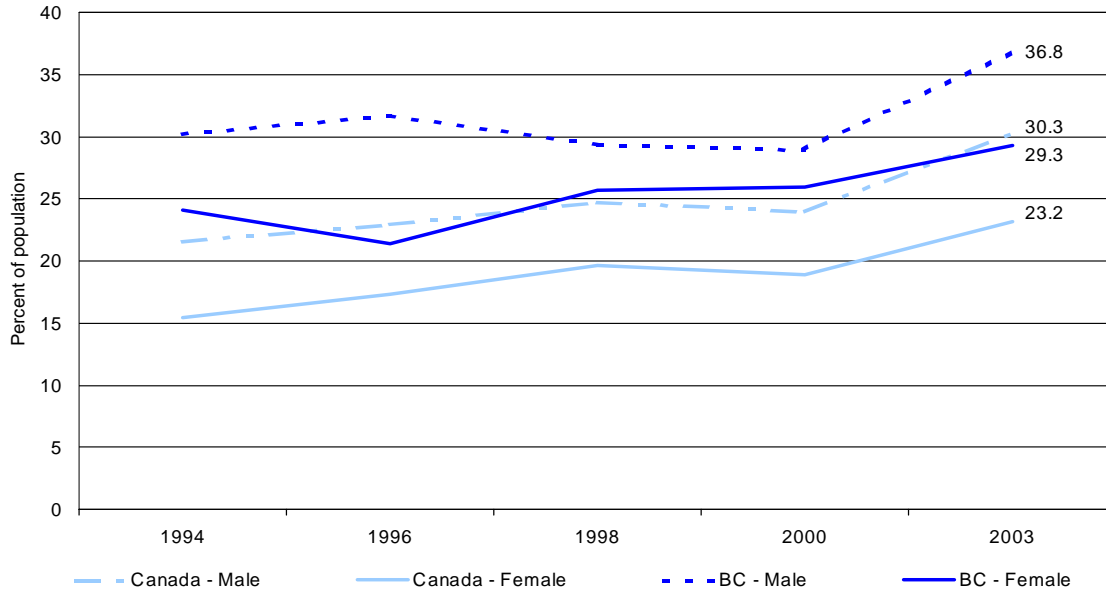


*...British Columbia reported a higher rate of physical activity than the rest of Canada.*

Indicator: 67 - Physical activity  
 Source: Statistics Canada, Canadian Community Health Survey - Cycle 2.1 2003 and Cycle 1.1 2000/01; National Population Health Survey, 1994-95 to 1998-99

Chart 24 shows the percentage of the CCHS population that reported being active in 2003. In British Columbia, an estimated 36.8 per cent of males and 29.3 per cent of females report being physically active. This compares to 30.3 per cent of Canadian males and 23.2 per cent of Canadian females. The estimated difference between British Columbia and Canada is statistically significant at the five per cent level.

**Chart 25**  
**Percentage of Population Aged 12 and Over**  
**Who Report a Physical Activity Index of "Active", by Sex,**  
**Canada and British Columbia, 1994, 1996, 1998, 2000, and 2003**



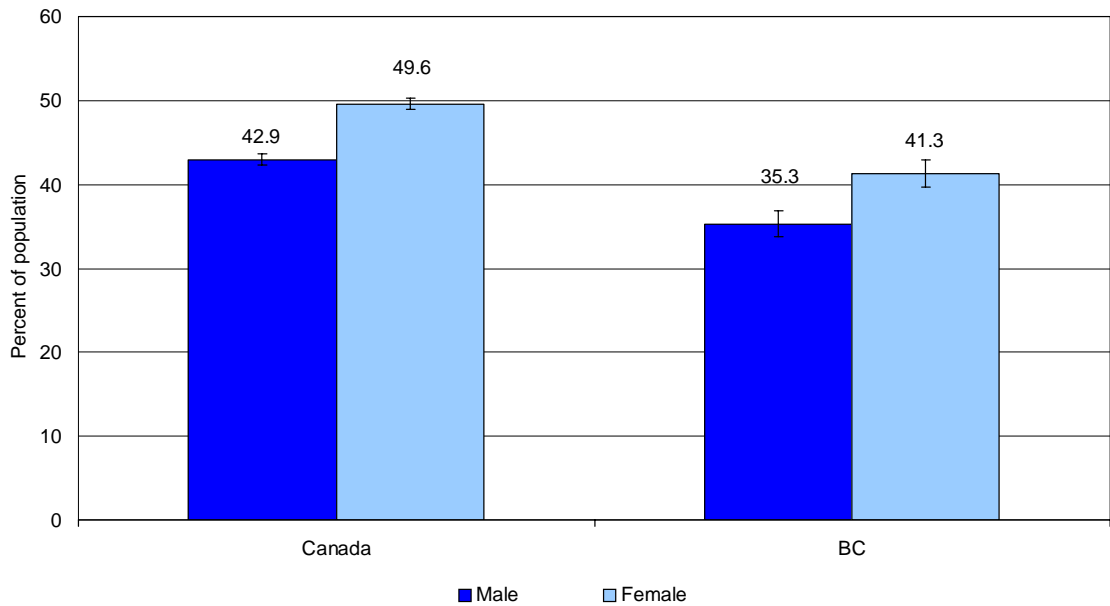
Indicator: 67 - Physical activity

Source: Statistics Canada, Canadian Community Health Survey - Cycle 2.1 2003 and Cycle 1.1 2000/01;  
 National Population Health Survey, 1994-95 to 1998-99

The time series of the proportion of the population that reported being physically active for the period 1994 to 2003 is illustrated in Chart 25. British Columbia males reported a higher rate of physical activity than Canadian males in each of the five years surveyed. British Columbia females also reported a higher rate of physical activity than females in Canada. Males in both British Columbia and Canada had higher rates of physical activity than females, although British Columbia females had rates comparable to Canadian males. The upward trend is statistically significant at the five per cent level for Canadian males and females but not for males and females in British Columbia. Due to changes in the way Statistics Canada collected data, readers should be cautious in the interpretation over time.

**Chart 26**  
Percentage of Population Aged 12 and Over Who Report a Physical Activity Index of "Inactive", by Sex, Canada and British Columbia, 2003

*A lower percentage of British Columbians are inactive.*



Indicator: 67 - Physical activity

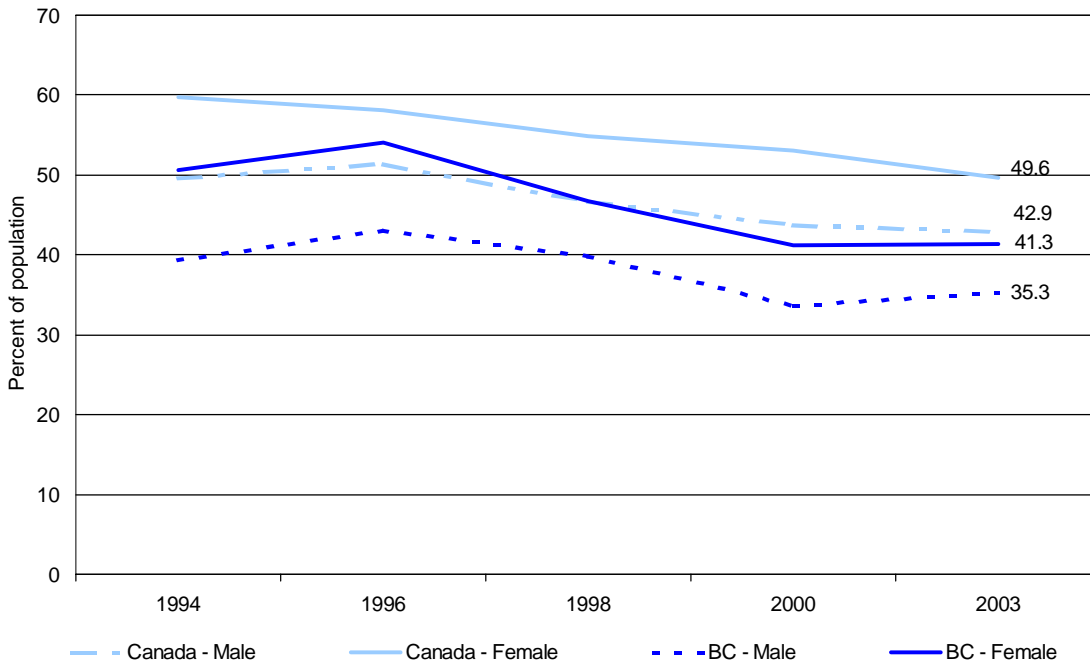
Source: Statistics Canada, Canadian Community Health Survey - Cycle 2.1 2003 and Cycle 1.1 2000/01; National Population Health Survey, 1994-95 to 1998-99

British Columbia demonstrates a high level of physical activity, but the proportion of individuals who are physically inactive should also be noted. The levels of physical inactivity are illustrated for British Columbia and Canada in Chart 26.

The percentage of the population that is physically inactive is the mirror image of the percentage of active people. An estimated 35.3 per cent of British Columbia males and 41.3 per cent of British Columbia females report being physically inactive. This compares to 42.9 per cent of Canadian males and 49.6 per cent of Canadian females. In both cases the estimated difference is statistically significant at the five per cent level of significance.



**Chart 27**  
**Percentage of Population Aged 12 and Over**  
**Who Report a Physical Activity Index of "Inactive", by Sex,**  
**Canada and British Columbia, 1994, 1996, 1998, 2000, and 2003**



*The percentage of physically inactive people is on a downward trend for males and females in both Canada and British Columbia.*

Indicator: 67 - Physical activity - active/inactive

Source: Statistics Canada, Canadian Community Health Survey - Cycle 2.1 2003 and cycle 1.1 2000/01; National Population Health Survey, 1994-95 to 1998-99

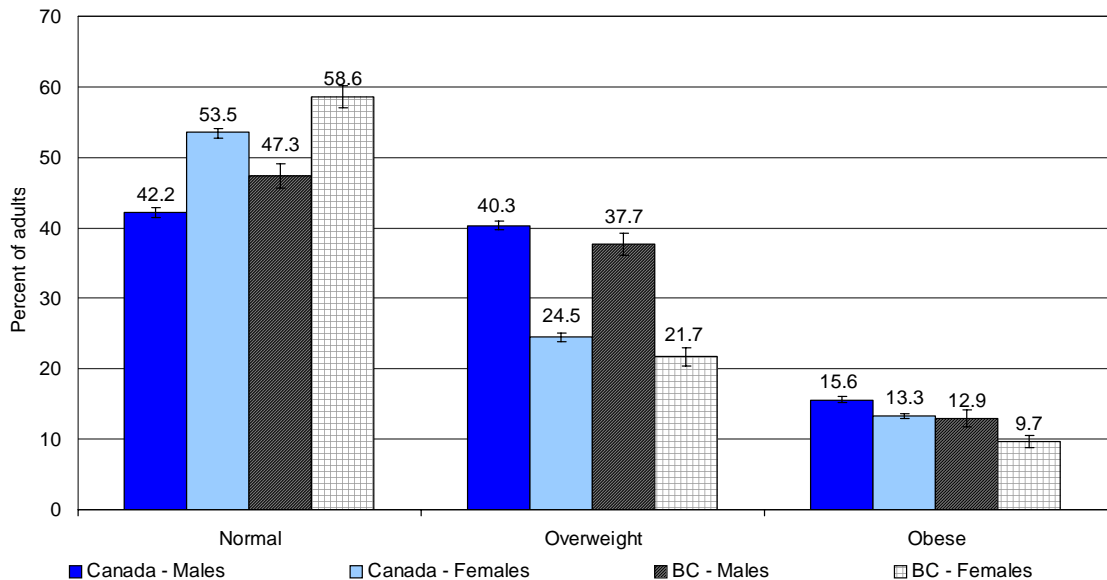
Chart 27 shows the time series for the percentage of the population that reports being physically inactive. This percentage is on a downward trend for males and females in both Canada and British Columbia. This trend is statistically significant at the five per cent level for Canadian males and females but not for males and females in British Columbia. Due to changes in the way Statistics Canada collected data, readers should be cautious in the interpretation over time.

## Obesity

Obesity has been identified as a major risk factor contributing to a number of chronic illnesses such as diabetes and heart disease. Body Mass Index (BMI) is the most common method of determining if an individual's weight is in a healthy range. The body mass index is calculated as weight in kilograms divided by height in meters. The risk excess weight poses to health increases with BMI scores above 25.

**Chart 28**  
 Percentage\* of Population Aged 18 and Over Who Report a Body Mass Index, Ranging from Normal to Obese, by Sex, Canada and British Columbia, 2003

*For both males and females a higher percentage of British Columbia residents are of an acceptable weight.*



Indicator: 68 - Body Mass Index

Source: Statistics Canada, Canadian Community Health Survey - Cycle 2.1 2003 and Cycle 1.1 2000/01; National Population Health Survey, 1994-95 to 1998-99

\*Note: Age Standardized

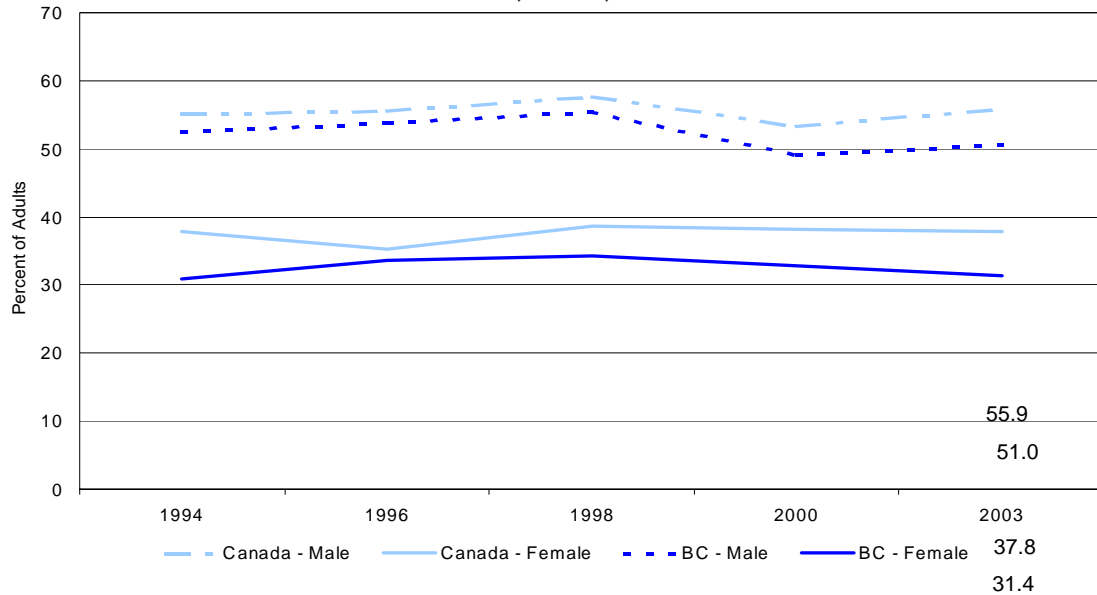
Chart 28 shows the proportions of the CCHS population over age 18 that report being an acceptable weight (BMI between 18.5 and 24.9), overweight (a BMI between 25.0 and 29.9) and obese (a BMI over 30.0). The BMI calculated is based on self-reported height and weight and might be susceptible to some inaccuracy as a result.

In British Columbia 47.3 per cent of males and 58.6 per cent of females reported being an acceptable body weight. The corresponding values for Canada are somewhat lower at 42.2 per cent and 53.5 per cent. For both males and females the estimated difference is statistically significant at the five per cent level of significance.

As a higher percentage of British Columbia residents are of an acceptable body weight, there is also a lower percentage of British Columbia residents in each of the overweight and obese categories than in Canada as a whole. In all cases the estimated difference is statistically significant at the five per cent level.

**Chart 29**

Percentage\* of Population Aged 18 and Over Who Report a Body Mass Index of Overweight or Obese, Canada and British Columbia, 1994, 1996, 1998, 2000, and 2003



Indicator: 68 - Body Mass Index

Source: Statistics Canada, Canadian Community Health Survey - Cycle 2.1 2003 and Cycle 1.1 2000/01; National Population Health Survey, 1994-95 to 1998-99

\*Note: Age Standardized

Chart 29 is the proportion of the total population who are either overweight or obese over time. In every year the percentage of British Columbian males and females who were overweight or obese was lower than the percentage of Canadian males and females who were overweight or obese. Neither males nor females in British Columbia or Canada exhibited a statistically significant trend. Due to changes in the way Statistics Canada collected data, readers should be cautious in the interpretation over time.

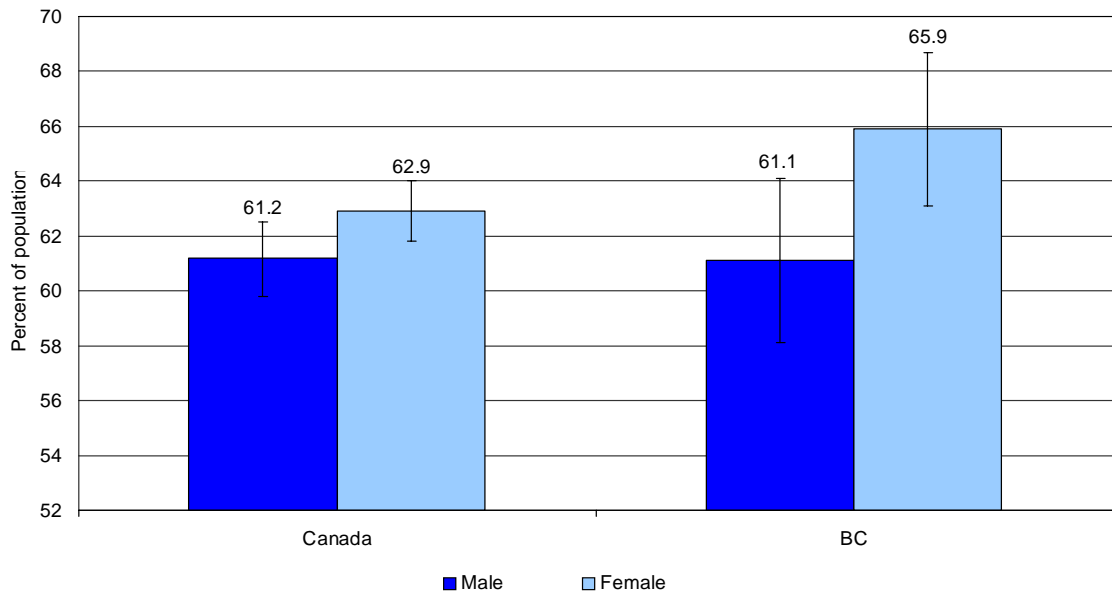
## Flu Shots

*Influenza, particularly for the elderly, is a potentially serious illness.*

Influenza, particularly for the elderly, is a potentially serious illness. However, vaccination can be effective in preventing influenza. Current B.C. guidelines recommend that doctors and nurses focus their immunization efforts on adults and children with chronic heart and lung disease, the elderly, children and teens on long-term aspirin therapy, residents and staff of long-term care facilities, infants and toddlers, household contacts of the immune compromised, infants younger than six months and women in their third trimester of pregnancy.

**Chart 30**

Proportion of Population\* 65 Years and Older Who Report Having a Flu Shot Within One Year, by Sex, Canada and British Columbia, 2003



*The vaccination rate for the flu among seniors is slightly higher in British Columbia.*

Indicator: 69 - Immunization for influenza aged 65+

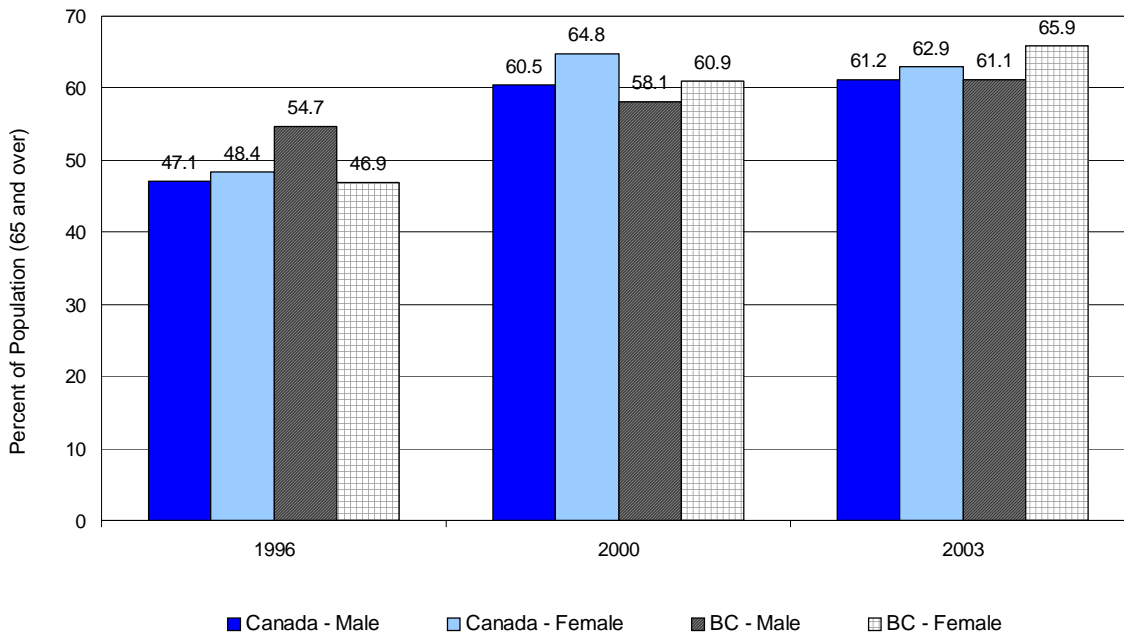
Source: Statistics Canada, Canadian Community Health Survey (sub sample), cycle 2.1 2003 and Cycle 1.1 2000/01;

\*Note: Age Standardized

Note: The exclusion of people in institutions may have an effect on the interpretation of these results.

The percentage of the CCHS population over the age of 65 who report receiving an influenza vaccination in the previous year is illustrated in Chart 30. Among seniors in British Columbia, an estimated 65.9 per cent of females and an estimated 61.1 per cent of males received influenza vaccinations. At the national level an estimated 62.9 per cent of female seniors and 61.2 per cent of male seniors received influenza vaccinations. In each case the estimated difference between Canada and British Columbia is not statistically significant at the five per cent level.

**Chart 31**  
 Proportion of Population\* 65 Years and Older Who Report  
 Having a Flu Shot Within One Year, by Sex,  
 Canada and British Columbia, 1996, 2000, and 2003



Indicator: 69 - Immunization for influenza aged 65+

Source: Statistics Canada, Canadian Community Health Survey (sub sample), cycle 2.1 2003 and Cycle 1.1 2000/01;

\*Note: Age Standardized

Note: The exclusion of people in institutions may have an effect on the interpretation of these results.

Chart 31 shows the percentage of the entire population of seniors who reported receiving an influenza vaccination from 1996 to 2003. For both British Columbia and Canada, the vaccination rate increased over this time period. In general the vaccination rate in British Columbia is comparable to the vaccination rate in Canada.

## Summary of the Report 'Healthy British Columbians'

*British Columbians appear to be healthier on average than other Canadians.*

British Columbians have better access to health care services and are generally healthier than the average Canadian. Clearly we have a lot to be proud of - the longest life expectancy within Canada; the second-lowest smoking rate in all of North America; and some of the best cancer outcomes in the entire world, to name a few. Not only can we benefit from an abundance of opportunities for physical activity, we also have a strong, patient-centred health care system.

This report shows that British Columbians:

- are mostly satisfied with their health care
- have good access to health care
- have fewer difficulties obtaining routine medical services;
- are healthier
- find hospital services comparable to the rest of Canada
- have a high degree of confidence in physicians
- wait a shorter amount of time for diagnostic tests such as MRI and CT scans
- remain healthy longer
- smoke less as teenagers
- lead an active lifestyle
- receive more flu shots as seniors
- use hospitals more appropriately

When individuals are asked about their own healthcare experiences, they generally indicate a high level of satisfaction with the services received. Unfortunately, perceptions about the overall state of our health care system are often influenced by outside opinions which can cause a disconnect between what we 'know' and what we 'think'. We know that on almost every indicator measured in this report, British Columbia is either comparable to or better than the rest of Canada.

Each of the surveys used in this report were conducted during the year 2002 and part of 2003. We can be encouraged that during this time of reform and renewal in our health care system, the general response to services provided was favourable. With most of our reforms now completed, we know British Columbia is well-positioned to achieve even more remarkable outcomes in the years to come.

There is a great deal of work being done within the healthcare system to help individuals become healthier and make healthy choices the easy choices. We've laid the foundation for our future and we are now set to meet the expectations of all British Columbians.



## **Appendix**

### **Technical Notes**





## Indicator 1 - Difficulty obtaining routine or on-going health services

### Definition

Percent who required routine or on-going health services for self or a family member in the past 12 months and experienced difficulties obtaining them, based on population 15 years of age and older.

### Rationale and Notes for Interpretation

The ability to obtain routine care when needed is believed to be important in maintaining health, preventing health emergencies and preventing the inappropriate use of services (e.g., use of hospital emergency rooms for non-emergencies).

### Technical Specifications

- Exclusions: Persons less than 15 years of age, persons living in Nunavut, the Yukon, the Northwest Territories, on First Nation Reserves and on Crown lands, residents of institutions, full-time member of Canadian Armed Forces and residents of certain remote regions are excluded from the sample.
- Calculation:  $(\text{Numerator}/\text{denominator}) \times 100$
- Numerator: Persons indicating they experienced difficulty accessing routine or on-going care at any time of day.
- Denominator: Population 15 years of age and over requiring routine or on-going health care services.
- Source: Health Services Access Survey, supplement to the Canadian Community Health Survey, 2003.

### Data Availability

For 2003, data available for Canada (excluding the Territories), and all provinces. Crude and age-standardized rates are available.

### Considerations for Indicator Quality and Comparability

In 2003, sampling permits reliable estimates at both the national (10 provinces) and provincial levels.

This indicator only present the distribution of the people reporting difficulty accessing routine or on-going health care services and does not measure in any way the degree of difficulty.

Data from 2001 and 2003 for these indicators should not be compared.

### Responsibility to Produce the Data

Statistics Canada

## Indicator 2 - Difficulty obtaining health information or advice

### Definition

Percent who required health information or advice for self or a family member in the past 12 months and experienced difficulty obtaining it at any time of day, based on population 15 years of age and older.

### Rationale and Notes for Interpretation

Access to information or advice is believed to be important to maintaining health and ensuring appropriate access to health services.

### Technical Specifications

- Exclusions: Persons less than 15 years of age, persons living in Nunavut, the Yukon, the Northwest Territories, on First Nation Reserves and on Crown lands, residents of institutions, full-time member of Canadian Armed Forces and residents of certain remote regions are excluded from the sample.
- Calculation:  $(\text{Numerator}/\text{denominator}) \times 100$
- Numerator: Persons indicating they experienced difficulty accessing health information or advice at any time of day.
- Denominator: In 2003: Persons requiring health information or advice.
- Source: Health Services Access Survey, supplement to the Canadian Community Health Survey, 2003.

### Data Availability

For 2003, data available for Canada (excluding the Territories), and all provinces. Crude and age-standardized rates are available.

### Considerations for Indicator Quality and Comparability

In 2003, sampling permits reliable estimates at both the national (10 provinces) and provincial levels.

This indicator only present the distribution of the people reporting difficulty accessing health information or advice and does not measure in any way the degree of difficulty.

Data from 2001 and 2003 for these indicators should not be compared.

### Responsibility to Produce the Data

Statistics Canada

## Indicator 3 - Difficulty obtaining immediate care

### Definition

Percent who required immediate care for a minor health problem for self or a family member in the past 12 months and experienced difficulty obtaining it at any time of day, based on population 15 years of age and older.

### Rationale and Notes for Interpretation

The ability to obtain needed care for emergent but minor health problems is believed to be important in restoring health, preventing health emergencies, and preventing the inappropriate use of services (e.g., use of hospital emergency rooms for non-emergencies).

### Technical Specifications

Exclusions:	Persons less than 15 years of age, persons living in Nunavut, the Yukon, the Northwest Territories, on First Nation Reserves and on Crown lands, residents of institutions, full-time member of Canadian Armed Forces and residents of certain remote regions are excluded from the sample.
Calculation:	$(\text{Numerator}/\text{denominator}) \times 100$
Numerator:	Persons indicating they experienced difficulty accessing immediate care at any time of day.
Denominator:	In 2003: Population 15 years of age and over requiring immediate care at any time.
Source:	Health Services Access Survey, supplement to the Canadian Community Health Survey, 2003.

### Data Availability

For 2003, data available for Canada (excluding the Territories), and all provinces. Crude and age-standardized rates are available.

### Considerations for Indicator Quality and Comparability

In 2003, sampling permits reliable estimates at both the national (10 provinces) and provincial levels.

This indicator only present the distribution of the people reporting difficulty accessing immediate care and does not measure in any way the degree of difficulty.

Data from 2001 and 2003 for these indicators should not be compared.

### Responsibility to Produce the Data

Statistics Canada

## Indicator 5 - Patient satisfaction with overall health care services

### Definition

Percentage of the population aged 15 and over who rate themselves as either very satisfied or somewhat satisfied with the overall health care services received.

### Rationale and Notes for Interpretation

This indicator applies to individuals who have received any health care services over a 12-month reference period. The individual's assessment of the satisfaction with the services is measured. The indicator applies to individuals 15 years old and older living in private households.

### Technical Specifications

For health care services, the following question was asked: Overall, how satisfied were you with the way health care services were provided? Were you: ... very satisfied? ... somewhat satisfied? ... neither satisfied nor dissatisfied? ... somewhat dissatisfied? ...very dissatisfied?

**Exclusions:** Persons living on First Nation Reserves and on Crown lands, residents of institutions, full-time members of Canadian Armed Forces, and residents of certain remote regions are excluded from the sample. Persons less than 15 years of age are not asked this question.

**Calculation:** (Numerator/denominator) x 100

**Numerator:** Number of individuals reporting "very satisfied" or "somewhat satisfied" with the way the health care services were provided.

**Denominator:** Total population aged 15 and older who received health care services in past 12 months.

**Source:** Canadian Community Health Survey: 2000/01, 2003.

### Data Availability

Crude and age-standardised data available by sex for Canada, the provinces and the territories.

Supplementary data also available by sex and age-group:

15 - 19 years	45 - 64 years
20 - 34	65 - 74
35 - 44	75 years and over

### Considerations for Indicator Quality and Comparability

No known issues.

### Responsibility to Produce the Data

Statistics Canada

## Indicator 7 - Patient satisfaction with community-based services

### Definition

Percentage of the population aged 15 and over who rate themselves as either very satisfied or somewhat satisfied with community-based services received. The CCHS definition for 'community-based care' includes any health care received outside of a hospital or doctor's office (e.g., home nursing care, home-based counselling or therapy, personal care, community walk-in clinics).

### Rationale and Notes for Interpretation

This indicator applies to individuals who have received any community-based care over a 12-month reference period. The individual's assessment of the satisfaction with the care is measured. The indicator applies to individuals 15 years old and older living in private households.

### Technical Specifications

For community-based care, the following question was asked: Overall, how satisfied were you with the way community-based care was provided? Were you: ... very satisfied? ... somewhat satisfied? ... neither satisfied nor dissatisfied? ... somewhat dissatisfied? ...very dissatisfied?

**Exclusions:** Persons living on First Nation Reserves and on Crown lands, residents of institutions, full-time members of Canadian Armed Forces, and residents of certain remote regions are excluded from the sample. Persons less than 15 years of age are not asked this question.

**Calculation:** (Numerator/denominator) x 100

**Numerator:** Number of individuals reporting "very satisfied" or "somewhat satisfied" with the way the community-based care was provided.

**Denominator:** Total population aged 15 and older who received community-based care in past 12 months.

**Source:** Canadian Community Health Survey: 2000/01, 2003.

### Data Availability

Crude and age-standardised data available by sex for Canada, the provinces and the territories.

Supplementary data also available by sex and age-group:

15 - 19 years	45 - 64 years
20 - 34	65 - 74
35 - 44	75 years and over

### Considerations for Indicator Quality and Comparability

No known issues.

### Responsibility to Produce the Data

Statistics Canada

## Indicator 9 - Patient satisfaction with telephone health line or tele-health services

### Definition

Percentage of the population aged 15 and over who rate themselves as either very satisfied or somewhat satisfied with the telephone health line or tele-health service received.

### Rationale and Notes for Interpretation

This indicator applies to individuals who have used a telephone health line or tele-health service over a 12-month reference period. The individual's assessment of the satisfaction with the services is measured. The indicator applies to individuals 15 years old and older living in private households.

### Technical Specifications

For tele-health services, the following question was asked: Overall, how satisfied were you with the way the tele-health service was provided? Were you: ... very satisfied? ... somewhat satisfied? ... neither satisfied nor dissatisfied? ... somewhat dissatisfied? ...very dissatisfied?

**Exclusions:** Persons living on First Nation Reserves and on Crown lands, residents of institutions, full-time members of Canadian Armed Forces, and residents of certain remote regions are excluded from the sample. Persons less than 15 years of age are not asked this question.

**Calculation:** (Numerator/denominator) x 100

**Numerator:** Number of individuals reporting "very satisfied" or "somewhat satisfied" with the way the tele-health service was provided.

**Denominator:** Total population aged 15 and older who used tele-health services in past 12 months.

**Source:** Canadian Community Health Survey: 2003.

### Data Availability

Crude and age-standardised data available by sex for Canada, the provinces and the territories.

Supplementary data also available by sex and age-group:

15 - 19 years	45 - 64 years
20 - 34	65 - 74
35 - 44	75 years and over

### Considerations for Indicator Quality and Comparability

At this point there is nothing leading us to think there has been misunderstanding of this survey question that would lead to poor quality of the responses or misinterpretation of the question.

This module is only asked of those respondents aged 15 or over. Respondents are asked if they have ever used a telephone health line, and if so they are asked to rate the quality of this service.

Telephone health line or tele-health service was defined as: Phone based services, which offers health information often provided by a nurse or other health specialists.

Please note that there are no telephone health line or tele-health services offered in the Northwest Territories, Nunavut or in Yukon.

### Responsibility to Produce the Data

Statistics Canada

## Indicator 12 - Hospitalization rate for ambulatory care sensitive conditions

### Definition

Age-standardized inpatient hospitalization rate for conditions where appropriate ambulatory care prevents or reduces the need for admission to hospital.

### Rationale and Notes for Interpretation

Hospitalization rates for conditions which may often be cared for in the community are one indicator of appropriate access to community-based care. These are long term health conditions which can often be managed with timely and effective treatment in the community, without hospitalization. These conditions include diabetes, asthma, alcohol and drug dependence and abuse, neurosis, depression, and hypertensive disease. Although preventive care, primary care and community-based management of these conditions will not eliminate all hospitalizations, such steps could prevent many of them.

Health care professionals generally believe that managing these conditions before a patient requires hospitalization improves the patient's health, contributes to better overall community health status, and often saves money because community-based care usually costs less than hospitalization. Optimizing the management and treatment of these conditions will contribute to both improved patient health outcomes and more efficient resource utilization.

The hospitalization rates for these conditions tend to vary from place to place; for example, there are large rural/urban differences. One factor influencing the variation in rates is likely to be the extent to which preventive care and management within the community are available and accessible. Tracking hospitalization rates for these conditions over time can provide an indicator of the impact of community- and home-based services. Variations over time, and differences between regions, should be examined to determine the extent to which they are attributable to the accessibility and quality of community-based care, hospital admitting practices, or the prevalence and acuity of these chronic health conditions.

### Technical Specifications

Exclusions: Patients not treated as inpatients in acute care hospitals (e.g., those seen only in an emergency department or chronic care institution).

Calculation: Standardized rates are age-adjusted using a direct method of standardization based on the July 1, 1991 Canadian population (see figures under OI-13) Diagnosis code(s):  
Based on the Alberta Health reference below, primary diagnosis code of:

Most responsible diagnosis	ICD-9 or ICD-9-CM code(s)	ICD-10 code(s)
Diabetes	250	E10, E11, E13, E14
Drug and alcohol dependency	291, 292, 303, 304, 305	F10, F11, F12-F19 (excluding F12.6, F13.6, F14.6, F15.6, F16.6, F17.6, F18.6 and F19.6), F55
Neurotic depressive disorders	300, 311	F32.0, F32.9, F34.1, F40, F41, F42, F44, F45.0, F45.1, F45.2, F48, F53.0, F68.0, F99
Hypertension	401,402, 403,404, 405	I1
Asthma	493	J45



Numerator:	Number of ACSC inpatient separations from acute care hospitals (discharges and deaths) during the year, by age and gender categories.
Denominator:	Population by age and gender categories, either from census or census estimates, for the year.
Source:	Hospital Morbidity Database, CIHI. Census, Statistics Canada; ISQ.
References:	Alberta Health. (1998, Dec). Health authority business plan and annual report requirements, 1999-2000 to 2001-2002. Edmonton, AB: Alberta Health. p. 22. Anderson, G.M. (1996). Common conditions considered sensitive to ambulatory care. In V. Goel, J.I. Williams, G.M. Anderson, P. Blackstien-Hirsch, C. Fooks, & C.D. Naylor (eds.), <i>Patterns of Health Care in Ontario. The ICES practice atlas</i> (2nd edition.). Ottawa, ON: Canadian Medical Association. p. 104-110. Billings, J., Anderson, G.M., & Newman, L.S. (1996, Fall). Recent findings on preventable hospitalizations. <i>Health Affairs</i> , 15(3), p. 239-249. Billings, J., Zeital, L., Lukomnik, J., Carey, T.S., Blank, A.E., & Newman, L. (1993, Spring). Impact of socio-economic status on hospital use in New York City. <i>Health Affairs</i> , 12(1), p. 162-173. Manitoba Centre for Health Policy and Evaluation (MCHPE). Ambulatory Care Sensitive (ACS) conditions. <a href="http://www.umanitoba.ca/centers/mchpe/concept/dict/ACS_conditions.htm">http://www.umanitoba.ca/centers/mchpe/concept/dict/ACS_conditions.htm</a> .

## **Data Availability**

This indicator will be available for the years 1995/96 - 2001/02, for total population, males and females. Data are available for all provinces and territories.

## **Considerations for Indicator Quality and Comparability**

A re-abstraction study designed to examine the consistency of coding for this indicator yielded a 10.8% discrepancy rate overall. In the majority of discrepant records, however, an ACSC condition did appear as a diagnosis on the patient record, although not as a most responsible diagnosis. It is important to note that this discrepancy rate represents an overall average and cannot be directly attributed to individual facilities, provinces or territories. Only 13 of 272 re-abstracted records did not have an ACSC condition recorded in any diagnosis field. Almost half of these (6) were originally coded as neurotic or depressive disorders, and all of these records were re-abstracted as a mental disorder, although the re-abstracted condition did not strictly qualify as ACSC. This suggests that the ACSC indicator is consistently coded and may be compared inter-jurisdictionally and across time, with one exception.

The discrepancy rates reported here represent an overall average and cannot be directly attributed to individual facilities, provinces, or territories. This means that while the overall rate includes results from a number of jurisdictions, the rate for a particular subgroup of the population (e.g. a specific region or jurisdiction) may differ to some degree from the overall rate and therefore caution should be used when making comparisons across subgroups.

Caution is advised when comparing 2001/02 rates with previous years rates for provinces coding in ICD-10-CA/CCI. It is important to note that some of the differences identified may not be due to the implementation of ICD-10-CA/CCI but may reflect other factors such as the establishment or withdrawal of programs and services specific to the conditions comprising this indicator.

## **Responsibility to Produce the Data**

CIHI

## Indicator 28 - Patient satisfaction with hospital care

### Definition

Percentage of the population aged 15 and over who rate themselves as either very satisfied or somewhat satisfied with the way hospital services were provided.

### Rationale and Notes for Interpretation

These indicators apply to individuals who have received health care services at a hospital over a 12-month reference period. The individual's assessment of the satisfaction with the services is measured. The indicator applies to individuals 15 years old and older living in private households.

### Technical Specifications

For hospital services, the following question was asked: Thinking of this most recent hospital visit, how satisfied were you with the way hospital services were provided? Were you: ... very satisfied? ... somewhat satisfied? ... neither satisfied nor dissatisfied? ... somewhat dissatisfied? ... very dissatisfied?

**Exclusions:** Persons living on First Nation Reserves and on Crown lands, residents of institutions, full-time members of Canadian Armed Forces, and residents of certain remote regions are excluded from the sample. Persons less than 15 years of age are not asked this question.

**Calculation:** (Numerator/denominator) x 100

**Numerator:** Number of individuals reporting "very satisfied or "somewhat satisfied" with the way hospital services were provided.

**Denominator:** Total population aged 15 and older who received any health care services in hospital in the past 12 months.

**Source:** Canadian Community Health Survey: 2000/01, 2003.

### Data Availability

Crude and age-standardised data available by sex for Canada, the provinces and the territories. Supplementary data also available by sex and age-group:

15 - 19 years	45 - 64 years
20 - 34	65 - 74
35 - 44	75 years and over

### Considerations for Indicator Quality and Comparability

No known issues.

### Responsibility to Produce the Data

Statistics Canada

## Indicator 30 - Prescription drug spending as a percentage of income

### Definition

Percent of households spending over given percentages (0%, 1%, 2%, 3%, 4% and 5%) of total after tax income out-of-pocket on prescription drugs.

### Rationale and Notes for Interpretation

This indicator will provide a measure of the extent to which households are burdened by prescription drugs costs.

### Technical Specifications

**Exclusions:** Persons living on First Nation Reserves and on Crown lands, residents of institutions, full-time members of Canadian Armed Forces, and residents of certain remote regions are excluded from the sample. Data from the territories are not available due to data quality issues.

**Source:** Statistics Canada, Survey of Household Spending 1997, 1998, 1999, 2000, 2001, 2002.

**Note:** *Only includes out-of-pocket spending on prescription drugs i.e. does not cover drug expenses paid by a third party i.e. private or public drug plan. If prescription drugs are covered by a plan but the household pays a certain percentage of the cost of the drugs, the cost to the household is included in the amount spent on prescription drugs. Over-the-counter medications are not included. The numbers for private and public premiums are not included in out-of-pocket spending and cannot be reported separately because the numbers would be too small.*

There are a number of reasons why households may spend more than the maximum paid under a provincial prescription drug plan. These reasons include:

- ◆ The FAMEX and SHS are a household survey. Thus, multiple families or a number of non-related persons (room-mates, for example) could be in one household.
- ◆ In some cases, insurance premiums for a provincial prescription drug plan may have been reported as prescription drug spending.
- ◆ Households could live in more than one province in a survey year, but would be coded as living in the province at the time they were surveyed.
- ◆ People who change insurers may not request the required documentation from their previous insurer to ensure that they do not spend more than the maximum.
- ◆ Prescription drug spending while persons are temporarily outside of their home province may not be covered under the provincial plan.
- ◆ Spending could be on prescription drugs not covered under the provincial formulary.

### Data Availability

Data from the three territories are not available due to data quality issues.

### Considerations for Indicator Quality and Comparability

No known issues.

### Responsibility to Produce the Data

Statistics Canada

## **Indicator 33 - Self reported wait times for diagnostic services**

### **Indicator 33a - Median wait time for diagnostic services**

#### **Definition**

Reported median wait time for diagnostic services.

Wait time refers to the length of time, in weeks, between the patient being referred for a specialized service and receiving the service, during the 12 months prior to the survey.

The median is the 50th percentile of the distribution of wait times: half the patients wait less and half wait longer than the median number of weeks. Patients who have not yet received the service are excluded from the indicator calculation.

Note: Diagnostic tests include non-emergency MRIs, CT Scans, and angiographies only.

#### **Rationale and Notes for Interpretation**

This indicator refers to the wait time in weeks, between the patient being referred for a diagnostic service and receiving the service, during the 12 months prior to the survey.

#### **Technical Specifications**

Exclusions: Persons less than 15 years of age, persons living in Nunavut, the Yukon, the Northwest Territories, on First Nation Reserves and on Crown lands, residents of institutions, full-time member of Canadian Armed Forces and residents of certain remote regions are excluded from the sample.

Source: Health Services Access Survey, 2001 and Health Services Access Survey, supplement to the Canadian Community Health Survey, 2003.

#### **Data Availability**

For 2001, data available for Canada (excluding the Territories), and for Prince Edward Island, Alberta and British Columbia.

For 2003, data available for Canada (excluding the Territories), and all provinces.

Crude and age-standardized data available.

#### **Considerations for Indicator Quality and Comparability**

Sampling was done, in 2001, to obtain reliable national estimates (excluding the Territories) and provincial estimates for Prince Edward Island, Alberta and British Columbia. In 2003, sampling permits reliable estimates at both the national (10 provinces) and provincial levels.

#### **Responsibility to Produce the Data**

Statistics Canada

## **Indicator 33 - Self reported wait times for diagnostic services**

### **Indicator 33b - Distribution of wait times for diagnostic services**

#### **Definition**

Distribution of reported wait times for diagnostic services.

Wait time refers to the length of time, in weeks, between the patient being referred for a diagnostic service and receiving the service.

The indicator is the percent of those requiring a diagnostic service that waited less than 1 month, between 1 to 3 months or more than 3 months to receive the service, during the 12 months prior to the survey. Patients who have not yet received the service are excluded from the indicator calculation.

#### **Rationale and Notes for Interpretation**

This indicator refers to the wait time in weeks, between the patient being referred for a specialized service and receiving the service, during the 12 months prior to the survey.

#### **Technical Specifications**

**Exclusions:** Persons less than 15 years of age, persons living in Nunavut, the Yukon, the Northwest Territories, on First Nation Reserves and on Crown lands, residents of institutions, full-time member of Canadian Armed Forces and residents of certain remote regions are excluded from the sample.

**Source:** Health Services Access Survey, 2001 and Health Services Access Survey, supplement to the Canadian Community Health Survey, 2003.

#### **Data Availability**

For 2001, data available for Canada (excluding the Territories), and for Prince Edward Island, Alberta and British Columbia.

For 2003, data available for Canada (excluding the Territories), and all provinces.

Crude and age-standardized data available.

#### **Considerations for Indicator Quality and Comparability**

Sampling was done, in 2001, to obtain reliable national estimates (excluding the Territories) and provincial estimates for Prince Edward Island, Alberta and British Columbia. In 2003, sampling permits reliable estimates at both the national (10 provinces) and provincial levels.

#### **Responsibility to Produce the Data**

Statistics Canada

## Indicator 34 - Patient satisfaction with physician care

### Definition

Percent of population 15 years old and older who rate themselves as either very satisfied or somewhat satisfied with the care received from a physician - family doctor or medical specialist (excluding services received in a hospital).

### Rationale and Notes for Interpretation

These indicators apply to individuals who have received health care services over a 12-month reference period. The individual's assessment of the satisfaction with the way physician care was provided is measured. The indicator applies to individuals 15 years old and older living in private households.

### Technical Specifications

For physician care, the following question was asked: Thinking of this most recent care from a physician: how satisfied were you with the way physician care was provided? Were you: ... very satisfied? ... somewhat satisfied? ... neither satisfied nor dissatisfied? ... somewhat dissatisfied? ... very dissatisfied?

**Exclusions:** Persons living on First Nation Reserves and on Crown lands, residents of institutions, full-time members of Canadian Armed Forces, and residents of certain remote regions are excluded from the sample. Persons less than 15 years of age are not asked this question.

**Calculation:** (Numerator/denominator) x 100

**Numerator:** Number of individuals reporting "very satisfied" or "somewhat satisfied" with the service provided.

**Denominator:** Total population aged 15 and older who received any health care services in hospital in the past 12 months.

**Source:** Canadian Community Health Survey: 2000/01, 2003.

### Data Availability

Data available for Canada, the Provinces and the Territories.

Crude and age-standardized data available.

Available by sex and age-group:

15 - 19 years	45 - 64 years
20 - 34	65 - 74
35 - 44	75 years and over

### Considerations for Indicator Quality and Comparability

No known issues.

### Responsibility to Produce the Data

Statistics Canada

## **Indicator 37 - Health adjusted life expectancy (HALE)**

### **Indicator 37a - Health adjusted life expectancy (HALE) for overall population**

#### **Definition**

Health Adjusted Life Expectancy (HALE) is an indicator of overall population health. It combines measures of both age and sex-specific health status, and age and sex-specific mortality into a single statistic. HALE represents the number of expected years of life equivalent to years lived in full health, based on the average experience in a population. In this sense, HALE is not only a measure of quantity of life but also a measure of quality of life.

#### **Rationale and Notes for Interpretation**

Canadians have been experiencing continuing increases in life expectancy for many decades. However, with the increasing prevalence of chronic disease, there has been an international debate as to whether or not these added years of life expectancy are years spent in good or poor health. By examining trends in HALE in conjunctions with trends life expectancy (LE), it is possible to assess whether Canadians' increasing life expectancy is associated with a "compression or an expansion of morbidity". In other words, if HALE increases more over time than LE, we can then conclude that added years of life expectancy are indeed more often years in better health. This example is one illustration of the use and interpretation of HALE.

As with life expectancy, HALE is a standardized statistical indicator. It is not the number of full health equivalent years a particular newborn (or person currently age 65) can actually expect to live. The reason is that mortality rates and levels of health status only for the observation period (e.g. 2001) are used, and these are averages for the entire population. Historically, mortality rates in Canada have been falling, so that the mortality rates individuals are likely to face in future years as they age may be lower. Canada does not yet have consistent data over a sufficiently long period to know what the trends in health status have been, or are likely to be in the future. Moreover, individuals' circumstances vary so that, for example, if they had become chronically ill at an early age, their particular health-adjusted life expectancy would be less.

This indicator should be presented by sex since HALE of women and men differs so much.

Coefficients of variation, confidence intervals (both of which are provided by Statistics Canada), and tests of significance must be analyzed before differences between provinces can be interpreted as real (statistically significant).

#### **Technical Specifications**

Exclusions: The National Population Health Survey Institutional component collects data on long-term residents (expected to stay six months or more) living in health care institutions with four or more beds. Institutions that exclusively provided short-term care, such as drug rehabilitation centres were excluded. Health care institutions in the Territories, on Indian reservations and Canadian Forces Bases, and within correctional facilities were excluded. The CCHS excludes from its target population individuals living on Indian Reserves and on Crown Lands, residents of institutions, full-time members of the Canadian Armed Forces, and residents of certain remote regions. Persons less than 12 years of age are not surveyed.

Calculation: Part A: (average Health Utility Index (HUI) for institutional residents \* percentage of population in institutions in the province) + (average HUI for household population \* percentage of population in households in the province) = overall HUI score by sex and age group in each province.

Part B: Overall HUI by sex and age group \* years of life lived in each age group = health adjusted years of life lived.

Part C: Health adjusted years of life lived are then summed and divided by the total number of persons surviving at given ages. This will provide HALE at birth and age 65 by province.

Source: NPHS, Institutional Component for HUI of persons living in institutions (1996-1997 cross-sectional sample), 2001 Census for counts of persons in long-term health care institutions (to match with sampling frame of the NPHS), CCHS Cycle 1.1 (2000-2001) 2000/2001 abridged life tables.

References: Berthelot, Jean-Marie. (2003). Health-adjusted Life Expectancy (HALE). In J-M Robine, C. Jagger, C.D. Mathers, E.M. Crimmins and R.M. Suzman (eds.), *Determining Health Expectancies* p.235-246. West Sussex, England: John Wiley & Sons Ltd.

## **Data Availability**

HALE will be calculated at birth and at age 65, by province and sex only.

Data are not available for the territories.

## **Considerations for Indicator Quality and Comparability**

HALE will be calculated at birth and age 65. However, HALE at birth will be based on data for those aged 15 and over.

Because of the small sample size for the institutional component of the NPHS the average HUI for institutional residents will be calculated for people under 65 and people aged 65 and over. As well, the NPHS provides only regional data so the average HUI for institutional residents will be calculated for the Atlantic Provinces, Quebec, Ontario, the Prairie Provinces, and British Columbia.

## **Responsibility to Produce the Data**

Statistics Canada



## Indicator 37 - Health adjusted life expectancy (HALE)

### Indicator 37b - Health adjusted life expectancy (HALE) by Income

#### Definition

Health Adjusted Life Expectancy (HALE) is an indicator of overall population health. It combines measures of both age and sex-specific health status, and age and sex-specific mortality into a single statistic. HALE represents the number of expected years of life equivalent to years lived in full health, based on the average experience in a population. In this sense, HALE is not only a measure of quantity of life but also a measure of quality of life.

#### Rationale and Notes for Interpretation

Canadians have been experiencing continuing increases in life expectancy for many decades. However, with the increasing prevalence of chronic disease, there has been an international debate as to whether or not these added years of life expectancy are years spent in good or poor health. By examining trends in HALE in conjunctions with trends life expectancy (LE), it is possible to assess whether Canadians' increasing life expectancy is associated with a "compression or an expansion of morbidity". In other words, if HALE increases more over time than LE, we can then conclude that added years of life expectancy are indeed more often years in better health. This example is one illustration of the use and interpretation of HALE.

As with life expectancy, HALE is a standardized statistical indicator. It is not the number of full health equivalent years a particular newborn (or person currently age 65) can actually expect to live. The reason is that mortality rates and levels of health status only for the observation period (e.g. 2001) are used, and these are averages for the entire population. Historically, mortality rates in Canada have been falling, so that the mortality rates individuals are likely to face in future years as they age may be lower. Canada does not yet have consistent data over a sufficiently long period to know what the trends in health status have been, or are likely to be in the future. Moreover, individuals' circumstances vary so that, for example, if they had become chronically ill at an early age, their particular health-adjusted life expectancy would be less.

This indicator should be presented by sex since HALE of women and men differs so much.

Coefficients of variation, confidence intervals (both of which are provided by Statistics Canada), and tests of significance must be analyzed before differences between provinces can be interpreted as real (statistically significant).

#### Technical Specifications

**Exclusions:** The National Population Health Survey Institutional component collects data on long-term residents (expected to stay six months or more) living in health care institutions with four or more beds. Institutions that exclusively provided short-term care, such as drug rehabilitation centres were excluded. Health care institutions on Indian reservations and Canadian Forces Bases or within correctional facilities were excluded.

The CCHS excludes from its target population individuals living on Indian Reserves and on Crown Lands, residents of institutions, full-time members of the Canadian Armed Forces, and residents of certain remote regions. Persons less than 12 years of age are not surveyed.

The life tables exclude non-residents of Canada.

**Calculation:** Based on previous work by Wilkins et al (2002) 1996 life tables by income terciles were constructed using an ecological approach. Deaths were coded to the EA based on postal codes. Average income for each enumeration area (EA) was calculated and then EAs were assigned to the bottom, middle, or highest income tercile. The life tables were then constructed using deaths assigned to each income tercile. The 1996 percentage of deaths in each income tercile will be applied to the 2000/2001 life tables. Using the EA link in the CCHS, respondents will be placed in one of the three income terciles. Mean HUI will be calculated for each tercile by age, sex, and

province. The 1994 NPHS household longitudinal file was analyzed in order to determine the tercile distribution for institutional residents. The postal codes of respondents who lived in the community in 1994 but were living in an institution during a subsequent survey cycle were assigned to a tercile based on their EA of residence in 1994. This tercile distribution was then applied to determine the percentage of institutional residents in each income tercile.

Part A: (average Health Utility Index (HUI) for institutional residents \* percentage of population in institutions in the province) + (average HUI for household population \* percentage of population in households in the province) = overall HUI score by sex and age group in each province.

Part B: Overall HUI by sex and age group \* years of life lived in each age group = health adjusted years of life lived.

Part C: Health adjusted years of life lived are then summed and divided by the total number of persons surviving at given ages. This will provide HALE at birth and age 65 by province.

Source: NPHS, Institutional Component for HUI of persons in institutions (1996-1997 cross-sectional sample), 2001 Census for counts of residents living in long-term health care institutions (to match with sampling frame of the NPHS), CCHS Cycle 1.1 (common content) for HUI and counts of persons in households. 2000/2001 abridged life tables adjusted to 1996 income terciles.

References: Berthelot, Jean-Marie. (2003). Health-adjusted Life Expectancy (HALE). In J-M Robine, C. Jagger, C.D. Mathers, E.M. Crimmins and R.M. Suzman (eds.), *Determining Health Expectancies* p.235-246. West Sussex, England: John Wiley & Sons Ltd. Wilkins, Russell, Edward Ng, Jean-Marie Berthelot, and Francine Mayer. (2002). "Provincial Differences in Disability-Free Life Expectancy by Neighbourhood Income and Education in Canada, 1996". Technical Report to the Performance Indicators Reporting Committee (PIRC) of the Federal-Provincial-Territorial Conference of Deputy Ministers of Health.

## **Data Availability**

HALE will be calculated at birth and at age 65 by sex only, income tercile, and province. The territories will be excluded.

## **Considerations for Indicator Quality and Comparability**

HALE will be calculated at birth and age 65. However, HALE at birth will be based on data for those aged 15 and over.

Because of the small sample size for the institutional component of the NPHS the average HUI for institutional residents will be calculated for people under 65 and people aged 65 and over. As well, the NPHS provides only regional data so the average HUI for institutional residents will be calculated for the Atlantic Provinces, Quebec, Ontario, the Prairie Provinces, and British Columbia. The average HUI will be the same for all income terciles of institutional residents.

The ecological approach based on enumeration area (EA link) is not appropriate to use for institutional residents since institutional residents move to an institution not because of the neighbourhood but because of their need for health care. Thus neighbourhood income is not necessarily a reflection of the income of institutional residents.

The EA link and coding of deaths to EAs is based on the average incomes in each EA in 1996. The tercile each EA was assigned to in 1996 is then applied to the 2000/2001 CCHS. As well, the same percentage of deaths in each income tercile in 1996 is applied to the 2000/2001 life tables (i.e. if 40% of deaths occurred in the lowest income tercile in 1996 then 40% of deaths occurred in the lowest income tercile in 2000/2001).

## **Responsibility to Produce the Data**

Statistics Canada

## Indicator 63 - Prevalence of diabetes

### Definition

The prevalence rate of diagnosed diabetes among health service users per 100 population.

### Rationale and Notes for Interpretation

The period prevalence of diabetes gives an idea of the importance or burden of this disease at a given time and is widely used in public health monitoring and planning. It has been estimated that approximately 5% of all Canadians are affected by diabetes, thereby generating direct costs related to physician and hospital care, prescription drugs, and other costs borne by individuals, as well as indirect costs including premature death or disability (NDSS, 2003).

### Technical Specifications

Exclusions:	Persons younger than 20 year of age, New Brunswick and Newfoundland & Labrador.
Calculation:	$(\text{Numerator}/\text{denominator}) \times 100$
Numerator:	Number of cases in persons 20 years of age and older.
Denominator:	Estimated population using health registry and census data for those persons 20 years and older.
Source:	Health Canada (2003), Responding to the Challenge of Diabetes in Canada. First Report of the National Diabetes Surveillance System (NDSS) Ottawa.

### Data Availability

Data available for fiscal years 1997/98, 1998/99, 1999/2000. Data is only available for those 20 years of age and older. Data is included for all provinces and territories EXCEPT New Brunswick and Newfoundland and Labrador. Data is available by sex and age group (20-29, 30-39, 40-49, 50-54, 55-59, 60-64, 65-69, 70-74, 75-79, 80-84, 85+). Crude and age-standardized rates are available

### Considerations for Indicator Quality and Comparability

Data is based on administrative data therefore its quality is constrained by the accuracy of those systems.

Data should not be used for trend analysis.

Some data produced for the September 2002 Comparable Health Indicators Reports may have changed due to updated provincial and territorial numbers therefore, data tables provided for the November 2004 Comparable Health Indicators Reports, replaces all previous data tables.

Minor variations in data will occur when comparing data with other federal and provincial/territorial publications because of reporting delays, different cut-off dates and date of access to Statistics Canada's population estimates.

**Disclosure of Limitations:** (Note to Readers: Readers should be cautious when interpreting these data)

- ◆ Three types of diabetes are included in the database: Type 1, Type 2, and gestational diabetes. Note that gestational diabetes is only included when coded as diabetes mellitus (ICD9 code 250);
- ◆ A baseline error rate of 20% to 25% exists in the published (1999/2000) data;
- ◆ This level of error is accepted by Health Canada and by those national experts identified by Health Canada;
- ◆ Since 1997-98, these data have been accumulating false positives. For the data published here this may not have a significant impact. Health Canada plans to work to reduce these errors so that by the time it publishes the 2001-02 data, this accumulation will not become significant; and
- ◆ This "baseline error rate" is likely to vary by age and sex groups.

### Responsibility to Produce the Data

Health Canada

## Indicator 65 - Self-reported health

### Definition

Percent of the population aged 12 and older who report that their health is very good or excellent.

### Rationale and Notes for Interpretation

Self-reported health is a general indicator of the overall health status of individuals. It can include what other measures may miss: incipient disease, disease severity, some aspects of positive health status, physiologic/psychological reserve, social and mental function.

Self-reported health data is collected using a five point reporting scale, ranging from excellent to poor. Studies indicate that when individuals rate their health in response to this question, they tap into information that has important predictive power relating to chronic disease incidence, functional decline and ultimately survival. Numerous longitudinal studies have found that self-reported health is predictive of mortality even when more objective measures such as clinical evaluations are taken into account. Inconsistencies between self-reported health data from population surveys and best estimates from epidemiological studies (under-reporting of undiagnosed conditions, over-reporting of some conditions, lack of information on condition severity) may explain why measures of self-reported health do not have credibility with all groups. This indicator applies to individuals 12 years old and older living in private households.

### Technical Specifications

Exclusions:	Persons living on First Nation Reserves and on Crown lands, residents of institutions, full-time members of Canadian Armed Forces, and residents of certain remote regions are excluded from the sample.
Calculation:	$(\text{Numerator}/\text{denominator}) \times 100$ , with weighting adjusted to reflect non-response.
Numerator:	Estimated number of persons reporting excellent or very good health within a survey cycle for a given jurisdiction (response categories are excellent, very good, good, fair, poor).
Denominator:	Total population aged 12 and over in the jurisdiction.
Source:	Canadian Community Health Survey, 2003 and 2000/01; National Population Health Surveys (1994-95 to 1998-99).
References:	Statistical Report on the Health of Canadians, ACPH, 1999, Health Reports, Vol. 11, No. 3 <i>How healthy are Canadians?</i> ; NPHS and CCHS documentation and analysis found on <a href="http://www.statcan.ca/health_surveys">www.statcan.ca/health_surveys</a> , <a href="http://www.healthcanada.ca">www.healthcanada.ca</a> .

### Data Availability

Crude and age-standardised data available by sex for Canada, the provinces and the territories.

Supplementary data also available by sex and age-group: Total, 12 years and over

12 - 19 years	45 - 64 years
20 - 34 years	65 years and over
35 - 44 years	

### Considerations for Indicator Quality and Comparability

No known issues.

### Responsibility to Produce the Data

Statistics Canada

## Indicator 66 - Teenage smoking rates

### Indicator 66a - Teenage smoking rates: Proportion current teenage smokers

#### Definition

Percentage of population aged 12 - 19 (inclusive) reporting they are current smokers (current includes daily and occasional smokers) at the time of the interview and percentage of population aged 12 - 19 (inclusive) reporting they are daily smokers at the time of the interview.

#### Rationale and Notes for Interpretation

Tobacco use is the leading cause of preventable illness and death in Canada. Health Canada estimates that smoking is responsible for more than 45,000 deaths per year. The indicator is the proportion of those aged 12-19 who report current smoking. Because of the addictive nature of nicotine, youth smoking is of particular concern. It is estimated that approximately eight out of every 10 people who try smoking become habitual smokers.

#### Technical Specifications

The data are based on the question: At the present time do you smoke cigarettes daily, occasionally or not at all?

Exclusions: Persons living on First Nation Reserves and on Crown lands, residents of institutions, full-time member of Canadian Armed Forces and residents of certain remote regions are excluded from the sample.

Calculation:  $(\text{Numerator/denominator}) * 100$

Numerator: Number of individuals aged 12 - 19 who report: current smoking.

Denominator: Total population aged 12 - 19.

Source: Canadian Community Health Survey 2003 and 2000/01; National Population Health Survey, 1994-95 to 1998/99.

#### Data Availability

Crude rates reported of (a) daily smokers; and (b) occasional smokers, aged 12 - 19. Data available for Canada, the provinces and the territories.

#### Considerations for Indicator Quality and Comparability

Results may also be reported for other age groups and by sex.

#### Responsibility to Produce the Data

Statistics Canada

## Indicator 66 - Teenage smoking rates

### Indicator 66b - Teenage smoking rates: Proportion daily teenage smokers

#### Definition

Percentage of population aged 12 - 19 (inclusive) reporting they are daily smokers at the time of the interview.

#### Rationale and Notes for Interpretation

Tobacco use is the leading cause of preventable illness and death in Canada. Health Canada estimates that smoking is responsible for more than 45,000 deaths per year. The indicator is the proportion of those aged 12-19 who report current smoking. Because of the addictive nature of nicotine, youth smoking is of particular concern. It is estimated that approximately eight out of every 10 people who try smoking become habitual smokers.

#### Technical Specifications

The data are based on the question: At the present time do you smoke cigarettes daily, occasionally or not at all?

Exclusions: Persons living on First Nation Reserves and on Crown lands, residents of institutions, full-time member of Canadian Armed Forces and residents of certain remote regions are excluded from the sample.

Calculation:  $(\text{Numerator}/\text{denominator}) * 100$

Numerator: Number of individuals aged 12 - 19 who report: daily smoking.

Denominator: Total population aged 12 - 19.

Source: Canadian Community Health Survey 2003 and 2000/01; National Population Health Survey, 1994-95 to 1998/99.

#### Data Availability

Crude rates reported of (a) daily smokers; and (b) occasional smokers, aged 12 - 19. Data available for Canada, the provinces and the territories.

#### Considerations for Indicator Quality and Comparability

Results may also be reported for other age groups and by sex.

#### Responsibility to Produce the Data

Statistics Canada

## Indicator 67 - Physical activity

### Definition

- a) Percentage of population aged 12 and over who report a physical activity index of “active”.
- b) Percentage of population aged 12 and over who report a physical activity index of “inactive”.

### Rationale and Notes for Interpretation

Maintaining physical activity is associated with a range of health benefits. Many studies have shown that regular physical activity confers major heart health benefits and that inactivity is a major risk factor for heart disease. Recent evidence from the National Population Health Survey supports this conclusion, and also shows that physically active individuals are less likely to become depressed.

### Technical Specifications

**Exclusions:** Persons living on First Nation Reserves and on Crown lands, residents of institutions, full-time member of Canadian Armed Forces and residents of certain remote regions are excluded from the sample.

**Calculation:** (Numerator/denominator) x 100

The physical activity index is based on an individual's energy expenditure (EE). EE is calculated using the frequency and duration per session of physical activity, as well as the MET (metabolic) value. The MET is the energy cost of the activity expressed as kilocalories expended per kilogram of body weight per hour of activity, doing a physical activity during the past 3 months, the number of times and time spent on each activity. A physical activity index is calculated to determine energy expenditure values (EE). The derived physical activity index results in the following categories:

Description	Definition
Active	Average 3.0 +kcal/kg/day of energy, or exercise required for cardiovascular health benefit
Moderate	Average 1.5-2.9 kcal/kg/day, some health benefits but little cardiovascular
Inactive	Energy expenditure below 1.5 kcal/kg/day

**Numerator:** a) Number of individuals reporting combined active (>3.0 kcal/kg/day) and moderately active levels of physical activity (1.5-2.9 kcal/kg/day). b) Number of individuals reporting an inactive level of physical activity (<1.5 cal/kg/day)

**Denominator:** Total population aged 12 and over.

**Source:** Canadian Community Health Survey – Cycle 2.1 2003 and Cycle 1.1 2000/01; National Population Health Survey, 1994/95 to 1998/99.

#### Data Availability

Crude and age-standardised data available by sex for Canada, the provinces and the territories.

Supplementary data also available by sex and age-group: Total, 12 years and over

12 - 19 years	45 - 64 years
20 - 34 years	65 years and over
35 - 44 years	

### Considerations for Indicator Quality and Comparability

No known issues.

### Responsibility to Produce the Data

Statistics Canada

## Indicator 68 - Body Mass Index

### Definition

Percent of adults who report a [computed] body mass index in specified categories, ranging from underweight to obese.

Body mass index (BMI) is based on self-reported height and weight, and calculated for persons 18 years of age and over, excluding pregnant women. Due to different rates of growth for individuals under 18 years of age, the standard BMI is not considered a suitable indicator for this group. BMI is calculated as weight (in kilograms) divided by height (in meters) squared.

### Rationale and Notes for Interpretation

Obesity has been identified as a major risk factor contributing to a number of chronic illnesses such as diabetes and heart disease. BMI is the most common method of determining if an individual's weight is in a healthy range. Data on height and weight are based on self-report survey responses. Individuals may not always report reliably. The effect of excess weight as a risk factor for various diseases increases with BMI above the threshold of 25; this is a widely used standard in the health literature.

### Technical Specifications

Exclusions:	Everyone less than 18 years of age, persons living on First Nation Reserves and on Crown lands, residents of institutions, full-time member of Canadian Armed Forces and residents of certain remote regions are excluded from the sample. Also excluded are pregnant women, and persons measuring less than 914 centimetres (3 feet) or greater than 210.8 centimetres (6 feet 11 inches) in height.
Calculation:	(Numerator/denominator) x 100
Numerator:	Population aged 18 years and over reporting a BMI in each of the four categories shown under requirements below.
Denominator:	Total population aged 18 years and over.
Source:	Canadian Community Health Survey, Cycle 2.1 2003, Cycle 1.1 2000/01; National Population Health Survey, 1994/95 to 1998/99.

### Data Availability

Data available for Canada, the provinces and the territories, by sex.

Results are presented as a distribution with the following categories:

<18.5	(underweight)	30.0 - 34.9	(obese Class I)
18.5 - 24.9	(acceptable weight)	35.0 - 39.9	(obese Class II)
25.0 - 29.9	(overweight)	40.0+	(obese Class III)
30.0+	(obese)		

Results from the most recent year (2003) are reported.

Crude and age-standardized data available by sex for Canada, the provinces and the territories.

Supplementary data also available by sex and age-group: Total, 18 years and over

18 - 34 years	45 - 64 years
35 - 44 years	65 years and over.

### Considerations for Indicator Quality and Comparability

The definition for BMI has been modified from the one used with previous data released by Statistics Canada, in order to respect the latest guidelines from Health Canada, which in turn, correspond to those of the World Health Organisation.

### Responsibility to Produce the Data

Statistics Canada



## Indicator 69 - Immunization for influenza aged 65+

### Definition

Proportion of population 65 and over who report having a flu shot in the past year.

### Rationale and Notes for Interpretation

The indicator reports time of last immunization. Individuals aged 65 and over who have not been immunized in the past year are asked why not. Data are available from the CCHS for a subset of the sample, but will allow for estimates at provincial and national levels.

### Technical Specifications

This indicator is usually reported as the proportion of individuals reporting immunization within certain time frames. The questions asked are: Have you ever had a flu shot? When did you have your last flu shot?

**Exclusions:** Persons living on First Nation Reserves and on Crown lands, residents of institutions, full-time member of Canadian Armed Forces and residents of certain remote regions are excluded from the sample.

**Calculation:** (Numerator/denominator) x 100

**Numerator:** Estimated population 65+ reporting immunization: a) <1 year ago; b) 1 or more years ago; c) never.

**Denominator:** Total population aged 65+.

**Source:** Canadian Community Health Survey (sub sample) Cycle 2.1, 2003 and Cycle 1.1, 2000/01, National Population Health Survey, 1996/1997, cross sectional sample, health file (household component).

### Data Availability

Data available for Canada, the provinces and the territories.

Response categories above presented by the following age breakdowns: 65 to 74, 75+.

Crude and age-standardised data available by sex for Canada, the provinces and the territories.

Supplementary data also available by sex and age-group: Total, 65 years and over

65 - 74 years

75 years and over

### Considerations for Indicator Quality and Comparability

No known issues.

### Responsibility to Produce the Data

Statistics Canada



