

# Health Reflections

Newfoundland and Labrador



## Background Report

This report is a supplementary document to the *Health Reflections* report. It provides information regarding the data sources, indicator definitions and notes relevant to the statistical analysis and reporting of the data. The data for Newfoundland and Labrador (NL) is compared with Canada. Gender and age comparisons are also presented where data quality exists.

### **Statistical Significance**

Differences in the data for NL and Canada for all indicators included in the report, with the exception of potential years of life lost due to select causes and the diabetes rate, were statistically significant. Information was not available to determine the statistical significance of the differences in the data for these two indicators.

### **Age-standardization versus Crude Rates**

When possible, individual indicator rates were age-standardized (or adjusted in order to remove or minimize the effects of differences in age composition) to compare rates for different populations (e.g., NL and Canada). Where age-standardized rates have been used this is indicated in the charts.

### **Survey Information**

Many of the indicators presented in this report were obtained from the Canadian Community Health Survey, a national survey administered by Statistics Canada. For additional information on this survey refer to: <http://www.statcan.ca/english/concepts/hs/index.htm>.

Data respecting smoking was obtained from the Canadian Tobacco Use Monitoring Survey, a joint project of Statistics Canada and Health Canada ([http://www.hc-sc.gc.ca/hl-vs/tobac-tabac/research-recherche/stat/index\\_e.html](http://www.hc-sc.gc.ca/hl-vs/tobac-tabac/research-recherche/stat/index_e.html)). In addition to surveys, other sources of data utilized in preparing this report include:

- Regional Health Authorities, wait time data for select services
- Newfoundland and Labrador Provincial Cancer Care Program, Cervical Cancer Registry
- Newfoundland and Labrador Centre for Health Information (NLCHI), Clinical Database Management System
- National Diabetes Surveillance System (NDSS)
- Canadian Institute for Health Information (CIHI)
- Statistics Canada

### **Health Reflections**

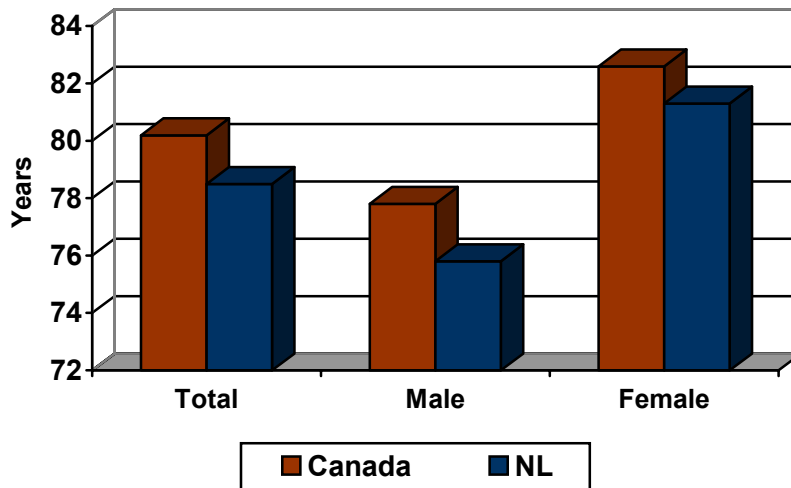
*Health Reflections* can be accessed through the Internet via the Government website at [www.gov.nl.ca/health](http://www.gov.nl.ca/health)

## Life Expectancy

Data Source: Statistics Canada, Vital Statistics, Death Database, and Demography Division (population estimates).

Description: According to Statistics Canada, life expectancy is the number of years a person would be expected to live, starting from birth (for life expectancy at birth) and similarly for other age groups, on the basis of the mortality statistics for a given time period. It is a widely used indicator of the health of a population and it measures quantity rather than quality of life.

**Life Expectancy at Birth by Gender,  
Canada and Newfoundland and Labrador, 2005**



Source: Statistics Canada, 2005

## Self Rated Health

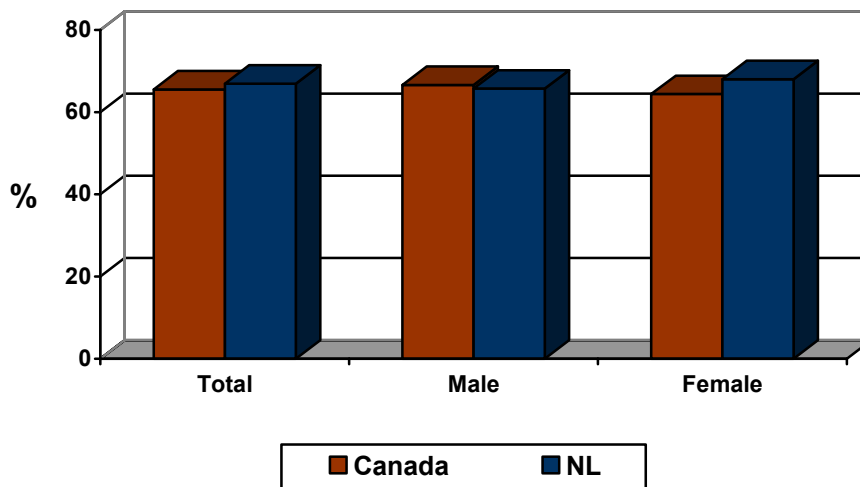
Data Source: Statistics Canada, Canadian Community Health Survey, Cycle 3.1, 2005.

Description: This variable indicates the respondent's health status based on his/her own judgement and is presented as an age-standardized percentage. Respondents aged 12 years and over were asked "In general, would you say your health is excellent, very good, good, fair or poor?"

According to Statistics Canada, self rated health is an indicator of overall health status and can depict aspects of health not captured in other measures, including incipient disease, disease severity, aspects of positive health status, physiological and psychological reserves and social and mental function.

Data are presented as the age-standardized percentage for respondents aged 12 and over. Rates are age-standardized using the direct method and the 1991 Canadian Census population structure. Age-standardization allows for more meaningful comparisons as it removes or minimizes the effects of differences in age composition over time and across geographic areas.

### **Age-standardized Percentage of the Population Reporting Health as Very Good or Excellent by Gender, Canada and Newfoundland and Labrador, 2005**



Source: Canadian Community Health Survey, Cycle 3.1, 2005

## Self Rated Health Aged 65+

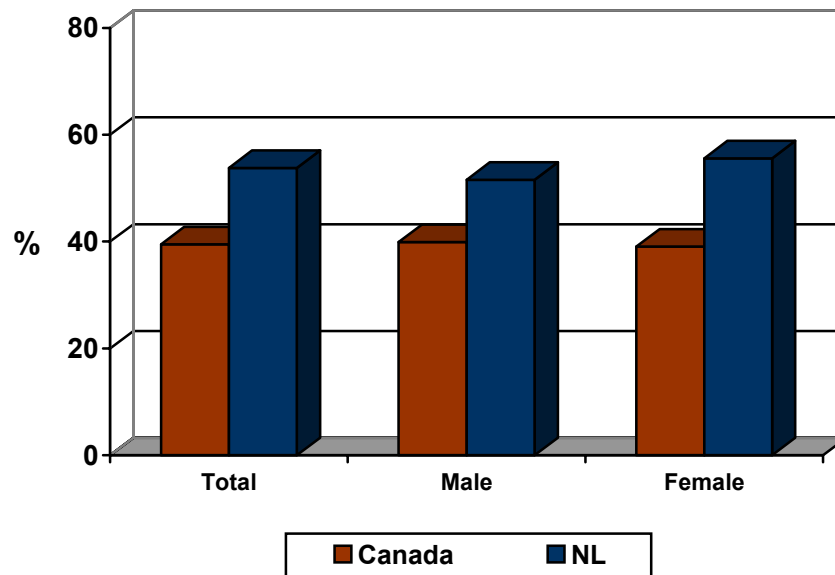
Data Source: Statistics Canada, Canadian Community Health Survey, Cycle 3.1, 2005.

Description: This variable indicates the respondent's health status based on his/her own judgement and is presented as an age-standardized percentage. Respondents 65 years of age and older were asked "In general, would you say your health is excellent, very good, good, fair or poor?"

According to Statistics Canada, self rated health is an indicator of overall health status and can depict aspects of health not captured in other measures, including incipient disease, disease severity, aspects of positive health status, physiological and psychological reserves and social and mental function.

Data are presented as the age-standardized percentage for respondents aged 65 years and older. Rates are age-standardized using the direct method and the 1991 Canadian Census population structure. Age-standardization allows for more meaningful comparisons as it removes or minimizes the effects of differences in age composition over time and across geographic areas.

**Age- standardized Percentage of the Population Aged 65+ Years Reporting Health as Very Good or Excellent by Gender, Canada and Newfoundland and Labrador, 2005**



Source: Canadian Community Health Survey, Cycle 3.1, 2005

## Self Rated Mental Health

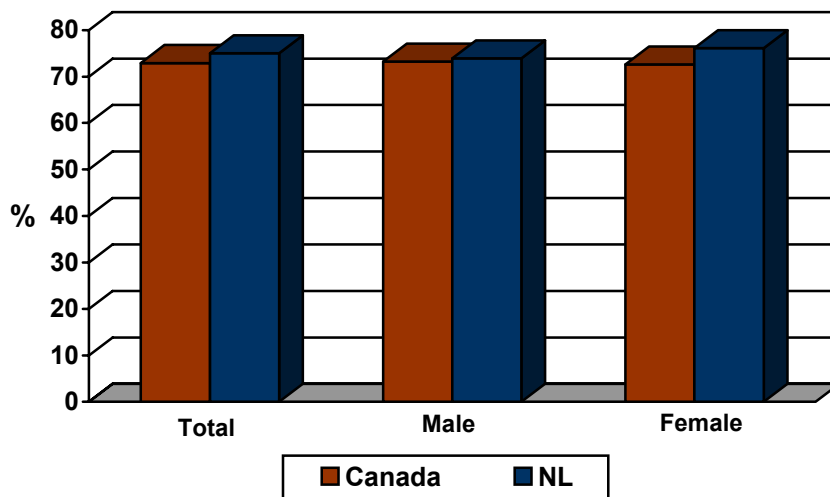
Data Source: Statistics Canada, Canadian Community Health Survey, Cycle 3.1, 2005.

Description: This variable indicates the respondent's mental health status based on his/her own judgement and is presented as a percentage. Respondents aged 12 and over were asked "In general, would you say your mental health is excellent, very good, good, fair or poor?"

According to Statistics Canada, self-reported mental health provides a general indication of the population suffering from some form of mental disorder, mental or emotional problems, or distress, not necessarily captured in self-reported (physical) health.

Data are presented as percentages for respondents aged 12 and over.

**Percentage of the Population Reporting Mental Health as Very Good or Excellent by Gender, Canada and Newfoundland and Labrador, 2005**



Source: Canadian Community Health Survey, Cycle 3.1, 2005

## Diabetes

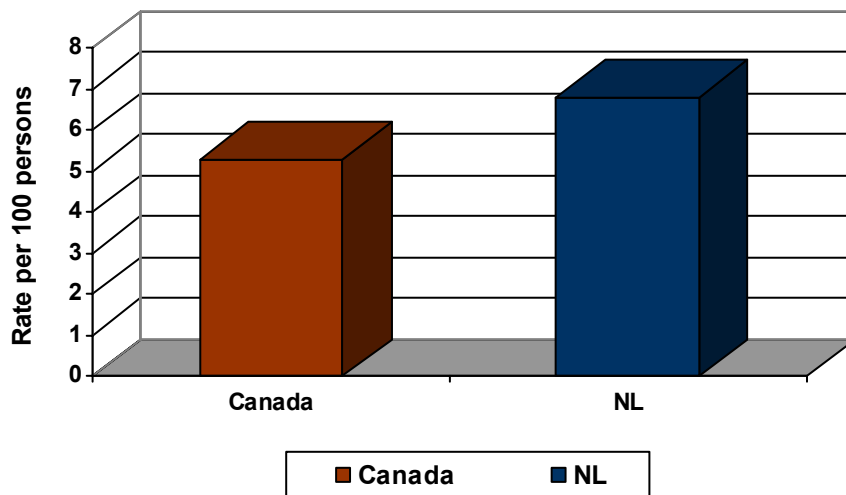
Data Source: National Diabetes Surveillance System (NDSS), 2001/2002.

Description: The NDSS case definition of diabetes is one hospital separation with mention of diabetes OR two fee-for-service medical services records with mention of diabetes not more than two years apart, OR one medical services record followed by a hospital separation not more than two years apart. Gestational diabetes is excluded.

Data are presented as the age-standardized rate for people aged 20 years and over.

Rates are age-standardized using the direct method and the 1991 Canadian Census population structure. Age-standardization allows for more meaningful comparisons as it removes or minimizes the effects of differences in age composition over time and across geographic areas.

**Age-standardized Prevalence of Diabetes Aged 20+ Years,  
Canada and Newfoundland and Labrador, 2001/2002**



Source: National Diabetes Surveillance System (NDSS), 2001/2002

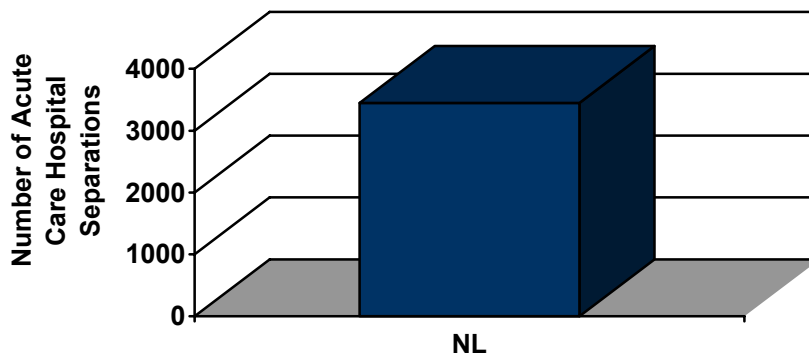
## Ischemic Heart Disease

Data Source: Clinical Database Management System, 2005/06, Newfoundland and Labrador Centre for Health Information (NLCHI).

### Description:

- Acute Care (inpatient) (care-episode type '0'): Care provided primarily for the diagnosis and short-term treatment of patients with a wide range of diseases or injuries.
- Hospital Separation: The end point of an inpatient hospital contact which consists of one or several days of care. A separation from a health care facility occurs any time a patient (or resident) leaves because of death, discharge, or sign-out against medical advice or transfer. The number of separations is the most commonly used measure of the utilization of hospital services. Separations, rather than admissions, are used because hospital abstracts for inpatient care are based on information gathered at the time of separation. Note that a given individual may have been hospitalized more than once during the fiscal year.
- Most Responsible Diagnosis (MRDx): A diagnosis or condition that can be described as being most responsible for the patient's stay in hospital.
- ICD-106 codes queried for Ischemic Heart Disease:
  - Ischemic Heart Diseases (I20-I25)
  - I20 Angina pectoris
  - I21 Acute myocardial infarction
  - I22 Subsequent myocardial infarction
  - I23 Certain current complications following acute myocardial infarction
  - I24 Other acute ischemic heart diseases
  - I25 Chronic ischemic heart disease
- ICD-10-CA: International Statistical Classification of Diseases and Related Health Problems - 10th revision – enhanced Canadian version, respectively. It is a variable axis classification with alphanumeric codes. The content of the chapters is based on the etiology of the disease, conditions specific to a certain body system or those related to circumstance.

**Acute Care Hospital Separations with Most-responsible Diagnosis of Ischemic Heart Disease, Newfoundland and Labrador, 2005/06**



Source: Clinical Database Management System, 2005/06, NLCHI



## Potential Years of Life Lost (PYLL)

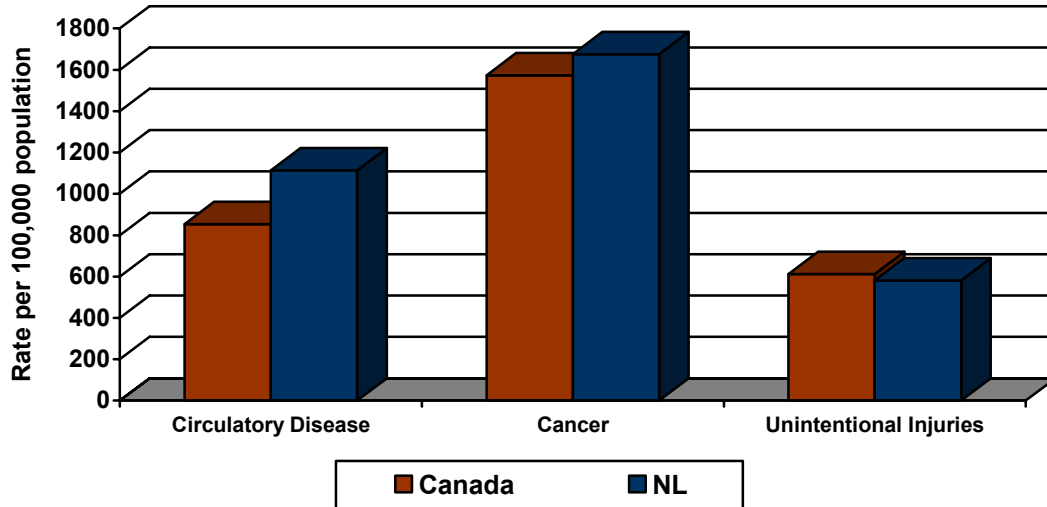
Data Source: Statistics Canada, Vital Statistics, Death Database, and Demography Division (population estimates); Newfoundland and Labrador Centre for Health Information.

Description: According to Statistics Canada, potential years of life lost (PYLL) (total mortality) is the number of years of life "lost" when a person dies "prematurely" from any cause - before age 75. A person dying at age 25, for example, has lost 50 years of life.

Potential years of life lost are calculated by taking the median age in each age group, subtracting from 75, and multiplying by the number of deaths in that age group disaggregated by sex and cause of death. These data are presented as a count (total PYLL) and as a rate per 100,000 population.

- Potential years of life lost (PYLL) due to circulatory disease deaths (ICD-10 codes I00-I99).
- Potential years of life lost (PYLL) due to cancer (ICD-10 codes for all malignant neoplasms C00-C97).
- Potential years of life lost (PYLL) due to unintentional injuries (ICD-10 V01-X59, Y85-Y86).

**Potential Years of Life Lost Due to Selected Causes of Death,  
Canada and Newfoundland and Labrador, 2003**



Source: Statistics Canada, 2003; NLCHI, 2003

Adult Body Mass Index (BMI)

Data Source: Statistics Canada, Canadian Community Health Survey, Cycle 2.2, 2004.

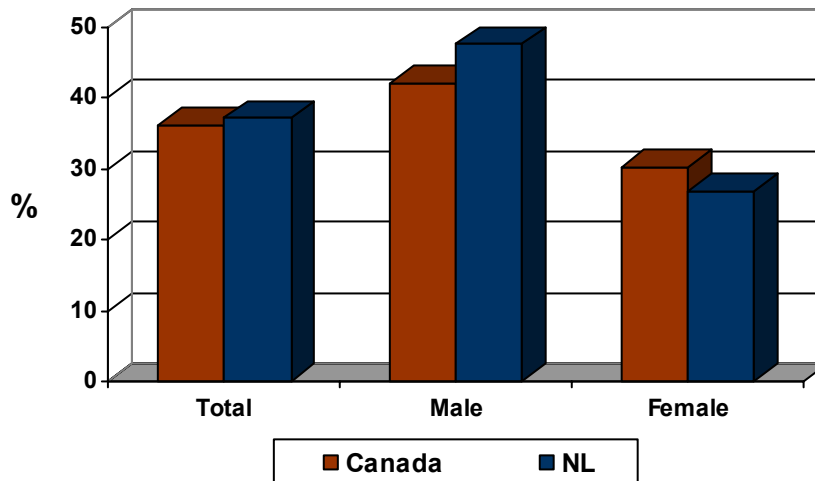
Description: Body Mass Index (BMI) is a method of classifying body weight according to health risk. According to World Health Organization (WHO) and Health Canada guidelines, the following categories of BMI are used to identify levels of health risk:

Body Mass Index	Weight Category	Disease Risk
< 18.5	Underweight	Increased Risk
18.5 – 24.9	Normal weight	Least Risk
25.0 – 29.9	Overweight	Increased Risk
30 and over	Obese:	
▪ 30.0 – 34.9	▪ Obese Class I	High Risk
▪ 35.0 – 39.9	▪ Obese Class II	Very High Risk
▪ ≥ 40.0	▪ Obese Class III	Extremely High Risk

Exact measures of height and weight of respondents aged 18 years and over were taken by Statistics Canada interviewers. BMI was calculated by dividing weight in kilograms by height in metres squared.

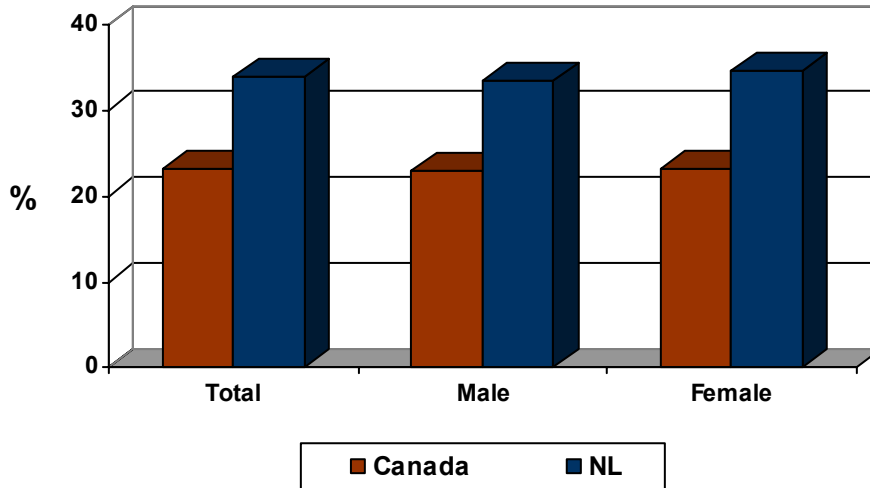
Percentages are age-standardized using the direct method and the 1991 Canadian Census population structure. Age-standardization allows for more meaningful comparisons as it removes or minimizes the effects of differences in age composition over time and across geographic areas.

**Age-standardized Percentage of the Population Aged 18+ Years who are Considered to be Overweight (BMI 25.0-29.9) by Gender, Canada and Newfoundland and Labrador, 2004**



Source: Canadian Community Health Survey, Cycle 2.2, 2004

**Age-standardized Percentage of the Population aged 18+ Years who are Considered to be Obese (BMI  $\geq 30$ ) by Gender, Canada and Newfoundland and Labrador, 2004**



Source: Canadian Community Health Survey, Cycle 2.2, 2004

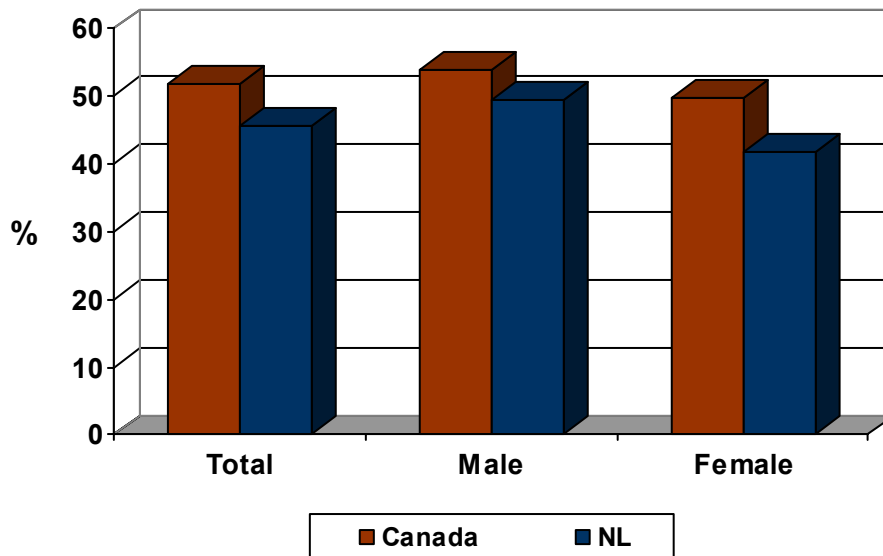
## Leisure Time Physical Activity Level

Data Source: Statistics Canada, Canadian Community Health Survey, Cycle 3.1, 2005.

Description: Respondent's are categorized as being active, moderately active or inactive based on the total daily energy expenditure values (kcal/kg/day).

Data are presented as age-standardized percentages for respondents 12 years of age and over. Percentages are age-standardized using the direct method and the 1991 Canadian Census population structure. Age-standardization allows for more meaningful comparisons as it removes or minimizes the effects of differences in age composition over time and across geographic areas.

**Age-standardized Percentage of the Population who Report Being Active or Moderately Active During Leisure Time, by Gender, Canada and Newfoundland and Labrador, 2005**



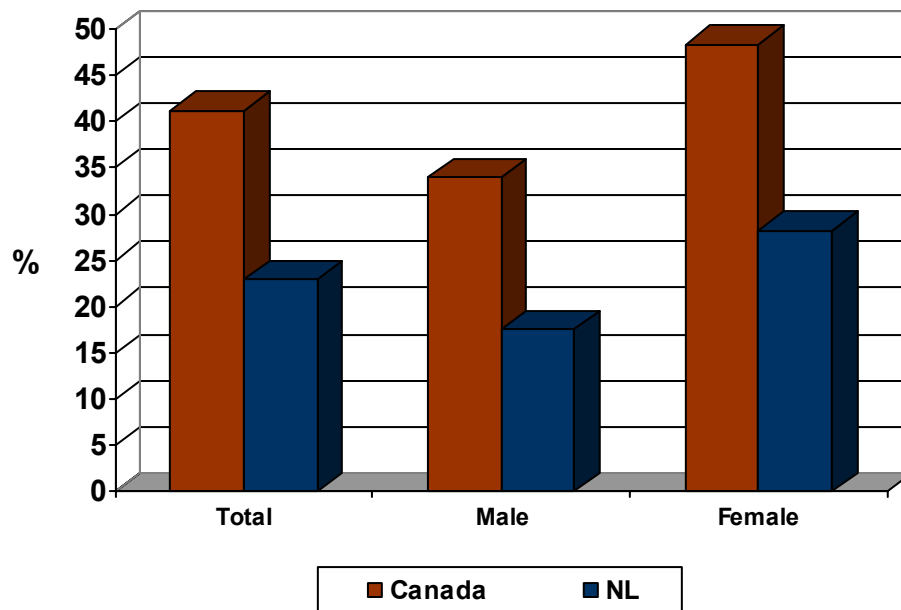
Source: Canadian Community Health Survey, Cycle 3.1, 2005

## Fruit and Vegetable Consumption

Data Source: Statistics Canada, Canadian Community Health Survey, Cycle 3.1, 2005.

Description: This variable classifies the respondent based on the total number of times per day he/she eats fruits and vegetables. The number of times (frequency) fruits and vegetables are consumed is measured and not the amount consumed. Data are presented as percentages for respondents 12 years of age and older.

**Percentage of the Population who Report Consuming Fruits and Vegetables 5 or More Times per day by Gender, Canada and Newfoundland and Labrador, 2005**



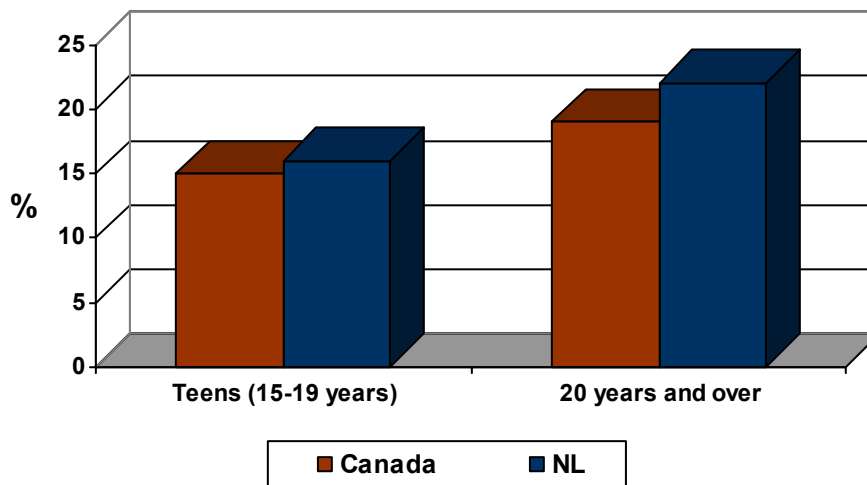
Source: Canadian Community Health Survey, Cycle 3.1, 2005

## Smoking Status

Data Source: Canadian Tobacco Use Monitoring Survey (CTUMS), February – December 2006.

Description: This variable indicates the type of smoker the respondent is, based on his/her smoking habits. A current smoker is defined as a person who currently smokes cigarettes daily or occasionally. Data are presented as percentages for respondents aged 15 to 19 years of age (teens) and 20 years of age and over.

**Percentage of Current Smokers by Age-group,  
Canada and Newfoundland and Labrador, 2006**



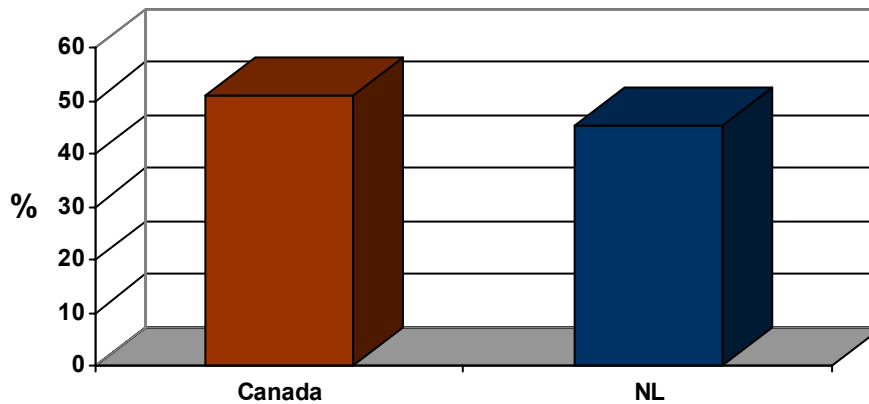
Source: Canadian Tobacco Use Monitoring Survey, 2006

## Routine Screening Mammography

Data Source: Statistics Canada, Canadian Community Health Survey, Cycle 3.1, 2005.

Description: Data are presented as percentages for females aged 50 to 69 years of age who reported they had a mammogram for routine screening within the last two years.

**Percentage of Women aged 50-69 Years who Report they Received a Routine Screening Mammogram Within the Last 2 Years, Canada and Newfoundland and Labrador, 2005**



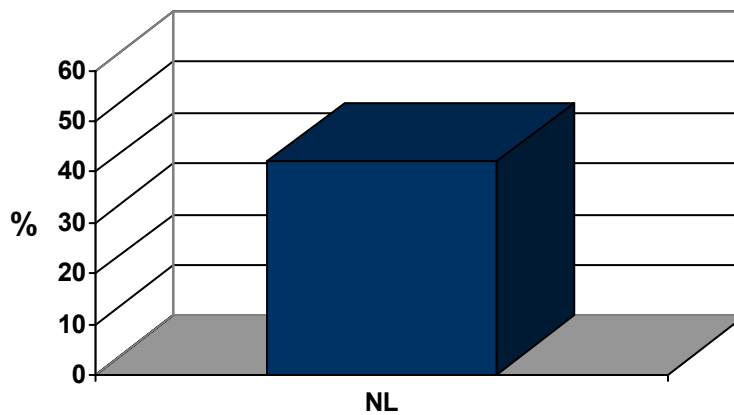
Source: Canadian Community Health Survey, Cycle 3.1, 2005

## Pap Smear

Data Source: Newfoundland and Labrador Provincial Cancer Care Program, Cervical Cancer Registry, 2006.

Description: Data are for females aged 20 to 69 years of age who had a Pap smear test in 2006.

**Percentage of Women Aged 20-69 years who had a Pap Smear Test in 2006**



Source: Newfoundland and Labrador Provincial Cancer Care Program, Cervical Cancer Registry, 2006

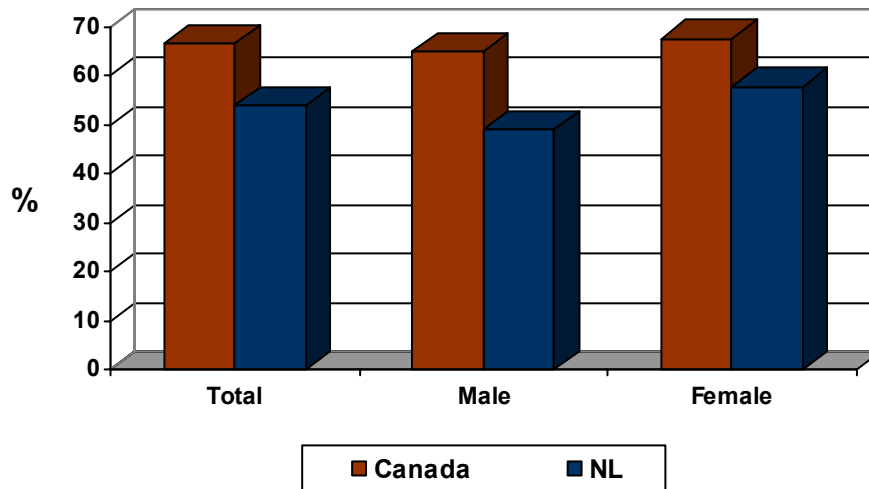
## Influenza Immunization

Data Source: Statistics Canada, Canadian Community Health Survey, Cycle 3.1, 2005.

Description: Data are presented as age-standardized percentages for respondents aged 65 years and over who reported they had an influenza immunization less than one year ago.

Percentages are age-standardized using the direct method and the 1991 Canadian Census population structure. Age-standardization allows for more meaningful comparisons as it removes or minimizes the effects of differences in age composition over time and across geographic areas.

**Age-standardized Percentage of the Population Aged 65 Years and Over who Report Having an Influenza Immunization Less Than 1 Year ago by Gender, Canada and Newfoundland and Labrador, 2005**



Source: Canadian Community Health Survey, Cycle 3.1, 2005



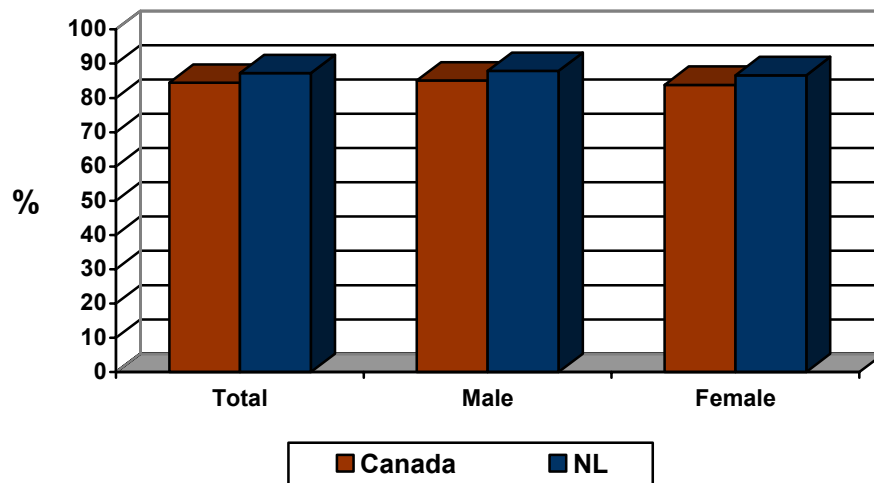
## Patient Satisfaction with Overall Health Care Services

Data Source: Statistics Canada, Canadian Community Health Survey, Cycle 3.1, 2005.

Description: Data are presented as age-standardized percentages for respondents aged 12 years and over who reported being very or somewhat satisfied with health care services received.

Percentages are age-standardized using the direct method and the 1991 Canadian Census population structure. Age-standardization allows for more meaningful comparisons as it removes or minimizes the effects of differences in age composition over time and across geographic areas.

**Age-standardized Percentage of the Population who Report Being Very or Somewhat Satisfied with Overall Health Care Services by Gender, Canada and Newfoundland and Labrador, 2005**



Source: Canadian Community Health Survey, Cycle 3.1, 2005

## Difficulty Accessing Routine or On-going Care

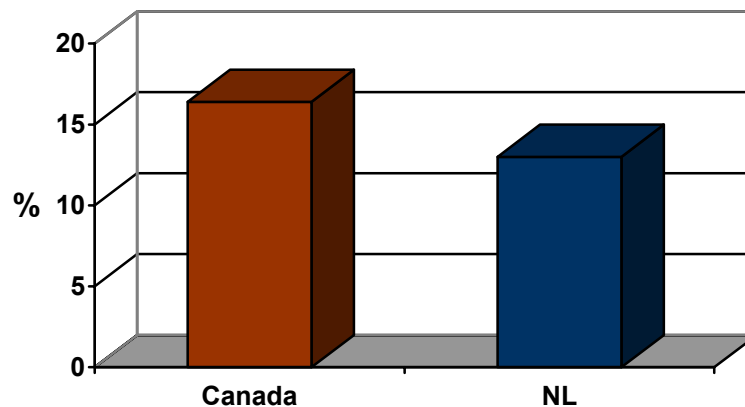
Data Source: Statistics Canada, Canadian Community Health Survey, Cycle 3.1, 2005.

Description: Data are presented as age-standardized percentages for respondents aged 15 years and over who reported difficulty accessing routine or on-going care at any time of day.

Routine or on-going care refers to health care provided by a family or general physician including annual check-up, blood tests or routine care for an on-going illness (ex: prescription refills).

Percentages are age-standardized using the direct method and the 1991 Canadian Census population structure. Age-standardization allows for more meaningful comparisons as it removes or minimizes the effects of differences in age composition over time and across geographic areas.

**Age-standardized Percentage of the Population who Report Difficulty Obtaining Routine or On-going Health Services, Canada and Newfoundland and Labrador, 2005**



Source: Canadian Community Health Survey, Cycle 3.1, 2005

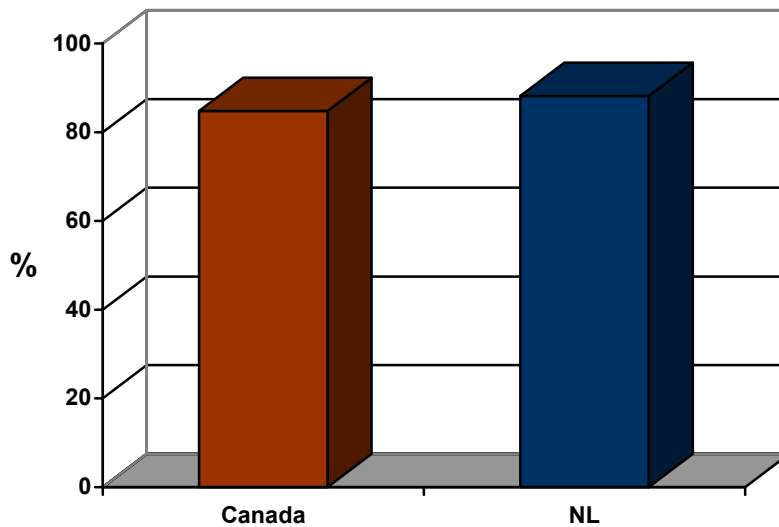
## Regular Family Doctor

Data Source: Statistics Canada, Canadian Community Health Survey, Cycle 3.1, 2005.

Description: Data are presented as age-standardized percentages for respondents aged 12 years and over who reported they have a regular family doctor.

Percentages are age-standardized using the direct method and the 1991 Canadian Census population structure. Age-standardization allows for more meaningful comparisons as it removes or minimizes the effects of differences in age composition over time and across geographic areas.

**Age-standardized Percentage of the Population who Report Having a Regular Family Doctor, Canada and Newfoundland and Labrador, 2005**



Source: Canadian Community Health Survey, Cycle 3.1, 2005

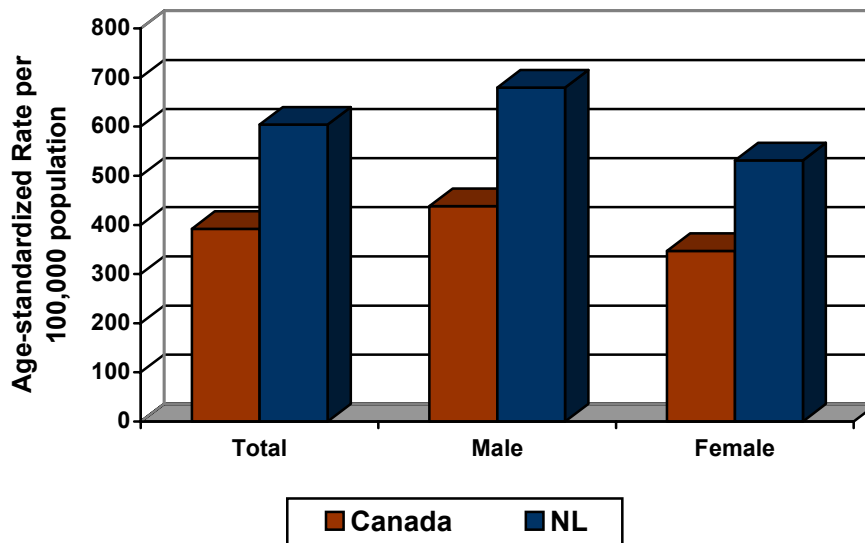
## Hospitalization Rates for Ambulatory Care Sensitive Conditions

Data Source: Canadian Institute for Health Information (CIHI), 2004/05.

Description: According to the Canadian Institute for Health Information (CIHI), hospitalizations for Ambulatory Care Sensitive Conditions are considered to be a measure of access to appropriate medical care. While not all admissions for these conditions are avoidable, it is assumed that appropriate ambulatory care could prevent the onset of this type of illness or condition, control an acute episodic illness or condition, or manage a chronic disease or condition. A disproportionately high rate is presumed to reflect problems in obtaining access to primary care. Data is based on the population under the age 75 years.

Rates are age-standardized using the direct method and the 1991 Canadian Census population structure. Age-standardization allows for more meaningful comparisons as it removes or minimizes the effects of differences in age composition over time and across geographic areas.

**Age-standardized Hospitalization Rates for Ambulatory Care Sensitive Conditions by Gender, Canada and Newfoundland and Labrador, 2004/05**



Source: Canadian Institute for Health Information (CIHI), 2004/05

## Newfoundland and Labrador Wait Times for Select Services, January – March 2007

Data Source: Regional Health Authorities, 2007.

Description: Wait time from time of decision to treat. This is when the patient and the appropriate physician (specialist) agree to a particular service, and the patient is ready to receive the service. Wait time ends when the patient receives the service, or the initial service in a series. The wait is then measured in calendar days between start date and end date.

Service Area	Pan-Canadian Benchmarks	Newfoundland and Labrador Wait Times (April - June, 2007)
Curative Radiotherapy	Within 4 weeks (28 days) of being ready to treat	<ul style="list-style-type: none"> <li>93% in 30 days</li> </ul>
Coronary Bypass Surgery (CABG)		<ul style="list-style-type: none"> <li>92% of CABG cases completed in 182 days.</li> </ul>
Cataract	Within 16 weeks (112 days) for patients who are at high risk	<ul style="list-style-type: none"> <li>Eastern Health: 75.4%</li> <li>Central Health (Gander): 100% in 90 days</li> <li>Central Health (GF-W): 100% in 90 days</li> <li>Western Health: 97%</li> <li>Labrador-Grenfell Health: 75%</li> </ul>
Hip Replacement	Within 26 weeks (182 days)	<ul style="list-style-type: none"> <li>Eastern Health: 78.7%</li> <li>Central Health: 100%</li> <li>Western Health: 100%</li> <li>Labrador-Grenfell Health: Data suppressed</li> </ul>
Knee Replacement	Within 26 weeks (182 days)	<ul style="list-style-type: none"> <li>Eastern Health: 77.5%</li> <li>Central Health: 96.4%</li> <li>Western Health: 96%</li> <li>Labrador-Grenfell Health: Data suppressed</li> </ul>
<p>Notes: Joint replacement and hip fracture repair data is suppressed for the Labrador Grenfell Health region, as fewer than 10 cases were performed during this quarter. Likewise, hip fracture repair data is suppressed for the Central Health region, as fewer than 10 cases were performed during this quarter.</p>		

Source: Regional Health Authorities, 2007

Proportion 65+ with at least one Acute Care Hospital Separation

Data Source: Clinical Database Management System, 2005/06, Newfoundland and Labrador Centre for Health Information; Population Estimates for Census Subdivisions, Statistics Canada, 2005 (based on 2001 Census).

Description: Acute Care (inpatient) (care-episode type '0') is defined as care provided primarily for the diagnosis and short-term treatment of patients with a wide range of diseases or injuries.

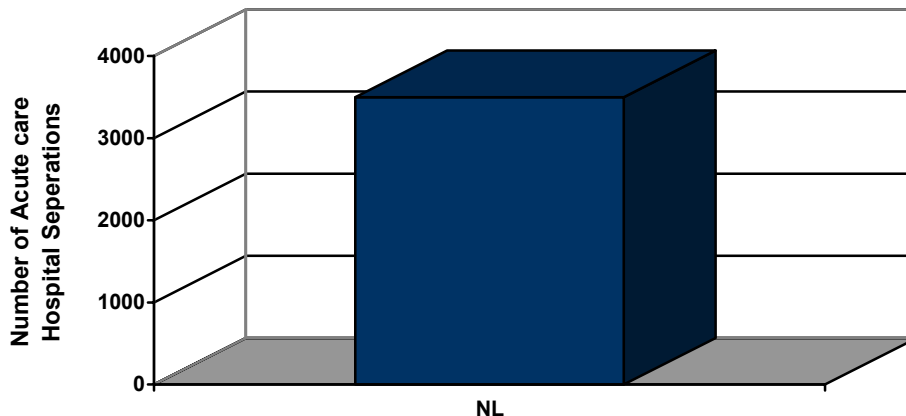
Hospital Separations are defined as the end point of an inpatient hospital contact which consists of one or several days of care. A separation from a health care facility occurs anytime a patient (or resident) leaves because of death, discharge, or sign-out against medical advice or transfer. The number of separations is the most commonly used measure of the utilization of hospital services. Separations, rather than admissions, are used because hospital abstracts for inpatient care are based on information gathered at the time of separation. Note that a given individual may have been hospitalized more than once during the fiscal year.

$$\text{Acute care hospital separations for people 65+ as a percentage of total acute care hospital} = \frac{\text{Number of acute care hospital separations for people aged 65+}}{\text{Total number of acute care hospital separations}} \times 100$$

Numerator: Number of acute care hospital separations for people aged 65 years and over, Newfoundland and Labrador, 2005/06

Denominator: Total number of acute care hospital separations (all ages) excluding live and still births, Newfoundland and Labrador, 2005

**Percentage of Acute Care Hospital Separations for People aged 65+, Newfoundland and Labrador, 2005/06**



Source: Clinical Database Management System, 2005/06, Newfoundland and Labrador Centre for Health Information, 2005