

Prostate Cancer

fast facts

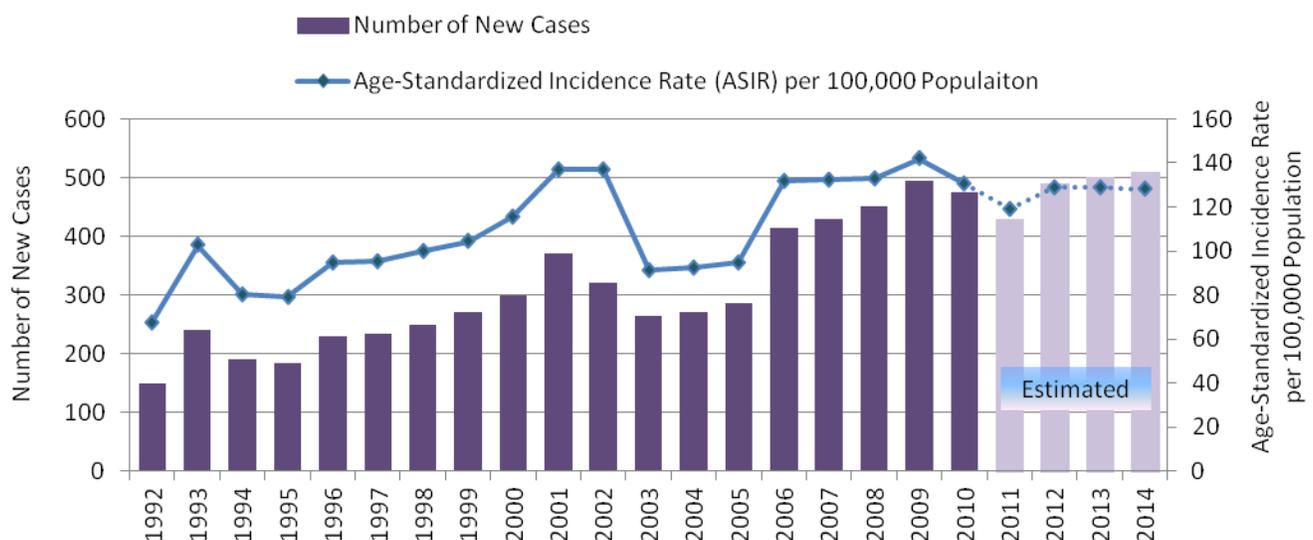
Prostate cancer is a malignant tumour affecting males that starts in the cells of the prostate. The tumour grows slowly but can often be completely removed or successfully managed. The likelihood of developing prostate cancer increases after age 50 and is diagnosed most frequently in men aged 65 years and older (Source: Canadian Cancer Society). This fast facts presents prostate cancer trends across Canada and Newfoundland and Labrador.

In this issue...

- Incidence Rates
- Prostate Cancer Risk
- Mortality Rates
- Hospitalization Rates
- Physician Visits

In Canada, the incidence rate for prostate cancer peaked in 1993 and 2001, during which time there was intensified screening activity using the prostate-specific antigen (PSA) test. Newfoundland and Labrador observed the highest incidence in prostate cancer occurrence in 2009. This may be due to a growing and aging provincial population and a heightened public awareness of the disease in recent years. Prostate cancer incidence rates vary considerably across Canada, likely due to variations in PSA testing from province to province.

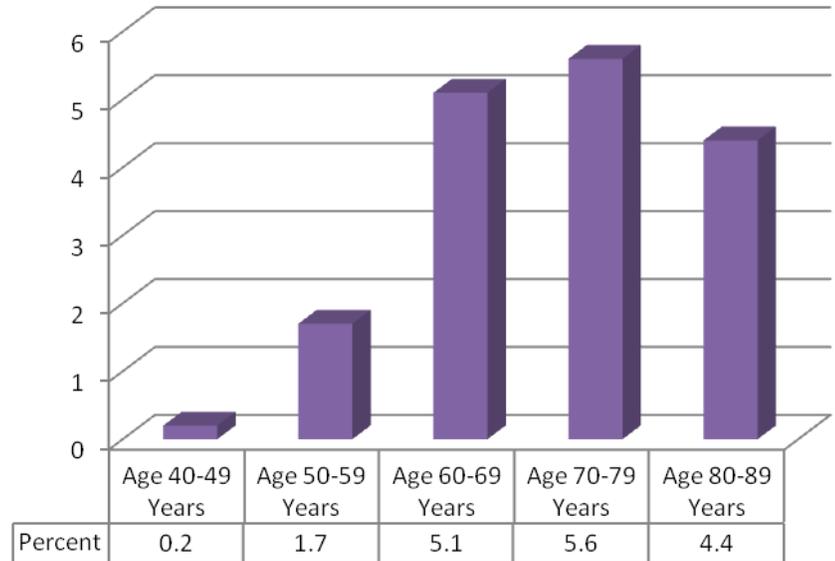
New Cases and Incidence Rates for Prostate Cancer, Newfoundland and Labrador, 1992-2014



Sources: 1) Statistics Canada. Table 103-0553— New cases and age-standardized rate for primary cancer (based on the February 2014 CCR tabulation file), by cancer type and sex, Canada, provinces and territories, annual, CANSIM (database); 2) Canadian Cancer Society's Advisory Committee on Cancer Statistics. Canadian Cancer Statistics 2011-2014. Toronto, ON: Canadian Cancer Society, 2011-2014.

Canadian males are more likely to develop prostate cancer than any other type of cancer. One in eight males will develop prostate cancer in his lifetime. The risk of developing prostate cancer increases with age. Canadian males aged 70-79 years have the highest risk of developing prostate cancer within the next 10 years compared to other age groups. For example, a 70 year-old Canadian man has a 5.6% chance of developing prostate cancer before he turns 80 years; whereas a 50 year-old Canadian man has a 1.7% chance of developing cancer by the time he turns 60 years.

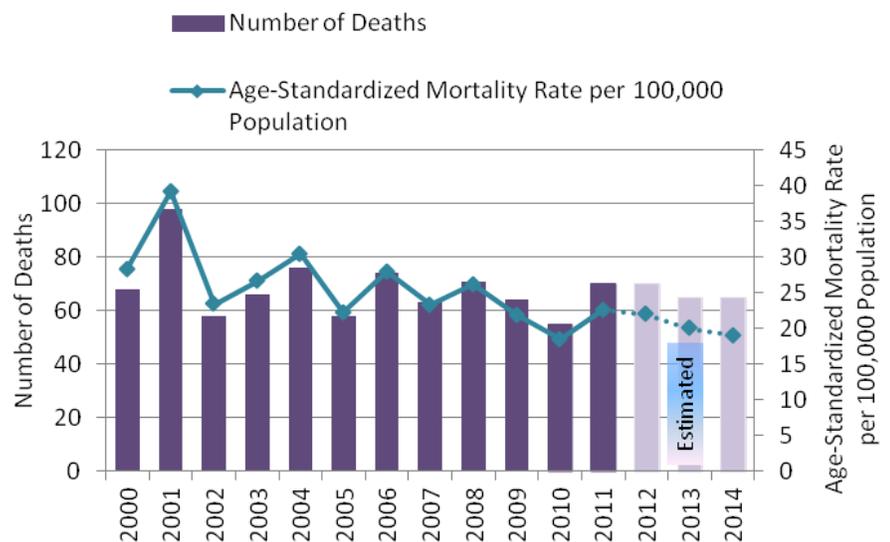
Probability (%) of Developing Prostate Cancer Within the Next 10 Years, by Age Group, Canada,



Source: Canadian Cancer Society's Advisory Committee on Cancer Statistics. *Canadian Cancer Statistics 2014*. Toronto, ON: Canadian Cancer Society, 2014.

In 2011, 70 male residents of Newfoundland and Labrador died of prostate cancer. This number represents 9.8% of all male cancer deaths in the province that year. The average age of males who died of prostate cancer in 2011 was 80 years. It is estimated that 65 male residents of the province will die of prostate cancer in 2014.

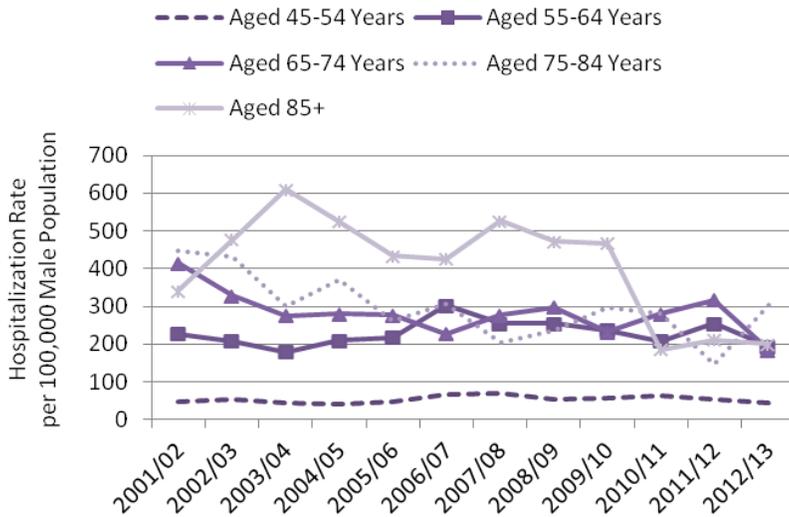
Number of Deaths and Mortality Rates due to Prostate Cancer, Newfoundland and Labrador, 2000



Sources: 1) Statistics Canada, Canadian Vital Statistics, Birth and Death Databases (CANSIM table 102-0552); 2) Canadian Cancer Society's Advisory Committee on Cancer Statistics. *Canadian Cancer Statistics 2012-2014*. Toronto, ON: Canadian Cancer Society, 2012-2014; 3) Statistics Canada, Annual Mortality Files, 2011.

Between 2000 and 2011, the age-standardized mortality rate of prostate cancer for the province decreased from 28.3 to 22.6 per 100,000 population. This decrease likely reflects improved prostate cancer treatments including hormonal therapy and radiation therapy for early and advanced-stage disease, as well as earlier detection of the disease.

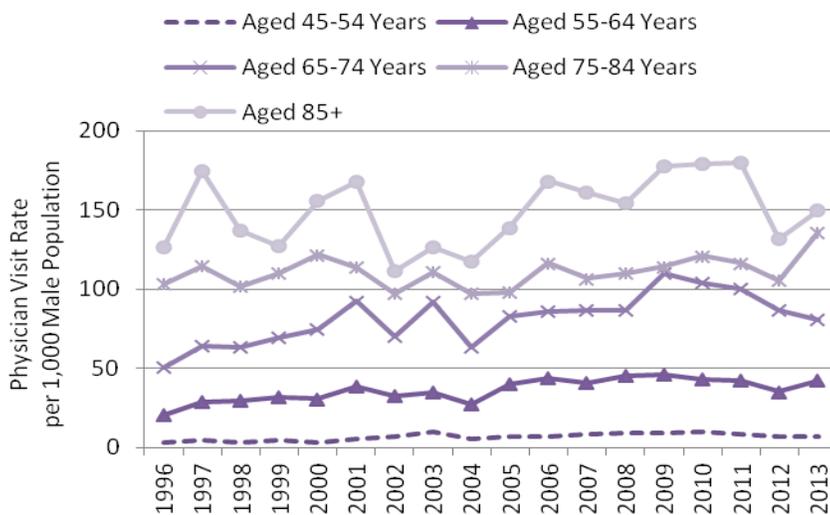
Hospitalization Rates for Prostate Cancer by Age Group,



Source: NLCHI Clinical Data Management System, 20001/02-2012/13

- Includes acute care hospitalizations with the most responsible diagnosis of prostate cancer (ICD-10-CA diagnosis code C61)

Fee-for-Service Physician Visit Rates for Prostate Cancer by Age Group, Newfoundland and Labrador,



Source: Newfoundland and Labrador Medical Care Program Fee-For-Service Physician Claims Database, 1996-2013.

- Includes visits to fee-for-service physicians only. Visits to salaried physicians (~1/3 of the province's physicians) are not included as this data is not readily available.
- Includes physician visits for prostate cancer (ICD-9 diagnosis code 185) -related care.

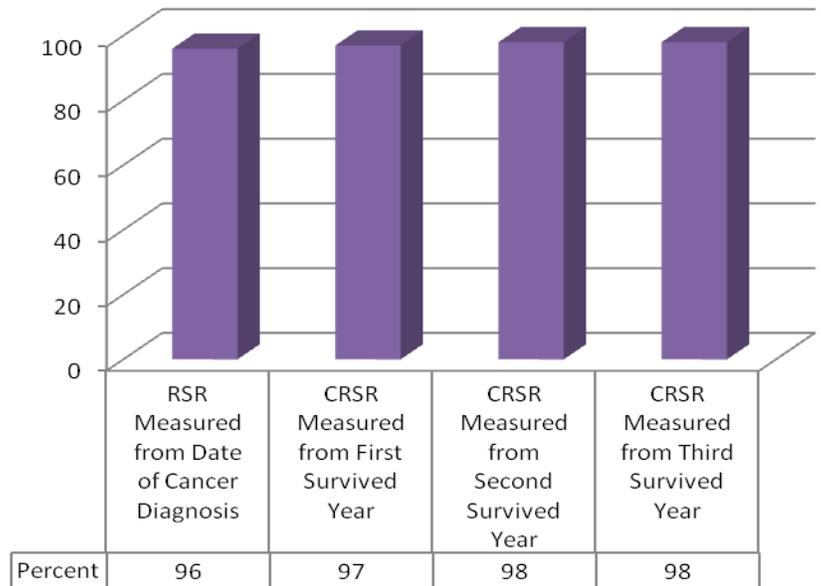
Between 2001/02 and 2012/13, the prostate cancer hospitalization rate for Newfoundland and Labrador decreased from 78.9 (per 100,000 males) to 72.0. Over the 12-year period, the greatest decline in prostate cancer hospitalization rates was observed among males aged 65 years and older. The most significant decline was observed among the 65-74 year age group which had a 55.6% decrease in the prostate cancer hospitalization rate.

From 1996 to 2013, the overall rate of physician visits for prostate cancer-related care increased 167.1% in Newfoundland and Labrador. The overall visit rate increased from 9.0 per 1,000 male population in 1996 to 24.1 per 1,000 male population in 2013. This increase occurred across all age groups and may be attributed to a growing number of visits to general physicians and urologists for prostate cancer screening, diagnosis and treatment.

Males with prostate cancer have an excellent chance of survival compared to most other types of cancer¹. Between 2006 and 2008, the five-year relative survival ratio (RSR²) for males diagnosed with prostate cancer was 96%. This means that males with prostate cancer have a 96% chance of surviving at least five years after diagnosis compared to the general population (who is free from prostate cancer).

Survival of patients with prostate cancer generally improves with increased time since diagnosis. The five-year conditional relative survival ratio (CRSR³) was 97% for those patients who survived the first year after diagnosis and increased to 98% for those who had survived two or three years since diagnosis. Survival varies by age, sex, stage of cancer at diagnosis, treatments and response to treatment.

Five-Year Observed, Relative and Conditional Survival for Prostate Cancer, Aged 15-99 Years at Diagnosis,



¹ Source: Canadian Cancer Society's Advisory Committee on Cancer Statistics. *Canadian Cancer Statistics 2014*. Toronto, ON: Canadian Cancer Society, 2014.

² Five-year relative survival (RSR) is defined as the ratio of the observed survival in a group of people diagnosed with cancer to the expected survival in a comparable group of people—free from the cancer under study—in the general population.

³ Five-year conditional relative survival ratio (CRSR) is defined as a measure that reflects the likelihood a person will survive an additional five years once he or she has already survived a fixed number of years since a cancer diagnosis, compared to the expected survival in a comparable group of people—free from the cancer under study—in the general population.

About the Centre for Health Information

The Newfoundland and Labrador Centre for Health Information (NLCHI) provides quality information to health professionals, the public, researchers and health system decision-makers. Through collaboration with the health system, NLCHI supports the development of data and technical standards, maintains key health databases, prepares and distributes health reports, and supports and carries out applied health research and benefits evaluations. The NLCHI's mandate also includes the development and implementation of a confidential and secure provincial electronic health record, including the change management required to support adoption by end user clinicians.