

COLORECTAL CANCER HIGHLIGHTS FROM THE CANADIAN CANCER STATISTICS NOVEMBER 2021



This publication was developed by the Canadian Cancer Statistics Advisory Committee in collaboration with the Canadian Cancer Society, Statistics Canada and the Public Health Agency of Canada with data provided by the provincial and territorial cancer registries.
cancer.ca/statistics

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These statistics are based on cancer incidence data up to **2017**, and cancer death data up to **2018** (except Quebec, where cancer incidence data were available up to 2010).

These historical data were used to estimate cancer incidence and deaths in 2021.

It is important to note that since these data are from before 2019 and therefore do not reflect the impact of the COVID-19 pandemic on cancer control or diagnosis patterns, these projections reflect the **underlying** cancer incidence and mortality trends in the Canadian population.

This document highlights some of the colorectal cancer-specific statistics and is meant for informational and educational purposes.

HOW MANY PEOPLE GET CANCER?

On average, 68 Canadians will be diagnosed with colorectal cancer every day.

Important terms to understand:

Cancer incidence rate: the number of new occurrences of cancer in a population over a period of time. People who have a history of cancer are **not** included.

Understanding cancer incidence is useful for determining the amount of diagnosis, treatment, and support services that are needed.

229,200

*new cancer cases, 2021
(all cancer types)*

about

1 IN 10

*new cancer cases are colorectal cancer
(24,800 new cases, 2021)*

COLORECTAL CANCER INCIDENCE BY SEX

Incidence of colorectal cancer (CRC) varies by sex.

11.6% of new cancer cases in males (13,700) and **10%** in females (11,100) can be attributed to CRC.

COLORECTAL CANCER INCIDENCE BY AGE

Over half (**56%**) of CRC cases are expected to occur in Canadians who fall within the age covered by the screening guidelines (50 to 74 years).

It is expected that **8%** of CRC cases will be diagnosed in people younger than 50 years of age.

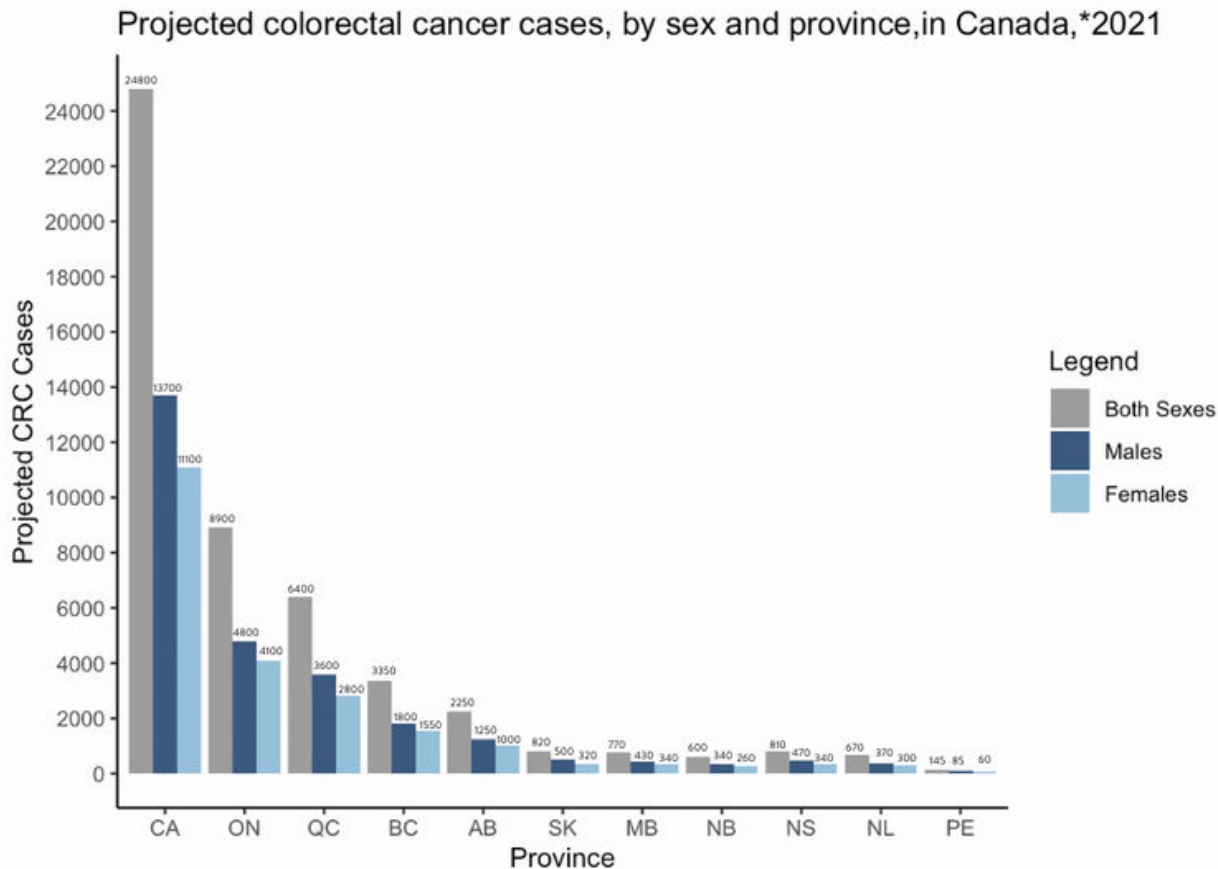


FIGURE 1

Figure 1. displays the projections of new colorectal cancer cases in 2021 based on the Canadian Cancer Society Report. As seen in figure 1., new colorectal cancer cases are expected to be higher in males relative to females across all Canadian provinces. Nationally, 24,800 cases (13,700 males and 11,100 females) are predicted to have developed colorectal cancer in year 2021. As expected, Ontario and Quebec are the leading provinces in CRC incidence as these two provinces account for 60% of the Canadian population.

* The 2021 mortality projections were based on mortality data up to 2018. The 2021 incidence projections were based on incidence data up to 2017. The impact of the COVID-19 pandemic on CRC incidence & mortality in Canada remains unknown and is not reflected through this data.

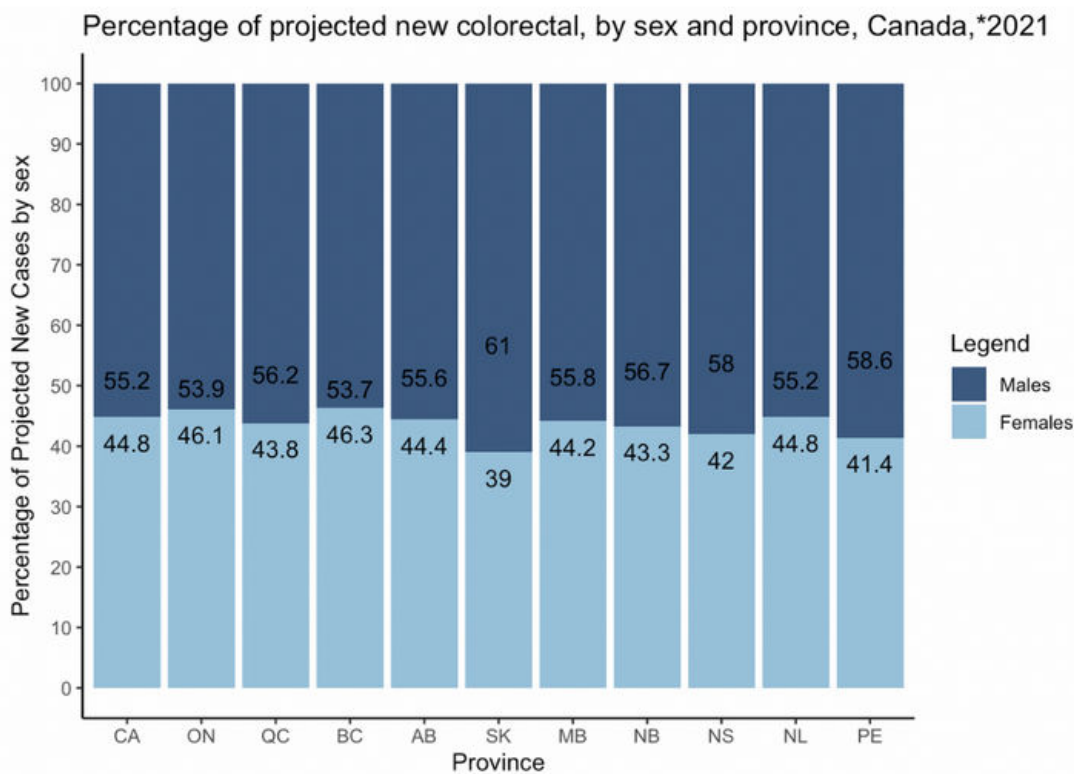


FIGURE 2

Figure 2. displays the percentages of colorectal cancer by province and sex in Canada in 2021. Nationally, 55.2% of the individuals projected to be newly diagnosed with colorectal cancer are males and 44.8% are females. The percentage of males expected to be diagnosed with colorectal cancer remains higher relative to females through all provinces of Canada in 2021.

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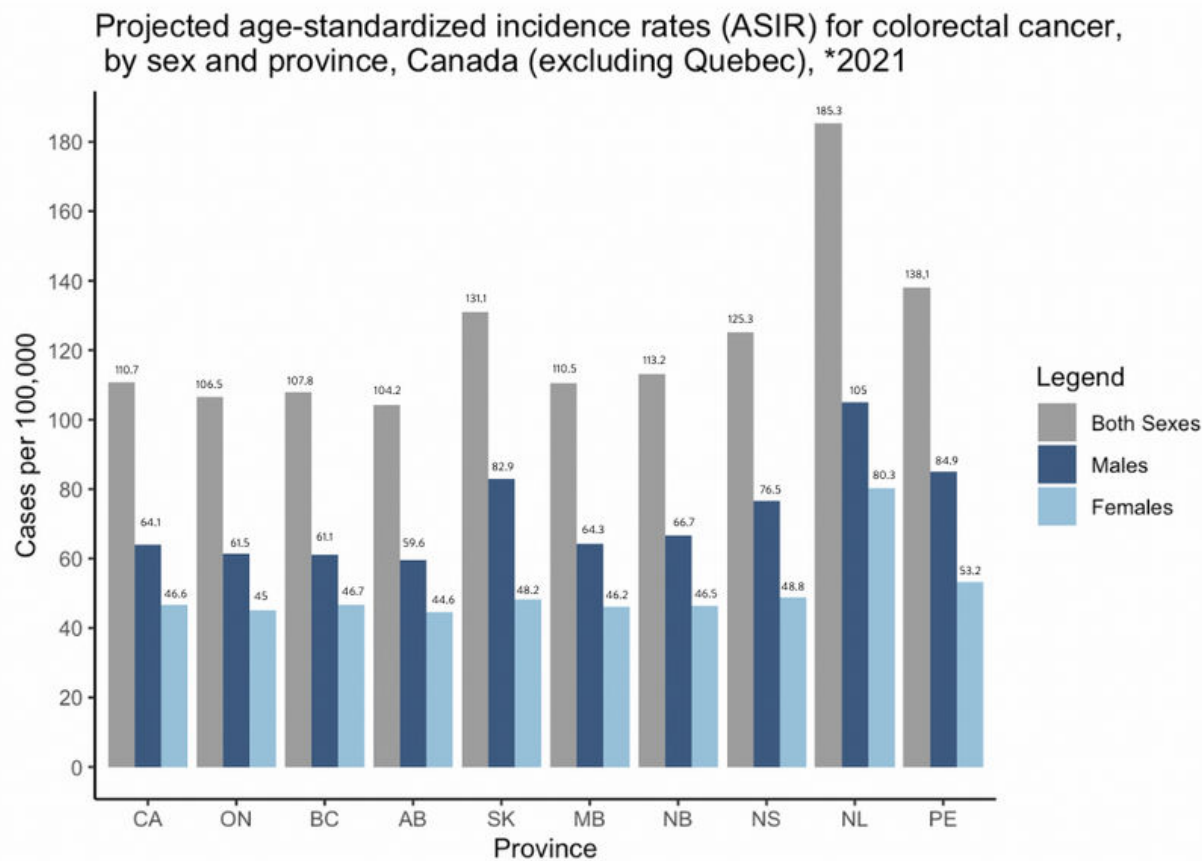


FIGURE 3

Figure 3. represents the age-standardized incidence rates for colorectal cancer by sex and province, in Canada in 2021. Age standardization is a technique used in epidemiology to allow populations to be compared when the age distribution of the populations are different; it adjusts for the differences in age profiles (age-subgroups). Since we're comparing the incidence rate between provinces we need to adjust for age. The incidence rate here is defined as the rate of new colorectal cancer cases over a period of time (2021). The incidence rate for colorectal cancer across Canada in 2021 is projected to be 110.7 cases per 100,000 individuals. As we adjust for age, CRC incidence rates appear to be the highest in Newfoundland and Labrador, followed by Prince Edward Island, and Saskatchewan.

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HOW MANY PEOPLE DIE FROM CANCER?

On average, 26 Canadians will die from colorectal cancer every day.

Important terms to understand:

Cancer mortality rate: the number of deaths from cancer during a specific time period.

Understanding cancer mortality is useful for determining the amount of healthcare and support services that are needed, especially for those who are at the end of life.

12%

of all cancer deaths will be due to colorectal cancer

1 IN 37

The probability of a Canadian dying from colorectal cancer

COLORECTAL CANCER MORTALITY BY SEX

CRC mortality rates are decreasing in both males and females, with the rate in females decreasing more rapidly. Part of this decrease in mortality may be driven by the decrease in incidence and improvements in treatment.

In males, CRC accounts for **12%** (5,300) of all cancer deaths.

In females, CRC accounts for **11%** (4,300) of all cancer deaths.

COLORECTAL CANCER MORTALITY BY AGE

42% of CRC deaths are expected to occur among Canadians who fall within the age covered by the screening guidelines (50-74 years).

4% are expected to occur in Canadians who are younger than 50 years of age.

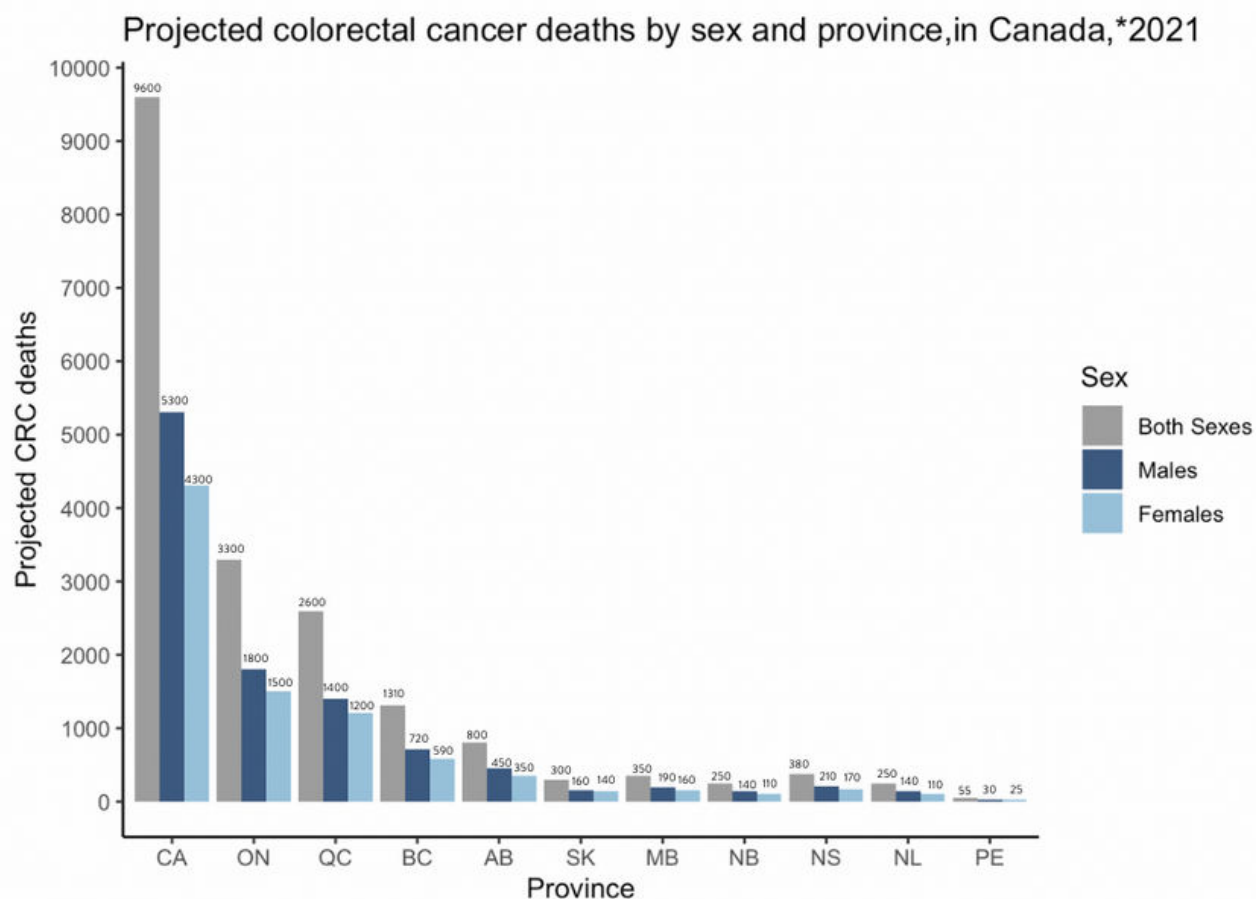


FIGURE 4

Figure 4. represents the distribution of projected CRC-related deaths across Canada in 2021. In total 9600 individuals (5300 males and 4300 females) are projected to die from colorectal cancer in 2021. Projected deaths are expected to be higher in males and in the provinces of Ontario and Quebec.

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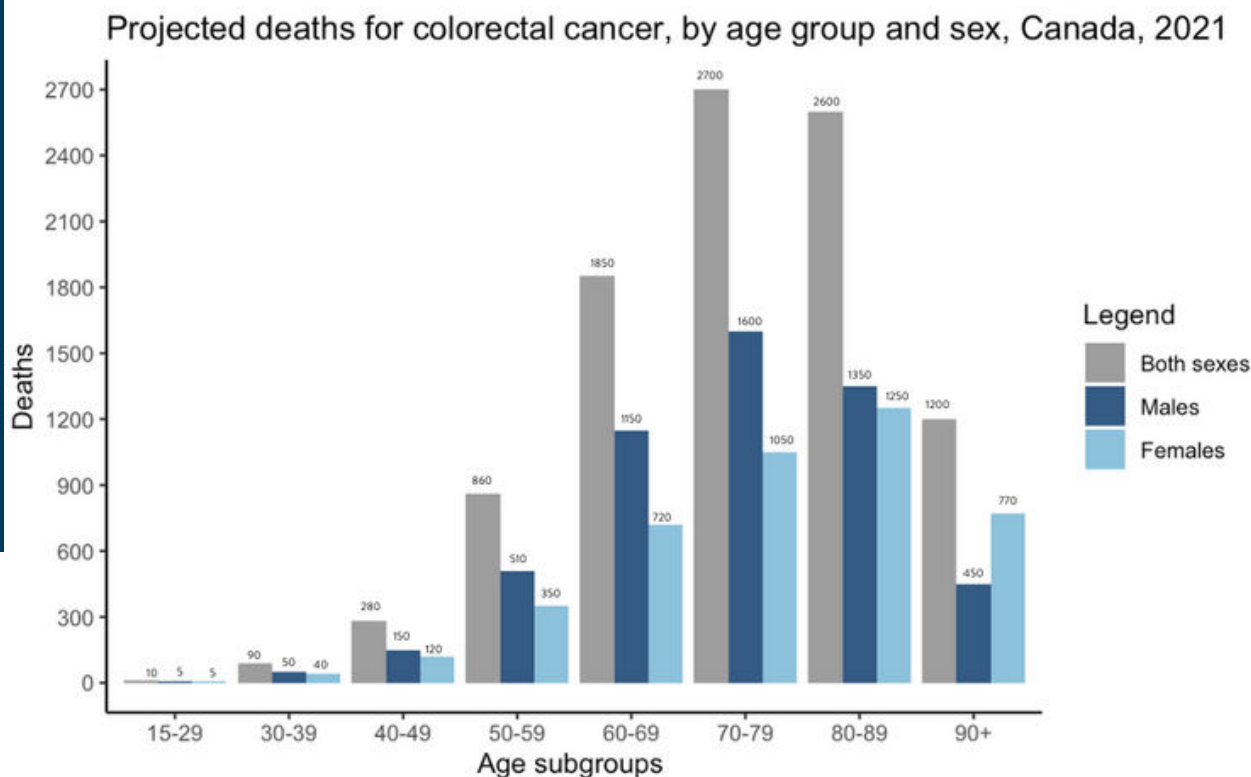


FIGURE 5

Figure 5. represents the distribution of projected CRC deaths by age and sex in Canada in 2021. As seen in figure 3., CRC deaths are projected to increase from 90 (50 Males and 40 Females) at 30-39 to 2,700 (1600 Males and 1050 Females) at 70-79. CRC deaths are projected to be around 2,600 (1350 Males 1250 Females) in the age group 80-89. Among all age groups, males are expected to have higher deaths relative to females, except for individuals aged 90 years and above.

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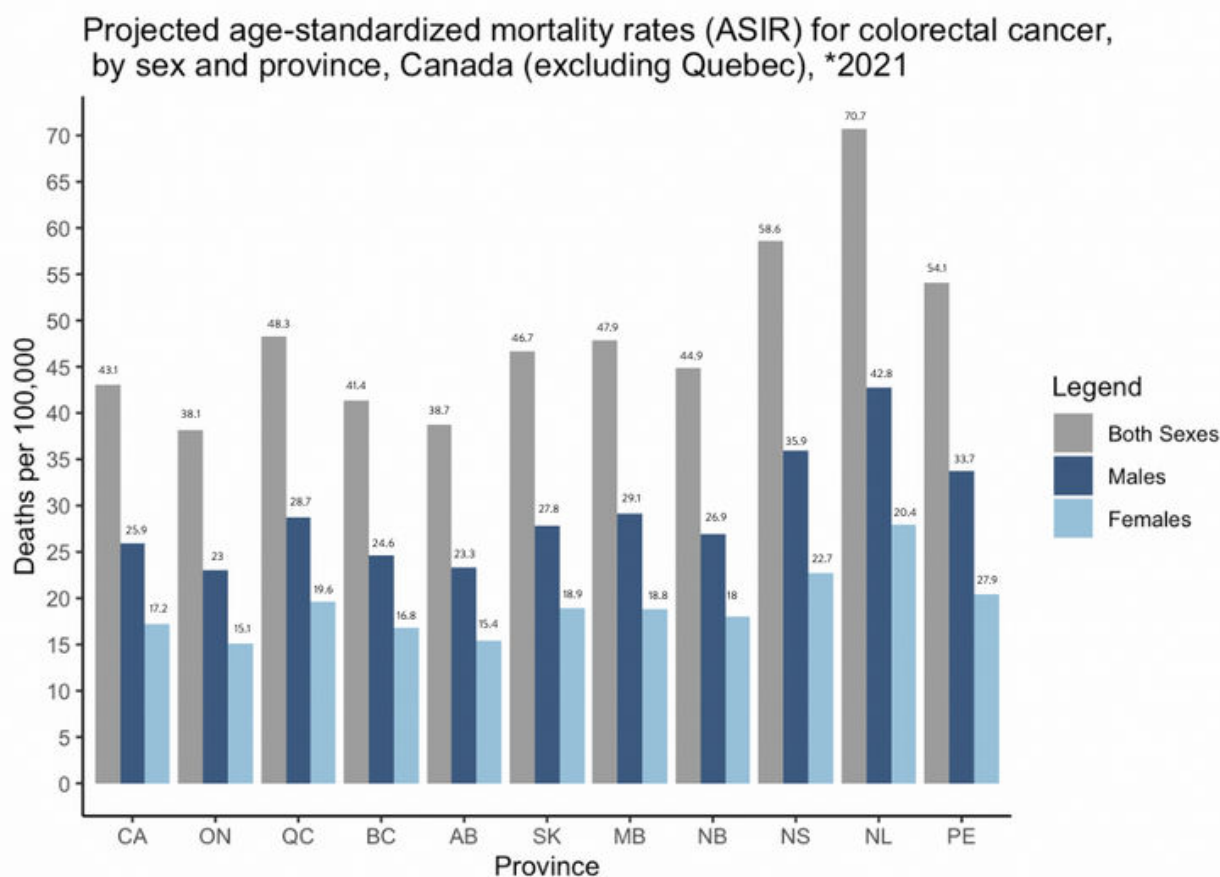


FIGURE 6

Figure 6. displays the distribution of age standardized mortality rates for colorectal cancer in Canada in 2021. 43.1 deaths per 100,000 individuals are expected to die of colorectal cancer. The mortality rate appears to be the highest in the provinces of Newfoundland and Labrador, Nova Scotia, and Prince Edward Island. It is also estimated to be higher for males relative to females across all provinces. Mortality rate is defined as the number of deaths from colorectal cancer in the specific population in 2021.

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HOW LIKELY IS SOMEONE TO SURVIVE CANCER?

Important terms to understand:

Net survival: the percentage of people diagnosed with cancer who survive a given period of time past their diagnosis, assuming that the cancer is the only possible cause of death.

5- or 10-year net survival rate: The percentage of people who are alive five or ten years after they were diagnosed with or started treatment.

Understanding survival rates allows researchers to compare survival across populations and over time, and to monitor the effects of early detection and diagnosis and treatment on cancer outcomes.

67%

5-year net survival rate for colorectal cancer

61%

10-year net survival rate for colorectal cancer

COLORECTAL CANCER 5- AND 10-YEAR NET SURVIVAL RATE

While CRC survival has improved, the 5-year net survival is still only 67% - this is likely a reflection of the fact that almost 50% of CRCs are diagnosed at stage III and IV. With better participation in population-based CRC screening programs, it is expected that more cancers will be found early and survival will increase.

IS COLORECTAL CANCER INCIDENCE DECREASING?

Yes. Overall, CRC incidence rates decreased between 1984-1995 (decline of 1.1% per year), stabilized between 1995-2001, and decreased slightly between 2001-2013 (decline of 0.5% per year).

From 2013 until now, CRC incidence rates have decreased more steeply in both males (4.3% decrease per year) and females (3.4% decrease per year).

However, the decline may be confined to older adults as rates are increasing among adults younger than 50 years of age in Canada and the US.

BETTER SCREENING

Better screening for the disease, which can detect treatable precancerous polyps and reduce cancer incidence, is likely responsible for the overall decline in CRC incidence rates.

Between 2007 and 2016, Yukon and every province in Canada except Quebec implemented CRC screening programs.



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