



The 2019-2029 Canadian Strategy for Cancer Control (the Strategy) is a 10-year road map to improve the quality and outcomes of cancer care for all people in Canada.

This document is a companion to the Strategy's Priority 1. It highlights **data and evidence** showing the magnitude of gaps in care and where action on cancer control could have the greatest impact across Canada.

As Steward of the Strategy, the Canadian Partnership Against Cancer (the Partnership) is responsible for monitoring and reporting on progress that has been made towards achieving the Strategy's goals. The Partnership is working with partners across the country to develop a set of indicators for measuring progress towards the Strategy's goals and associated targets. They will be used to report to Canadians starting in the fall 2020.



For more information about the Canadian Strategy for Cancer Control, visit [partnershipagainstcancer.ca/cancer-strategy](https://partnershipagainstcancer.ca/cancer-strategy)

# Decrease the risk of people getting cancer

## **ACTION 1:**

Help people to stop smoking or not start in the first place and live healthier lives.

## **ACTION 2:**

Adopt proven practices known to reduce the risk of cancer.




**Up to four in 10 cancer cases are preventable** — which means in Canada, up to 40,000 fewer people could develop cancer each year.<sup>1</sup>

Ways to reduce cancer risk:

**Not smoking**

**Smoking causes  
1 in 5 cancers**



**and kills more than  
45,000  
people each year  
in Canada**



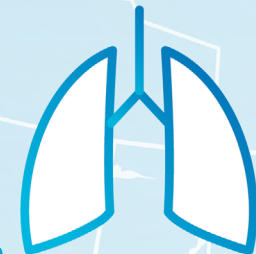
**16,000  
from lung cancer.**<sup>2,3,4</sup>

**\$16.2 billion**


Estimated health and economic cost of tobacco use in Canada (\$6.5 billion of which is attributed to direct health care costs)<sup>19</sup>

Over **\$9.5 billion**

Estimated cost of cancers caused by tobacco use, physical inactivity and alcohol use<sup>19</sup>



Investment in tobacco research reached a peak in 2016 at **\$7 million**<sup>9</sup>

**16%**  of people in Canada reported **smoking daily or occasionally**

**Smoking varies considerably by**

Jurisdiction

**14%** in British Columbia



**62%** in Nunavut<sup>5</sup>

Mental health condition

**17%** good/very good/excellent mental health



**31%** poor/fair mental health

Data source: Statistics Canada, Canadian Community Health Survey

Smoking has increased among adolescents.

% of adolescents aged **16-19 years** who reported smoking 15+ days in the past month:

**4.8%**  
in 2017



**7.4%**  
in 2018<sup>6</sup>

If Canada achieves the national target of **5%** of the population smoking by 2035, there could be:

**31,000**

fewer people diagnosed with lung cancer by 2035



**20,000**

fewer people dying from lung cancer by 2035<sup>5</sup>

Beyond its importance for prevention, quitting smoking is one of the best things people who have cancer can do to help improve their chances of benefitting from cancer treatment.

**1 in 5**

Nearly **5,000**

**\$198 – \$295 million**

**66%**  
(73 of 111)

people diagnosed with cancer are smokers<sup>7,8</sup>

cancer patients' treatments fail every year due to smoking<sup>8</sup>

annual estimated costs associated with failed cancer treatment due to continued smoking among cancer patients in Canada<sup>8</sup>

of cancer centres in Canada report offering smoking cessation supports to cancer patients

## Getting vaccinated

Over 7,000 people each year are diagnosed with cancers caused by infections.<sup>10</sup>

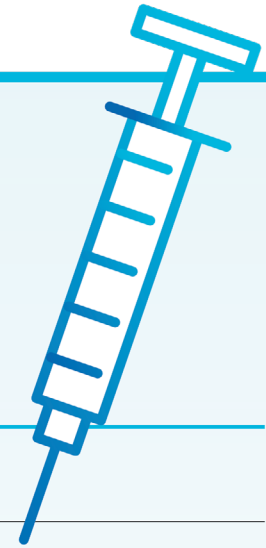
>90% of infection-associated cancers are due to being infected with:

Human papillomavirus (HPV)

Hepatitis B virus

Hepatitis C virus

*Helicobacter pylori*<sup>10</sup>



HPV vaccines can prevent more than **90%** of cervical cancer cases

Cervical cancer continues to pose a significant economic toll in Canada, estimated at

**\$24 million**  
per year<sup>20</sup>

National HPV vaccination uptake = 67%

**Vaccination uptake (for final dose) varies by jurisdiction:<sup>12</sup>**

Girls

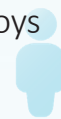


**57%** in Northwest Territories



**92%** in Newfoundland and Labrador

Boys



**67%** in Alberta



**90%** in Prince Edward Island

If HPV vaccination uptake could be increased from **67% to 90%** there could be:<sup>5</sup>

↓ (+) **23%**

reduction in new cervical cancer cases

↓ (skull) **21%**

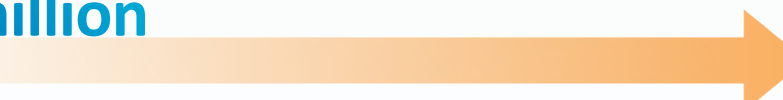
reduction in the number of cervical cancer related deaths

The benefits to Canadians and the healthcare system would be even greater if other HPV-related illnesses (e.g., anal, penile, oral cavity and oropharyngeal cancers) that could be prevented were taken into account.

Research investment on infectious agents that cause cancer has increased.



**\$6 million**  
in 2005



**\$10 million**  
in 2016<sup>9</sup>  
(**43%** to HPV research)

## Eating well

**\$13.8 billion**

Estimated economic burden (direct and indirect costs) of not meeting Canadian food recommendations<sup>21</sup>

Food insecurity affects the quality and amount of food people eat, which potentially increases cancer risk.<sup>(14)</sup>

**8%**

of households in Canada reported experiencing food insecurity in 2011-12



**37%**

Nunavut had the highest rate of food insecurity<sup>15</sup>



% of people who reported eating fruit and vegetables 5+ times a day:<sup>16</sup>

**19%**

**severely food insecure households**

**vs**

**30%**

**food secure households**

By 2042,



Eating more fruits could prevent over 20,000 cancers<sup>13</sup>



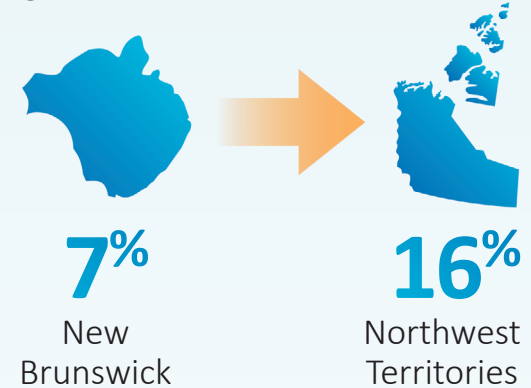
Eating more vegetables could prevent over 10,000 cancers<sup>13</sup>



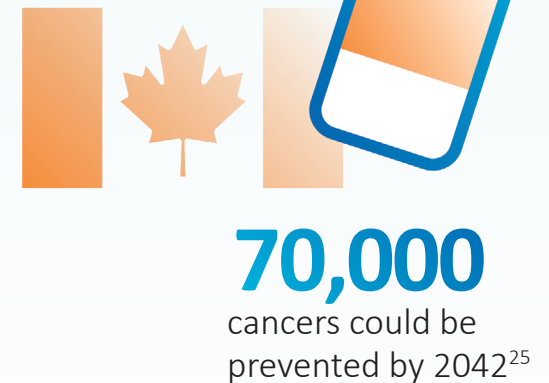
Eating less red and processed meat could prevent approximately 67,000 cancers<sup>22</sup>

## Limiting alcohol consumption

% of adults who were drinking in excess of Canada's low-risk alcohol guideline in 2015-16



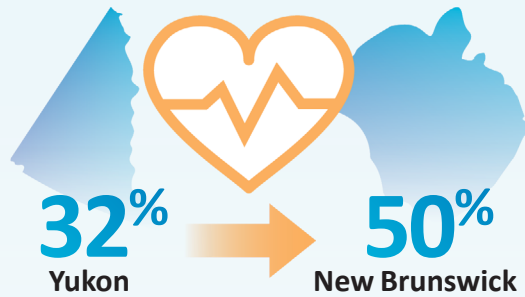
If Canadians drank **50%** less alcohol by 2032,





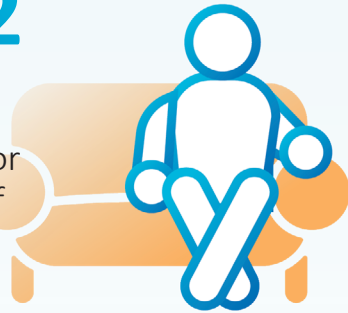
## Moving more, sitting less

% of adults who were not meeting Canadian physical activity guidelines in 2015/16



**1 in 2**

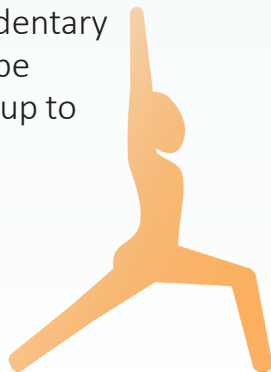
people in Canada are sedentary for **3-6 hours** of leisure time every day<sup>24</sup>



If leisure-time sedentary behaviour could be reduced by 50%, up to

**4,000**

cancers could be prevented by 2042<sup>24</sup>

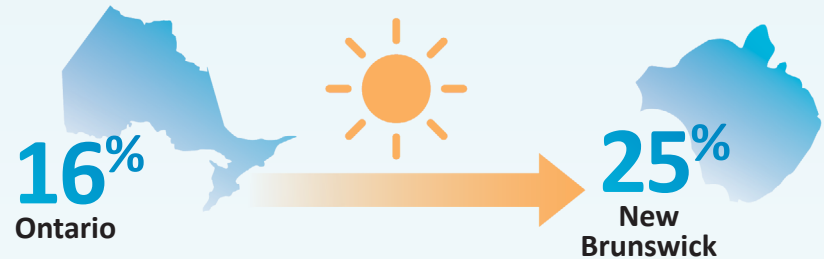


## Practicing sun safety

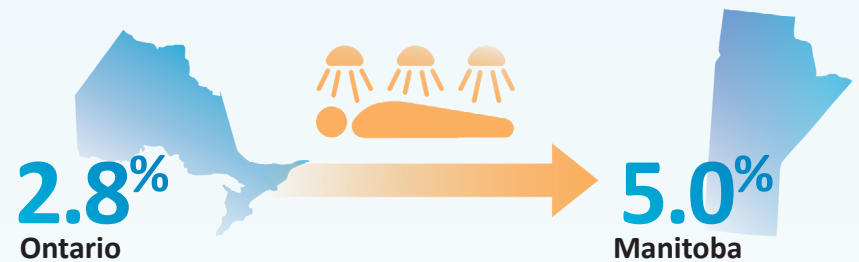


Exposure to solar and artificial ultraviolet radiation

% of people aged 12+ who reported spending 4-6 hours in the sun on a typical weekend or day off in the summer<sup>26</sup>



% of people aged 12+ who reported using a tanning bed or booth with tanning lamps<sup>26</sup>



If Canadians reduced their exposure to ultraviolet radiation by **50%**

**nearly 12,000** melanomas could be prevented by 2042<sup>27</sup>

The economic burden (direct and indirect costs) of melanoma and non-melanoma skin cancers is estimated to be

**\$922 million** by 2031<sup>28</sup>

The economic burden (direct, indirect and intangible costs) of newly diagnosed occupational non-melanoma skin cancers due to solar ultraviolet radiation is estimated to be

**\$29 million**<sup>28</sup>



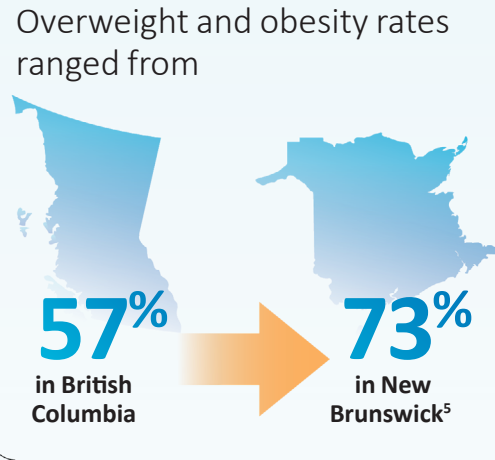
## Having a healthy body weight



After smoking, excess weight is expected to become the second leading preventable cause of cancer in Canada by 2042

**7%** of cancers are due to excess body weight<sup>17</sup>

More than **1 in 2** adults were considered **overweight or obese** in 2015-16



If Canadians could reduce their body mass index by one unit, **42,000+** cancers could be prevented by 2042<sup>23</sup>

**1 in 3** children aged **5–17** were **overweight or obese** in 2017<sup>18</sup>



## Preventive surgery

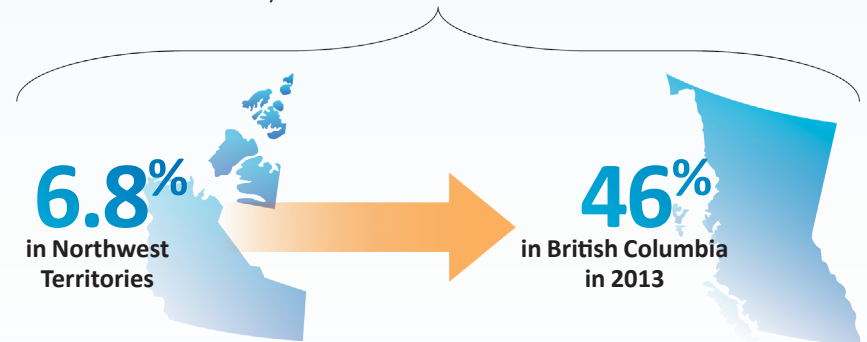
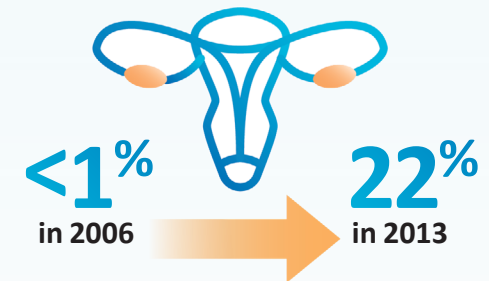
Some people have an increased risk of developing certain cancers because of inherited gene mutations and, in a few situations, preventive surgeries may be used to reduce cancer risk.



Opportunistic salpingectomy – removal of the fallopian tubes during a hysterectomy – substantially reduces the risk of ovarian cancer because many ovarian cancers start in the fallopian tubes. In 2019, 3,000 Canadian women were diagnosed with ovarian cancer and 1,900 died from it.<sup>29</sup> Given the high proportion of women who die from this disease and the lack of effective screening for it, finding ways to prevent ovarian cancer is important.

**The use of opportunistic salpingectomy has increased in Canada:**

(This strategy can only be used when a woman needs a hysterectomy for other reasons.)



## What's next? We need more evidence on:

- **Effectiveness and cost-effectiveness of tobacco cessation and avoidance** among the public (including adolescents) and cancer patients
- **Impact of other forms of inhaled substances**, including vaping, cannabis smoking and cannabis edibles
- **Enablers (e.g., individual, social and physical environment, policy) that promote healthy lifestyles** such as healthier diets, safer levels of alcohol consumption, increased physical activity and safer sun practices
- **Availability of, access to and cost-effectiveness of genetic testing** to identify individuals at higher risk of cancer and help them take important steps to reduce their chance of getting cancer
- **Availability and uptake of evidence-based preventive interventions** such as vaccination and preventive surgeries that can reduce risk of certain types of cancer
- **Cancer prevention programs and whether they are delivered in a way that is sensitive to cultural and social norms of communities** in Canada, including First Nations, Inuit and Métis

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