



## Prevention System Quality Index 2020: Key findings

The Prevention System Quality Index reports on indicators of effective policies and programs for cancer prevention in Ontario. It identifies achievements and gaps in efforts to reduce cancer risk factors and exposures. *Prevention System Quality Index 2020* includes the following cancer risk factors and exposure domains: tobacco, alcohol, healthy eating, physical activity, ultraviolet radiation, environmental carcinogens, occupational carcinogens and infectious agents.

A limited number of indicators in *Prevention System Quality Index 2020* show improvements from previous reports in the Prevention System Quality Index series. Comprehensive strategies implemented across sectors and multiple levels of government can help achieve broader improvements in cancer prevention in Ontario.



### Tobacco smoking

#### Tobacco taxation

The World Health Organization recommends that tobacco taxes make up 75 percent or more of the total retail price of tobacco.

- In 2018, taxes made up 65.3 percent of the average total retail price of cigarettes in Ontario.
- Opportunity: Increase tobacco taxes to at least 75 percent of the retail price.

#### Second-hand smoke exposure

There is no safe level of second-hand smoke exposure. Smoke-free laws and policies can protect people from second-hand smoke.

- During 2015–2016, 14.6 percent of adults and 29.7 percent of adolescents reported exposure to second-hand smoke every day or almost every day in public places in the past month.
- Opportunity: Increase awareness and enforcement of the Smoke-Free Ontario Act, and promote broader implementation of smoke-free policies.

#### Smoke-free policies in social housing

People who live in multi-unit housing (in particular, social housing) may be more likely to be exposed to second-hand smoke than people who live in single detached homes.

- As of January 2020, eight out of 13 social housing providers with 1,500 or more residential units had a smoke-free policy, providing protection for about 96,600 out of 225,200 residents.
- Opportunity: Increase the number of social and other multi-unit housing properties that have smoke-free policies.

#### Smoking cessation

A provincial-level focus on increasing the number of people who currently smoke and try to quit and their number of quit attempts may help increase the smoking cessation rate.

- In 2017, 48.1 percent of adults who smoke made one or more quit attempts in the past 12 months.
- During 2015–2017, 51.5 percent of adults reporting past daily or occasional smoking stopped smoking completely at least one year ago.
- Opportunity: Increase mass media campaigns to support quit attempts and expand funding for smoking cessation programs to ensure free access to counselling supports and pharmacotherapy.



## Alcohol

### Minimum price of alcohol

To achieve substantial reductions in drinking in Ontario, it is estimated that the minimum price for alcohol sold in retail stores should be \$1.75 per standard drink (2019 dollars).

- As of March 2019, the minimum prices per standard drink for alcohol sold in retail stores ranged from \$1.06 for beer to \$1.55 for spirits.
- Opportunity: Increase the minimum price of alcohol sold in retail stores to \$1.75 per standard drink (2019 dollars).

### Alcohol availability

Privatization of alcohol retail stores and increasing the number of alcohol retail stores faster than the growth of a population in a given area may result in increased alcohol drinking.

- In 2019, 79.3 percent of alcohol retail stores were privately owned, which was an increase from 75.9 percent in 2015.
- In 2019, there were 2.5 alcohol retail stores for every 10,000 people age 15 and older, compared to 2.3 in 2015.
- Opportunity: Identify an appropriate limit for privatized alcohol retail stores and the number of alcohol retail stores based on the size of the population.



## Healthy eating

### Household food insecurity

Food insecurity reduces a household's ability to afford adequate food. Households with the lowest income are much more likely to experience food insecurity than households with the highest income.

- In 2017, 15.0 percent of households experienced some level of food insecurity.
- Opportunity: Implement provincial poverty reduction policies, including increasing the minimum wage and income supports to reduce household food insecurity.

### Food literacy development in secondary schools

Food literacy development in schools – including learning how to choose and prepare healthy foods – can increase healthy eating among children and youth, shaping lifelong health.

- From 2005/06 to 2012/13, only about a third of students who started Grade 9 in each of these school years completed one or more credits that included food literacy during their secondary school education.
- Opportunity: Include at least one required credit that has a food literacy component as part of the Ontario secondary school curriculum.



## Physical activity

### Active transportation in adults and adolescents

People who regularly walk, bicycle or use other forms of active transportation report higher levels of overall physical activity.

- During 2015–2017, 48.0 percent of adults and 78.7 percent of adolescents ages 12 to 17 reported using active transportation in the previous week.
- Opportunity: Continue to develop provincial and municipal infrastructure, policies and plans that support active transportation.

### Health and physical education specialist teachers in schools

Physical education specialists can improve the quality of physical education classes and increase the time students spend being physically active during class time.

- In the 2016/17 school year, 21.7 percent of elementary schools and 20.3 percent of secondary schools reported having at least one health and physical education specialist teacher.
- Opportunity: Increase the percentage of schools that have a health and physical education specialist teacher.

### Enrolment in health and physical education courses

Physical education classes can increase overall physical activity in children and adolescents, and address a decrease in physical activity that occurs during adolescence.

- In the 2016/17 school year, 86.3 percent of students in Grade 9 earned a health and physical education credit, compared to 28.2 percent of students in Grade 12.
- Opportunity: Require health and physical education credits in every grade of secondary school.



## Ultraviolet radiation

### Shade policies

Most skin cancers are caused by exposure to ultraviolet radiation (UVR) from the sun or other sources, such as tanning beds. Built structures and dense tree canopies can provide shade and protect people from UVR exposure more reliably than sunscreen. Local municipalities in Ontario may require new developments or redevelopments provide shade.

- As of 2019, three local municipalities with a population of 100,000 or more have strong shade policies in their planning policy documents, which state that shade should be provided for a broad range of sites in new developments or redevelopments. The number of municipalities with a strong shade policy is unchanged from 2016.
- From 2016 to 2019, five municipalities added moderate shade policies to their planning policy documents, which state that shade should be provided for only a few types of sites.
- Opportunity: Strengthen municipal shade policies, and monitor the implementation and impact of these policies.

## Tanning bed use in Ontario students in Grades 7 to 12

In 2014, the Ontario government enacted the Skin Cancer Prevention Act (Tanning Beds), 2013 to ban the sale and marketing of tanning services to youth under age 18.

- The results of a survey conducted one year after the Skin Cancer Prevention Act (Tanning Beds), 2013 came into effect showed no changes in tanning bed use for students in Grades 7 to 12, compared to the results of a similar survey conducted before the act came into effect (7.9 percent in 2015 versus 6.9 percent in 2014).
- Opportunity: Monitor tanning bed use in youth and increase enforcement of the Skin Cancer Prevention Act (Tanning Beds), 2013.



## Environmental carcinogens

### PM<sub>2.5</sub> concentrations in outdoor air

Fine particulate matter (PM<sub>2.5</sub>) in outdoor air pollution increases the risk of lung cancer. There is no known safe level of exposure to PM<sub>2.5</sub>.

- In 2017, annual average PM<sub>2.5</sub> concentrations ranged from 4.1 to 8.5 µg/m<sup>3</sup> at monitoring stations in Ontario. All average PM<sub>2.5</sub> concentrations were lower than the current Canadian Ambient Air Quality Standard of 8.8 µg/m<sup>3</sup>.
- Opportunity: Continue to reduce PM<sub>2.5</sub> emissions from homes, transportation and industry.



## Occupational carcinogens

### Industrial nickel use and employment

Nickel compounds are a known cause of lung, nasal and sinus cancers. Nickel compounds are commonly found in fumes from welding.

- The number of facilities reporting nickel use and the total amount of nickel used decreased from 2013 to 2016. However, the total number of employees working at industrial facilities that reported using nickel increased during this same time period.
- Opportunity: Introduce ventilation requirements in Ontario's occupational health and safety legislation for welding activities.

### Industrial formaldehyde use and employment

Formaldehyde is a widely used chemical. Formaldehyde exposure can cause cancer of the nasopharynx (a type of head and neck cancer) and leukemia, and may be a cause of sinus cancer.

- The amount of formaldehyde use reported in Ontario was lower in 2016 than the previous three years.
- The number of employees and the number of facilities reporting formaldehyde use were about the same from 2013 to 2016.
- Opportunity: Reduce the occupational exposure limit for formaldehyde to the level recommended by the Canadian Labour Code and American Conference of Governmental Industrial Hygienists.



## Infectious agents

### School-based human papillomavirus (HPV) and hepatitis B vaccination coverage

Human papillomavirus (HPV) and the hepatitis B virus are two infectious agents (viruses, bacteria and parasites) that are known to cause cancer. Publicly funded school-based vaccination programs for HPV and the hepatitis B virus are offered to students in Grade 7 in Ontario.

- At the end of the 2017/18 school year:
  - 59.9 percent of 12-year-old students received two doses of the HPV vaccine through the school-based program.
  - 69.2 percent of 12-year-old students received two doses of the hepatitis B vaccine through the school-based program.
- Opportunity: Support local public health agencies in increasing education for parents and students on the benefits and safety of vaccinations.

The full *Prevention System Quality Index 2020* can be found at: [cancercareontario.ca/PSQI](http://cancercareontario.ca/PSQI).

[Contact us](#) if you need this information in an accessible format.

1-855-460-2647 / TTY (416) 217-1815

Ontario Health (Cancer Care Ontario)  
500–525 University Avenue  
Toronto, Ontario M5G 2L3  
[cancerprevention@ontariohealth.ca](mailto:cancerprevention@ontariohealth.ca)  
[ccohealth.ca](http://ccohealth.ca)