Prevention System Quality Index 2023: Key Findings

The key findings below represent findings from published literature, as well as analyses undertaken by Ontario Health for this report. The indicators in PSQI 2023 show improvements in some domains (e.g., smoking rates in Ontario decreased from 2017 to 2020). However, there are still many opportunities to improve chronic disease prevention in Ontario such as ensuring tobacco taxes and minimum alcohol prices meet the level recommended by the World Health Organization. Working with partners to implement comprehensive strategies across sectors and multiple levels of government can help achieve broader improvements in chronic disease prevention in Ontario.

For more information and citations for the material referenced below, please see the full Prevention System Quality Index 2023 at ontariohealth.ca/psqi.

Social determinants of health

The conditions under which people are born, grow, live, work and age directly shape their health and are known as the social determinants of health (SDOH). Extensive research has demonstrated a strong link between the SDOH and chronic diseases. Low income, food insecurity, housing and systemic racism are explored in the PSQI 2023:

- Data from 2005 to 2012 show a greater prevalence of multimorbidity (including cancers, COPD, diabetes and heart disease) in the lowest income quintile compared to the highest income quintile in Ontario.
- Adults in Ontario who lived in households experiencing food insecurity had more than twice the risk of developing type 2 diabetes compared to food secure households.
- Poor-quality housing affects chronic disease risk through exposure to respiratory toxins due to cold and damp conditions, overcrowding and a reduced sense of wellbeing.
- Race-based data collected from June 2020 to April 2021 found that racialized populations had up to 7 times higher rates of COVID-19 infection than White Ontarians.

First Nations, Inuit, Métis, and urban Indigenous Health

Collectively, First Nation, Inuit, Métis and urban Indigenous peoples experience a greater impact on health and well-being from chronic diseases than all other populations living in Canada. This impact is a result of intergenerational trauma from colonialism and violent assimilation efforts including residential schools and Indian hospitals, combined with ongoing inequities in the SDOH.

First Nations people in Ontario

- The prevalence of type 2 diabetes is 3 to 5 times higher amongst First Nations people compared to non-First Nations in Ontario.
- First Nations people have a 2.5 times higher prevalence of cardiovascular disease (CVD) than non-First Nations people. CVD mortality is also disproportionately higher among First Nations people.
• In Ontario, the incidence of some common cancers, including lung, colorectal, kidney, cervical, and liver cancers, is higher amongst First Nations than other populations. First Nations women had higher incidence of all cancers combined than non-First Nations women.

**Inuit people in Ontario**
• Incidence rates for lung cancer in Inuit men and women living in the Canadian Arctic are the highest in the world.
• One study of cancer in the population living in Inuit Nunangat showed that Inuit are more likely to be diagnosed with lung and colorectal cancer than other Canadians, and less likely to be diagnosed with breast and prostate cancer.

**Métis people in Ontario**
• Compared to the general Ontario population, Métis people have a 1.6 times higher prevalence of chronic obstructive pulmonary disease.
• Métis people who had diagnosed congestive heart failure had more frequent hospitalizations and emergency department visits than non-Métis people in Ontario.

**Urban Indigenous people in Ontario**
• Healthcare services offered in urban areas are not consistently appropriate for First Nations, Inuit, Métis peoples, and studies have found that urban Indigenous populations have reservations about accessing healthcare services because of the risk of stigmatization and discrimination.

### Commercial Tobacco

**Smoking in Ontario**
• During 2017–2020, 15.4 per cent of adults ages 20 and older in Ontario reported that they currently smoke commercial tobacco every day or occasionally.
• Smoking is more common in adults with lower household income and differs by immigration status and racial group.

**Tobacco taxation in Ontario**
• In 2022, the taxation rate in Ontario is 57.5 per cent of the average retail price. The World Health Organization recommends a relative tax of 75 per cent for effective tobacco control.
• Ontario has the third lowest taxation rate in Canada compared to all provinces and territories. This ranking has changed from 2018, when Ontario ranked fifth lowest.

**Second-hand smoke exposure in Ontario**
• During 2019-2020, 9.5 per cent of non-smoking adults ages 20 and older in Ontario reported second-hand smoke exposure in public, 6.4 percent in the workplace or at school, 2.3 percent at home and 2.3 percent in a private vehicle.

**Smoke-free policies in Ontario**
• As of October 2022, 32 out of 47 local housing corporations (68 per cent) had smoke-free policies that applied to all their properties.
• Ontario can build on local momentum by adopting a province-wide policy for all local housing corporations or use incentives to further encourage local implementation.
Smoking cessation in Ontario
- During 2017–2020, 54.1 percent of adults in Ontario age 20 and over who reported past daily or occasional smoking reported that they stopped smoking at least 1 year ago.
- Adults in lower income households were less likely to report long-term smoking cessation.

Alcohol

The 2023 Canada’s Guidance on Alcohol and Health by the Canadian Centre on Substance Use and Addiction (CCSA) state that any consumption of alcohol is associated with risk and should be minimized. Currently, CCSA recommends 2 drinks per week or less to avoid alcohol-related consequences.

Alcohol drinking in Ontario
- During 2017–2020, 31.1 percent of adults age 19 and older reported drinking more than two drinks in the past week.
- Men (37.7 percent) were more likely than women (24.8 percent) to exceed the drinking guidelines, as well as people residing in rural areas (37.1 percent) compared to urban (30.5 percent), and people in the highest household income quintile compared to all other quintiles.

Minimum price of alcohol
- The gap between the recommended minimum price and highest retail price per standard drink has increased since 2013, with the largest difference occurring in 2022.
- No type of alcohol product (beer, wine, spirits) met the World Health Organization’s recommended MUP of $1.97 per standard drink (17.05 millilitres of alcohol) in 2022 dollars.

Alcohol availability in Ontario
- During the COVID-19 pandemic, several regulations in Ontario were amended to increase the availability of alcohol, including enabling liquor takeout and delivery with food from liquor licensed establishments, liquor sale and service on docked boats, reducing minimum liquor delivery fees and extending retail hours of sale to authorized grocery and alcohol stores.

Healthy eating

The COVID-19 pandemic has likely had an impact on dietary patterns of households in Ontario, including reported decreases in the number of servings of vegetables and fruit consumed, and increases in the sweet and salt food intake.

Healthy eating in Ontario
- From 2015 to 2017, 77.1 percent of adults age 18 and older in Ontario reported that they ate fruits and vegetables fewer than five times a day.
- More adults in the lowest household income quintile in Ontario (82.0 percent) reported inadequate fruit and vegetable consumption than adults in the highest household income quintile.

Food literacy in Ontario
- During their secondary school education in Ontario, less than a third of students who started Grade 9 in each of the school years from 2013/14 to 2016/17 earned one or more credits in courses that include a food literacy component.
Physical activity

Physical inactivity in Ontario
- During 2016–2018, 42.3 per cent of adults aged 18 and older in Ontario were not achieving the recommended 150 minutes of moderate-to-vigorous aerobic physical activity per week and 73.0 per cent of adolescents ages 12-17 in Ontario were not meeting the recommended 60 minutes of moderate to vigorous aerobic physical activity per day.
- Women (45.5 percent) were more likely than men (38.9 percent) to report inadequate aerobic physical activity, as well as people in lower income households. Physical inactivity also differed by immigration status and racial group.

Active transportation in Ontario
- During 2016–2018, 48.8 percent of adults in Ontario reported using active transportation in the previous week.
- People residing in urban areas (49.8 percent) were much more likely to report using active transportation than those in rural areas (38.6 percent).
- During 2016–2018, 78.5 percent of adolescents in Ontario reported using active transportation in the past week.
- More urban-dwelling (79.6 percent) than rural-dwelling (69.9 percent) adolescents reported using active transportation.

Physical education in Ontario
- In the 2020/21 school year, 21.6 percent of elementary schools and 15.1 percent of secondary schools reported having at least one full or part-time health and physical education (HPE) specialist teacher.
- Between 2017/18 to 2020/21 school years, the percentages of secondary schools with at least one specialist teacher show a decreasing trend.

Environmental exposures

Ultraviolet radiation
- The majority of melanoma cases in Ontario are a result of ultraviolet radiation (UVR) exposure.

Shade policies in Ontario
- As of November 2022, all 28 local municipalities in Ontario with populations of 100,000 or more included a shade policy in their planning policy documents. Of these 28 municipalities, 4 had strong shade policies, which was an increase from three in 2018.

Sun protection in Ontario
- During 2015–2016, 70.1 percent of adults age 18 and older and 62.9 percent of adolescents ages 12 to 17 in Ontario reported using one or more sun protection measure.

Radon
- Radon is an invisible and odourless radioactive gas that requires equipment to test for its presence. Harmful exposure for most people in Ontario occurs in occupational settings and in their homes.
**Fine particulate matter**

- Fine particulate matter (PM$_{2.5}$) is used as an indicator of air quality because it is one of the most concerning pollutants. Over 10 years (from 2011 to 2020), the PM$_{2.5}$ annual mean concentrations in Ontario decreased by 17 per cent overall.

**Occupational exposures**

**Asbestos**

- Exposure to asbestos can cause chronic diseases such as asbestosis, mesothelioma and lung cancer. Data from 2016 suggest that 77,000 Ontario workers have been exposed to asbestos, an increase by 25,000 persons since 2006 (or 32 percent increase).

**Diesel engine exhaust**

- People who are frequently exposed to diesel engine exhaust, such as underground miners, farmers, truckers, delivery and courier drivers, bus rivers, transit operators, railway workers, heavy equipment mechanics and construction workers, have an increased risk of occupational lung diseases including lung cancer and COPD.
- In 2016, 327,000 Ontario workers were exposed to diesel engine exhaust. That is a 26,000 person increase from 2006 (or 8 percent increase) and was primarily accounted for by an increase in the number of workers in transportation and warehousing.

**Infectious agents**

**School-based human papillomavirus (HPV) and hepatitis B**

Both HPV and hepatitis B can be asymptomatic after infection and lead to life-threatening diseases. Early detection and routine vaccination programs are recommended.

- According to available data (January 2023) HPV and hepatitis B school-based vaccination coverage remained lower than prior to the pandemic.

For more information and citations for the material referenced above, please see the full Prevention System Quality Index 2023 at ontariohealth.ca/psqi. Please contact prevention@ontariohealth.ca with questions or comments. If you need an alternative format, email Ontario Health Communications at info@ontariohealth.ca.

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