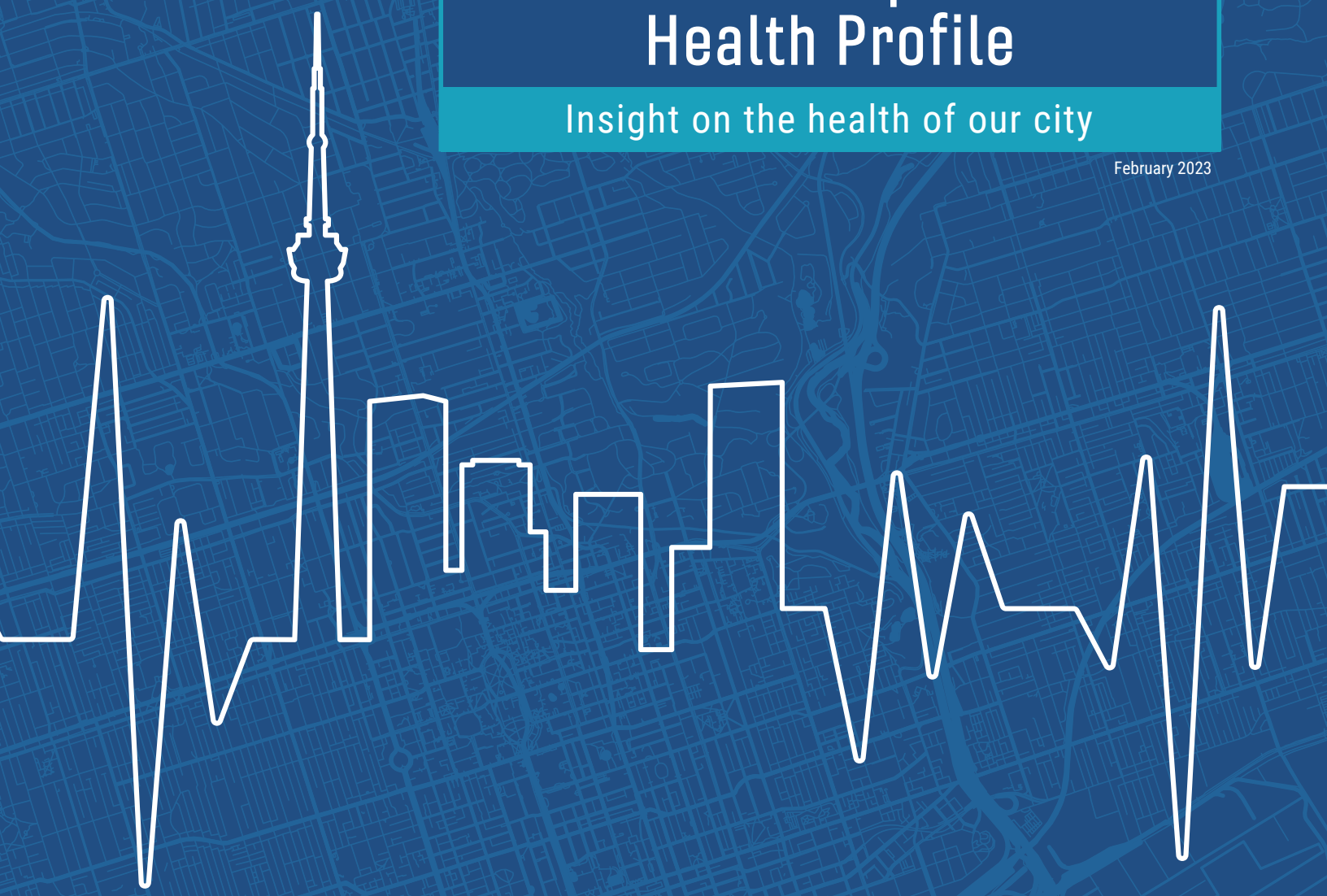
Toronto's Population Health Profile

Insight on the health of our city

February 2023



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Toronto Public Health

We acknowledge that the work we do throughout Toronto takes place on the traditional territory of many nations including the Mississaugas of the Credit, the Anishnabeg, the Chippewa, the Haudenosaunee, and the Wendat peoples and is now home to many diverse First Nations, Inuit, and Métis peoples. The City also acknowledges that Toronto is covered by Treaty 13 signed with the Mississaugas of the Credit, and the Williams Treaty signed with multiple Mississaugas and Chippewa bands.

The City of Toronto acknowledges all Treaty peoples – including those who came here as settlers – as migrants either in this generation or in generations past – and those of us who came here involuntarily, particularly those brought to these lands as a result of the Trans-Atlantic Slave Trade and Slavery. We pay tribute to those ancestors of African origin and descent.

Reference

Toronto Public Health. Toronto's Population Health Profile. February 2023.

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Access

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MESSAGE FROM TORONTO'S MEDICAL OFFICER OF HEALTH

I am proud to present Toronto's 2022 Population Health Profile on behalf of Toronto Public Health. Understanding Toronto's health status is essential to guiding the work of Toronto Public Health. We work closely with community partners and the health system to advance the health and well-being of over 2.7 million Torontonians.

In this report, you will find information about Toronto's demographics and key health and wellness indicators. This report includes examples of how public health issues can be examined through focused looks at three health issues – mental health, human papillomavirus vaccination, and liver cancer. This information is key to inform upstream efforts to keep Toronto healthy for all those who live, work, and play in the city.

The year 2023 marks an important milestone, as Toronto Public Health celebrates 140 years of local public health action in Toronto. From improvements to Toronto's sanitation standards to life-saving immunization campaigns, we have been working to improve and prolong life for Torontonians for almost a century and a half. Although Toronto is now a very different city than it was in 1883, Toronto Public Health's goal remains to improve the health of all Torontonians with a commitment to health equity.

The City of Toronto influences many factors that determine good health, such as safe and affordable housing, active transportation infrastructure, accessible transit, and public spaces in which people can prosper, socialize, and be physically active. As our city continues to grow and evolve, Toronto Public Health is committed to using high quality evidence to inform interventions and strategies that help make Toronto a healthy city.

I would be remiss if I did not reflect on the enormous toll that the past three years of the COVID-19 pandemic have had on Torontonians. Together, our actions protected Torontonians, particularly those at highest risk for severe COVID-19 disease, and helped preserve health system capacity. Responding to the pandemic required, and continues to require, a substantial coordinated effort across the city. We recognize the vital importance of addressing the issues raised in this report, many of which have been intensified by the pandemic.

My sincere thanks go to all residents of Toronto for their sacrifices and collective efforts to protect one another throughout the COVID-19 pandemic. It is my hope that the information in this report will serve to build our understanding of the health of our city and guide us in our shared work towards a healthier, flourishing Toronto.

Dr. Eileen de Villa
Medical Officer of Health

EXECUTIVE SUMMARY

After three years of living with, and responding to, a pandemic, there is a need to update our collective understanding of Toronto's population health status. This information can help local public health and our partners focus recovery and planning efforts where they are needed most during this time of transition.

Building on the comprehensive 2019 T.O. Health Check: An Overview of Toronto's Population Health Status report, this update provides more current insights into the health status of Toronto's population. This report highlights a more recent Toronto demographic profile, updates key public health indicators where available, and includes three focused topic areas to illustrate the complexity of certain public health issues. It is important to note that the COVID-19 pandemic impacted health-seeking behaviour, which underlies many traditional public health indicators. Many important routine sources of public health data were paused and not yet updated at the time of this report. This has resulted in notable data gaps for routine public health indicators, some of which were only available for the pre-pandemic period, and caveats to interpretation of trends during the pandemic.

Key findings in this report include:

Torontonians are aging and increasingly diverse. Census data show that Toronto is home to an aging population. The share of seniors aged 65+ years increased from 16% to 17% between 2016 and 2021. In addition, Toronto's population is increasingly diverse with 56% of individuals belonging to a racialized group in 2021 (an 8% increase since 2016). More than one in four Torontonians speak a language at home that is neither English nor French. The pandemic had a negative impact on immigration rates; this contributed to a slowing of population growth since the last census update (4% growth noted between 2011 and 2016 compared to 2% noted from 2016 to 2021).

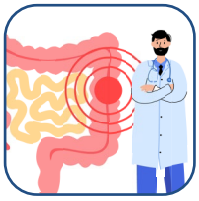
Torontonians are negatively impacted by the effects of an increasingly expensive city. In 2021, nearly one in five individuals experienced household food insecurity in the past year. At the same time, the rising cost of housing contributed to 40% of Toronto tenant households spending more than 30% of their household income on shelter costs in 2021, a trend that was temporarily improved due to federal emergency relief during the pandemic. Homelessness continues to be a pressing issue with over 7,300 people experiencing homelessness on any given night in 2021. As of late 2022, over 9,700 individuals actively used the shelter system in the past three months.

Climate change presents a significant and growing health risk, despite improvements in Toronto's natural and built environment. Health promoting achievements in Toronto's environment include a reduction in lead in drinking water, more swimmable beach days, and increases in tree canopy cover. However, climate change poses a significant risk to the health of Torontonians as the city has experienced increased temperatures and more days with extreme weather. Climate change can cause damage to property and infrastructure and exacerbate chronic conditions due to heat exposure or worsening air quality. Climate change can also facilitate the spread of climate-sensitive infectious diseases.

Mental illnesses and mental health have worsened during the pandemic, with some groups more affected. The COVID-19 pandemic has negatively impacted mental health and increased the need for services and interventions. The monthly rate of mental health and addiction-related outpatient visits increased from 5 per 100 population prior to the COVID-19 pandemic (January 2019 to March 2020) to 6 per 100 population for the first two years of the pandemic (April 2020 to December 2021). Given that many medical offices were closed and that virtual and online assessments are not captured in the rates provided, the impact of the pandemic period on mental health is likely underestimated by these data. Among youth, less than half of Toronto students rated their mental health as very good or excellent prior to the pandemic. Some data indicates that this has worsened since the start of the pandemic. The 2021 Ontario Student Drug Use and Health Survey found that 59% of Ontario students stated that the pandemic has made them feel depressed about the future and 39% reported that it has made their mental health worse.[1]

Opioid overdoses reached record levels in 2021. Opioid toxicity deaths in Toronto rose to 591 confirmed deaths in 2021. These are all preventable deaths. Many factors, including stigma and discrimination, prevent individuals from accessing services and impact the health of people who use drugs.

There was a significant decrease in testing and screening for many sexually transmitted infections during the pandemic period. The number of reported cases of many infectious diseases, especially sexually transmitted infections (STIs) such as chlamydia and gonorrhea, decreased during the COVID-19 pandemic. This likely reflected reduced primary care visits and routine screening. For example, there was an almost 40% decrease in routine STI testing between 2019 and 2021. In this context, the 2021 rise in syphilis cases is especially concerning. These missed opportunities for treatment may lead to continued transmission and long-term health outcomes. Without appropriate testing rates, trends cannot be identified across the population, which contributes to challenges with treating current infections and preventing future ones.



Chronic disease and its risks are increasing, as is the number of Torontonians who are overdue for health screening. The prevalence of diabetes among those aged 20 years and older continued to increase with the rate going from 11,936 per 100,000 people in 2011 to 13,008 per 100,000 people in 2020. An increasing proportion of Torontonians were overdue for breast, cervical, and colorectal cancer screenings in 2020. This increases the risk of later stage diagnoses and poorer outcomes. In addition, pre-pandemic data showed that nearly 25% of children and youth had not visited a dental professional for preventative oral care in the previous year; this is expected to have worsened as a result of pandemic-related closures.

[1] Boak, A. Elton-Marshall, T., and Hamilton, H.A. (2022). The well-being of Ontario students: Findings from the 2021 Ontario Student Drug Use and Health Survey (OSDUHS). Toronto, ON: Centre for Addiction and Mental Health.

Infectious diseases will continue to emerge globally, presenting threats to Toronto's population. The introduction and spread of emerging diseases, such as COVID-19 shows that the close proximity of human and animal habitats is one factor that creates conditions for new viruses to emerge and spread globally. Lessons learned from the COVID-19 response, along with leveraging of pre-existing relationships with community partners, helped public health successfully control the local mpox outbreak in 2022. This illustrates how public health practice and emergency preparedness can benefit from application of knowledge gained during the COVID-19 pandemic response.

In summary, Toronto is home to a population diverse in gender, sexual orientation, age, country of birth, and race. Our population is aging, and we expect increasing rates of chronic disease, exacerbated by the decreased rates of screening during the pandemic. Inconsistent and reduced testing for infectious diseases has resulted in missed opportunities for treatment and challenges in describing the burden of specific diseases. At the same time, Torontonians experienced worsening mental health, and health risks associated with an increasing cost of living. Toronto residents also have more health threats related to climate change, particularly from extreme weather.

The findings in this report highlight the important role that local public health has in identifying population health concerns, inequities, and opportunities for upstream intervention. Meaningful progress can be made to improve the health outcomes of all Torontonians with ongoing monitoring and comprehensive evidence-based services and interventions. These services and interventions include those provided by Toronto Public Health, health care, and social service partners, as well as other public and private sector agencies. This updated population health profile will inform the work of Toronto Public Health, including the recovery of core public health services.

INTRODUCTION

The goals of Toronto Public Health are to maintain and improve the health of the population, reduce health inequities, and to prepare for and respond to health emergencies. These cumulative efforts increase and preserve wellbeing, prolong life, and help reduce burden on the healthcare system.

Understanding the current health status of the population through a population health profile is an important step in achieving these goals. In its most complete form, this includes understanding the risks and causes of health issues, and identifying health inequities. Collecting and using population health and surveillance data are requirements under the Ministry of Health's Ontario Public Health Standards: Requirements for Programs, Services, and Accountability, to ensure that local public health programs and services reflect current and evolving population health needs.

Human health is influenced by a range of factors across the lifespan and at multiple levels including individual, household, community, city, and societal levels. A person's behaviour is shaped by the economic, social, and physical environments in which they live, work, learn, and play. Health-related behaviours can be opportunities for disease prevention, especially at the individual level. However, at the population level, the prevalence of disease is more significantly affected by community environments that influence behaviours. The World Health Organization notes that meaningful improvements to health require addressing the determinants of health through healthy public policy and effective health promotion strategies at the population level.[2]

Health, and the determinants of health, are not distributed equally amongst the people and groups that live in Toronto. Systemic, avoidable, and unjust differences between population groups that result in poor health are termed health inequities. Increasing health equity, one of the goals of Toronto Public Health, means that "all people can reach their full health potential and should not be disadvantaged from attaining it because of their race, ethnicity, religion, gender, age, social class, socioeconomic status or other socially determined circumstance."[3]

While not a comprehensive health status report, where possible, this report provides an update to trends captured in the 2019 T.O. Health Check: An Overview of Toronto's Population Health Status

[2] World Health Organization, 2022, Health promotion, accessed on January 13, 2023 at https://www.who.int/health-topics/health-promotion#tab=tab_3

[3] National Collaborating Centre for Determinants of Health. (2013). Let's talk: Health equity. Antigonish, NS: National Collaborating Centre for Determinants of Health, St. Francis Xavier University.

report. This is accomplished through an overview of Toronto's current demographics and updated insights into specific health indicators affecting Torontonians. Three focused topic areas illustrate the complexity of some of the health indicators, and their associated interventions and strategies. These focused topics are: mental health, human papillomavirus vaccination, and liver cancer.

The following criteria were used to inform the selection of indicators included in this report:

- **Relevance:** indicators that reflect issues significant for the residents of Toronto.
- **Public health importance:** indicators that are consistent with the mandate of Toronto Public Health.
- **Actionable:** indicators that can help inform preventive interventions.
- **Clarity:** indicators that are well defined, measure their intended purpose, and can easily be interpreted by a range of audiences.
- **Data quality and availability:** indicators that are valid, reliable, and collected using sound methodological principles, based on available population-based data sources.

The objectives, timing, and data limitations of this report are reflected in the condensed format. The demographics update is a standalone section that provides a brief update on relevant characteristics. The health indicators section that follows is comprised of subsections that represent a distinct area of public health. These each have a brief introduction that includes its relevance to public health. The selected topic indicators and available data at the time of this report are summarized in data tables in Appendix 1. Key trends for a subset of these indicators are highlighted and shared in each section through a combination of bullet points and infographics. The focused topic areas were summarized in a standard format to introduce the issue, provide context, share equity considerations, and outline options for a public health response.

As this is not a full population health assessment, this report does not stratify most indicators by race/ethnicity, sex/gender, income level, or other sociodemographic factors and, therefore does not systematically capture existing inequities. This important limitation is addressed, in part, by highlighting select focus areas to illustrate and explore possible inequities.

The threat of, and the response to, the COVID-19 pandemic had effects on daily life, including impacts on care-seeking behaviours.[4] This includes difficulties in receiving needed health care services, delays in care due to the fear of exposure to COVID-19, or concerns about overloading the system.[5] [6] This context is an important caveat for interpreting trends for health conditions and indicators from healthcare visits. For these indicators, the trend may reflect a temporary change in behaviour and, therefore, should be interpreted with caution. Additionally, the pause in collection of data on some key population health surveys has resulted in less timely and complete data for some indicators.

When taken together, the information in this report provides an updated profile of the public health issues affecting Toronto residents. This knowledge is a prerequisite to assessing and strengthening public health programs after three years of the COVID-19 pandemic response. This is a tool for health and community partners as we work together to effectively improve health for all who live, work, and play in Toronto.

[4] Canadian Institute for Health Information, 2021, COVID-19's impact on emergency departments. Accessed on January 16, 2023, https://www.cihi.ca/en/covid-19-resources/impact-of-covid-19-on-canadas-health-care-systems/emergency-departments

[5] Canadian Institute for Health Information, 2021, COVID-19's impact on emergency departments. Accessed on January 16, 2023, https://www.cihi.ca/en/covid-19-resources/impact-of-covid-19-on-canadas-health-care-systems/emergency-departments

[6] Survey on access to health care and pharmaceuticals during the pandemic, March 2020 to May 2021– The Daily. Statistics Canada. Accessed on January 16, 2023 at statcan.gc.ca

DEMOGRAPHICS

DEMOGRAPHICS

Toronto is Canada's largest city and has one of the most diverse populations of any city in the world. Demographic information reflecting the city's changing size and composition helps public health and other service providers prepare for issues and demands arising from population growth, age structure, migration patterns, and other changes.

Data sources and references supporting information in the Demographics section are cited at the end of this section (Demographics: Data sources and references). A list of terms and definitions used throughout the report can be found in Appendix 3: Terms and Definitions.

Population Size

Toronto was home to 2,794,356 residents as of the 2021 census counts.[7] This represented a 2.3% growth since 2016, and a slowdown from the 4.5% population increase noted between 2011 and 2016 (Figure 1). This lower growth rate of 2.3% in Toronto from 2016 to 2021 can be compared to the provincial and national averages of 5.8% and 5.2%, respectively. Toronto's slower growth may reflect the impact of the pandemic on a pattern of 'urban exodus' across Canada, which was supported by increases in remote work and fueled by record housing prices. Moreover, there were reduced immigration rates (a major driver of population growth in Toronto[8]) during the pandemic.

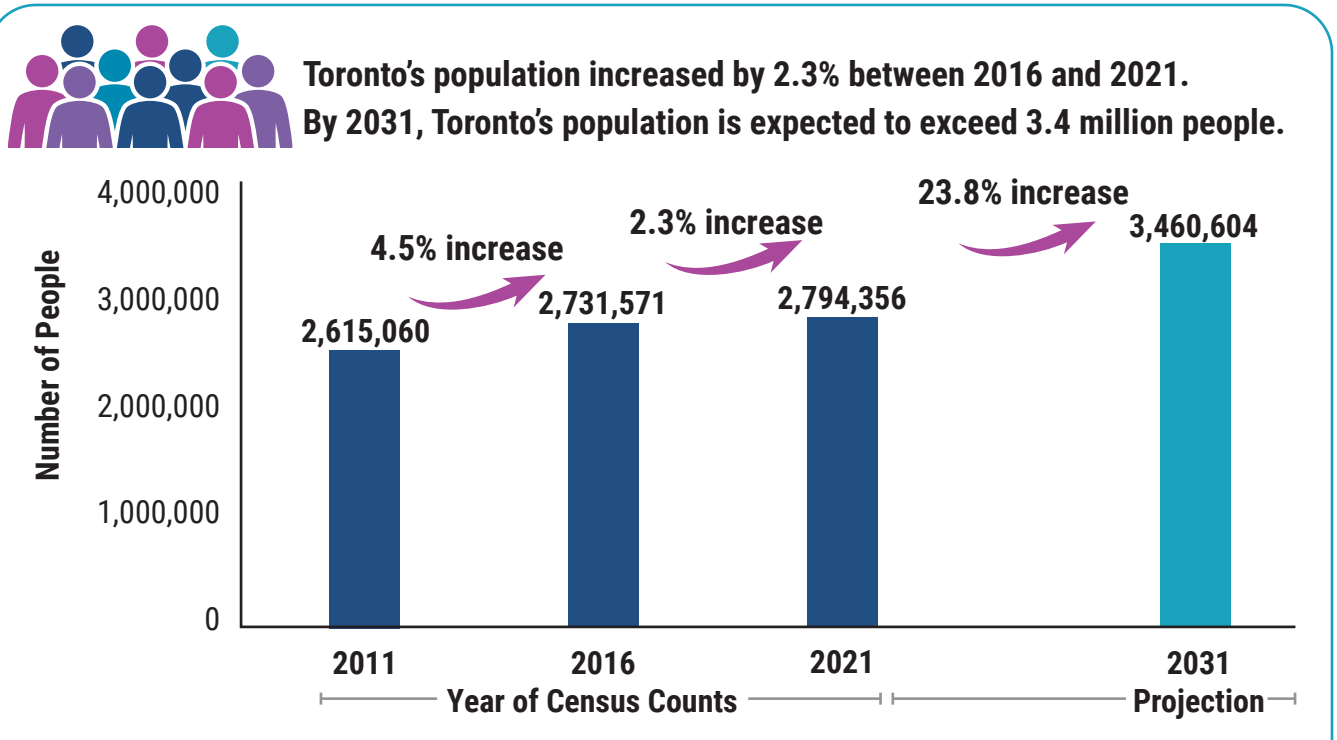


Figure 1: Population Growth, Toronto, 2011, 2016, 2021, and 2031

Data sources: **Statistics Canada, Census of Population, 2011, 2016, 2021**
Population Projections 2031, Ontario Ministry of Health and Long-Term Care, IntelliHealth Ontario,
Date Extracted: October 17, 2022.

Life Expectancy

While updated data for Toronto are not yet available, life expectancy at birth was 86.6 years for females and 82.0 years for males,[9] in Toronto in 2015. Until updated Toronto-specific data become available, it is useful to refer to recent updates that have been published at the national level. Data for 2020 showed the largest decrease in Canadian life expectancy since 1921 (from 82.3 years in 2019 to 81.7 years in 2020), when vital statistics data first started being collected. This decrease is primarily attributed to deaths due to the COVID-19 pandemic.[10]

Gender

Gender is a social construct that refers to the characteristics, norms, behaviours and, roles of women, men, girls, and boys.[11] Gender is different from sex, which refers to the different biological and physiological characteristics of females, males, and intersex persons, such as chromosomes, hormones, and reproductive organs.[12] Data collection has been evolving in recent years to reflect that there is a need to collect gender data. For example, beginning in 2021, the variable "gender" is expected to be used by default in most social statistics programs at Statistics Canada. In 2021, Statistics Canada's gender variable included two categories: men+ and women+. The men+ category includes men and boys, as well as some non-binary persons.[13] [14] The women+ category includes women and girls, as well as some non-binary persons. However, other surveys have continued to use sex categories. This report provides data on gender where available; however, some data are presented by sex.

In Toronto, census data showed there were more women+ (52%) than men+ (48%) in 2021. This is the equivalent of 94 men+ for every 100 women+ and comparable to the 93 men+ to every 100 women+ reported in 2016.

In the Toronto census metropolitan area (CMA)[15] [16] in 2021, 1 out of 312 individuals identified as transgender or non-binary. Of those who identified as transgender or non-binary:

- 38% identified as non-binary;
- 34% identified as transgender women; and
- 28% identified as transgender men.

Toronto was home to 15% of non-binary people in Canada in 2021.

In 2016, 1% of Indigenous Peoples (aged 15 years and over) in Toronto identified as transgender or other and 23% identified as Two-Spirit.[17]

Sexual Orientation

In 2021, 3% of Toronto adults (aged 18 years and over) self-identified as gay or lesbian and the same proportion (3%) identified as bisexual.[18 19] Among children and youth, data from 2019 indicate that 12% of Toronto students in grades 9 to 12 identified as being 2SLGBTQ+.[20 21]

Aging Population

Toronto's population is aging, as the share of seniors aged 65 years and over increased from 16% in 2016 to 17% in 2021. By 2031, almost 1 out of 5 Toronto residents are expected to be seniors aged 65 years and over, numbering about 642,000 individuals (Figure 2).

Share of seniors aged 65 years & over increased from 15.6% in 2016 to 17.1% in 2021.

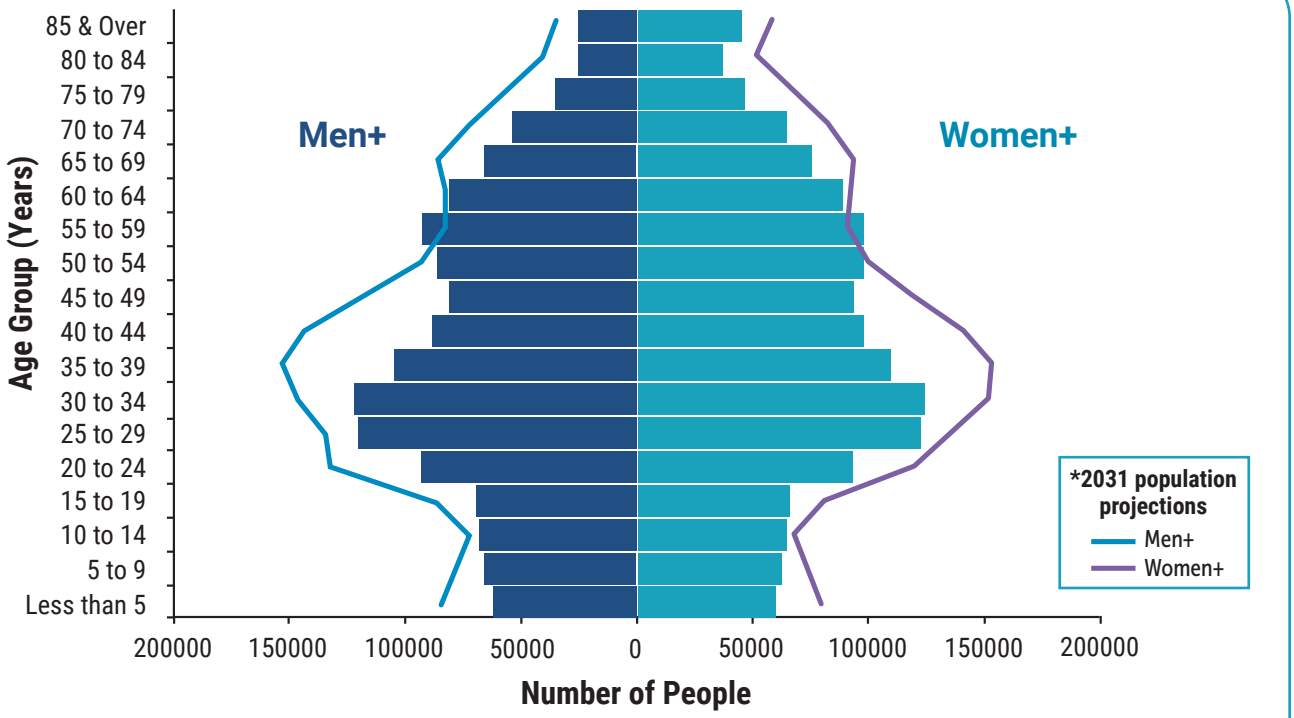


Figure 2: Population Distribution by Age Category and Gender, Toronto, 2021 and 2031*

Data sources: **Statistics Canada, Census of Population, 2021**
Population Projections 2031, Ontario Ministry of Health and Long-Term Care, IntelliHealth Ontario, Date Extracted: October 17, 2022.

Marital Status

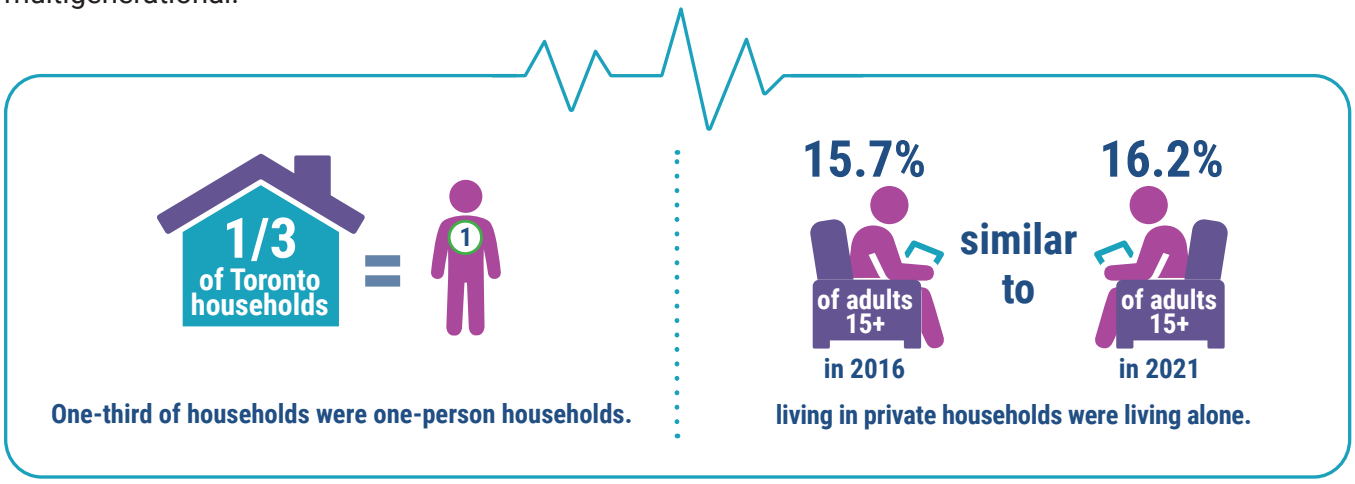
For Torontonians aged 15 years and over, in 2021:

- 50% were married or living common-law;[22]
- 35% were single (never married); and
- 14% were divorced, separated or widowed. Women+ were about twice as likely (19%) to be in this category compared to men+ (9%).

Living Arrangements, Family Type, and Household Type

In 2021, one-third (33%) of families with children were lone-parent families. Of these, most lone-parents were women+ (84%). Over one in five children (23%) aged 14 years and under lived in a lone-parent family.

In 2021, 54% of couples had children, down from 56% in 2016. The average Toronto household size in 2021 was 2.4 people. One-third of households were one-person households and 16% of people aged 15 years and older living in private households were living alone. 3.5% of households were multigenerational.



Indigenous Peoples

Urban Indigenous Peoples are under-represented in national surveys, such as the census and other health data sources. This is due to systemic barriers that include a lack of culturally appropriate and Indigenous-led surveys and community distrust of government and health information systems rooted in colonial practices, and discrimination.[23,24] These factors contribute to under counting of Indigenous Peoples in the Census. According to the 2021 Census, there were 22,925 people living in Toronto who identified with Indigenous identity (0.8% of the total 2021 Toronto population). Of these 22,925 people, 60% were First Nations, 32% were Métis, and 1% were Inuit.[25]

With the limitations of the 2021 Census, estimates for Toronto are presented here from Our Health Counts, an Indigenous-led survey of Toronto's Indigenous population. Our Health Counts estimates that Toronto's Indigenous population is between 2 and 4 times larger than what is reported in Census data. In 2021, Our Health Counts estimated Toronto's Indigenous population to be 88,397 people.[26]

In 2016, Our Health Counts data showed that the majority of Indigenous adults living in Toronto identified as First Nations (86%), followed by Métis (14%), and Inuit (0.4%).[27] The Indigenous population tended to be younger than the general population in Toronto in 2016. Of those aged 15 years and over, 62% of the Indigenous population was between 15 and 44 years of age compared to 50% of the overall Toronto population, and 3% were 65 years and over compared to 18% for Toronto overall.[28 29]

Immigration

In 2021, 47% of Toronto's population were immigrants. Non-permanent residents (such as temporary residents and refugee claimants) made up approximately 5% of the population in 2021 (Figure 3), compared to 3% in 2016. Most immigrants in Toronto were longer-term immigrants (85%) who first obtained landed immigrant or permanent resident status before 2016.

For immigrants who landed from 1980 until the day of the 2021 Census, about half were admitted under the economic category, 31% were sponsored by family, 18% landed as refugees, and 2% were in other immigration categories. The number of refugees increased by 6% from 2016 to 2021 (176,120 to 186,825).

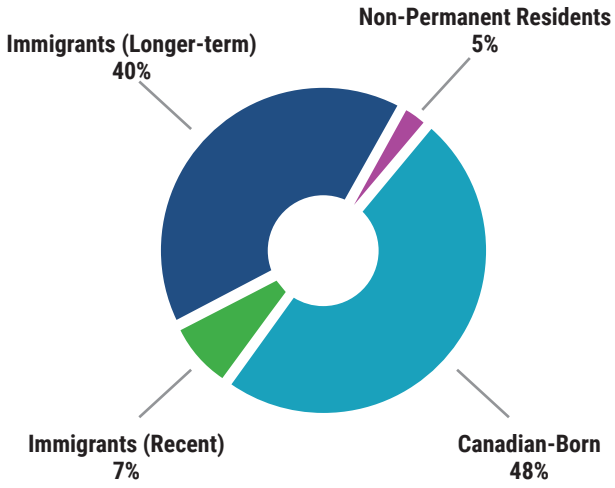


Figure 3: Percent of People by Immigrant Status, Toronto, 2021

Data source: **Statistics Canada, Census of Population, 2021**
Notes: Percent totals may not equal 100% due to rounding.
Recent immigrants first obtained landed immigrant or permanent resident status between 2016 and 2021.

Table 1: Place of birth for all immigrants and recent immigrants, Toronto, 2021

Data source: **Statistics Canada, Census of Population, 2021**
Notes: * Percentages in the table do not total 100% as only the top 10 countries are shown.
** Recent immigrants first obtained landed immigrant or permanent resident status between 2016 and 2021.

All Immigrants		
Rank	Country of Birth	% of Total Immigrant Population*
1	Philippines	10%
2	China	10%
3	India	8%
4	Sri Lanka	4%
5	Jamaica	3%
6	Italy	3%
7	Iran	3%
8	Hong Kong	3%
9	United Kingdom	3%
10	Portugal	3%

Recent Immigrants**		
Rank	Country of Birth	% of Recent Immigrant Population*
1	India	20%
2	Philippines	13%
3	China	9%
4	Pakistan	3%
5	Iran	3%
6	United States of America	3%
7	Bangladesh	2%
8	Syria	2%
9	Nigeria	2%
10	Brazil	2%

Ethno-racial Groups

Race is a construct that is politically, historically, and socially informed. In 2021, Statistics Canada replaced "Visible Minority", a term that is outdated and not acceptable for many equity-deserving communities, with "racialized group". For comparison purposes with previous reports, racialized group is derived directly from "Visible Minority" which includes a mix of racial and ethno-racial (ethnicity) groups. From the 2021 Census, 56% of individuals belonged to a racialized group, an 8% increase since 2016. The largest ethno-racial categories were White (44%), South Asian (14%), Chinese (11%) and Black (10%) (Figure 4).

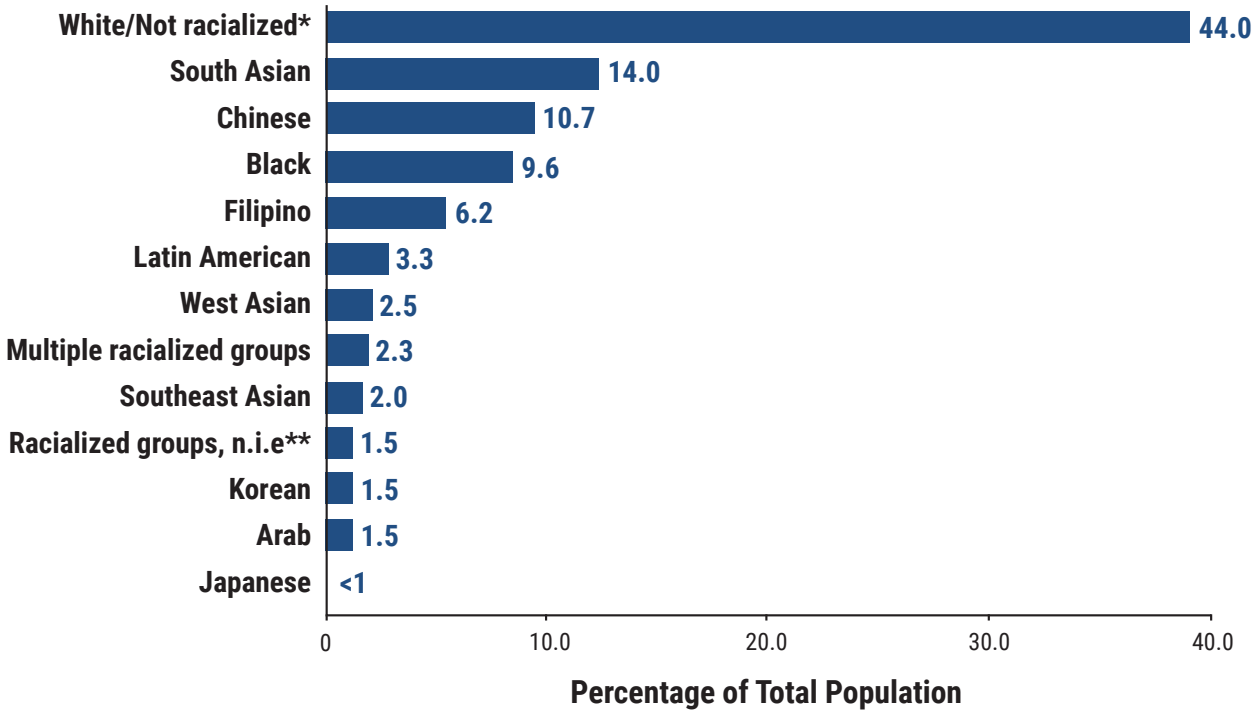


Figure 4: Percentage of people by ethno-racial group, City of Toronto, 2021

Data sources: **Statistics Canada, Census of Population, 2021**
Notes: * The White/Not Racialized group excludes people who identified as Indigenous.
** Racialized groups, n.i.e. means racialized groups not included elsewhere.

Language

Toronto continues to be linguistically diverse, although 74% of Torontonians speak English at home. Excluding English, the top three most common languages spoken at home continue to be Mandarin, Cantonese, and Tagalog (Figure 5). People aged 65 years and older were more likely (13%) to not have knowledge of either official language compared to people under 65 years (3%).

In 2021 more than **1 in 4** (26%) of Torontonians spoke a language other than English or French at home

Seniors 65+ were more likely (13%) to not have knowledge of either official language compared to people under 65 years (3%)

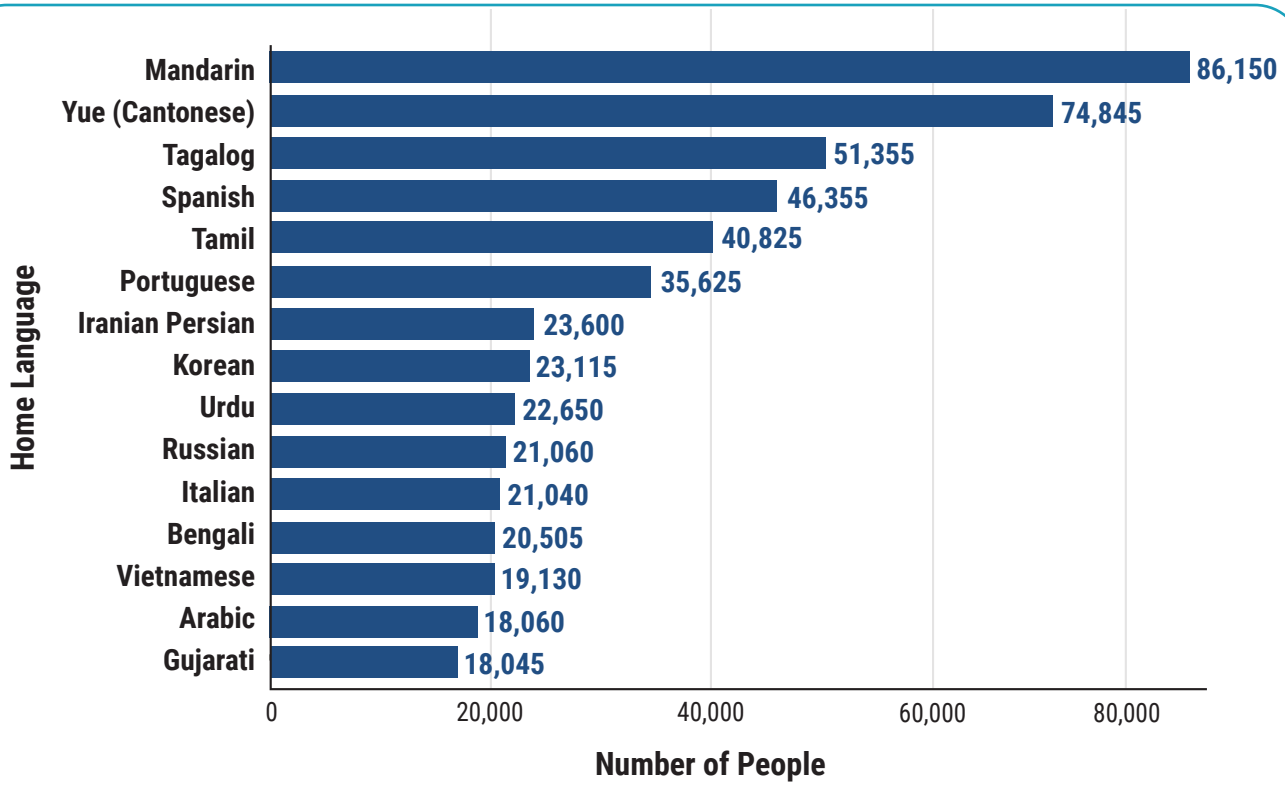


Figure 5: Top 15 home languages, excluding English, Toronto, 2021

Data sources: Statistics Canada, Census of Population, 2021

Disability

While several definitions and models of disability exist, most agree that a disability includes a long-term or an episodic health-related condition (such as physical, sensory, or mental) that limits a person's everyday activities and for which there are barriers to their full participation in society.[30 31 32 33] Disability barrier types include those that are physical or architectural (built environment), informational or communicational, technological, organizational (policies and practices), and attitudinal barriers.[34]

Ableism describes discriminatory attitudes and practices that deny people with disabilities their basic rights to housing, employment, education, recreation, and to participation in public life and to the achievement of social, cultural, and economic well-being.[35 36]

Disability is a social determinant of health.[37] Further, people with disabilities experience added barriers to other social determinants of health that lead to higher rates of unemployment, low wages, poverty, exclusion, and violence.[38 39] During the COVID-19 pandemic, access to needed services and resources was restricted for people with disabilities.[40]

According to data from the Canadian Survey on Disability, it was estimated that approximately half a million people in Toronto reported having a disability in 2017.[41] Among Toronto residents 15 years of age and over, in 2017:[42]

- 22% (25% of females, 19% of males) had a disability.
- 47% of seniors (65 years of age and over) had a disability, almost three times greater than for those 15 to 64 years of age (17%).
- The most common disability types reported relate to pain (14%), flexibility (11%), and mobility (10%) followed by mental health and seeing (both 7%) (Figure 6).

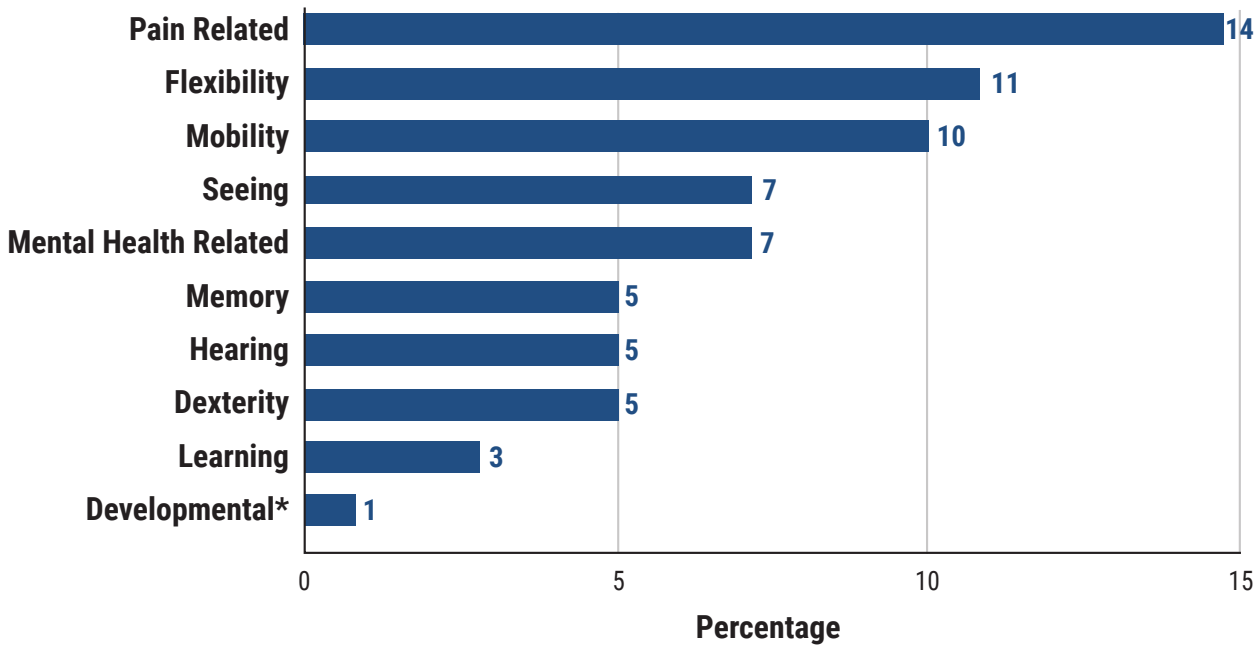


Figure 6: Percent of individuals 15 years of age and over with disabilities by disability type, Toronto, 2017

Data Source: **Canadian Survey on Disability, 2017. Community Data Program – Custom data order from Statistics Canada**
Note: The categories presented above are not mutually exclusive and will not add to 100%.
*Estimate has high sampling variability; interpret with caution.

Demographics: Data Sources and References

7 Statistics Canada, Census of Population, 2021.

8 Census 2021 Backgrounder – Population and Dwellings. City of Toronto. Accessed on January 16, 2023 at https://www.toronto.ca/wp-content/uploads/2022/02/92e3-City-Planning-2021-Census-Backgrounder-Population-Dwellings-Backgrounder.pdf

9 Numerator: Vital Statistics, 2006- 2015, Ontario Ministry of Health and Long-Term Care, IntelliHealth Ontario, Date Extracted: February 2019. Denominator: Population Estimates 2006 to 2015, Ontario Ministry of Health and Long term Care, IntelliHealth Ontario. Date extracted: February 2019.

10 Deaths, 2020 – The Daily. Statistics Canada. Accessed on January 16, 2023 at (statcan.gc.ca)

11 Gender and Health. World Health organization. Accessed on January 16, 2023 at Gender (who.int)

12 Data for Equity Guidelines. City of Toronto. Accessed on January 16, 2023 at https://www.toronto.ca/legdocs/mmis/2020/ex/bgrd/backgroundfile-158052.pdf

13 Gender and sex at birth variables. Statistics Canada. Accessed January 2023 at https://www.statcan.gc.ca/en/concepts/definitions/gender-sex-variables

14 This definition maintains backward compatibility with 2016 Census information.

15 CMA was the smallest level of geography at which this information was available.

16 The Toronto CMA includes the city of Toronto, and the regional municipalities of Durham, Halton, Peel, and York."

17 Firestone, M., Xavier, C., O'Brien, K., Maddox, R., Wolfe, S., and Smylie, J. (2018). Demographics.

18 Estimates have high sampling variability; interpret with caution

19 Canadian Community Health Survey, 2021. Statistics Canada. Received on October 14, 2022.

20 Ontario Student Drug and Health Survey, 2019. Centre for Addiction and Mental Health.

21 2SLGBTQ+ is an acronym that stands for Two-Spirit, Lesbian, Gay, Bisexual, Transgender, Queer or Questioning and additional sexual orientations and gender identities.

22 Includes same-sex, common-law, and married couples.

23 Rotondi MA, O'Campo P, O'Brien K, et al. Our Health Counts Toronto: using respondent-driven sampling to unmask census undercounts of an urban indigenous population in Toronto, Canada. BMJ Open 2017;7:e018936.doi:10.1136/ bmjopen-2017-01893.

24 Firestone, M., Maddox, R., O'Brien, K., Xavier, C., Wolfe, S., & Smylie, J. (2018). Our Health Counts Toronto - Project Overview & Methods.

25 Census 2021 Backgrounder – Housing and Indigenous Peoples. City of Toronto. Accessed on January 16, 2023 at https://www.toronto.ca/wp-content/uploads/2022/09/8e3a-CityPlanning-2021-Census-Backgrounder-Housing-Indigenous-Peoples.pdf

26 Smylie, J., McConkey, S, Blais, G., C. Bourgeois, M. Rotondi. (2022) 2021 Indigenous Population Estimates for the City of Toronto.

27 Firestone, M., Xavier, C., O'Brien, K., Maddox, R., Wolfe, S., and Smylie, J. (2018). Demographics.

28 Firestone M., et al. (2018). Ibid.

29 Statistics Canada, Census of Population, 2016

30 Government of Canada. (2013). Federal Disability Reference Guide. Human Resources and Skills Development Canada. Accessed on January 24, 2023 at https://www.canada.ca/en/employment-social-development/programs/disability/arc/reference-guide.html#h2.3-h3.1

31 Statistics Canada. (2017). Canadian Survey on Disability Reports Canadian Survey on Disability, 2017: Concepts and Methods Guide. Accessed January 24, 2023 at https://www150.statcan.gc.ca/n1/pub/89-654-x/89-654-x2018001-eng.htm

[32] Berghs M, Atkin K, Graham H, Hatton C, and Thomas C. (2016). Implications for public health research of models and theories of disability: a scoping study and evidence synthesis. Southampton (UK): NIHR Journals Library; 2016 Jul. (Public Health Research, No. 4.8.) Chapter 3, Scoping models and theories of disability. Accessed on January 24, 2023 at https://www.ncbi.nlm.nih.gov/books/NBK378951/

[33] Toronto for All Disability Awareness and Inclusion promotes the social model of disability. The social model of disability sees disability not as a medical problem inherent to an individual, but as a disconnect between an individual living with an impairment and a world that is not designed to include people living with impairments. See Toronto for All at https://www.toronto.ca/community-people/get-involved/community/toronto-for-all/disability-awareness-and-inclusion/

[34] Accessibility for Ontarians with Disabilities Act (AODA). (2019). Disability Barriers. Accessed on January 24, 2023 at https://www.aoda.ca/disability-barriers/

[35] Ontario Human Rights Code (OHRC). (2016). Policy on ableism and discrimination based on disability. Accessed on January 24, 2023 at https://www.ohrc.on.ca/en/book/export/html/18436

[36] City of Toronto. Toronto Accessibility Advisory Committee. Accessed on January 24, 2023 at https://secure.toronto.ca/pa/decisionBody/321.do

[37] Raphael D, Bryant T, Mikkonen J, and Raphael A. (2020). Social Determinants of Health: The Canadian Facts. Oshawa: Ontario Tech University Faculty of Health Sciences and Toronto: York University School of Health Policy and Management. Accessed on January 24, 2023 at http://www.thecanadianfacts.org/

[38] World Health Organization. (2022). Disability: Key Facts 2 December 2022. Accessed on December.30, 2022 at https://www.who.int/news-room/fact-sheets/detail/disability-and-health

[39] Dis-Abled Women's Network of Canada. (2020). The Impact of COVID-19 on Women living with Disabilities in Canada. Parliamentary Brief, June 22, 2020. Accessed on January 24, 2023 at https://dawncanada.net/media/uploads/page_data/page-63/parliamentary_brief_covid_19_june_22nd_2020.pdf

[40] Porch W. (2021). Accessibility Task Force on COVID 19 Vaccines: Overview and Recommendations. Accessed at https://www.toronto.ca/legdocs/mmis/2021/hl/bgrd/backgroundfile-166806.pdf

[41] The total number (N) of people in Toronto reporting a disability on the Canadian Survey on Disability, 2017 is an estimate (N = 495,500; Lower Estimate = 442,765, Upper Estimate = 548,202).

[42] Canadian Survey on Disability, 2017. Community Data Program –Custom data order from Statistics Canada.

[43] Statistics Canada. (2017). Canadian Survey on Disability, 2017: Concepts and Methods Guide Appendix B– Identifying disability types. Accessed on January 24, 2023 at https://www150.statcan.gc.ca/n1/pub/89-654-x/2018001/app-ann-b-eng.htm

[44] Persons with a flexibility disability are identified as persons whose daily activities are limited because of difficulties bending down or reaching. See Canadian Survey on Disability, 2017: Concepts and Methods Guide

HEALTH INDICATORS

HEALTH INDICATORS

In this report, health indicators for Toronto have been grouped into nine categories:

Social Environment	Environmental Health	Reproductive, Maternal, and Early Child Health
Oral Health	Mental Health	Substance Use
Infectious Diseases	Unintentional Injuries	Chronic Diseases

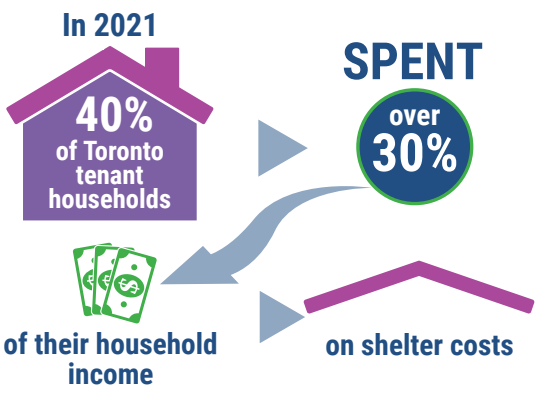
The content in each section provides context to the relevance of the category as it relates to public health, along with Toronto-specific data. Where possible trends and comparisons to previous years are provided.

More detailed information about the data provided in these categories has been provided in Appendix 1: Data Tables and Appendix 2: Data Notes. A list of terms and definitions used throughout the report can be found in Appendix 3: Terms and Definitions.

Social Environment

The social environment in which we live, work, learn, and play has a major role in determining health status. Education, employment, housing, working conditions, community safety, and income are important dimensions to consider when assessing population health status. Recent data suggest that inflation and high housing costs are impacting a growing proportion of Torontonians, with reports that:

- 23% of Toronto residents had an income below the low income measure, as of 2019.
- 12% of households were living in unsuitable housing (that is, not enough bedrooms for the size and composition of the household), as of 2021.
- Chronic homelessness continues to be an issue in Toronto.
- Hate crimes rose in Toronto in 2020 and 2021.
- The homicide rate was stable in 2020 and 2021, but on the higher-end of the last 10-year range.



individuals were experiencing household food insecurity in the past 12 months in 2021.

This equals roughly 511,000 people.

Social Capital

Findings from Toronto Foundation's Toronto Social Capital Study 2022:[45]

- The percent of Torontonians who feel they always or often have people they can depend on when they really need it has **decreased from 70% in 2018 to 59% in 2022.**
- The percent of Torontonians who believe people working together as a group in their community can make a big difference in solving problems has **decreased from 55% in 2018 to 41% in 2022.**

Homelessness in Toronto

Housing is an important determinant of health and access to good quality, safe, stable, and affordable housing is essential for promoting and maintaining good physical and mental health.[46] [47] In Toronto, homelessness continues to be significant. Over 7,300 people were experiencing homelessness during the Toronto point-in-time count in 2021. As of late 2022, over 9,700 individuals were actively using the shelter system in the past three months.

Compared to their housed counterparts, people experiencing homelessness are at increased risk of dying prematurely and suffer a higher incidence of chronic and acute health problems. These include infectious disease, diabetes, cardiovascular and respiratory disease, cognitive impairments, mental health issues, and injuries.[48] [49] [50] [51] These issues in Toronto have been exacerbated by the worsening drug poisoning crisis and the COVID-19 pandemic. In the Toronto 2021 Street Needs Assessment survey, 76% of respondents identified as having one or more types of health challenge. Half of the respondents reported having a mental health issue, 42% identified a substance use issue, and one third reported experiencing an illness or medical condition.[52]

In 2021, there were 221 reports of deaths among people experiencing homelessness in Toronto with more than half of these deaths attributed to drug toxicity.[53] The number of death reports has doubled in the five years since the data collection initiative began in 2017. Compared to the median age of death for the general population, which was 79 years for males and 84 years for females in 2015, people experiencing homelessness in Toronto were living on average 30 to 40 fewer years than the overall population.

[45] Toronto Foundation. Toronto Social Capital Study 2022. Accessed on December 19, 2022 from: https://www.environicsinstitute.org/docs/default-source/default-document-library/tf---scs2022---final---digital-final-ua52844d4113104e2899d928c42c4c367f.pdf?sfvrsn=69940316_0.

[46] Taylor LA. (2018). Housing and Health: An Overview of the Literature, Health Affairs Health Policy Brief, June 7, 2018. Accessed on January 24, 2023: https://www.healthaffairs.org/do/10.1377/hpb20180313.396577/

[47] D'Alessandro, D., Appolloni, L. (2023). Housing and Health in Urban Areas. In: Battisti, A., Marceca, M., Ricotta, G., Iorio, S. (eds) Equity in Health and Health Promotion in Urban Areas. Green Energy and Technology. Springer, Cham. https://doi.org/10.1007/978-3-031-16182-7_8

[48] Public Health Ontario. Homelessness and Health Outcomes: What are the associations? April 2019. Accessed on January 24, 2023: https://www.publichealthontario.ca/-/media/documents/E/2019/eb-homelessness-health.pdf

[49] Street Health, The Street Health Report 2007, Toronto, 2007.

[50] Guirguis-Younger M, McNeil R and Hwang SW, (2014). Homelessness & Health in Canada, University of Ottawa Press.

[51] T Kiran et al. Association of Homelessness with COVID-19 Positivity among Individual Visiting a Test Centre: A Cross-Sectional Study. Healthcare Policy 17(2). February 2022. Accessed on January 24, 2023 at: Association of Homelessness with COVID-19 Positivity among Individuals (longwoods.com)

[52] City of Toronto. Street Needs Assessment. 2021 Results Report. Accessed at: https://www.toronto.ca/legdocs/mmis/2021/ec/bgrd/backgroundfile-171729.pdf
Toronto Public Health. Deaths of People Experiencing Homelessness, January 1, 2017 to June 20, 2022. Accessed on January 24, 2023: https://public.tableau.com/app/profile/tphseu/viz/DeathsofPeopleExperiencingHomelessness/HomelessDeathsFinal?publish=yes

[53] Toronto Public Health. Deaths of People Experiencing Homelessness, January 1, 2017 to June 20, 2022. Accessed on January 24, 2023: https://public.tableau.com/app/profile/tphseu/viz/DeathsofPeopleExperiencingHomelessness/HomelessDeathsFinal?publish=yes

Environmental Health

The natural and built environments in which people live, work, learn, and play influence healthy behaviours and create conditions for good health. Safe and affordable housing, active transportation infrastructure, and an abundance of green space create settings in which people can prosper, socialize, and be physically active. Conversely, environmental exposures to air and water pollution, ultraviolet (UV) radiation, persistent organic pollutants, and heavy metals are linked with poor health outcomes, chronic disease, and increased mortality.

- Recent data suggest improvements to environmental health indicators such as reduced instances of high levels of lead in drinking water, more swimmable beach days, and increased canopy cover in Toronto.
- Climate change, however, continues to pose a significant risk to Toronto. Climate change refers to the long-term shift in weather patterns such as temperature and precipitation.
    - Although there is variability year over year, in Toronto, the general trend has been towards an increased number of extreme days and prolonged heat.
    - Climate modeling suggests that Toronto should expect hotter weather and heat waves that are longer in duration in the future.
    - Toronto can also expect changing patterns of precipitation and more frequent extreme weather events.[54] [55]

[54] City of Toronto. 2012. Toronto's Future Weather & Climate Driver Study: Outcomes Report. Accessed on December 16, 2022 at: Toronto Environment Office: Toronto's Future Weather and Climate Driver Study - Outcome reports - December 2011

[55] Public Health Agency of Canada. Chief Public Health Officer of Canada's Report on the State of Public Health in Canada 2022: Mobilizing Public Health Action on Climate Change in Canada. Ottawa, ON: Public Health Agency of Canada; 2022.

In 2021

It was estimated that **1,375 deaths per year** in Toronto were attributable to air pollution

There were **19** **Extreme Heat Days** in Toronto in 2022

In 2019

13% of Toronto was comprised of green space

In 2021

10% of Adults used active transportation to get to work

In 2021

67% of Torontonians lived and worked close to a cycling route

From 2019 to 2021

65 kilometres of new bikeways were installed in Toronto

Reproductive, Maternal, and Early Child Health

The early years are an important time for rapid growth and development. A person's future health status is heavily influenced by experiences, exposures, and relationships during pregnancy and their first few years of life. In Toronto, the most recently available data showed:

- Pregnancy rates have been decreasing and women[56] were having children at later ages.
- Complications during pregnancy have been increasing, including gestational diabetes and mental health concerns.

Adverse childhood experiences, including experiences of abuse, neglect, household dysfunction, and repeated exposure to violence or individual and interpersonal racism increase the risk of physical and mental health issues later in life. There are major data gaps on children's health, behaviours, and experiences, including adverse childhood experiences. Although more recent data has started to address this issue, additional trends and a more comprehensive set of indicators are not currently available for Toronto on this topic.

The crude birth rate for Toronto was 9 live births per 1,000 total population in 2021

The crude birth rate has been steadily declining since 2012 when it was reported as 11 live births per 1,000 total population

3 in 20 women (15%) reported a mental health concern during pregancy in 2021

This is 1.8 times higher than the 8% reported in 2013

Most infants (95%) were fed any amount of breastmilk

at the time of discharge from hospital or birth centre in 2021

Adverse childhood experiences in 2019

16% of children & youth (aged 1-17 years)

reported having ever experienced the separation or divorce of a parent

and 3% of children & youth

reported ever having experienced the death of a family member, such as a parent or sibling

[56] The term "women" is used in this section to stay consistent with the data source. Trans-men and non-binary individuals are also able to get pregnant and have children.

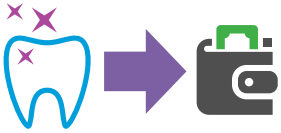
Oral Health

Good oral health allows people to eat, drink, speak, smile, and socialize, and protects against pain and microbial infections. Poor oral health is associated with a variety of negative health outcomes, including the delivery of pre-term and/or low birthweight babies, diabetes, and cardiovascular disease. Children who have poor oral health often miss more school and receive lower grades than children who do not. Pre-pandemic data showed that an increasing number of Torontonians had not visited a dental professional for preventative oral care in the past year; this is expected to have worsened as a result of pandemic-related closures and negative impact on health seeking behaviour.

In 2019 the majority of adults (70%)

had visited a dental professional in the past year.

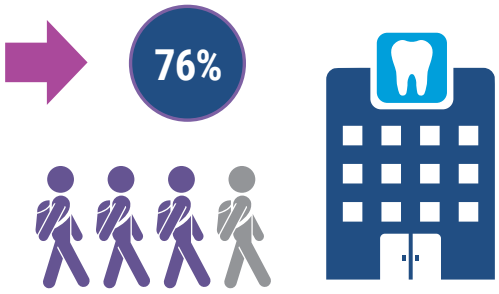
In 2019 1 in 5



children and youth (aged 1 to 17 years) did not have dental insurance.

In 2019 three out of every four children and youth aged 1-17 years

had visited a dental professional for preventative care (such as check-up or cleaning) in the past year.

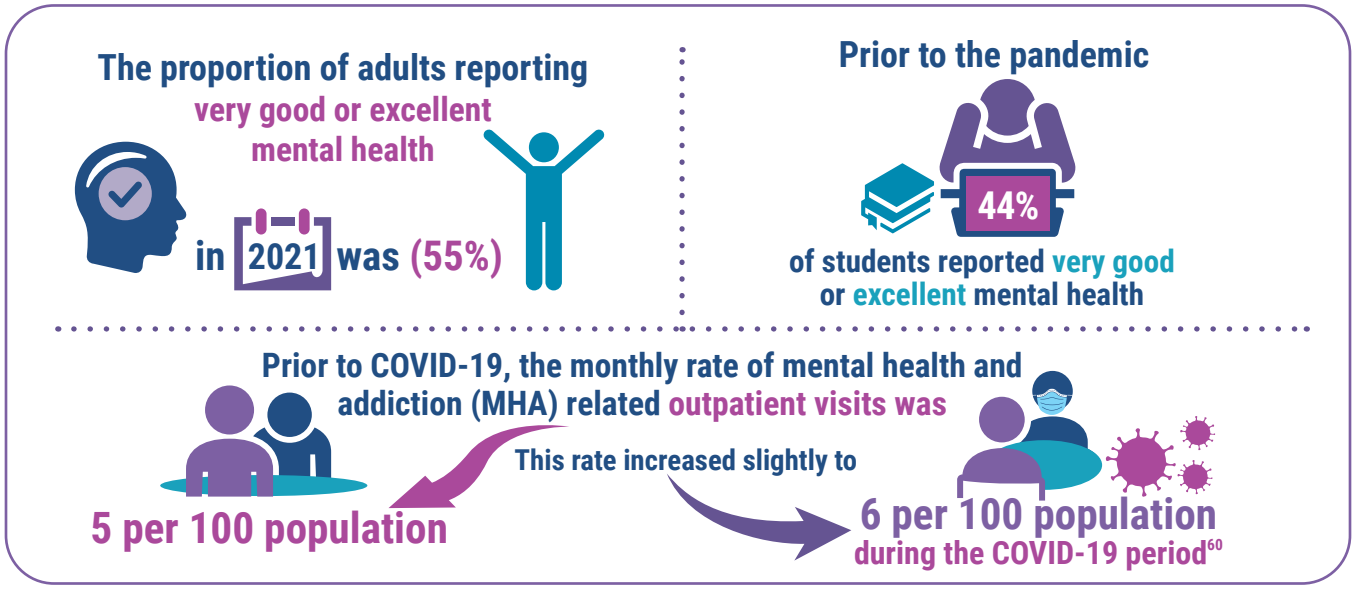


Mental Health

Assessing the state of mental health of the population involves examining two distinct but interrelated concepts: 1) mental illnesses, medically diagnosable conditions where a person's thinking, mood, and/or behaviours can negatively and sometimes severely impact functioning in life; and 2) positive mental health, a person's ability to enjoy life, work productively, and manage life's challenges.

Within Toronto, findings suggest that:

- Mental illnesses and mental health have worsened during the COVID-19 pandemic with women, 2SLGBTQ+, seniors, Indigenous peoples, racialized populations, people with disabilities, and children and youth disproportionately affected.
- Prior to the pandemic, the monthly rate of mental health and addiction-related outpatient visits to any physician was 5 per 100 population in Toronto. This monthly rate increased to 6 per 100 population during the COVID-19 period.[57] Given that many medical offices were closed and that virtual and online assessments are not captured in the rates provided, the impact of the pandemic period on mental health is likely underestimated by these data.
- Recent polls have suggested that an increasing number of Canadians are seeking access to mental health services. A poll conducted in January 2022 for the Canadian Mental Health Association (CMHA)[58] found that that one in four Ontarians (24%) sought help for their mental health challenges, which is an increase from previous polls (17% in 2021 and 9% in 2020).[59] That same survey reported that 43% of people found it difficult to access mental health supports, up from 37% at the start of the pandemic.



[57] For mental health and addiction-related outpatient visits, the "pre-COVID" period is defined as January 2019 to March 2020. "During" COVID is defined as April 2020 to December 2021

[58] CMHA Ontario's fourth survey was conducted by Pollara and questioned 1,001 Ontario adults from Jan. 10-17. It carries a margin of error of ± 3.1 percent, 19 times out of 20.

[59] Canadian Mental Health Association. (CMHA). February 2022. 1 in 4 Ontarians access mental health help – the highest rate during the pandemic. Accessed on December 19, 2022.

[60] For MHA-related outpatient visits, the "pre-COVID" period is defined as January 2019 to March 2020. "During" COVID is defined as April 2020 to December 2021. Visits to primary care, psychiatrists, and/or paediatricians were included.

Focus Area: Mental Health

Three focus area topics have been included in this report. These were selected to show the complexity of factors that influence health conditions and outcomes beyond what is suggested by the health indicators. The selected topics demonstrate the important role of local public health in assessing the multifaceted factors that influence a public health issue. Use of evidence from population health assessments can inform interventions and strategies to address public health issues.

Issue: Mental health is a component of overall health and well-being. Mental illnesses and poor mental health are associated with a range of negative health outcomes, such as increased health care use, substance use, work absenteeism, and a lower quality of life. Contextual factors can positively or negatively impact mental health and mental illnesses.[61] Positive or protective factors include supportive social relationships, organizational policies and practices that support mental health, safe neighbourhoods, and cohesive and inclusive communities.[62] Mental health is shaped by the social determinants of health. The COVID-19 pandemic has negatively impacted mental health and increased the need for services and interventions, exacerbating existing gaps for mental health care.[63]

Background: The global COVID-19 pandemic has compounded stress and impaired coping for those living with mental illnesses. The pandemic stretched scarce mental health resources and service capacity for vulnerable populations, including those experiencing poverty and homelessness, and widened the gap in access to supports and services.[64] [65]

Equity: Prior to the pandemic, the demand for mental health services outpaced the resources available, particularly for populations that face marginalization and isolation due to structural inequities, low-income, and social stigma.

[61] University of Minnesota, School of Public Health, Centre for Leadership in Maternal & Child Health. (2015). Mental Health and Wellbeing: A Socio-Ecological Model. Updated January 2021. Accessed on October 19, 2022 at https://mch.umn.edu/resources/mhecomodel/

[62] University of Minnesota, Center for Leadership in Maternal & Child Health. (2015). Mental Health and Well-being: A Socio-Ecological Model. Accessed on October 19, 2022 at https://mch.umn.edu/resources/mhecomodel/

[63] World Health Organization. (2022). Mental Health and COVID-19: Early evidence of the pandemic's impact: Scientific brief, 2 March 2022. Accessed October 19, 2022 at https://www.who.int/publications/i/item/WHO-2019-nCoV-Sci_Brief-Mental_health-2022.1

[64] World Health Organization. (2022). World Mental Health Day 2022: Make mental health & well-being for all a global priority. Accessed on January 5, 2023 at https://www.who.int/campaigns/world-mental-health-day/2022.

[65] CMHA. (2020). Mental Health Impacts of COVID-19: Wave 2. Summary of Findings – Mental Health Impacts of COVID-19: Wave 2. Accessed on January 5, 2023 at https://cmha.ca/wp-content/uploads/2020/12/CMHA-UBC-wave-2-Summary-of-Findings-FINAL-EN.pdf

Focus Area: Mental Health

Populations at greater risk for poor mental health outcomes include people facing homelessness, women, 2SLGBTQ+ populations, seniors, Indigenous Peoples, Black and other racialized populations, people with disabilities, and children and youth.[66] [67]

COVID-19 compounded poor mental health outcomes for Indigenous Peoples, whose mental health experiences are already affected by the ongoing impacts of colonization.[68] A Statistics Canada survey of Indigenous residents who live off reserve found worsened overall health and, in particular, worsened mental health at rates higher than non-Indigenous participants during COVID-19.[69] Notably, reported experience of mental health conditions was higher among Indigenous people (1 in 5) than non-Indigenous (1 in 10) and access to important services was limited due to pandemic closures. Further, virtual services were limited or non-existent for vulnerable individuals and communities lacking access to telecommunications (such as phone, computer, and internet), which meant that people were unable to get access to necessary services.[70]

According to a 2020 Statistics Canada survey, for most measures of mental health, Black Canadians reported poorer self-rated mental health and greater financial insecurity compared with White Canadians during the COVID-19 pandemic. A higher proportion of Black respondents (32%) compared to White respondents (24.2%) reported symptoms consistent with moderate/severe generalized anxiety disorder in the two weeks prior to completing the survey.[71] Many were challenged to find needed resources as local agencies struggled to move their services online amidst pandemic closures.[72] In a recent study, heightened mental health challenges related to the social determinants of health were also noted for some racialized, working age residents in the Greater Toronto Area early in the pandemic.[73] Racialized residents described experiences of racism and discrimination. These made mental health concerns like anxiety worse. This occurred especially in the context of the COVID-19 pandemic and amidst highly-publicized, racially-motivated violence against Asian and Black communities. Compounding this, multiple barriers to service existed for racialized populations. These include lack of access to appropriate and affordable mental health supports, lack of access to required technology for virtual services, experiences of stigma, cultural and linguistic barriers, and mistrust in systems, all of which contributed to individuals in racialized communities not obtaining needed services.

Public health measures required to control the pandemic resulted in disruptions to in-person learning and school-based services, resulting

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[66] Toronto Public Health. (2022). Health Impacts of the COVID-19 Pandemic on children and Youth. Medical Officer of Health's Report to the Board of Health, Accessed on January 20, 2023 from https://www.toronto.ca/legdocs/mmis/2022/hl/bgrd/backgroundfile-223213.pdf

[67] Pettinicchio D, Maroto M, Chai L and Lukk M. (2021). Findings from an online survey on the mental health effects of COVID-19 on Canadians with disabilities and chronic health conditions. Disability and Health Journal, 14 (3), https://doi.org/10.1016/j.dhjo.2021.101085.

[68] Mashford-Pringle A, Skura C, and Stuts S. (2021) What We Heard: Indigenous People and COVID-19: Supplementary Report for the Chief Public Health Officer of Canada's Report on the State of Public Health in Canada. Thilaxcy Yohathasan Waakebiness-Bryce Institute for Indigenous Health, Dalla Lana School of Public Health, University of Toronto. Accessed on November 14, 2022 at https://www.canada.ca/content/dam/phac-aspc/documents/corporate/publications/chief-public-health-officer-reports-state-public-health-canada/from-risk-resilience-equity-approach-covid-19/indigenous-peoples-covid-19-report/cpho-wwh-report-en.pdf

[69] Hahmann T and Kumar MB. (2022). Unmet health care needs during the pandemic and resulting impacts among First Nations people living off reserve, Métis and Inuit. StatCan COVID-19: Data to Insights for Better Canada. Accessed on November 14, 2022 at https://www150.statcan.gc.ca/n1/pub/45-28-0001/2022001/article/00008-eng.htm

[70] Mashford-Pringle A, Skura C, and Stuts S. (2021) What We Heard: Indigenous People and COVID-19: Supplementary Report for the Chief Public Health Officer of Canada's Report on the State of Public Health in Canada. Thilaxcy Yohathasan Waakebiness-Bryce Institute for Indigenous Health, Dalla Lana School of Public Health, University of Toronto. Accessed on November 14, 2022 at https://www.canada.ca/content/dam/phac-aspc/documents/corporate/publications/chief-public-health-officer-reports-state-public-health-canada/from-risk-resilience-equity-approach-covid-19/indigenous-peoples-covid-19-report/cpho-wwh-report-en.pdf

[71] Moyser, M. (2020). The mental health of population groups designated as visible minorities in Canada during the COVID-19 pandemic (Catalogue No. 45280001). Statistics Canada. Accessed on November 14, 2022 at https://www150.statcan.gc.ca/n1/pub/45-28-0001/2020001/article/00077-eng.htm

[72] Black Health Alliance. (2022). Perspectives on Health & Well-Being in Black Communities in Toronto: Experiences through COVOD-19. Accessed on December 16, 2022 at https://blackhealthalliance.ca/wp-content/uploads/Perspectives-on-Health-Well-Being-in-Black-Communities-in-Toronto-Experiences-through-COVID-19.pdf.

[73] Sanford S, Um S, Tolentino M, Raveendran L, Kharpal K, Acco-Weston N, and Roche B. (2022). The Impact of COVID-19 on Mental Health and Well-Being: A Focus on Racialized Communities in the GTA. Accessed on December 16, 2022 at https://www.wellesleyinstitute.com/wp-content/uploads/2022/03/The-Impact-of-COVID-19-on-Mental-Health-and-Well-being-A-Focus-on-Racialized-Communities-in-the-GTA.pdf

in indirect mental health impacts on children and youth.[74] In the first year of the pandemic one in four youth experienced increased depressive symptoms. One in five experienced elevated anxiety, representing a 32% increase in experiences of worry and stress. Hospital data showed emergency department visits related to self-harm among children and youth in Toronto increased from 467 visits in the 15 months before the pandemic to 606 visits in the 15 months after pandemic onset.[74] Mental health concerns in Toronto are also prominent among international students, students with special needs, students facing discrimination and those in families with lower household income and parental education rates.[74]

Response: Toronto Public Health has identified the increase in mental health conditions as one of four priority issues to address.[75] Toronto Public Health is exploring how it can facilitate the development of effective strategies to improve mental health at a population level. In the 2021 Toronto Indigenous Health Strategy implementation report, Toronto Public Health also identified the need to support culturally appropriate and safe mental health promotion programs to better serve Indigenous clients.[76] In addition, Toronto Public Health is working with school boards and school communities to support COVID-19 recovery efforts prioritizing the promotion of mental health. This action involves youth engagement initiatives using a comprehensive school health approach. Other actions underway include collating evidence and local mental health data to inform a new mental health strategy, partnering with other City divisions, and engaging the community to identify opportunities to improve access to mental health resources in Toronto.[76]

Substance Use

Substance use is common. People from all types of backgrounds use legal and illegal substances for a variety of reasons. High potency drugs, an unregulated drug supply, overdoses, and contaminated substances can have negative physical, social, and psychological impacts for both the individual using drugs and those around them. The criminalization of some types of drug use contributes significantly to these harms. A public health approach to drugs includes: the decriminalization of drug possession, as well as increased prevention, harm reduction, and treatment supports. Addressing the social determinants of health – such as social inclusion and adequate housing and income – is important to prevent and reduce harms from substance use.

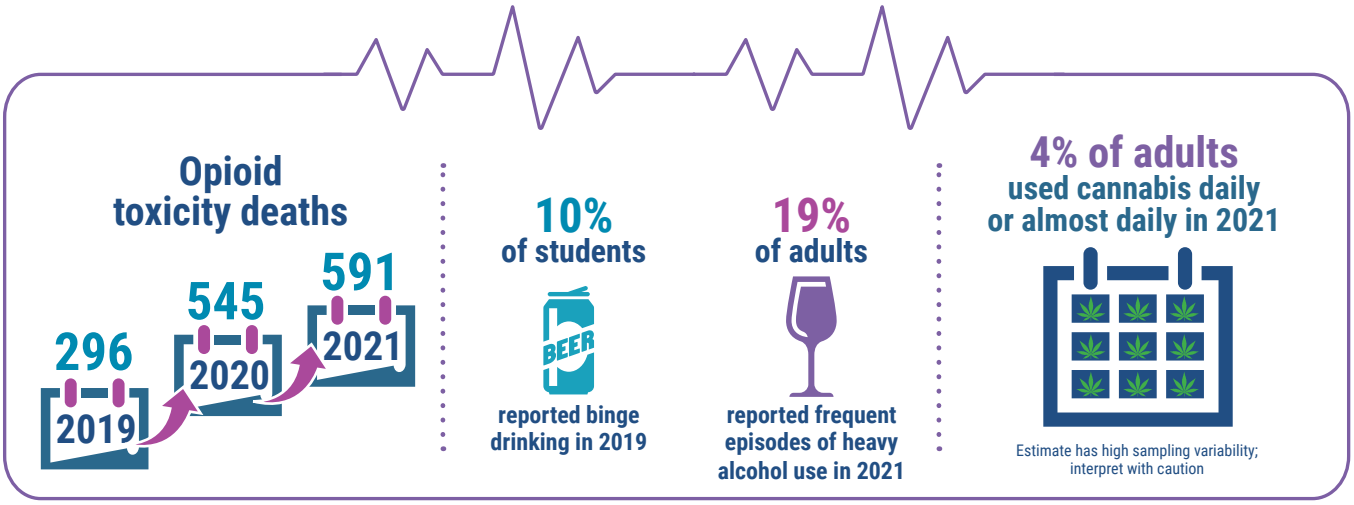
Overdose deaths are due, in large part, to the unregulated drug supply. The use of highly-potent opioids combined with unexpected substances are increasing the risk of overdose in Toronto. In 2022, the unregulated opioid supply in Toronto is dominated by fentanyl.

[74] Toronto Public Health. (2022). Health Impacts of the COVID-19 Pandemic on Children and Youth. Report to Toronto Board of Health, March 30, 2022. Accessed on October 13, 2022 at https://www.toronto.ca/legdocs/mmis/2022/hl/bgrd/backgroundfile-223213.pdf

[75] Toronto Public Health. (2022). Update on COVID-19 response and other public health functions. Report to Toronto Board of Health, June 6, 2022. Accessed on October 17 at: https://www.toronto.ca/legdocs/mmis/2022/hl/bgrd/backgroundfile-226723.pdf

[76] Toronto Public Health. (2022). Advancing the Implementation of the Toronto Indigenous Health Strategy at Toronto Public Health. Accessed on December 15, 2022 at https://www.toronto.ca/legdocs/mmis/2021/hFfel/bgrd/backgroundfile-170532.pdf.

- Toronto continues to be in the midst of a drug poisoning crisis, exacerbated by the COVID-19 pandemic.
- Rates of fatal opioid poisoning, including from fentanyl, remain consistently high.
- Rates of non-fatal opioid poisonings have fluctuated with peaks in 2021.
- Reports of daily cannabis use among adults have remained stable from 2019 to 2021.



Infectious Diseases

Despite successful public health interventions such as vaccination, food safety programs, and improved sanitation, infectious diseases are present in Toronto's population. The COVID-19 pandemic has demonstrated how infectious diseases can significantly impact health by causing acute illnesses, chronic diseases, and deaths. Some risk factors for infectious disease exposure include housing status, income security, and travel patterns. Infectious disease risk can be reduced by vaccination and access to health care for prevention. Outcomes of infectious disease can be modified by the availability and use of early diagnosis and treatment.

Toronto Public Health closely monitors the incidence of certain infectious diseases collectively known as diseases of public health significance (DOPHS) which are designated by the Government of Ontario (O. Reg. 135/18: Designation of Diseases).

The close proximity of human and animal habitats can create conditions that promote an ongoing threat of novel disease emergence. The effects of climate change, including rising temperatures, can further contribute to the spread of zoonotic disease.[77] Toronto's high level of interconnectedness with the rest of the world through air travel makes the introduction and spread of a novel disease a real and ongoing possibility.

The most recent data show:

- Decreased diagnostic testing and screening made it challenging to determine recent trends among

[77] World Health Organization (WHO); Regional Office for Europe. A Health Perspective on the Role of the Environment in One Health; WHO/EURO:2022-5290-45054-64214; WHO: Geneva, Switzerland, 2022.

diseases of public health significance. Testing rates were impacted by the reduced availability of clinical services and the redeployment of swabs and materials to COVID-19 testing during the pandemic.

- Emerging and re-emerging viruses were responsible for two recent outbreaks: the ongoing COVID-19 pandemic first detected in Toronto in 2020 and the mpox outbreak in 2022.
- There is a significant gap in immunization coverage for routine childhood vaccines because of decreased access to routine healthcare services during the pandemic.
- Sexually transmitted infections represent the highest proportion of cases among all non-pandemic infectious diseases (2017-2019, Figure 7).
- Testing for common sexually transmitted infections (chlamydia and gonorrhea) declined by 40% during the pandemic. This suggests significant missed opportunities for treatment and prevention of longer term complications, as well as increased risk of infection transmission.

In long-term care, retirement homes, hospitals, and other institutional settings:

Since the start of the pandemic, Toronto Public Health responded to more than 1,374 COVID-19 outbreaks.

(January 1, 2020 to August 31, 2022)

Outbreaks of enteric (such as E.coli and salmonella) and non-COVID-19 respiratory diseases (such as rhinovirus and influenza) decreased in 2021 compared to 2017-2019.

Respiratory: Down 78% (from 319 to 69)

Enteric: Down 87% (from 67 to 9)

There was a 16% increase in new infectious syphilis cases in 2021, compared to the period 2017 to 2019; this may be the continuation of a trend that began prior to the pandemic.

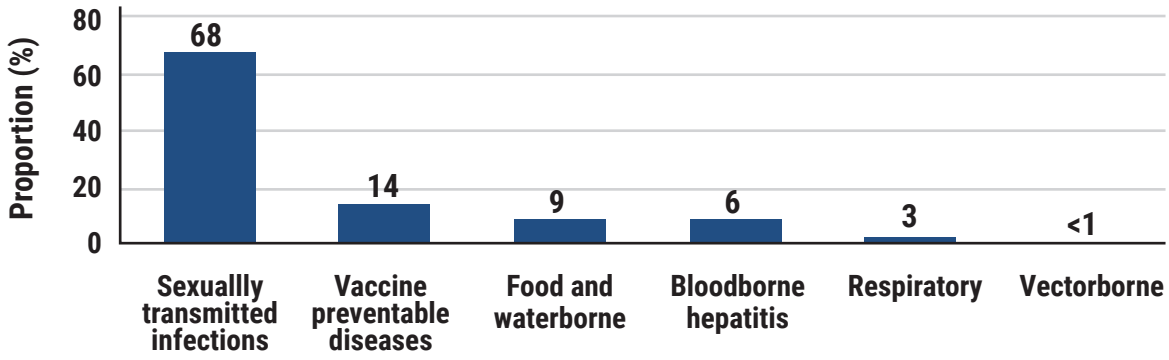


Figure 7: Proportion of infectious disease cases, by disease type, in Toronto for 2017-2019

Data source: Ontario Ministry of Health, integrated Public Health Information System (iPHIS), extracted [10/28/2022].

COVID-19 and Mpox

Since the 2019 T.O. Health Check: An Overview of Toronto's Population Health Status report, Toronto Public Health led the response to two new communicable diseases in our community: COVID-19 and mpox

The first COVID-19 case in Canada was detected in Toronto, and was lab-confirmed on January 25, 2020. This event evolved into an unprecedented public health response that impacted the lives of all Torontonians. From the start of the pandemic to the end of December 2022 (January 25, 2020 to December 31, 2022) there were 16,701 reported COVID-19 hospitalizations and 4,680 deaths in Toronto. (Figure 8). An estimated 15% of adult cases experienced post-COVID conditions (long COVID).[78]

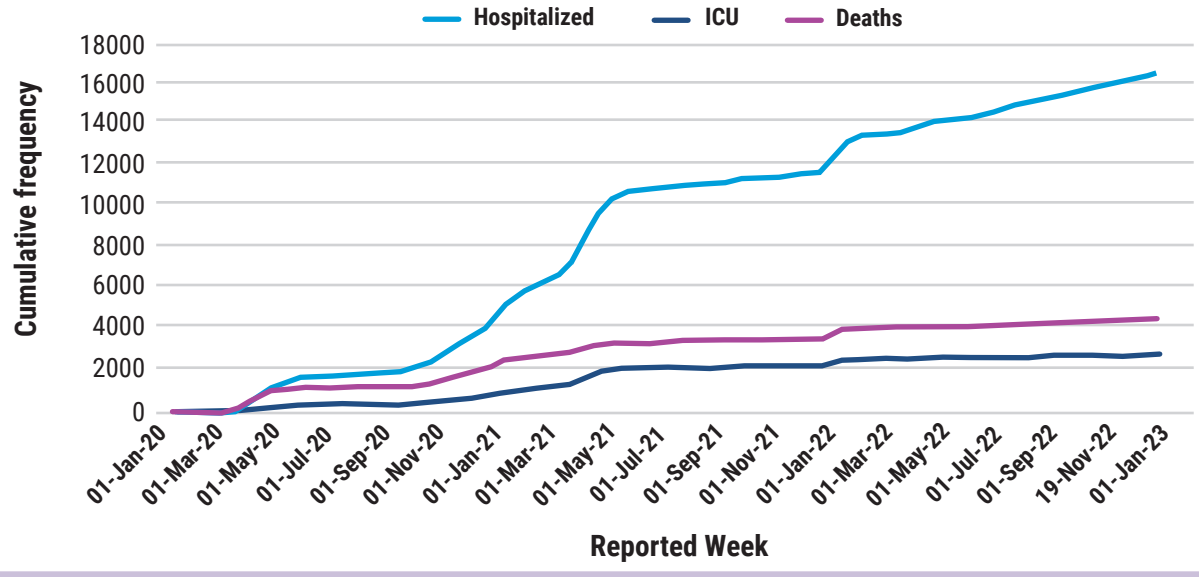


Figure 8: Cumulative counts of COVID-19 severe outcomes, January 25, 2020 to December 31, 2022

Data source: Ontario Ministry of Health, Case and Contact Management System (CCM), extracted [01/25/2023].

[78] Statistics Canada. 2022. Long-term symptoms in Canadian adults who tested positive for COVID-19 or suspected an infection, January 2020 to August 2022. Accessed on January 20, 2023 at https://www150.statcan.gc.ca/n1/daily-quotidien/221017/dq221017b-eng.htm.

In 2022, an mpox outbreak resulted in over 500 reported cases in Toronto, including 13 hospitalizations. Consistent with global trends, 99% of cases in Toronto were male and sexual contact with other cases was the main identified risk factor. As of December 31, 2022, more than 30,000 vaccines were administered to protect the population against mpox. The number of new mpox cases has decreased significantly since the peak in July 2022 (Figure 9).

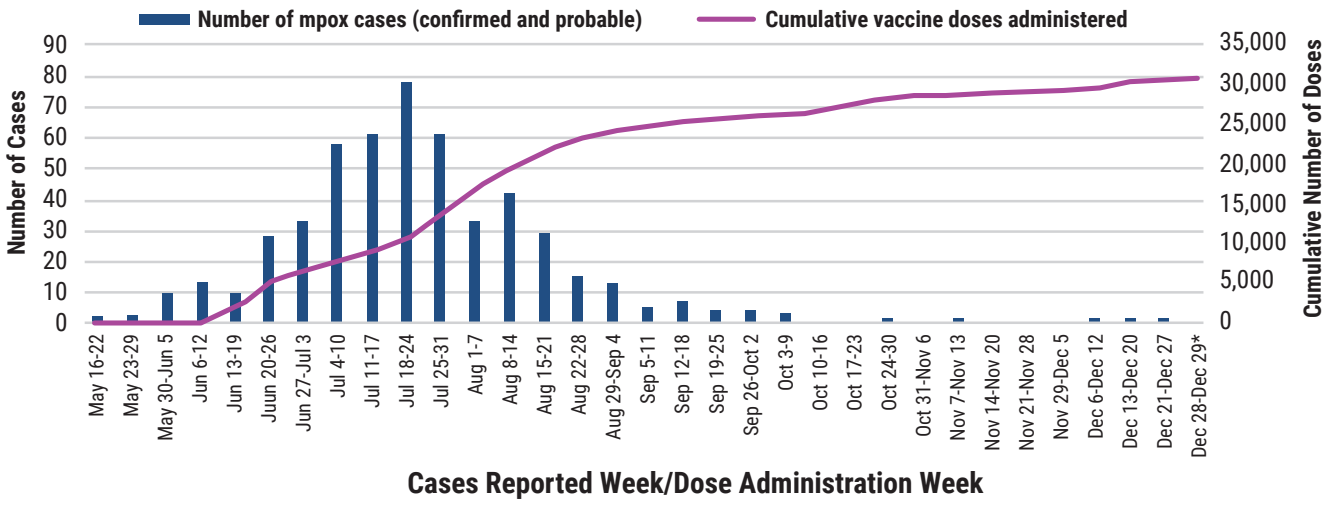


Figure 9: Mpox cases and cumulative vaccine doses administered, 2022

Data source: Ontario Ministry of Health, integrated Public Health Information System (iPHIS), extracted [01/06/2023]
*** indicates partial week**
Vaccine data from internal operational team, extracted [01/06/2023].

Focus Area: Human Papillomavirus Vaccination

Issue: Toronto Public Health's School Immunization Program administers three vaccines to students in Grades 7 to 12: Meningococcal vaccine; Hepatitis B vaccine; and Human Papillomavirus (HPV) vaccine. The COVID-19 pandemic response, and the redeployment of public health staff it required, meant that the Toronto Public Health School Immunization Program that is typically delivered in schools was paused for nearly 2.5 years.

Background: HPV vaccination protects against some types of HPV infection that can cause cervical, vaginal, vulvar, penile, anal, and oropharyngeal (back of the throat, including the base of the tongue and tonsils) cancers, as well as genital warts. The HPV vaccine is almost 100% effective against cervical cancer if administered before the age of 25.[79] Every year, cervical cancer causes 400 deaths in Canada.[80] Vaccine-preventable HPV infection is also a leading cause of oropharyngeal cancers.[81]

The HPV vaccination series is normally offered to Grade 7 and 8 students in Ontario. In April 2022, the Federation of Medical Women of Canada (FMWC) released a paper that determined that almost half a million 12 to 15 year olds in Ontario would not be protected against HPV-related cancers if immunization catch-up activities were not initiated in 2022.

Before the COVID-19 pandemic, vaccination coverage for HPV was on an upward trend in Toronto. However, due to the impact of the pandemic on routine immunizations, for the 2020/21 school year, only 1.3% of eligible 12-year-olds had initiated the HPV vaccine series in Toronto and only 0.1% were up-to-date on the series.

Equity: Missed school-based immunizations may further intensify existing inequities. For example, rates of HPV infections, advanced cervical cancer, and mortality from cervical cancer are all higher in women living on low incomes.[82] [83] Disproportionate rates of cervical cancer and mortality are linked not only to gaps in access to HPV vaccination but also to gaps in cervical cancer screening for women who are racialized

[79] Yousefi Z, Aria H, Ghaedrahmati F, et al. (2021). An Update on Human Papilloma Virus Vaccines: History, Types, Protection, and Efficacy. Front Immunol.;12:805695.

[80] Canadian Partnership Against Cancer. (2020). Action Plan for the Elimination of Cervical Cancer in Canada. Accessed October 13, 2022 at https://s22438.pcdn.co/wp-content/uploads/2020/11/Elimination-cervical-cancer-action-plan-EN.pdf

[81] Nielsen KJ, Jakobsen KK, Jensen JS, Grønhøj C, Von Buchwald C. The Effect of Prophylactic HPV Vaccines on Oral and Oropharyngeal HPV Infection-A Systematic Review. Viruses. 2021 Jul 11;13(7):1339. doi: 10.3390/v13071339. PMID: 34372545; PMCID: PMC8310210. Accessed October 13, 2022 at https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8310210/

or have Indigenous identity. A study at Unity Health (St. Michael's Hospital) in Toronto found that patients living below the low income cut-off were less likely to be screened than people living above the low income cut-off.[83] At the national level, First Nations, Inuit, and Métis people experienced three times more diagnoses and four times more deaths from cervical cancer than the population overall.[82] In a study of cancer patterns and disparities by ethnicity in Canada for 2006 to 2016, cervical cancer was among the top 10 causes of cancer deaths of Caribbean females.[84] Similarly, in the United States, Black women are more likely to die from cervical cancer than women of any other race or ethnicity.[85]

Response: Since June 2022, Toronto Public Health has focused on school-based vaccinations in grades 7 to 12 (HPV, hepatitis B, and meningococcal vaccines) to address missed immunizations. As of July 2022, there were approximately 86,000 students in grades 7 to 12 who were outstanding for one or more of these vaccines. Toronto Public Health immunized approximately 13,000 Grade 7 to 12 students in summer 2022 through immunization clinics held throughout Toronto. In the fall of 2022, the School Immunization Program re-started with Toronto Public Health providing vaccines to Grade 7 and 8 students in schools. Students in Grades 9 to 12 were also invited to receive these vaccines at Toronto Public Health clinics and at some secondary schools. From September 1, 2021 to December 31, 2022, more than 59,800 students were given over 89,100 doses of hepatitis B, human papillomavirus, and/or meningococcal vaccines. Overall, the combined coverage for all grades and these three vaccines increased from 37% to 48% at the end of 2022.

[82] Canadian Partnership Against Cancer (CPAC). Action Plan for the Elimination of Cervical Cancer in Canada 2020-2030. Retrieved October 2022 from https://s22438.pcdn.co/wp-content/uploads/2020/11/Elimination-cervical-cancer-action-plan-EN.pdf

[83] Lofters A K, Baker A, Corrado A, Schuler A, Rau A, Baxter NN, Leung FH, Weyman K, and Kiran T. (2021) Care in the Community: Opportunities to improve cancer screening uptake for people living with low income, Preventive Medicine Reports, 24 (2021). Accessed January 16, 2023 at https://doi.org/10.1016/j.pmedr.2021.101622

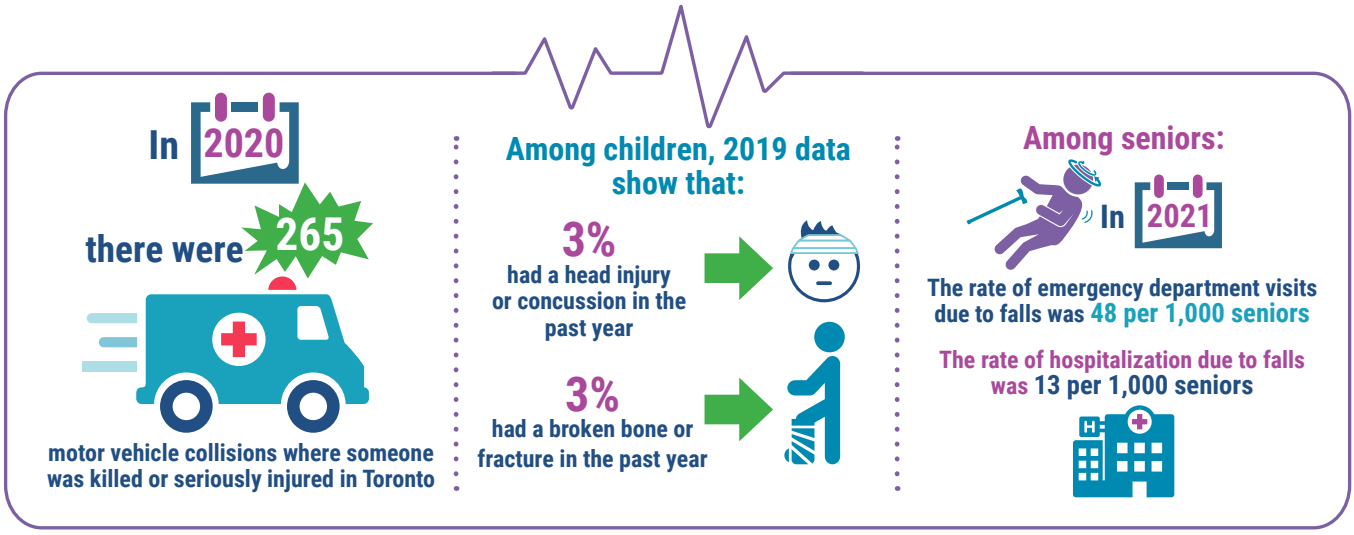
[84] Statistics Canada. (2021). Health Reports: Do cancer incidence and mortality rates differ among ethnicities in Canada? Accessed on January 18, 2023. https://www150.statcan.gc.ca/n1/pub/82-003-x/2021008/article/00001-eng.htm

[85] O'Hara. (2022). Mayo Clinic Q&A podcast: The link between racial disparities and cervical cancer. Mayo Clinic News Network. Accessed on January 18, 2023 at https://newsnetwork.mayoclinic.org/discussion/mayo-clinic-qa-podcast-the-link-between-racial-disparities-and-cervical-cancer/

Unintentional Injuries

Unintentional injuries constitute the majority of injuries. Unintentional injuries include those resulting from motor vehicle collisions, drownings, falls, sports, and recreation. These injuries can lead to emergency department visits, hospitalizations, and adverse health outcomes like impairments and disabilities such as blindness, spinal cord or brain injuries. The large majority of injuries are both predictable and preventable. Most injuries can be prevented by recognizing and addressing unsafe environments, conditions and behaviours.[86] The trends in types of unintentional injuries are notably different among adults and seniors compared with children and youth.

- As a result of reduced mobility during the COVID-19 pandemic, the number of serious motor vehicle collisions decreased in 2020 in Toronto.
- The number of serious falls requiring emergency care or hospitalization and other reported injuries remained high overall.



Chronic Diseases

Chronic diseases (such as cancer, diabetes, and cardiovascular disease) are leading contributors to death and disability. Like other population health outcomes, chronic conditions are influenced by complex interactions of biological, social, and environmental determinants.

This report identified concerning trends among risk factors contributing to increases in chronic disease. Some of these trends may be aggravated by the COVID-19 pandemic, rising household costs (including increased costs for food), and the growing proportion of seniors who are at increased risk of most chronic diseases.

In Toronto:

- An increasing number of residents were overdue for breast, cervical, or colorectal cancer screening in 2020. Overdue health screens increase the risk of disease diagnosis at later stages and lower survival.

[86] Health Surveillance Indicators: Adult and Senior Unintentional Injury, 2017.Toronto Public Health. Accessed on January 15, 2023 at https://www.toronto.ca/wp-content/uploads/2017/12/9419-tph-hsi-adult-and-senior-unintentional-injury-2017jun28.pdf

- The age-standardized prevalence of diabetes was increasing in adults aged 20 years and over in 2020 compared to 2011.
- Most adults were eating vegetables or fruit less than five times per day in 2021.
- Among children and youth, in 2019:
  - an estimated one-third were overweight and obese
  - 7 in 100 children were physically active for at least 60 minutes each day in the past week

More than 2 out of every 3 (70%) adults
met or exceeded Canadian Physical Activity Guidelines

2021 data

7% of children & youth
were physically active in the past week for at least

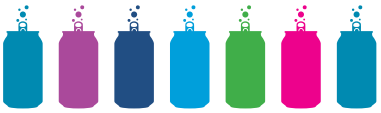
2019 data

1 in 5 (19%) of adults

ate vegetables and fruits at least five times per day

2021 data

28% of children
consumed seven or more sugar-sweetened beverages[87] in the past week



2019 data

11% of adults were smoking daily or occasionally

2021 data

[87] Sugar-sweetened beverages include fruit flavoured, regular soft drinks, sports, energy drinks, chocolate milk/hot chocolate, and milkshakes. Questions on all drinks are restricted to children aged 3 years and over, except for sports drinks and coffee/tea which are restricted to youth aged 12 years and over.

Cancer Cases in Ontario[88]

In 2018

about half of all prevalent cancer cases in Ontario were among people

An aging 'baby boomer' generation (those born between 1946 and 1964)

is expected to contribute to an increased incidence of cancer in Ontario

Ontarians 65+

are anticipated to represent a larger proportion of cancer cases by 2034

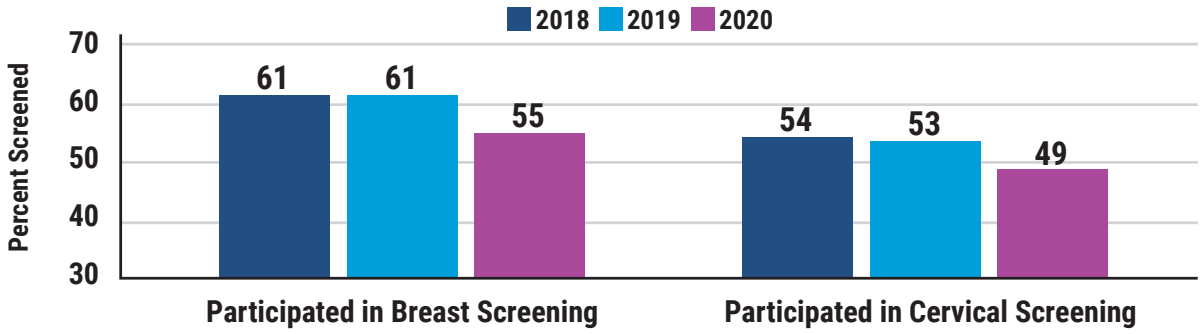


Figure 10: Cancer screening participation by screen-eligible people, percentage

Data source: Ontario Health (Cancer Care Ontario). Ontario Cancer Profiles [Internet]. 2021 [12/01/2022]. Available from: https://cancercareontario.ca/ontariocancerprofiles

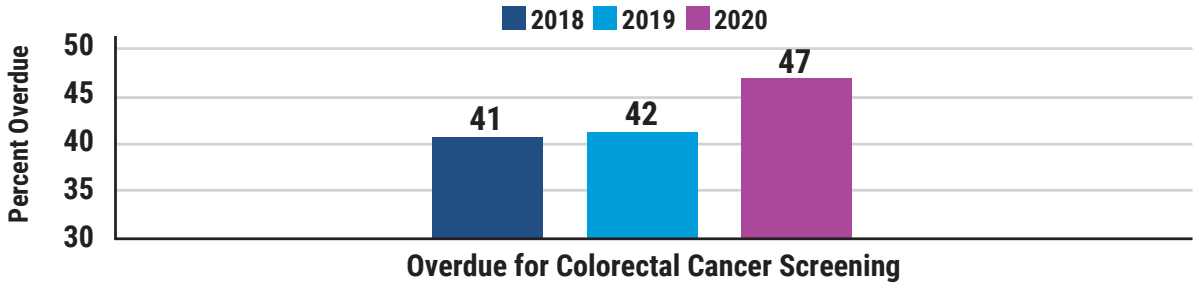
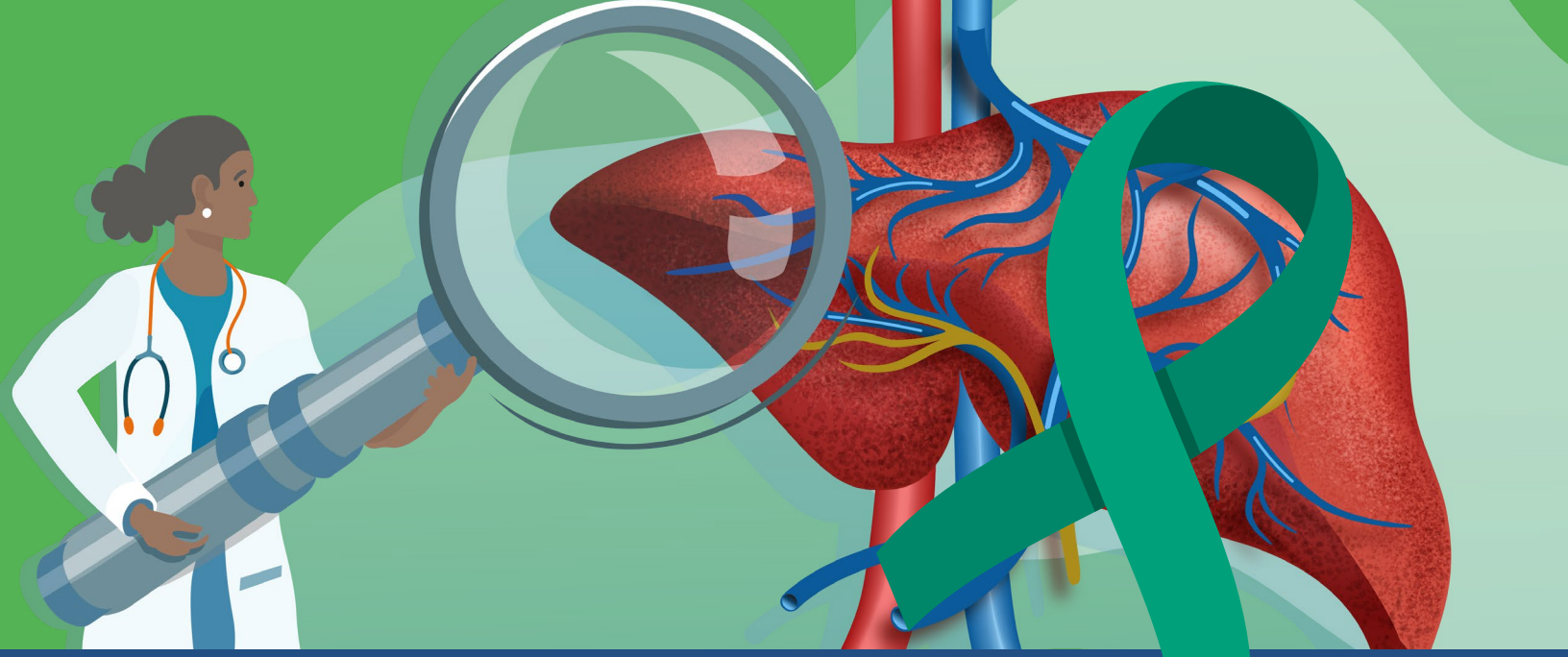


Figure 11: Overdue colorectal cancer screening proportion in screen-eligible people

Data source: Ontario Health (Cancer Care Ontario). Ontario Cancer Profiles [Internet]. 2021 [12/01/2022]. Available from: https://cancercareontario.ca/ontariocancerprofiles

[88] Cancer Care Ontario. Ontario Cancer Statistics 2022. Accessed on December 19, 2022 at https://www.cancercareontario.ca/en/data-research/view-data/statistical-reports/ontario-cancer-statistics-2022



Focus Area: Liver Cancer

Issue: After over 30 years of increases, the rates of liver cancer in Ontario have remained high and stable in the last 10 years.[89] [90] The common risk factors for liver cancer include tobacco smoking, obesity, alcohol consumption, and chronic hepatitis B and hepatitis C viral infections. It is estimated that, in Ontario, over a third of all liver cancer cases in 2013 were due to chronic hepatitis B (14%) or hepatitis C (24%) infection. In Canada, an estimated 24.2% of liver cancer cases in 2015 were attributable to active tobacco smoking[91] , 3.6% to alcohol consumption[92] , and 9.2% to overweight and obesity.[93] Many liver cancer cases can be prevented by addressing modifiable risk factors or providing vaccination or treatment for hepatitis infections. Cancer Research UK estimates that just under half of liver cancer cases are preventable.[94]

Background: Available data indicates that Toronto's liver cancer incidence rate is higher than the Ontario rate and is seventh-highest out of all public health units.[95] In Toronto, there is a disproportionate burden of liver cancer compared to the rest of Ontario, likely because there are higher numbers of at-risk populations for chronic hepatitis B and C infections. Some of these populations may be marginalized from mainstream health care services[96] and may encounter stigmatization in seeking testing.[97] [98] Chronic hepatitis B and C infections are typically asymptomatic for decades and may be diagnosed late unless at-risk individuals are tested for the infection. Almost 40% of those living with hepatitis C are unaware of their infection, which is why screening is critical.

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[89] Cancer Care Ontario. (2018). Ontario Cancer Facts: Liver cancer incidence rates have increased in Ontario. Accessed on December 23, 2022 at https://www.cancercareontario.ca/en/cancer-facts/liver-cancer-incidence-rates-have-increased-ontario

[90] Cancer Care Ontario. (2020). Ontario Cancer Statistics 2020. Accessed on January 16, 2023 at https://www.cancercareontario.ca/en/statistical-reports/ontario-cancer-statistics-2020

[91] Poirier AE, Ruan Y, Grevers X, Walter SD, Villeneuve PJ, Friedenreich CM, and Brenner DR. (2019). Estimates of the current and future burden of cancer attributable to active and passive tobacco smoking in Canada. Preventive Medicine, 122(2019), 9-19Geographics

[92] Grevers X, Ruan Y, Poirier AE, Walter SD, Villeneuve PJ, Friedenreich CM, and Brenner DR. (2019). Estimates of the current and future burden of cancer attributable to alcohol consumption in Canada. Preventive Medicine, 122(2019), 40-48

[93] Brenner DR, Poirier AE, Ruan Y, Hebert LA, Grevers X, Walter SD, Villeneuve PJ, and Friedenreich CM. (2019). Estimates of current and future burden of cancer attributable to excess body weight and abdominal adiposity in Canada. Preventive Medicine 122(2019), 49-64

[94] Cancer Research UK (ND) Liver cancer risk. Accessed January 23, 2023 at: https://www.cancerresearchuk.org/health-professional/cancer-statistics/statistics-by-cancer-type/liver-cancer/risk-factors

[95] Cancer Care Ontario. (2018). Ontario Cancer Profiles: Cancer Incidence. Extracted October 25, 2022 from https://profiles.cancercare.on.ca/Incidence/atlas.html?date=2018 tics-by-cancer-type/liver-cancer/risk-factors

Equity: Given the increased risks from chronic hepatitis infections, liver cancer may more greatly affect specific sub-populations in Toronto. Populations at higher risk for chronic hepatitis infections include those exposed to unsafe injection, piercing or transfusion practices, people who use injection drugs, people who engage in unsafe sex, and those who have emigrated from a country where hepatitis infections are more common.[96] Factors that influence hepatitis B and C epidemics in Canada include the ongoing crisis related to substance use and rising injection drug use, along with the social determinants of health (such as immigration, housing instability, or access to health services), that increase the vulnerability of some populations getting delayed prevention or treatment for hepatitis B and C.[99]

Response: The risks of liver cancer from chronic hepatitis infections can be modified by preventing transmission, such as through immunization and through timely referral to appropriate treatment and care to reduce complications.[96] Hepatitis B vaccines are publicly-funded and 95% effective in preventing infection and the development of associated chronic disease and liver cancer. Through Toronto Public Health's Student Immunization Program, hepatitis B vaccine is administered to middle school students in Grade 7 and 8 schools. From September 14, 2021 to December 31, 2022, over 36,000 doses of hepatitis B vaccine were administered to nearly 16,000 students as part of efforts to address missed doses of these lifesaving vaccines.

Harm reduction approaches, such as needle exchange services provided by Toronto Public Health and community partners, can prevent acquisition of hepatitis C. In addition, Toronto Public Health manages the BodySafe program which involves complaints-based inspections of personal service settings to ensure safe practices are being used to reduce the spread of infections including hepatitis B and C.[100] Increasing harm reduction efforts in Canada (such as through needle exchange and supervised consumption services) may be one factor explaining recent declines in chronic hepatitis C nationally.[101]

Early diagnosis of both hepatitis B and C infections, and timely access to medical care and treatment, can prevent or reduce the risk of developing complications that can lead to liver cancer. Toronto Public Health's harm reduction services help detect previous infection in at-risk groups through screening, and link clients to appropriate health care for treatment and counselling.

Toronto Public Health works with community partners (including schools, workplaces, and

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[96] Toronto Public Health. (2017). Hepatitis B and C in Toronto: Preventing chronic viral hepatitis infections and complications. Accessed on October 25, 2022 at https://www.toronto.ca/legdocs/mmis/2017/hl/bgrd/backgroundfile-104494.pdf

[97] Smith-Palmer J, Cerri K, Sbarigia U, Chan EKH, Pollock RF, Valentine WJ, Bonroy K. (2020). Impact of Stigma on People Living with Chronic Hepatitis B. Patient Relat Outcome Meas. 2020 Mar 9;11:95-107. doi: 10.2147/PROM.S226936. PMID: 32214859; PMCID: PMC7082540. Accessed December 30, 2022 at https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7082540/#:~:text=The%20stigma%20directed%20towards%20people,of%20transmission%20routes%20for%20HBV.

[98] British Columbia Centre for Disease Control. (2022). Stigma & hepatitis c: A fact sheet for health care providers. Accessed December 30. 2022 at http://www.bccdc.ca/Health-Info-Site/Documents/Hepatitis_Stigma_Fact_Sheet.pdf

[99] Public Health Agency of Canada. (2022). Report on Hepatitis B and C Surveillance in Canada. Accessed January 18, 2023 at https://www.canada.ca/content/dam/phac-aspc/documents/services/publications/diseases-conditions/report-hepatitis-b-c-canada-2019/report-hepatitis-b-c-canada-2019.pdf

[100] Toronto Public Health. (2023). Body Safe. Accessed on January 4, 2023 at https://www.toronto.ca/community-people/health-wellness-care/health-programs-advice/bodysafe/

[101] Public Health Agency of Canada. (2022). Report on Hepatitis B and C Surveillance in Canada: 2019. Accessed January 18, 2022 at https://www.canada.ca/en/public-health/services/publications/diseases-conditions/report-hepatitis-b-c-canada-2019.html#a5

other organizations) to address other modifiable liver cancer risks and to promote healthy living, especially for the most vulnerable Torontonians. Prior to the pandemic, the Healthy Schools and Substance Misuse Program worked with school boards, students, and parents to promote youth resilience, peer leadership, and school engagement aimed at preventing alcohol and drug use and associated harms. Further, to reduce short and long-term harms from the misuse of alcohol, Toronto Public Health promoted Canada's Low Risk Alcohol Drinking Guidelines for adults of legal drinking age through various programs and initiatives prior to the COVID-19 pandemic.[102] Through Canada's Guidance on Alcohol and Health released January 2023, Toronto Public Health will continue to provide evidence-based information about alcohol and cancer to enable Torontonians to make informed decisions about alcohol consumption.[103]

Toronto Public Health also collaborates in the areas of prevention of youth tobacco and vaping use and smoking cessation initiatives with a focus on reducing barriers for the most vulnerable. In addition, Toronto Public Health enforcement of the *Smoke-Free Ontario Act* reduces youth access to tobacco and vapour products and protects the public from second-hand smoke exposure. Toronto Public Health addresses obesity as a cancer risk factor through health promotion programs and healthy public policies aimed at creating physical and social environments that support healthy eating and physical activity. For example, Toronto's Student Nutrition Program supports access to safe, adequate, and nutritious food to over 211,000 students daily who are at risk for poor nutritional intake.[104]

[102] Toronto Public Health. (2023). Alcohol and Other Drugs. Accessed on January 10, 2023 at https://www.toronto.ca/community-people/health-wellness-care/health-programs-advice/alcohol-and-other-drugs/

[103] Paradis C, Butt P, Shield K, Poole N, Wells S, Naimi T, and Sherk A, (2023). The Low-Risk Alcohol Drinking Guidelines Scientific Expert Panels. Canada's Guidance on Alcohol and Health: Final Report. Ottawa, Ont.: Canadian Centre on Substance Use and Addiction. Accessed on January 17, 2023 at https://ccsa.ca/sites/default/files/2023-01/Canada%27s%20Guidance%20on%20Alcohol%20and%20Health%20Final%20Report_I.pdf

[104] City of Toronto (2023) Student Nutrition Program. Accessed on January 12, 2023 at: https://www.toronto.ca/community-people/health-wellness-care/health-programs-advice/student-nutrition-program/

APPENDIX 1: DATA TABLES

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How to read these tables:

The symbol type and colour are selected to show specific assessments in the trend of each public health indicator summarized in this section.

Increases or decreases in the trend for the indicator value are denoted by an upwards or downwards facing arrow, while a dash suggests a stable trend. Use of green or red colours indicates either a positive or negative trend, recognizing that some indicators measure healthy behaviours and outcomes, while others measure risk and harm. The use of grey colour indicates a stable trend or that the indicator does not have positive or negative connotation. N/A denotes that data was either not available for trending or that this was not possible for the data source. Please consult Data Notes for specific indicators.

See Appendix 2: Data Notes section for data sources.

Social Environment

Table 2: Social environment health indicators

Topic	Measure	Year	Unit	Value	Trend
Food insecurity	Individuals experiencing household food insecurity in the past year	2020 (CIS 2021)	%	18.6	▬ (2018-2020)
	Children/youth (1-17 years) experiencing household food insecurity in the past year	2019	%	18.5	N/A
Income	Proportion of persons with income below the low income measure, after tax (LIM-AT)	2019	%	22.5	▬ (2014-2019)
Housing	Tenant households spending 30%+ of household income on shelter costs*	2021	%	40	▼ (2006, 2016, 2021)
	Number of people experiencing homelessness (point-in-time count)	2021	N	7,347	▲ (2006-2021)
	Number of people actively using the shelter system in the past three months	2022	N	9,711	▲ (2018-2022)
	Deaths of people experiencing homelessness	2021	N	221	▲ (2017-2021)
	Births (Homeless)	2019	N	318	N/A
	Proportion of households living in unsuitable housing	2021	%	12.5	▬ (2016, 2021)

Topic	Measure	Year	Unit	Value	Trend
Social Capital	Adults (aged 18+) reporting somewhat strong or very strong sense of belonging to local community	2021	%	69.3	▬ (2012-2021)
Violence	Age-standardized rate of emergency department visits due to assaults **	2021	Rate per 1,000 population	1.9	▼ (2012-2021)
	Homicide rate in the city of Toronto	2021	Rate per 100,000 population	2.9	▬ (2012-2021)
	Shooting rate (persons killed or injured) in the city of Toronto ***	2021	Rate per 100,000 population	7.0	▬ (2012-2021)
	Toronto students (grades 7-12) who reported being bullied	2019	%	23.7	N/A
	Hate crime occurrences in Toronto	2021	N	257	▲ (2012-2021)

* The impact of the COVID-19 pandemic income support on income variables from the 2021 Census is still being investigated. Observed improvement may be temporary due to federal emergency relief during the pandemic. Interpret with caution.
** Prior to the pandemic, the age-standardized rate of emergency department visits due to assaults was stable, however a decrease was seen in 2020 and lasted into 2021. Emergency visits may have been impacted by the pandemic as some individuals may have avoided hospitals due to their interpretation of public health restrictions and/or their fear of contracting COVID-19 while in hospital.

*** After a peak seen in 2019, the shooting rate in Toronto decreased in 2020 and 2021 to levels similar to previous years.

Environmental Health

Table 3: Environmental health indicators

Topic	Measure	Year	Unit	Value	Trend
Safe Water	Lead in drinking water: % of samples that exceed 10 ug/L	2021	%	0	▼ (2008-2021)
	Beach water: average % of potential days deemed as swimmable beach days	2022	%	89	▲ (2000-2022)
Climate Change	Reduction in Toronto Greenhouse Gases (GHG) emissions compared to 1990 baseline levels	2019	%	38	▼ (1990-2019)
	Exposure to extreme heat: Number of days that the daily maximum temperature was 30°C or hotter	2022	#	19	▲ (2000-2022)

Topic	Measure	Year	Unit	Value	Trend
Transportation	Active transportation: % of individuals (15+) who used active transportation as their main mode of commuting	2021	%	9.6	▼ (2016; 2021)
	Public transportation: % of individuals (15+) who used public transportation as their main mode of commuting	2021	%	26.2	▼ (2016; 2021)
	Percent of people living and working within close proximity of a cycling route	2021	%	67.1	▲ (2018-2021)
	New bikeways installed	2021	km	65	▲ (2019-2021)
Built Environment	Green Space: % of total land area of the city covered by parks and ravines	2019	%	13	N/A
	Canopy cover: area of the tree population as viewed from above	2018	%	28.4	▲ (2008; 2018)
Chemicals and hazards	Estimated deaths due to air pollution	2021	Rate per 100,000 population and N	48 per 100,000 people ~ 1375 deaths per year	▬ (2014; 2021)

Reproductive, Maternal, and Early Child Health

Table 4: Reproductive health indicators

Measure	Year	Unit	Value	Trend
Crude birth rate	2021	Live births per 1,000 total population	8.9	▼ (2012 to 2021)
Pregnancy rate (15-49 years)	2019	Pregnancies per 1,000 females aged 15 to 49 years	46.7	▼ (2010 - 2019)
Average age of mother at birth	2020	Age in years	32.5	▲ (2011-2020)

Table 5: Maternal health indicators

Measure	Year	Unit	Value	Trend
Folic acid intake prior to and during pregnancy	2021	%	32.6	▲ (2013-2021)
Women who gained more than recommended amount of weight during pregnancy	2020	%	42.6	▲ (2016-2020)
Gestational diabetes	2020	%	10.8	▲ (2013-2020)
Any drug or alcohol use during pregnancy	2021	%	2.3	▬ (2013-2021)
Mental health concern during pregnancy	2021	%	15.1	▲ (2013-2021)

Table 6: Early child health indicators

Measure	Year	Unit	Value	Trend
Small for gestational age (SGA) rate	2021	%	11.4	▬ (2013-2021)
Large for gestational age (LGA) rate	2021	%	7.3	▬ (2013-2021)
Pre-term birth rate	2021	%	8.0	▬ (2013-2021)
Infant fed any breastmilk at time of discharge	2021	%	94.8	▬ (2013-2021)
Children (5-6 years) vulnerable on two or more domains on the Early Development Instrument	2018	%	12.6	▼ (2015-2018)
18-month well-baby visit rate (12-24 months)	2020	%	50.8	▼ (2011-2020)
Children and youth (1-17 years) who ever experienced the separation or divorce of a parent	2019	%	15.5	N/A
Children and youth (1-17 years) who ever experienced the death of a family member (such as a parent or sibling)	2019	%	2.7	N/A

* The 18-month well-baby visit rate was stable from 2015 to 2019 and then dropped in 2020. Access to health care services might have been impacted by the pandemic.

Oral Health

Table 7: Oral health indicators

Measure	Year	Unit	Value	Trend
Adults (18+) who saw or talked to a dental professional last year	2019	%	69.9	N/A
Age-standardized rate of emergency department visits for oral health conditions*	2020	Rate per 100,000 population	343.1	▼ (2011-2020)
Children and youth (1-17 years) who visited a dental professional for preventative care such as cleaning in the past year	2019	%	76.4	N/A
Children and youth (1-17 years) without dental insurance	2019	%	20.2	N/A

* Emergency department visits for oral health conditions were stable prior up to 2019 but dropped in 2020. Emergency visits may have been impacted by the pandemic as some individuals may have avoided hospitals due to their interpretation of public health restrictions and/or their fear of contracting COVID-19 while in hospital.

Mental Health

Table 8: Mental health indicators

Measure	Year	Unit	Value	Trend
Adults (18+) who perceive their mental health as excellent/very good	2021	%	55.4	▼ (2012-2021)
Adults (18+) reporting moderately severe/severe depression over the past two weeks*	2021	%	5.4	N/A
Adults (18+) who considered attempting suicide in the last 12 months*	2020	%	4.5	■ (2015/2016, 2019, 2020)
Age-standardized rate of emergency department visits due to self-harm among Toronto residents (10+) **	2021	Rate per 100,000 population	98.6	■ 2012-2021
Children (1-11 years) who had very good/excellent mental health	2019	%	88.7	N/A
Toronto students (grades 7-12) who rated their mental health as very good/excellent	2019	%	44.3	N/A
Toronto students (grades 7-12) reported that they had seriously contemplated suicide in the past year	2019	%	16.7	N/A

Measure	Year	Unit	Value	Trend
Rate of mental health and addiction (MHA) related outpatient visits to any physician	During COVID (Apr 2020 - Dec 2021)	Rate per 100 population	5.9	▲ (Jan 2019 - March 2020 - Apr 2020 - Dec 2021

* Estimate has high sampling variability; interpret with caution
** Emergency department visits due to self-harm among Toronto residents were stable from 2012 to 2021 with a decrease seen in 2020. Emergency visits may have been impacted by the pandemic as some individuals may have avoided hospitals due to their interpretation of public health restrictions and/or their fear of contracting COVID-19 while in hospital.

Substance Use

Table 9: Substance use health indicators

Measure	Year	Unit	Value	Trend
Number of opioid toxicity deaths among Toronto residents	2021	N	591	▲ (2015-2021)
Number of non-fatal calls to Toronto Paramedics Services due to suspected opioid overdoses	2021	N	6005	▲ (2018-2021)
Adults (18/19+) who drank 5+ / 4+ alcoholic drinks on one occasion at least once per month	2021	%	19.2	■ (2012-2021)
Adults (18+) who used cannabis daily or almost daily*	2021	%	3.9	■ (2019-2021)
Toronto students (grades 7-12) who reported use of alcohol in the past year	2019	%	31.7	N/A
Toronto students (grades 7-12) who reported use of cannabis in the past year	2019	%	14.6	N/A
Toronto students (grades 7-12) who reported having five or more drinks on the same occasion at least once in the past 4 weeks.	2019	%	9.8	N/A

*Estimate has high sampling variability; interpret with caution

Infectious Diseases

Note: for Infectious Diseases data tables, up or down arrows corresponded to changes of 5% or more in incidence rates.

Table 10: Overall burden of diseases of public health significance in Toronto (excludes COVID-19)

Measure	Year	Value
By disease category, % of reportable communicable diseases, by mode of transmission.	2017-2019 3-year average	Sexually transmitted infections: 68%
		Vaccine preventable disease: 14%
		Food and waterborne: 9%
		Blood borne hepatitis: 6%

Measure	Year	Value
By disease category, % of reportable communicable diseases, by mode of transmission.	2017-2019 3-year average	Respiratory: 3%
		Vector borne: <1%

Table 11: Infectious diseases indicators

Topic	Measure	Year	Unit	Value	Trend
Sexually Transmitted Infections	Chlamydia (CHL) incidence among 15-29 year old TO residents, by gender	2021	Age specific incidence rate per 100,000	**Male:** 1170.8 per 100,000 **Female:** 1340.8 per 100,000	Male: ▼ Female: ▼ (2017-2019)
	CHL and GC - Testing Volume	2021	Count	**CHL:** 76,100 **GC:** 75,193	CHL: ▼ GC: ▼ (2019)
	Incidence of HIV/AIDS	2021	Rate per 100,000	11.2 per 100,000	▼ (2017-2019)
	Female Incidence of HIV/AIDS	2021	Rate per 100,000	3.5 per 100,000	▼ (2017-2019)
	Male Incidence of HIV/AIDS	2021	Rate per 100,000	18.1 per 100,000	▼ (2017-2019)
	Incidence of Infectious Syphilis	2021	Rate per 100,000	50.3 per 100,000	▲ (2017-2019)
	Female Incidence of Infectious Syphilis	2021	Rate per 100,000	8.5 per 100,000	▲ (2017-2019)
	Male Incidence of Infectious Syphilis	2021	Rate per 100,000	93.7 per 100,000	▲ (2017-2019)
Other Diseases of Public Health Significance	Incidence of Tuberculosis in Toronto	2021	Incidence rate / 100,000	9.5 per 100,000	▼ (2017-2019)
	Incidence of Enteric Illness	2021	Incidence rate / 100,000	38.7 per 100,000	▼ (2017-2019)
	Incidence of Lyme disease	2021	Incidence rate / 100,000	4.2 per 100,000	▲ (2017-2019)
	Incidence of West Nile virus disease	2021	Incidence rate / 100,000	0.2 per 100,000	▼ (2017-2019)
	Incidence of Sporadic Influenza	2021	Incidence rate / 100,000	0.6 per 100,000	▼ (2017-2019)
	Incidence of Vaccine Preventable Diseases (excludes influenza)	2021	Incidence rate / 100,000	5.6 per 100,000	▼ (2017-2019)

Topic	Measure	Year	Unit	Value	Trend
Outbreaks in Toronto Healthcare Institutions	Enteric Outbreaks - # of OB	2021	Count	9	▼ (2017-2019)
	Respiratory Outbreaks - non-COVID - # of OB	2021/22 season	Count	69	▼ (2017/18-2019/20)
	Respiratory Outbreaks - COVID Outbreaks - # of OB	2021/22 season	Count	778	N/A
Mpox (formerly known as monkeypox)	Overall Number of Cases Reported	May 2022 - Dec 31 2022	Count	516 cases (508 confirmed, 8 probable)	N/A
COVID-19	Overall Number of COVID-19 Cases Reported	May 2022 - Dec 31 2022	Count	386,299	N/A
	Overall Number of COVID-19 Deaths	May 2022 - Dec 31 2022	Count	4,680	N/A
	Eligible Population with 2+ Doses (completion of primary series)	Start: Aug 31/22	%	2,528,779/ 3,043,396 = 83%	N/A

Unintentional Injuries

Table 12: Unintentional injuries health indicators

Measure	Year	Unit	Value	
Number of collisions where someone was killed or seriously injured in Toronto	2020	N	265	▼ (2012-2020)
Children and youth (1-17 years) with a head injury/concussion in the past year	2019	%	2.9	N/A
Children and youth (1-17 years) with a broken bone/fracture in the past year	2019	%	2.7	N/A
Rate of emergency department visits due falls of seniors (65+)*	2021	rate per 1,000 seniors	48.1	▼ (2012-2020)
Rate of hospitalization due to falls of seniors (65+)**	2021	rate per 1,000 seniors	12.6	■ (2012-2021)

* Emergency department visits due falls among seniors (65+) was stable up to 2019, however a decrease was seen in 2020 that lasted into 2021. Emergency visits may have been impacted by the pandemic as some individuals may have avoided hospitals due to their interpretation of public health restrictions and/or their fear of contracting COVID-19 while in hospital.

** Hospitalizations due to falls among seniors (65+) were stable from 2012 to 2021 with a decrease seen in 2020. Access to health care services might have been impacted by the pandemic as some individuals may have avoided hospitals due to their interpretation of public health restrictions and/or their fear of contracting COVID-19 while in hospital.

Chronic Diseases

Table 13: Chronic diseases health indicators

Topic	Measure	Year	Unit	Value	Trend
Lifestyle Factors	Adults (18+) who eat fruits and vegetables 5+ times per day	2021	%	19.2	■■ (2017; 2020; 2021)
	Adults (18+) engaged in 150 minutes of moderate- to vigorous-intensity aerobic physical activity per week	2021	%	70.2	▲ (2017; 2020; 2021)
	Adults (18+) who smoked daily or occasionally in the past year	2021	%	10.8	■■ (2012-2021)
	Children and youth (3-17 years) who consumed 7+ sugar-sweetened beverages in the past week	2019	%	28.2	N/A
	Children and youth (5-17 years) who were physically active in the past week for at least 60 minutes each day	2019	%	7.1%	N/A
Chronic Disease*	Adults (18+) with overweight or obese status	2021	%	47.1	■■ (2012-2021)
	Children and youth (5-17 years) who were overweight/obese	2019	%	30.9	N/A
	Age-standardized prevalence of diabetes among Toronto adults (20+)	2020	Rate per 100,000	13,008	▲ (2012-2020)
	Age-standardized prevalence of asthma among Toronto residents	2020	Rate per 100,000	14,086	▼ (2012-2020)
	Age-standardized prevalence of COPD among Toronto adults (20+)	2020	Rate per 100,000	6,078	▼ (2012-2020)
	Breast screening participation among screen eligible people (50-74)	2020	%	54.7	▼ (2018-2020)
	Cervical screening participation among screen eligible people (21-69)	2020	%	48.6	▼ (2018-2020)
	Overdue for colorectal cancer screening among screen eligible people (50-74)	2020	%	47.2	▲ (2018-2020)

* Prevalence rates for chronic diseases for 2020 should be interpreted with caution due to the impact of COVID-19 on the health-seeking behaviours and the availability of services

APPENDIX 2: DATA NOTES

APPENDIX 2: DATA NOTES

General notes regarding the measures presented in this report, as well as additional information on select data sources, indicator definitions and analysis notes can be found in the section below.

General Notes

Data notes

- Time trend analyses are based on the most recent years of complete and reliable data.
- Estimates from surveys such as the Canadian Community Health Survey (CCHS), 2019 Canadian Health Survey on Children and Youth (CHSCY), Ontario Student Drug and Health Survey (OSDUHS), the Canadian Survey on Disability (CSD), and Canadian Income Survey (CIS) are subject to sampling error. Their interpretation requires an indication of the magnitude of this error using a measure called the co-efficient of variation (CV). It is obtained by dividing the standard deviation of the estimate by the estimate itself and it is expressed as a percentage of the estimate. CVs will increase as the variability of an estimate increases, and decrease as an estimate is more precise. A CV between 16.6 and under 25 is considered to have high variability but may be released with a cautionary note, whereas a CV with a value of 25 and higher will not be released due to unacceptable quality.
- Data from CCHS, CHSCY, OSDUHS, and CIS are self-reported. Self-reported data have a number of limitations such as recall and/or social desirability bias. People do not always remember their behaviours, and may under-report or over-report certain behaviours or characteristics based on their perceived social desirability. For example, parents responding to food security questions in CHSCY may be hesitant to disclose that they and/or their child were hungry but could not afford food to eat.
- Some of the rates in this report have been age standardized. Age-standardization is a technique based on weighted averaging that removes the effects of the distribution of age when comparing over time and geography

Information on Data Sources

2019 Canadian Health Survey on Children and Youth (CHSCY)

- CHCSY is a cross-sectional survey that collected information on a broad range of topics affecting physical and mental health of children and youth aged 1 to 17 years. It excludes those living in foster homes and the institutionalized population.
- One questionnaire was administered to the Person Most Knowledgeable (PMK) about the selected child or youth aged 1 to 17 (PMK component). A separate questionnaire was administered directly to the selected youth aged 12 to 17 (youth component). The youth component collected data on determinants such drug use. Some questions that were asked to the PMK of the child aged 1 to 11 in the PMK component, were asked directly to the youth aged 12 to 17 in the youth component, such as physical activity.
- If a respondent did not respond to a survey question relevant to the analysis presented (missing), they were excluded from both the numerator and the denominator. CHSCY was administered for the first time in 2019. Therefore it was not possible to include trends for indicators derived from CHSCY data.

Canadian Income Survey (CIS)

- The CIS is a cross-sectional survey developed to provide a portrait of the income and income sources of Canadians, with their individual and household characteristics. It excludes persons living on reserves and other Indigenous settlements in the provinces and the institutionalized population.
- Data collection for a CIS cycle generally occurs from January through June of the year following the reference year.
- In each dwelling, information about all household members is usually obtained from one knowledgeable household member.

Better Outcomes Registry and Network (BORN)

- Data from the BORN Public Health Cube are reported using submitted records from the BORN Information System, which may or may not be acknowledged by the submitting hospital or mid-wife practice group (MPG). As such, the numbers are subject to change as organizations continue to submit, acknowledge, and fix errors in their data.

- Time trends are provided for 2013 onwards where possible. This is because, although the BIS was launched in April 2012, data may not be complete for some elements in that first year.
- BORN Ontario recommends not reporting data if the percentage of 'missing data' is 30% or more for a variable. Generally speaking, missing rates for earlier years are higher than recent years. As such, time trends using BORN data should be interpreted with caution.
- Analyses excluded pregnancy and birth records with missing information.

Canadian Community Health Survey (CCHS)

- The CCHS is a cross-sectional survey collecting information related to health status, health care utilization and the social determinants of health for the Canadian population.
- The CCHS covers the population 12 years of age and excludes people living on reserves and other Indigenous settlements, people who are institutionalized, full-time members of the Canadian Forces, and children in foster care. This survey is conducted in both official languages and relies upon a large sample to provide reliable estimates at the health region level every two years.
- The COVID-19 pandemic had major impacts on the data collection operations for the CCHS 2020. The collection was stopped mid-March, towards the end of the first collection period, and did not resume until September. The second, third and fourth quarterly samples were collected during very short collection periods, each of about five weeks, from September to December. The impossibility of conducting in-person interviews, the shorter collection periods and collection capacity issues resulted in a significant decrease in the response rates. As for previous CCHS cycles, survey weights were adjusted to minimise any potential bias that could arise from survey non-response; non-response adjustments and calibration using available auxiliary information were applied and are reflected in the survey weights provided with the data file. Extensive validations of survey estimates were also performed and examined from a bias analysis perspective. Despite these rigorous adjustments and validations, the high non-response increases the risk of a remaining bias and the magnitude with which such a bias could impact estimates produced using the survey data. Therefore, users are advised to use the CCHS 2020 data with caution, especially when creating estimates for small sub-populations or when comparing to other CCHS years.
- Please note that the year 2018 was not considered in the trends presented for the indicators derived from CCHS data in this report. In addition, historical data was not available for indicators on depression and oral health and therefore trends were not included for these indicators.

Canadian Survey on Disability (CSD)

- The Canadian survey on Disability is a survey conducted every 5 years, following the Census of Population. The purpose of this survey is to provide data on the experiences of Canadians 15 years and over whose every day activities are limited due to a long-term condition or health-related problem.
- The CSD included the full implementation of the Disability Screening Questions (DSQ) used for identifying persons with disabilities in 2017. In 2016, the DSQ framework replaced the Activities of Daily Living question on the Census as the filter to create the sampling frame for the CSD. Testing as shown that the new filter allows for better coverage of persons with disabilities. This is especially true of persons with less visible disabilities, related to pain, memory, learning, development and mental health. Please note that due to this change, the disability rates observed in the 2017 CSD are not comparable to those of the 2012 CSD.

Ontario Student Drug and Health Survey (OSDUHS)

- The 2019 OSDUHS was administered to students in 263 schools in Ontario, including 33 schools in Toronto, during November 2018 to June 2019. A total of 14,142 students in Ontario completed the survey, 1,792 of whom resided in Toronto.
- The survey results are considered to be a representative sample of students enrolled in publically funded schools in Ontario. Youth not attending school or those who were homeschooled, attending private school, or learning in an institutionalized setting were not included in the survey. All data are self-reported via an anonymous questionnaire administered during school. Behavioural questions, such as those related to drug use, may be an underestimate as students are likely to underreport socially undesirable, unhealthy, or illegal behaviours. Some questions were based on a random half sample of students. Data was not available at the level of the city of Toronto in the previous OSDUHS report, therefore trends were not included for indicators derived from these data.

Social Environment

Data notes

Housing

- For the number of people experiencing homelessness, the 2021 Street Needs Assessment (SNA) employs a point-in-time methodology for enumerating homelessness that is now the standard for most major U.S. and Canadian urban centres. For more information on the methodology used for the 2021 SNA, please visit: https://www.toronto.ca/community-people/community-partners/street-needs-assessment/
- The 2021 SNA indicates a decrease in the point-in-time count compared to 2018.This decrease is attributed to the decrease in the number of people staying in refugee response programs as a result of COVID-19 border restrictions.
- Deaths of People Experiencing Homelessness: Since January 2017, Toronto Public Health has been leading an initiative to collect data on deaths of people experiencing homelessness in Toronto. Previously, death data for people experiencing homelessness were limited to those who had been living in City-funded shelters. For more information on the methodology of the Deaths of People Experiencing Homelessness initiative, please visit: https://www.toronto.ca/community-people/health-wellness-care/health-inspections-monitoring/monitoring-deaths-of-homeless-people/
- Births to people experiencing homelessness: Recognizing that typical data collection systems may fail to capture this population as disclosure of housing status at birth could impact child custody, Toronto Public Health has been periodically collecting records of births among under-housed people since 1997 in collaboration with the Toronto-based network, Young Parents No Fixed Address (YPNFA).Due to inconsistent data collection, trending is not recommended.

Indicator definition

Food security

- Food insecurity includes marginal, moderate, and severe household food insecurity. The household food security modules from CIS and CHSCY are based on a set of 18-item questions asking about a household's experiences of food deprivation due to a lack of money. It describes the food security situation of the household in the previous 12 months. It captures four kinds of situations in the household:
  - Food secure: No indication of any income-related problems of food access.
  - Marginally food insecure: Some indication of worry or an income-related barrier to adequate, secure food access.
  - Moderately food insecure: Compromise in quality and/or quantity of food consumed by adults and/or children due to a lack of money for food.
  - Severely food insecure: Disrupted eating patterns and reduced food intake among adults and/or children.
- The unit for the food security variables from CIS and CHSCY is number of individuals (not households). To be more specific, it is the number of individuals who are experiencing household food insecurity. This means that anyone (adult and/or child) was experiencing food insecurity in the household.

Income

- Low income measures (LIMs), are relative measures of low income, set at 50% of adjusted median household income. These measures are categorized according to the number of persons present in the household, reflecting the economies of scale inherent in household size.

Housing

- Number of people experiencing homelessness (point-in-time count): total estimated number of people experiencing homeless in Toronto on a single night. This number includes those sleeping outdoors (including encampments), in City-administered sites (which includes base emergency and transitional shelters, 25-hour respite sties, 24-hour women's drop-ins, and COVID-19 response and recovery/isolation sites), as well as in provincially administered Violence Against Women (VAW) shelters, health and treatment facilities, and correctional facilities. The estimate does not capture hidden homelessness (e.g. people couch surfing or staying temporarily with others who do not have the means to secure permanent housing).
- Number of people actively using the shelter system in last three months: the number of unique individuals who have used the shelter and overnight services administered by the City of Toronto for at least one night in the past three months and has not been discharged to permanent housing.
- Deaths of people experiencing homelessness: the number of deaths of people experiencing homelessness

(both inside and outside the shelter system) reported to Toronto Public Health. Homelessness is defined as the situation of an individual, family or community without stable, safe, permanent, appropriate housing, or the immediate prospect, means and ability of acquiring it. Thus someone who is temporarily staying with friends or family, or transitioning to new housing, but has experienced long periods without a permanent home, would be considered homeless.

- Births (homeless); number of births to persons experiencing homelessness. Homelessness is defined as the situation of an individual, family or community without stable, safe, permanent, appropriate housing, or the immediate prospect, means and ability of acquiring it.
- Housing suitability refers to whether a private household is living in suitable accommodations according to the National Occupancy Standard (NOS); that is, whether the dwelling has enough bedrooms for the size and composition of the household.

Violence

- Rate of emergency department (ED) visits due to assault: Numerator Data: ED visits due to assaults (ICD codes (X85-Y09, Y87.1)). Denominator Data: Toronto population estimates. This measure has been age-standardized to the 2011 Canadian population.
- Crude rate of homicide in the city of Toronto: Numerator: Number of homicides. Denominator Data: Toronto population estimates
- Shooting rate (persons killed or injured) in the city of Toronto: Numerator: the sum of persons injured and killed. Number of persons injured is defined as being struck by a bullet as a result of a firearm discharge (as defined under the criminal code of Canada). This excludes events such as suicides, police involved events or where the weapon used was not a real firearm (such as pellet, air pistol, sim-munation, etc.). Denominator Data: Toronto population estimates.
- Please note that, in 2018, the Police Service updated its shooting and firearm discharge reports and definitions to align with national criminal code reporting on firearms and violent crime.
- Hate crimes occurrences refer to criminal offences committed against persons or property motivated by prejudice, bias or hate against the victim due to their race, language, national or ethnic origin, religion, colour, sex/gender, age, mental or physical disability, gender identity or expression, sexual orientation.
- Hate crime counts represent the number of reported occurrences and may not reflect the actual number of crimes in Toronto.

Data sources

Food security

- Canadian Income Survey, 2018-2020, Statistics Canada (Income Statistics Division), Custom Table. Received October 11, 2022.
- Canadian Health Survey on Children and Youth, 2019, Statistics Canada.

Income

- Tax filer (T1FF), 2019 from Community Data Program custom data request to Statistics Canada

Housing

- Census, 2021. Statistics Canada.
- Street Needs Assessment, 2021. City of Toronto. Accessed at:https://www.toronto.ca/legdocs/mmis/2021/ec/bgrd/backgroundfile-171729.pdf
- Shelter System Flow Data, 2022. City of Toronto. Accessed at: https://www.toronto.ca/city-government/data-research-maps/research-reports/housing-and-homelessness-research-and-reports/shelter-system-flow-data/
- Deaths of People Experiencing Homelessness, 2022. Accessed at: https://www.toronto.ca/community-people/health-wellness-care/health-inspections-monitoring/monitoring-deaths-of-homeless-people/
- Birth Among People Experiencing Homelessness, 2021 Toronto Public Health in collaboration with Young Parents No Fixed Address (YPNFA)
- Statistics Canada, Census of Population, 2016, 2021

Social capital

- Canadian Community Health Survey, 2021. Statistics Canada. Custom Table. Received on October 14, 2022.

Violence

- Numerator Data: National Ambulatory Care Reporting System (NACRS) 2012-2021, Ontario Ministry of Health, IntelliHealth Ontario, October, 2022. Denominator Data: Population (estimates 2012-2020 and projections

2021) Ontario Ministry of Health, IntelliHealth Ontario, December, 2022
- Numerator Data: Public Safety data portal. Analytics & Innovation. Toronto Police Service. Extracted on December 2022. Denominator Data: Population (estimates 2012-2020 and projections 2021) Ontario Ministry of Health, IntelliHealth Ontario, December, 2022
- Numerator Data: Public Safety data portal. Analytics & Innovation. Toronto Police Service. Extracted on December 2022. Denominator Data: Population (estimates 2012-2020 and projections 2021) Ontario Ministry of Health, IntelliHealth Ontario, December, 2022
- Ontario Student Drug and Health Survey, 2019. Centre for Addiction and Mental Health.
- Annual Hate Crime Statistical report, 2021, Hate crime Unit – Toronto Police Services. Accessed at: https://www.tps.ca/media/filer_public/c7/66/c766e428-2c6e-4fa3-ac3c-c7803305a12b/ce29b977-b584-406a-b09f-8e036d3c477e.pdf

Environmental Health

Data notes

- While the number of hot days varies from year to year, climate modelling indicates that Toronto should expect more frequent and extreme weather in the future.
- Temperature data were collected at Pearson airport weather monitoring station. There is significant spatial variability in temperature across urban environments.

Indicator definition

Safe water

- Lead in drinking water: % of homes/businesses and distribution systems tested that exceeded the current lead in drinking water standard of 10 ppb.
- Beach water: % of potential days deemed as swimmable beach days. Toronto has 10 supervised beaches (previously 11, as of 2021/2022 Rouge beach is now a federal property) for which beach water samples are collected and analyzed for quality yearly from June to Labour Day weekend. In order to calculate swimmable days, the total number of safe days for each beach is divided by total number of days in a beach season (typically 91 days) and multiplied by 100. Then all the average percentage days for all the beaches are totalled and divided by number of beaches.

Climate change

- Greenhouse gases (GHG) Emissions: Toronto GHG emissions compared to 1990 baseline levels
- Exposure to extreme heat: # of days where the daily maximum temperature was 30°C or hotter at the Toronto Pearson International Airport weather monitoring station

Transportation

- Active transportation: % of individuals aged 15 years and over who used active transportation (walking or cycling) as their main mode of transportation to travel between their home and their place of work.
- Public transportation: % of individuals aged 15 years and over who used public transit as their main mode of transportation to travel between their home and their place of work.
- Percent of people living and working within close proximity of a cycling route: Percentage of population and employment within 250m of a cycling route in Context 1 and within 500m in Context 2. Context 1 refers to the central area of Toronto, with high existing cycling mode share, high density of population, employment, and destinations, and a built-out environment with a tighter grid network and narrow street rights-of-way. Context 2 refers to the areas beyond central Toronto, with lower existing cycling mode share, and – in most but not all locations - lower density of population, employment, and destinations, more boulevard space, and greater distances between streets / blocks.
- New bikeways installed: centreline kilometres of new bikeways including cycle tracks, bike lanes, multi-use trails and neighbourhood routes with contra-flow bike lands and sharrows. Centreline kilometres measure the length of the road / trail segment. This is different to lane kilometres which counts infrastructure on both sides of the street.

Built environment

- Green Space: % of total land area of the city covered by parks and ravines
- Canopy cover is the area of the tree population as viewed from above.

Chemicals and hazards

- Burden of illness from air pollution: estimated number of premature deaths due to air pollution in Toronto. The 2021 estimate for premature deaths attributable to air pollution in Toronto is based on Health Canada research and analysis using the most up-to-date data and methodology on the health effects of air pollution. The pollutants include fine particulate matter (PM2.5), ground-level ozone, and nitrogen dioxide (NO2).

For more information about the methodology, please visit: https://www.canada.ca/en/health-canada/services/publications/healthy-living/2021-health-effects-indoor-air-pollution.html#a3.3. The 2014 estimate for the number of premature deaths attributable to air pollution in Toronto was calculated using the Pengelly and Sommerfreund's (2004) approach. For more information about the methodology, please visit: https://www.toronto.ca/wp-content/uploads/2017/11/9190-tph-Air-Pollution-Burden-of-Illness-2014.pdf

Data sources

Safe water

- City of Toronto (2022) Ontario Regulated Lead Testing Program Retrieved October 19, 2022 from Ontario Regulated Lead Testing Program – City of Toronto
- Toronto Public Health. Beach Water Quality. Received October 21, 2022

Climate change

- City of Toronto. Toronto on track to exceed its 2020 Greenhouse Gas emissions target of a 30 percent reduction. November 25, 2021 News Release. Accessed December 3, 2021 from: Toronto on track to exceed its 2020 Greenhouse Gas emissions target of a 30 percent reduction – City of Toronto
- Climate and rainfall reports. Environment and Climate Change Canada. Received Nov. 3, 2022.

Transportation

- Census Profile. 2021 Census. Statistics Canada. Released November 30, 2022.
- City of Toronto. 2021 Cycling Network Plan Update. Accessed at: https://www.toronto.ca/legdocs/mmis/2021/ie/bgrd/backgroundfile-173663.pdf

Built environment

- Parkland Strategy: Growing Toronto Parkland, 2019. City of Toronto. Accessed at: https://www.toronto.ca/wp-content/uploads/2019/11/97fb-parkland-strategy-full-report-final.pdf
- CanopyTO. City of Toronto. Revised October 2021. Accessed at: https://www.toronto.ca/legdocs/mmis/2021/ie/bgrd/backgroundfile-173552.pdf

Chemicals and hazards

- Health Impacts of Air Pollution in Canada: Estimates of morbidity and premature mortality outcomes – 2021 Report. Health Canada. Accessed December 3, 2021 from Health Impacts of Air Pollution in Canada 2021 Report - Canada.ca
- Path to Healthier Air: Toronto Air Pollution Burden of Illness Update. Technical Report. Toronto Public Health April 2014. Accessed at: 9190-tph-Air-Pollution-Burden-of-Illness-2014.pdf (toronto.ca)

Reproductive, Maternal, and Early Child Health

Data notes

- Although the term "women" is used in this section to stay consistent with the data source, it is important to note that trans-men and non-binary individuals are also able to get pregnant and have children.
- Birth data include births to Ontario residents occurring in Ontario only. The data exclude births to women that reside out-of-province; births to Toronto residents that occur out-of-province are also not included in the data.
- Birth data are from hospital discharges. Births occurring outside of hospitals (e.g. at home births) are not included. These births make up a small percentage of all births.
- Pregnancies include all live births, still births, and therapeutic abortions. Due to data quality issues with therapeutic abortion data for 2020 and 2021 in IntelliHealth, only the 2019 rate is provided. Moreover, pregnancies resulting in miscarriages are not included.
- Therapeutic abortion (TA) data are based on the adjusted total number of TA procedures performed in Ontario. The adjusted total number of procedures excludes those procedures that occurred within 40 days of the initial procedure (likely due to complications from the first procedure).

- For folic acid intake before/during pregnancy, it is not possible to determine the amount of folic acid intake nor the length of time that folic acid was taken. Thus, it is not known whether supplementation was at the recommended level. Moreover, those reporting no supplementation may have had adequate folate intake through their diet.
- BORN uses the gestational weight gain recommendations of the Society of Obstetricians and Gynaecologists (2011) for singleton, non-obese pregnancies and the Institute of Medicine/Health Canada recommendations (2009) for all other pregnancies. Detailed indicator definitions can be found in the Core Indicators table on the APHEO website.
- For the maternal weight gain during pregnancy variable, missing rates were over 30% for 2013 to 2015 and 2021. As such, the 2020 estimate is reported and trending is only available for 2016 to 2020.
- Alcohol and substance use during pregnancy are self-reported indicators. These indicators do not attempt to determine the number of women who were tested for alcohol or substance exposure and which exposure was detected.
- Drug use during pregnancy includes use of street drugs and the inappropriate use of prescription and non-prescription drugs.
- Maternal mental health variables from BORN capture any maternal mental health concerns during pregnancy, including those pre-existing, diagnosed during pregnancy, or active during pregnancy, both diagnosed and self-reported. Maternal mental health variables from BORN are self-reported and, thus, subject to under-reporting and social desirability bias.
- Women reporting any mental health concern include those experiencing anxiety, depression, history of post-partum depression, addiction, bipolar, schizophrenia, and/or other mental health concerns during pregnancy. Occurrences of different types of mental health concerns during pregnancy are not mutually exclusive.
- Small for gestational age and large for gestational age rates are based on a Canadian, population-based reference standard Canadian reference birth weight for gestational age percentile cut-offs may misclassify healthy infants of certain ethnicities as SGA. Newborns of parents originating from non-European/Western nations tend to be smaller at birth. However, ethnic-specific birth weight for gestational age cut-offs are currently not available for Ontario in a format that can be used for population health. As a result, higher SGA rates and lower LGA rates may be observed for Toronto.
- The terms breast milk/breastfeed/breastfeeding are also known as chest milk/chestfeed/chestfeeding, respectively, and can be used interchangeably.
- Infant feeding at time of discharge is based on the type of oral feeding given to the newborn from the time of birth to discharge from hospital or birth centre. Although the missing rate for the infant feeding at discharge variable in BORN was approximately 12% in 2021, missing rates for previous years (prior to 2021) for this variable have been over 20%. As such, time trend data should be interpreted with caution as breastfeeding rates may be over-estimated as there is a higher proportion of missing feeding information for infants born preterm or low birth weight and for multiple births due to missing feeding information from two hospital neonatal intensive care units in Toronto.
- Infants fed "any" breast milk at time of hospital/birth centre discharge include those that were fed breast milk only as well as a combination of breast milk and breast milk substitute (e.g. formula).
- The Early Development Instrument (EDI) is administered provincially every 3 years for all children attending Senior Kindergarten (aged 5-6) in publicly funded schools. Vulnerable describes the children who score below the 10th percentile cut-off of the Ontario Baseline population. It captures the children who are struggling, but not only those who are doing so visibly to have already been identified. Vulnerability on 2 or more domains means scoring below the 10th percentile cut-off on 2 or more domains.
- Data for the 18-month well baby visit are from the Claims History Database which is based on Ontario Health Insurance Plan (OHIP) billing codes. The Claims History Database contains service and payment information for fee-for-service claims submitted by physicians and other licensed health professionals. It also includes some of the "shadow billings" by providers in organizations covered by alternate payment arrangements. Since only some of the claims from the MOHLTC's various alternate payment programs or "shadow billers" are included, there may be undercounting of the total volume of certain services. This could include physicians who do not use fee-for-service billing, such as those who work in community health centres (CHCs).
- The denominator for the 18-month well baby visit rate is from the Population Estimates package in IntelliHealth and includes children aged one year. This package only provides estimates by age in years (not months). As such, it is assumed that children aged one year of age includes those children aged ≥12 months and <24 months.

- An increasing trend was observed for the 18-month well baby visit rate from 2011 to 2019. However, a decrease in the rate was observed in 2020. This is most likely due to health service disruptions that occurred during the pandemic.

Indicator definition

- Small for Gestational Age (SGA) Rate: Percentage of singleton live births with a birth weight below the 10th percentile of birth weight for babies of the same sex and gestational age.
- Large for Gestational Age (LGA) Rate: Percentage of singleton live births with a birth weight above the 90th percentile of birth weight for babies of the same sex and gestational age.
- Pre-term Birth Rate: Percentage of live births with a gestational age of less than 37 weeks.
- 18-Month Well Baby Visit Rate: Percentage of children (aged 12 to 24 months) with an 18-month well baby visit to a family physician or pediatrician.

Data sources

- BORN Information System: BORN Ontario. Public Health Cube (2012-2021 calendar years). Extracted on November 3, 2022.
- BORN Information System: BORN Ontario. Clinical Report (PHU-Pregnancy) (2012-2021 calendar years). Extracted on November 4, 2022.
- Inpatient Discharges, 2010-2021, Ontario Ministry of Health and Long-Term Care, IntelliHealth Ontario. Extracted on November 6, 2022.
- Hospital and Medical Services Data, 2010-2022, Ontario Ministry of Health and Long-Term Care, IntelliHealth Ontario. Extracted on November 6, 2022.
- Medical Services Claims History Database, 2011 to 2021, Ontario Ministry of Health and Long Term Care, IntelliHealth Ontario. Extracted November 4, 2022.
- Toronto Population (Aged 1 year): Population Estimates, 2011-2020, Ontario Ministry of Health and Long-Term Care, IntelliHealth Ontario. Extracted on November 4, 2022.
- Toronto Population (Aged 15 to 49 years): Population Estimates, 2010-2021, Ontario Ministry of Health and Long-Term Care, IntelliHealth Ontario. Extracted on November 7, 2022.
- Toronto Population (All Ages): Population Estimates, 2012-2020, Ontario Ministry of Health and Long-Term Care, IntelliHealth Ontario. Extracted on November 6, 2022.
- Toronto Population (All Ages): Population Projections, 2021, Ontario Ministry of Health and Long-Term Care, IntelliHealth Ontario. Extracted on November 6, 2022.
- Ontario Agency for Health Protection and Promotion (Public Health Ontario). Snapshots: Early Development Instrument [Internet]. Toronto, ON: Queen's Printer for Ontario; 2022 [updated 2022 Apr 20; cited 2022 Nov 04]. Available from: https://www.publichealthontario.ca/en/Data-and-Analysis/Reproductive-and-Child-Health/Early-Development-Instrument.
- Ontario Agency for Health Protection and Promotion (Public Health Ontario). Snapshots: Maternal Health snapshot: Women who gained more weight than recommended during pregnancy – Overall percent – 2020 [Internet]. Toronto, ON: King's Printer for Ontario; c2022 [updated 2022 Sep 30; cited 2022 Nov 04]. Available from: https://www.publichealthontario.ca/en/Data-and-Analysis/Reproductive-and-Child-Health/Maternal-Health.

Oral Health

Data notes

- Preventative dental care includes check-up and/or cleaning.
- Dental professional includes dentist or dental hygienist.
- Dental insurance includes full/part coverage by any insurance plan or government program.
- Emergency department visits for oral health conditions include both traumatic and non-traumatic oral health conditions. This measure has been age-standardized to the 2011 Canadian population.

Data sources

- Canadian Community Health Survey, 2019. Statistics Canada. Received on October 14, 2022.
- Canadian Health Survey on Children and Youth, 2019, Statistics Canada.
- Ontario Agency for Health Protection and Promotion (Public Health Ontario). Snapshots: Emergency Department Visits for oral health conditions Snapshot: ED visits for oral health conditions–age standardized rate (both sexes) 2020 [Internet]. Toronto, ON: Queen's Printer for Ontario; c2022 [updated

2022 Mar 31; cited 2023 Jan 10]. Available from: https://www.publichealthontario.ca/en/dataand-analysis/health-behaviours/oral-health-ed.

Mental Health

Data notes

- For MHA-related outpatient visits, the "pre-COVID" period is defined as January 2019 to March 2020 and "during" COVID is defined as April 2020 to December 2021. The OHIP claims database contains information on inpatient and outpatient services provided to Ontario residents eligible for the province's publicly funded health insurance system by fee-for-service health care practitioners (primarily physicians) and "shadow billings" for those paid through non-fee-for-service payment plans. The main data elements include patient and physician identifiers (encrypted), code for service provided, date of service, associated diagnosis, and fee paid. Rates were age- and sex- standardized to the 2016 Ontario population from Registered Persons Database (RPDB). Data is for individuals aged 0 to 105 years. Non-Ontario residents were excluded. Data also
- MHA-related outpatient visit data were obtained through an Applied Health Research Question (AHRQ). This study was supported by the Institute for Clinical Evaluative Sciences (ICES) which is funded by the Ontario Ministry of Health and Long-Term Care (MOHLTC).The opinions, results and conclusions are those of the authors and are independent from the funding source. No endorsement by ICES or the Ontario MOHLTC is intended or should be inferred. Parts of this material are based on data and/or information compiled and provided by Canadian Institute for Health Information (CIHI). However, the analyses, conclusions, opinions and

Indicator definition

- MHA-related outpatient visits refer to mental health and addiction-related visits to primary care physicians, psychiatrist, and/or paediatricians.
- The rates presented for this indicator have been age and sex standardized.
- The rates for emergency department visits due to self-harm among Toronto residents (10+) have been standardized to the 2011 population.

Data sources

- Canadian Community Health Survey, 2019-2021. Custom Tables. Statistics Canada. Received on October 14, 2022.
- Canadian Community Health Survey, 2012-2017. Statistics Canada.
- Ontario Agency for Health Protection and Promotion (Public Health Ontario). Snapshot: emergency department visits for injuries Snapshot: emergency department visits for falls–age-standardized rate (both sexes) 2021 [Internet]. Toronto, ON: King's Printer for Ontario; c2022 [updated 2022 Dec 15; cited 2023 Jan 6]. Available from: publichealthontario.ca/en/data-and-analysis/injuries-data/injury-er-visits
- Canadian Health Survey on Children and Youth, 2019. Statistics Canada.
- Ontario Student Drug and Health Survey, 2019. Centre for Addiction and Mental Health.
- Institute of Clinical Evaluative Sciences (ICES) AHRQ Project #: 2022 0950 133 000. Received September 21, 2022.

Substance Use

Data notes

- Adults (18/19+) who drank 5+ / 4+ alcoholic drinks on one occasion at least once per month : 2019-2021 estimate is measuring heavy drinking among adults 18+, prior data for this indicator were among adults 19+

Indicator definition

- Number of confirmed opioid toxicity deaths in Toronto: this includes accidental deaths, suicides and deaths with undetermined intent.

Data sources

- Coroner's Opioid Investigative Aid. Office of the Chief Coroner for Ontario. Extracted January, 2023.
- Electronic Patient Care Record. Toronto Paramedics Services. Extracted November 2, 2022.
- Canadian Community Health Survey, 2019-2021. Custom Tables. Statistics Canada. Received on October 14, 2022.
- Canadian Community Health Survey, 2012-2017. Statistics Canada.
- Ontario Student Drug and Health Survey, 2019. Centre for Addiction and Mental Health.

Infectious Diseases

Data notes

- Between January 2020 and December 2021, many non-COVID-19 reportable diseases were entered into iPHIS, but were not investigated by the program. Follow up, investigation, and quality assurance checks of the data entry did not occur, and this may significantly impact the quality and accuracy of the data extracted from iPHIS.
- Data for 2020 were excluded because of the significant impact of COVID-19 on these data. While the effects could vary considerably by disease, the results would be an expected reduction of the number and the detection of most notifiable cases.
- Vaccine data for mpox are operational data and includes Toronto Public Health administered doses and those administered by Health Care Practitioners.
- Data after March 2020 have not undergone extensive quality assurance.
- COVID-19 immunization includes Toronto residents vaccinated in or outside of Toronto with an immunization date between December 14, 2020 and August 31, 2022.

Data sources and extraction dates

- Sexually Transmitted Infections (STI) Lab Data Decision Support Tool, PHO. STI percent positivity and testing rates were extracted on August 10, 2022. Data for 2021 are complete to November 30, 2021; data for December 1, 2021 onward are incomplete.
- COVID-19 data from Case and Contact Management (CCM) System and COVaxON. COVID-19 data: extracted on January 23, 2023.
- Immunization data: Vaccine administration, Ontario Ministry of Health, IntelliHealth COVaxON.
- Mpox vaccine data are operational data from the Toronto Public Health Immunization Team.
- Mpox (formerly known as monkeypox) case data extracted January 6, 2023 from iPHIS and vaccine data as December 29th, 2022.
- Integrated Public Health Information System (iPHIS)
    - Direct contact and respiratory disease data (with the exception of tuberculosis) were extracted on October 28th, 2022.
    - Sexually transmitted infections data were extracted on November 2nd, 2022.
    - Hepatitis B and Hepatitis C data were extracted on October 28th, 2022.
    - Vectorborne and zoonotic disease data were extracted on October 28th, 2022.
    - Vaccine preventable disease data (including influenza) were extracted on October 28th, 2022.
    - Tuberculosis data were extracted on November 2nd, 2022.
    - Enteric, food and waterborne disease data were extracted on October 28th, 2022.
    - Outbreak data were extracted on October 12th, 2022 with the exception of COVID-19 outbreaks that were extracted on November 1st, 2022.
- Population Estimates 2017 - 2021, Ontario Ministry of Health and Long-Term Care, IntelliHealth Ontario, Date Extracted: January 2022.

Indicator definition

- Incidence rate: is the rate at which new events, or new cases, occur in a defined time in a defined population that is "at risk" of experiencing the condition or event, and is not standardized to account for the age structure of the population. In this report they are represented as the number of cases reported per 100,000 people.
- Counts: Number of new events, or new cases, occur in a defined time (e.g. # of outbreaks, # of cases, number of tests). Enteric Outbreaks include C. difficile.
- CHL and GC percent positivity: % of tests submitted for STI that were positive for CHL or GC.

Unintentional Injuries

Indicator definition

- Rate of emergency department (ED) visits due to falls: Numerator Data: ED visits due to falls (ICD code W00-W19) among seniors aged 65 years and over. Denominator Data: Population aged 65 and over.
- Rate of hospitalization visits due to falls: Numerator Data: Hospitalizations due to falls (ICD code W00-W19) among seniors aged 65 years and over. Denominator Data: Population aged 65 and over.

Data sources

- Public Safety data portal. Analytics & Innovation. Toronto Police Service. Extracted on November 2022.
- Canadian Health Survey on Children and Youth, 2019, Statistics Canada.
- Emergency department visits due falls of seniors: Numerator Data: National Ambulatory Care Reporting System (NACRS) 2012-2021, Ontario Ministry of Health, IntelliHealth Ontario, October, 2022. Denominator Data: Population (Estimates 2012-2020 and Projections 2021) Ontario Ministry of Health, IntelliHealth Ontario, October, 2022.
- Hospitalizations due falls of seniors: Numerator Data: Discharge Abstract Database 2012-2021, Ontario Ministry of Health, IntelliHealth Ontario, October, 2022. Denominator Data. Ontario Ministry of Health, IntelliHealth Ontario, October, 2022.

Chronic Diseases

Data notes

- Data for indicators on chronic disease prevalence were based on derived chronic condition cohorts developed at ICES using linked data algorithms. Prevalence rates for 2020 should be interpreted with caution due to the impact of COVID-19 on the health seeking behaviours and the availability of services. These measures have been age-standardized to the 2011 Canadian population.

Indicator definition

- The BMI classification variable categorizes children and youth aged >5 to 17 years as "obese", "overweight", "normal" or "thin" according to the age-and-sex specific BMI cut-off points as defined by the World Health Organization (WHO). Body mass index (BMI) is calculated from weight and height measurements and is used to determine whether an individual's weight is appropriate for their height. In 2007, the World Health Organization (WHO) produced growth references for children aged 5 to 19 years using data from National Health Examination Surveys II and III and National Health and Nutrition Examination Survey I. The WHO BMI growth curves for 5 to 19 year olds were constructed to ensure a smooth transition from the WHO standard for 0 to 5 year olds. Pregnancy status of female respondents aged 15 to 17 was not collected in CHSCY. As such, the BMI classification variable does not take into consideration the pregnancy status of female youth.
- The Canadian 24-Hour Movement Guidelines for Children and Youth recommends that children and youth have an accumulation of at least 60 minutes per day of moderate to vigorous physical activity. The physical activity variable includes any physical activities in which the children/youth was sweating at least a little or breathing harder. This variable excludes physical activity that took place during the school day (e.g. physical education class, lunch, or recess) for children aged 5-11 years.
- Physically Active is defined by the Canadian Physical Activity Guidelines as having at least 150 minutes of moderate- to vigorous-intensity aerobic physical activity per week, in bouts of 10 minutes or more. This is determined by asking survey respondents the total number of minutes they engaged in active transportation and moderate to vigorous recreational and other physical activities over the last 7 days.
- Sugar-sweetened beverages include fruit flavoured, regular soft drinks, sports, energy drinks, chocolate milk/hot chocolate, and milkshakes. All drinks are restricted to children aged

Chronic disease

- Breast screening participation reflects the percentage of screen-eligible people in Toronto, aged 50-74, who completed at least one mammogram within a 30-month period as of Dec 31, 2020. Numerator represents the count of the people screened. Denominator represents the total number of eligible people. Trend noted as per Ontario Cancer Profiles' website.
- Cervical screening participation reflects the percentage of screen-eligible people in Toronto, aged 21-69 years old, who completed at least one Pap test in a 42-month period as of Dec 31, 2020. Numerator represents the count of the people screened. Denominator represents the total number of eligible people. Trend noted as per Ontario Cancer Profiles' website.
- Overdue for colorectal cancer screening reflects the percentage of screen-eligible people in Toronto aged 50-74 years old, who were overdue for colorectal screening as of Dec 31, 2020. Numerator represents the count of people overdue for screening. Denominator represents the total number of eligible people. Trend noted as per Ontario Cancer Profiles' website.

Data sources

- Canadian Community Health Survey, 2019-2021. Custom Tables. Statistics Canada. Received on October 14, 2022.
- Canadian Community Health Survey, 2012-2017. Statistics Canada.
- Canadian Health Survey on Children and Youth, 2019, Statistics Canada.
- Ontario Agency for Health Protection and Promotion (Public Health Ontario). Snapshots: Chronic Disease Incidence and Prevalence Snapshot: prevalence of asthma–age standardized rate (both sexes) 2021. Toronto, ON: Queen's Printer for Ontario; c2021 [2021 Dec 31; cited 2022 Nov 7]. Available from: https:// Chronic Disease Incidence and Prevalence Snapshot | Public Health Ontario
- Ontario Health (Cancer Care Ontario). Ontario Cancer Profiles [Internet]. 2021 [12/01/2022]. Available from: https://cancercareontario.ca/ontariocancerprofiles

APPENDIX 3: TERMS & DEFINITIONS

APPENDIX 3: TERMS & DEFINITIONS

Term	Definition
18-month well-baby visit rate	is the number of children receiving the visit divided by the total population of children one year of age who were registered for the Ontario Health Insurance Plan (OHIP).
18-month well-baby visits	are the services rendered when a physician performs all of the following for a child aged 17 to 24 months: (1) those services defined as "well-baby care"; (2) an 18-month age appropriate developmental screen; and (3) review with the child's guardian of a brief standardized tool that aids in the identification of children at risk of development disorders.
2SLGBTQ+	is an acronym for the communities that include Two-Spirit, lesbian, gay bisexual transgender, queer, questioning, and additional sexual identities.
Active transportation	is using one's own power to get from one place to another. This includes: walking, biking, skateboarding, non-mechanized wheel chairing, etc.
Any breastfeeding rate	is the proportion of babies at a certain time point who were receiving human milk with or without other liquids or solid foods. Any breastfeeding includes both exclusive and non-exclusive breastfeeding.
Binge drinking	is defined as five or more drinks on the same occasion at least once in the past four weeks for students.
Breast screening participation	reflects the percentage of screen-eligible people in Toronto, aged 50-74, who completed at least one mammogram within a 30-month period.
Canopy cover	is the area of the tree population as viewed from above.
Cardiovascular disease	is a disease of the heart and/or blood vessels, and includes ischemic heart disease, cerebrovascular disease, peripheral vascular disease, heart failure, rheumatic heart disease, and congenital heart disease. It is defined by ICD-10 codes I00 to I99.
Cervical screening participation	reflects the percentage of screen-eligible people in Toronto, aged 21-69 years old, who completed at least one Pap test in a 42-month period.
Chronic homelessness	is the situation of an individual who is currently experiencing homelessness and who meets at least 1 of the following criteria: they have a total of at least 6 months (180 days) of homelessness over the past year; they have recurrent experiences of homelessness over the past 3 years with a cumulative duration of at least 18 months (546 days).
Climate-sensitive infectious diseases	are infectious diseases where changes to the climate impact where and how many people will get a specific disease. Examples include Lyme Disease, West Nile virus, and Hantavirus.
Dental insurance	includes full or partial coverage by any insurance plan or government program.
Diabetes	includes type 1 and type 2 diabetes combined. Type 1 diabetes is an autoimmune disease where the body is not able to produce insulin. Type 2 diabetes is a metabolic disorder where the body does not produce enough insulin, or it is not able to utilize the insulin produced efficiently.
Disability	includes a long-term or an episodic health-related condition (i.e. physical, sensory or mental) that limits a person's everyday activities and for which there are barriers to their full participation in society.
Emerging disease	is an infectious disease that has newly appeared in a population or has existed but is rapidly increasing in incidence or geographic range.
Extreme heat	refers to the number of days where the daily maximum temperature was 30°C or hotter at the Toronto Pearson International Airport weather monitoring station.

Term	Definition
Food security	• Food secure: No indication of any income-related problems of food access. • Marginally food insecure: Some indication of worry or an income-related barrier to adequate, secure food access. • Moderately food insecure: Compromise in quality and/or quantity of food consumed by adults and/or children due to a lack of money for food. • Severely food insecure: Disrupted eating patterns and reduced food intake among adults and/or children. The unit for the food security variables from CIS and CHSCY is number of individuals (not households). To be more specific, it is the number of individuals who are experiencing household food insecurity. This means that anyone (adult and/or child) was experiencing food insecurity in the household.
Frequent heavy drinking	is defined as men drinking 5+ alcoholic drinks and women drinking 4+ alcoholic drinks on one occasion at least once per month in the past year for adults.
Gender	is a social construct that refers to the characteristics, norms, behaviours and, roles of women, men, girls, and boys.
Hate crimes	refer to criminal offences committed against persons or property motivated by prejudice, bias or hate against the victim due to their race, language, national or ethnic origin, religion, colour, sex/gender, age, mental or physical disability, gender identity or expression, sexual orientation.
Homelessness	is the situation of an individual, family or community without stable, safe, permanent, appropriate housing, or the immediate prospect, means and ability of acquiring it.
Housing suitability	refers to whether a private household is living in suitable accommodations according to the National Occupancy Standard (NOS); that is, whether the dwelling has enough bedrooms for the size and composition of the household.
Immigrant	refers to a person who is, or who has ever been, a landed immigrant or permanent resident. Such a person has been granted the right to live in Canada permanently by immigration authorities. Immigrants who have obtained Canadian citizenship by naturalization are included in this group. This category excludes non-permanent residents (see 'Non-Permanent Resident' definition).
Immunization coverage	refers to the proportion of a defined group of people (e.g., students of a specific age) who are appropriately immunized against a specific vaccine-preventable disease at a point in time.
Lone-parent family	is a type of census family where a lone parent (with any marital status) is living with at least one child in the same dwelling.
Longer-term immigrant	are those immigrants that first obtained landed immigrant or permanent resident status at least five years or more prior to the year of data collection.
Low income measure	are relative measures of low income, set at 50% of adjusted median household income. These measures are categorized according to the number of persons present in the household, reflecting the economies of scale inherent in household size.
Marital status	refers to whether or not a person is living in a common-law union as well as the legal marital status of those who are not living in a common-law union. All persons less than 15 years of age are considered as never married and not living common law.
Mental health concern during pregnancy	are any mental health concern experienced by a woman during pregnancy. A mental health concern can include anxiety, depression, addiction, bipolar, schizophrenia, other, or a history of postpartum depression.

Term	Definition
Multigenerational household	is a category that includes households with three or more generations. These households contain at least one person who is both the grandparent of a person in the household and the parent of another person in the same household.
Non-permanent residents	includes people from another country who have a work or study permit or who are refugee claimants, and their family members sharing the same permit and living in Canada with them. The 'non-permanent residents' category is derived using the citizenship and immigrant status questions in the Census. People who are not Canadian citizens by birth (answered "no" to having a Canadian citizenship) and who answered "no" to the immigrant status question, are considered to be non-permanent residents.
Number of people actively using the shelter system	is the number of unique individuals who have used the shelter and overnight services administered by the City of Toronto for at least one night in the past three months and has not been discharged to permanent housing.
Number of people experiencing homelessness (point in time count)	is the total estimated number of people experiencing homeless in Toronto on a single night. This number includes those sleeping outdoors (including encampments), in City-administered sites (which includes base emergency and transitional shelters, 25-hour respite sties, 24-hour women's drop-ins, and COVID-19 response and recovery/isolation sites), as well as in provincially administered Violence Against Women (VAW) shelters, health and treatment facilities, and correctional facilities. The estimate does not capture hidden homelessness (e.g. people couch surfing or staying temporarily with others who do not have the means to secure permanent housing).
Overdue for colorectal cancer screening	reflects the percentage of screen-eligible people in Toronto aged 50-74 years old, who were overdue for colorectal screening.
Permanent residents	are people who have been granted permanent resident status in Canada. Permanent residents must live in Canada for at least 730 days (two years) within a five-year period or risk losing their status. Permanent residents have all the rights guaranteed under the Canadian Charter of Rights and Freedoms such as equality rights, legal rights, and mobility rights, freedom of religion, freedom of expression and freedom of association, but not the right to vote in elections.
Prevalence	is the rate of new and pre-existing cases in a population of people alive on a certain date.
Prevalent cancer cases	includes people who were recently diagnosed with cancer and are still under treatment, as well as people who are survivors of the disease.
Racialized group	is derived directly from "Visible Minority" which includes a mix of racial and ethno-racial (ethnicity) groups. In 2021, Statistics Canada replaced "Visible Minority", a term that is outdated and not acceptable for many equity-deserving communities, with "racialized group".
Recent immigrants	are those immigrants that first obtained landed immigrant or permanent resident status up to five years prior to the year of data collection.
Re-emerging disease	is a disease that reappears after it has been on a significant decline. Re-emergence may happen because of a breakdown in public health measures for diseases that were once under control. They can also happen when new strains of known disease-causing organisms appear.
Risk factor	is an aspect of someone's behaviour or lifestyle, a characteristic that a person was born with, or an event that he or she has been exposed to, that may have been associated with acquiring their episode of disease.
Sex	refers to the different biological and physiological characteristics of females, males, and intersex persons, such as chromosomes, hormones, and reproductive organs.

Term	Definition
Sexual orientation	is one's romantic, emotional, or sexual interest or attraction to another person. See also 2SLGBTQ+.
Social determinants of health	are the social, economic and political conditions in which people are born, grow, live, work and age. A combination of factors such as income, education, work, housing and discrimination interact and work together to shape people's opportunities to be healthy. The unequal distribution of these determinants of health makes some people more vulnerable to disease and injury, and are shaped by the distribution of money, power, and resources.
Substances	refer to the full range of psychoactive substances used in society including alcohol, cannabis, caffeine, prescription drugs, unregulated drugs, and inhalants and solvents.
Sugar-sweetened beverages	includes regular pop or soft drinks (such as Coke, Sprite, ginger ale, or root beer) and sweetened beverages (such as Gatorade, Snapple, Fruitopia, fruit punch, or Sunny D). Artificially sweetened 'diet' drinks are excluded.
Temporary resident	is a foreign national who is lawfully in Canada on a temporary basis under the authority of a valid document (i.e. work permit, study permit, etc.) issued for the purpose of entering Canada and individuals who seek asylum upon or after their arrival in Canada and remain in the country pending the outcome processes relative to their claim. In this report, temporary resident includes people that are study and work permit holders. It excludes asylum claimants.

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