

# Mortality Trends and Leading Causes of Death among Toronto Residents, 2014-2023

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## Executive Summary

Mortality reflects the ultimate health impact of a given cause or disease. Monitoring mortality rates can help track the health status of a population and can inform public health prevention and intervention efforts. The [last mortality report](#) produced by Toronto Public Health was released in 2017, which analyzed mortality data from 2001 to 2010.

This report provides a summary of mortality rates among Toronto residents over time and leading causes of mortality, using Vital Statistics death record data for Ontario residents from the most recent 10-year period of available data (2014-2023).

In 2023, Toronto residents had the 4<sup>th</sup> lowest age-standardized mortality rate in Ontario, lower than the rate for the rest of the province and higher than the rate for the rest of the Greater Toronto Area (GTA). Mortality rates increased in 2020 and 2021 coinciding with the COVID-19 pandemic but have declined since then.

Other key findings using 2023 mortality data:

- Mortality rates were highest among those in older age groups and among males.
- There are clusters of neighbourhoods in the city with higher mortality rates than the city as a whole (e.g. downtown core, south Scarborough, and parts of Etobicoke and York) and clusters of neighbourhoods with lower mortality rates (e.g., north Scarborough, and sections of North York).
- People living in areas within the lowest income quintile in Toronto had 20% higher mortality rates than those in the highest income quintile.
- Life expectancy at birth was 5 years higher among females (86.9 years) compared to males (81.8 years).
- Leading causes of death among Toronto residents differed by sex. Dementia was the leading cause among females and ischemic heart disease was the leading cause among males.
- COVID-19 emerged as a leading cause of death in 2020 and 2021, but mortality rates for this cause have decreased since then.
- Accidental poisoning was the leading cause of death among adults aged 20-44 years and the associated mortality rates have increased over time.
  - Accidental poisoning was the second leading cause of premature mortality (deaths among people <75 years old) overall among Toronto residents.

## Background

Mortality, also known as death, reflects the ultimate health impact of a given cause or disease.<sup>1</sup> Monitoring mortality rates and related measures can be key tools in informing public health's activities, as they reflect the upper limit of the disease severity continuum and the overall health of a population.<sup>2,3</sup> Causes of mortality may also be amenable to public health actions, thus their surveillance can be important for informing public health prevention and intervention efforts. Newer public health priorities related to mortality have emerged in the past decade (e.g., the opioid overdose crisis, COVID-19) and the population of adults aged 65 years and older in Toronto continues to grow. The last mortality report produced by Toronto Public Health was released in 2017, which analyzed mortality data from 2001 to 2010.<sup>2</sup>

Mortality data for Ontario include data from death certificates, as recorded by a physician, coroner, registered nurse, or nurse practitioner, and are managed provincially by the Office of the Registrar General.<sup>4,5</sup> Data collected on death records include age, sex, location of residence, date of death, and primary (i.e., underlying) cause of death. Provincial data are sent to the national Vital Statistics registry for standardized coding (e.g., for primary cause of death) and for nation-wide reporting.<sup>4</sup> The primary cause of death is assigned an ICD-10 code and grouped according to World Health Organization leading causes of mortality, with modifications by the Association of Public Health Epidemiologists in Ontario (APHEO).<sup>6-9</sup>

Data for this report were downloaded from IntelliHEALTH in 2025.<sup>10</sup> Toronto Public Health analyzed annual mortality rates, life expectancy, and leading causes of death for the most recent 10-year period of available data (2014-2023). Where possible, outcomes were examined by available socio-demographics (age and sex), by sub-Toronto geography (i.e., neighbourhood) and Toronto was compared to regions across Ontario.

Mortality rates (except for age-specific rates) were age-standardized using the 2011 Canadian population. Age standardization allows for comparison between populations as if they had the same age distribution. When age-standardized rates are lower than crude rates, it means there are more people in older age groups experiencing the outcome (i.e., death). Statistically significant differences between rates were determined by non-overlapping 95% confidence intervals. Leading causes of death were determined by the number of deaths due to a specific cause.

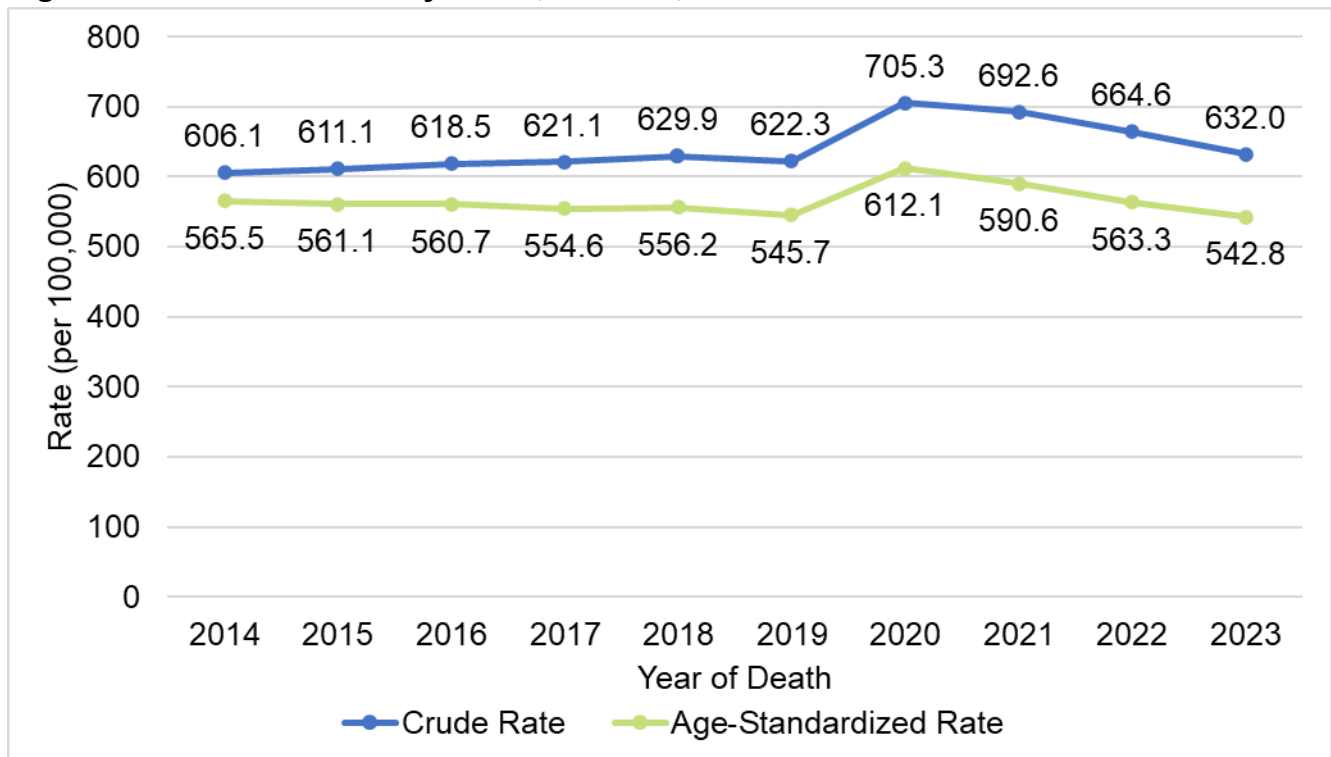
# Analysis

## Trends Over Time

Crude mortality rates represent the total number of deaths divided by the total population. Age-standardized rates are weighted rates that control for differences in age distributions when comparing different populations (e.g., over different years). It is important to control for potential age differences between populations, as death is often connected to age.<sup>11</sup> Figure 1 shows the crude and age-standardized all-cause mortality rates per 100,000 people (i.e., Toronto residents) from 2014 to 2023.

In 2023, there were 19,662 deaths among Toronto residents, with a crude mortality rate of 632.0 deaths per 100,000 population and an age-standardized mortality rate of 542.8 deaths per 100,000 population. Crude rates consistently exceeded age-standardized rates. While there was an increase in both the total number of deaths and crude mortality rates since 2014 (16,901 deaths and 606.1 deaths per 100,000 population, respectively), age-standardized mortality rates decreased. An increase in mortality (both crude and age-standardized rates) was observed in 2020, coinciding with the onset of the COVID-19 pandemic, with rates remaining high in 2021 and then decreasing from then onward. Rates in 2023 decreased to the level of those in 2019, immediately pre-pandemic. The relative difference between crude and age-standardized rates increased over time, suggesting that there was an increase in deaths among people in older age groups and/or changes in population age distributions over time.

**Figure 1: All-Cause Mortality Rates, Toronto, 2014-2023**



## Regional Comparisons in Ontario

Table 1 shows the age-standardized all-cause mortality rate per 100,000 people for Toronto, the rest of the Greater Toronto Area (GTA without Toronto), the rest of Ontario (Ontario without Toronto), and the highest and lowest Ontario public health units (PHUs) in 2023.

Toronto had the 4<sup>th</sup> lowest age-standardized mortality rate in Ontario in 2023, out of 29 PHUs. Toronto's mortality rate was significantly higher than the rest of the GTA and lower than the rest of Ontario.

**Table 1: Age-Standardized All-Cause Mortality, Selected Regions in Ontario, 2023**

| <b>Region</b>         | <b>Age-standardized all-cause mortality rate per 100,000</b> | <b>95% Confidence Interval</b> | <b>Significance</b> |
|-----------------------|--|--------------------------------|---------------------|
| Lowest PHU            | 467.4  | 456.2-478.6                    | Lower               |
| GTA minus Toronto     | 527.3  | 520.6-534.1                    | Lower               |
| <b>Toronto</b>        | <b>542.8</b>   | <b>535.1-550.6</b>             | <b>Reference</b>    |
| Ontario minus Toronto | 664.0  | 659.8-668.2                    | Higher              |
| Highest PHU           | 962.7  | 918.7-1,006.8                  | Higher              |

## Toronto Neighbourhood Comparisons

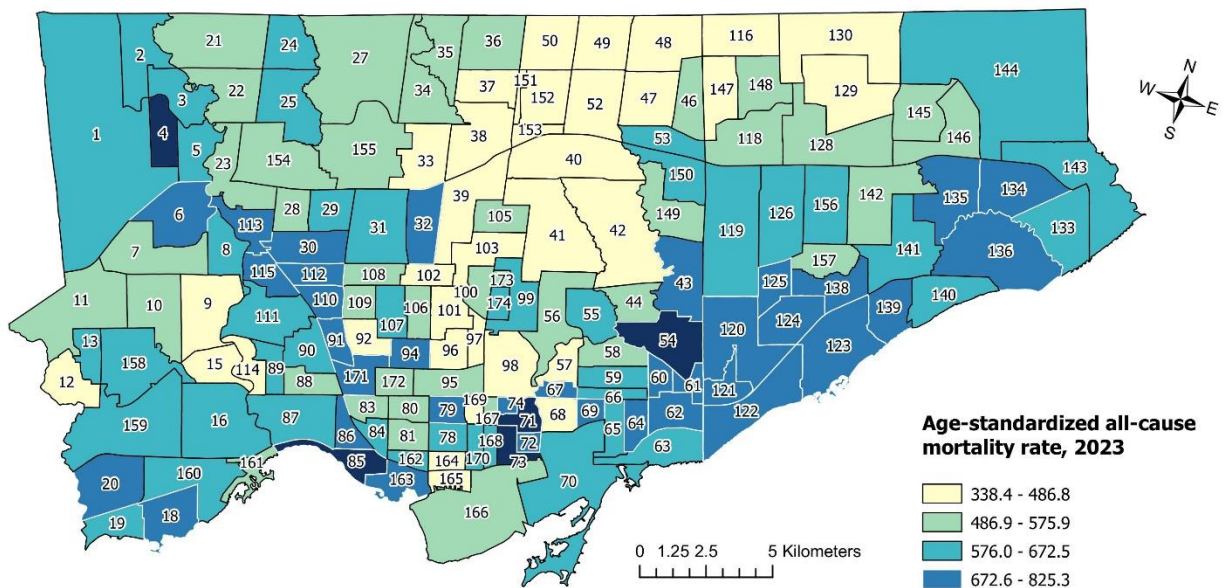
Map 1 shows age-standardized all-cause mortality rates across Toronto's 158 neighbourhoods for 2023. In addition to specific neighbourhoods identified below, there are clusters of neighbourhoods in the city with higher mortality rates than the city as a whole (e.g., downtown core, south Scarborough and parts of Etobicoke and York). There are also clusters of neighbourhoods with the lowest mortality rates (e.g., north Scarborough, and sections of North York).

The neighbourhoods with the highest mortality rates in Toronto were:

- Moss Park (73): 1,154.0/100,000 population
- Rexdale-Kipling (4): 970.3/100,000 population
- Cabbagetown-South St. James Town (71): 910.8/100,000 population
- O'Connor-Parkview (54): 868.1/100,000 population
- South Parkdale (85): 861.2/100,000 population

**Map 1: Age-Standardized All-Cause Mortality, Toronto Neighbourhood, 2023**

### Age-Standardized All-Cause Mortality among Toronto Residents by Neighbourhood (n=158), 2023



The map represents the Age-Standardized All-Cause Mortality Rate in Toronto by Neighbourhood (n=158), 2023. The rates shown represent age-standardized rates (per 100,000 population). Class breaks used were Natural breaks (Jenks). Class breaks are created in a way that best groups similar values together and maximizes the differences between classes. The features are divided into classes whose boundaries are set where there are relatively big differences in the data values.

Sources: Statistics Canada 2023, City of Toronto (Geospatial Competency Centre) Numerator: Ontario Mortality Data 2023, Ontario Ministry of Health, IntelliHealth Ontario. Date Extracted: April 10, 2025. Denominator: 2021 Canada Census, Statistics Canada.

Link to the List of Neighbourhoods  
<https://www.toronto.ca/city-government/data-research-maps/neighbourhoods-communities/neighbourhood-profiles/about-toronto-neighbourhoods/>  
 Prepared by: Toronto Public Health, Epidemiology and Data Analytics Unit, May 2025

## Socio-demographics

Table 2 shows the age-specific all-cause mortality rates per 100,000 people for five age groups. Mortality rates increased with age, with those aged 75 years and older having the highest mortality rates. No significant changes were observed between 2014 and 2023, however, the largest proportional increase in mortality rates (14%) was observed in the 20–44-year age group.

**Table 2: Age-Specific All-Cause Mortality by Age Group, Toronto 2014/2023**

| Age group (years) | 2014  |                 | 2023  |                 |
|-------------------|---|-----------------|---|-----------------|
|                   | Age-specific all-cause mortality rate per 100,000 | 95%CI           | Age-specific all-cause mortality rate per 100,000 | 95%CI           |
| 0 to 19           | 36.9  | 31.9-41.9       | 33.9  | 29.0-38.7       |
| 20 to 44          | 55.1  | 50.7-59.5       | 62.7  | 58.5-67.0       |
| 45 to 64          | 348.7   | 335.2-362.2     | 356.8   | 343.2-370.5     |
| 65 to 74          | 1,144.4   | 1,098.8-1,190.0 | 1,114.8   | 1,075.3-1,154.4 |
| 75 and older      | 5,615.0   | 5,510.6-5,719.4 | 5,508.0   | 5,413.2-5,602.8 |

*95%CI: 95% confidence interval*

Table 3 shows the age-standardized all-cause mortality rates per 100,000 people by sex. All-cause mortality rates among males were 1.6 and 1.5 times the rates among females in 2014 and 2023, respectively. Decreases in mortality rates were observed among both males (5%) and females (4%) but this was only statistically significant among males).

**Table 3: Age-Standardized All-Cause Mortality by Sex, Toronto, 2014/2023**

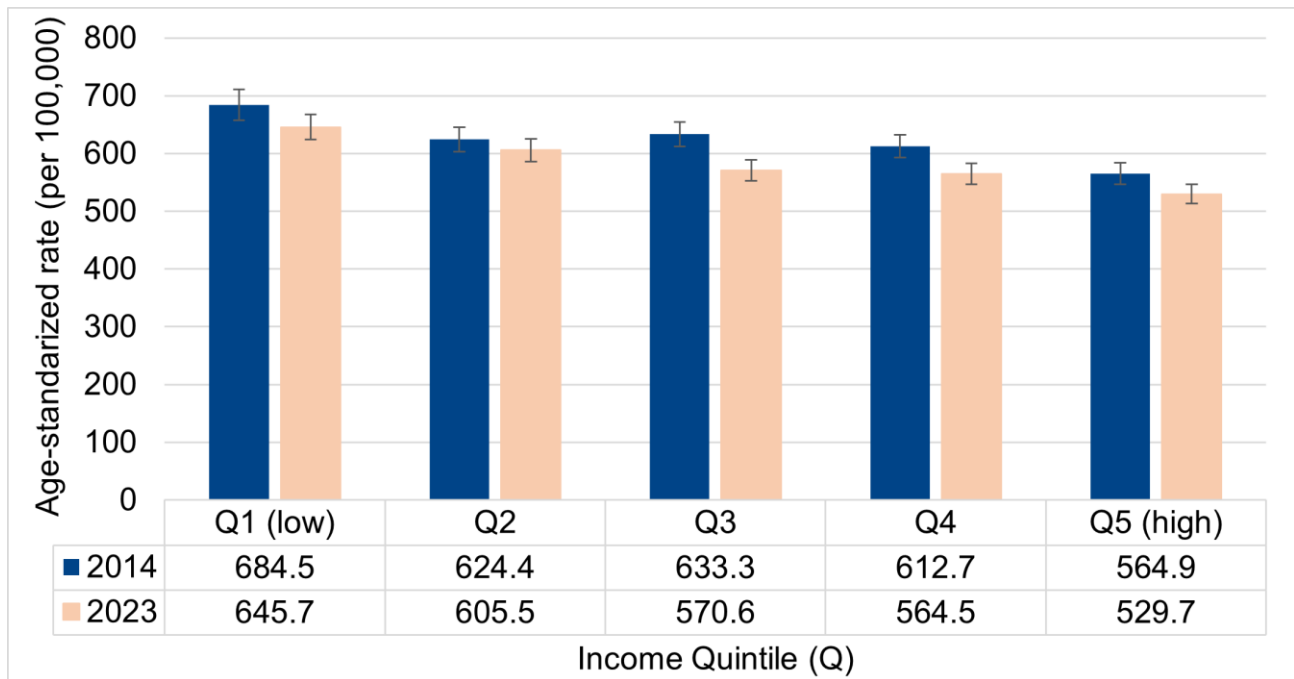
| Sex    | 2014             |             |              |            | 2023             |             |              |            |
|--------|------------------|-------------|--------------|------------|------------------|-------------|--------------|------------|
|        | Rate per 100,000 | 95%CI       | Significance | Rate Ratio | Rate per 100,000 | 95%CI       | Significance | Rate Ratio |
| Female | 455.9            | 445.8-466.0 | Ref          | -          | 438.2            | 429.0-447.4 | Ref          | -          |
| Male   | 712.4            | 697.3-727.4 | Higher       | 1.6        | 677.7            | 664.3-691.0 | Higher       | 1.5        |

*95%CI: 95% confidence interval; Ref: Reference*

Figure 2 shows the age-standardized all-cause mortality rates per 100,000 people by area-based income quintile. Five “income quintiles” were created by analyzing the percent of residents living in low income by geography. For example, Quintile 1 includes the areas with the highest percent of people with low income (see Technical Notes for method of calculating quintiles). Mortality rates were 20% higher in the lowest income quintile areas compared to the highest income quintile areas. Relative differences in mortality between income quintiles were stable in 2023 and 2014.

**Figure 2: Age-Standardized All-Cause Mortality by Income Quintile, Toronto, 2014/2023**

*Note: all quintile-specific rates were significantly higher than Q5 rates in both years*



## Life Expectancy

Life expectancy is a measure of how long someone at a particular age is predicted to live, based on the patterns in age-specific deaths at that time. Table 4 shows the annual life expectancy at birth among Toronto residents by sex, for each year from 2014 to 2023.

Life expectancy in 2023 was 86.9 years for females and 81.8 years for males. Sex differences in life expectancy were comparable for each year between 2014 and 2023.

**Table 4: Life Expectancy at Birth by Sex, Toronto, 2014/2023**

| <b>Year</b> | <b>Life Expectancy among Females (years)</b> | <b>Life Expectancy among Males (years)</b> |
|-------------|--|--|
| 2014        | 86.4   | 81.3                                       |
| 2015        | 86.4   | 81.7                                       |
| 2016        | 86.2   | 81.5                                       |
| 2017        | 86.7   | 81.5                                       |
| 2018        | 86.5   | 81.8                                       |
| 2019        | 86.8   | 81.8                                       |
| 2020        | 86.0   | 80.5                                       |
| 2021        | 86.1   | 80.8                                       |
| 2022        | 86.8   | 81.3                                       |
| 2023        | 86.9   | 81.8                                       |

## Leading Causes of Death

Tables 5 and 6 describe the Top 10 leading causes of death in 2023 among males and females, respectively, with each cause of death linked to its ranking in 2014. Leading causes were ranked by the number of deaths attributable to a cause. Figures 3 and 4 show age-standardized cause-specific mortality rates over time for selected leading causes of death for males and females, respectively. The selected causes reported over time were the Top 5 leading causes by sex in 2023, in addition to COVID-19 and accidental poisoning. Accidental poisoning includes primarily accidental drug poisoning (see Technical Notes).

Among males, the leading cause of death in 2023 was ischemic heart disease, followed by dementia and Alzheimer's disease. When compared to 2014, notable differences in leading causes of death in 2023 included: deaths due to accidental poisoning jumped to the 5<sup>th</sup> leading cause of death among males in 2023; COVID-19 emerged as the second leading cause of death in 2020/2021, but decreased over time and was the 10<sup>th</sup> leading cause in 2023; mortality rates for lung cancer decreased between 2014 and 2023.

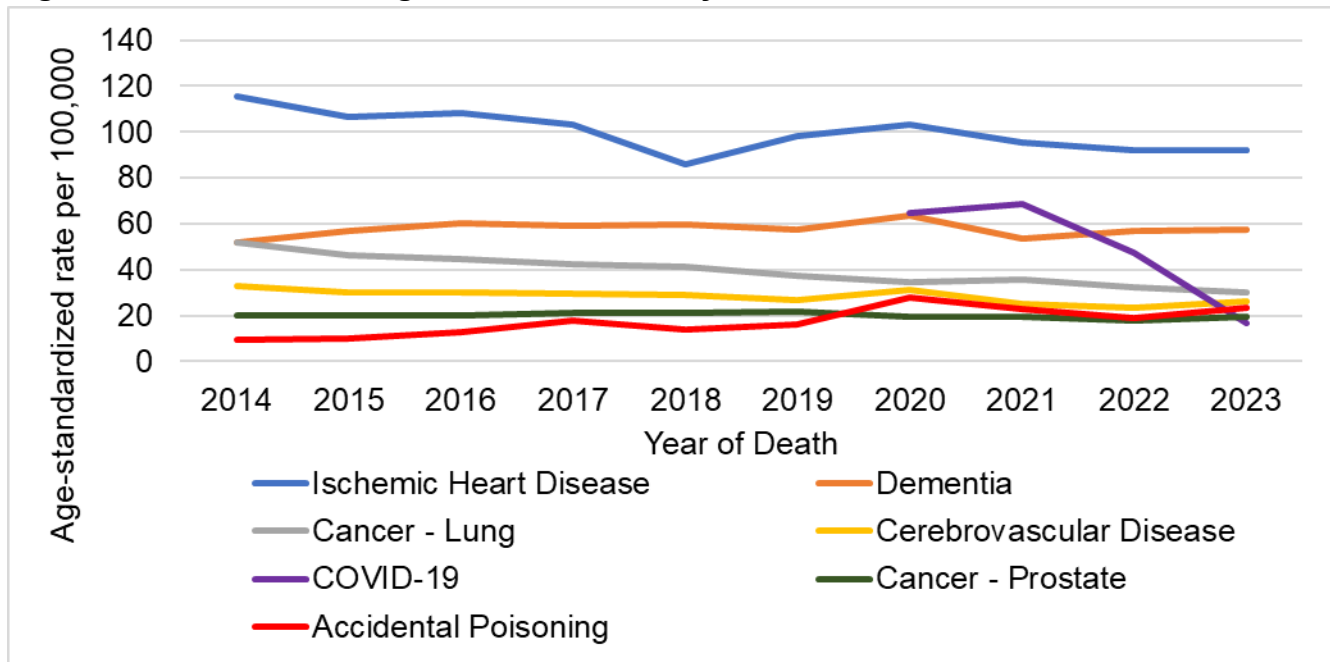
Among females in Toronto, dementia & Alzheimer's disease was the primary leading cause of death, followed by ischemic heart disease. When compared to 2014, notable differences in leading causes of mortality include: heart failure became a Top 10 leading cause only in 2023; COVID-19 became the 3<sup>rd</sup> leading cause of death in 2020/2021 but decreased to the 9<sup>th</sup> leading cause by 2023. Although accidental poisoning was not a Top 10 leading cause of death for females overall, mortality rates for accidental poisoning increased between 2014 and 2023.

**Table 5: Top 10 Leading Causes of Mortality, Males, Toronto, 2014/2023**

| Leading Cause of Death              | 2014*            |      | 2023             |      |
|-------------------------------------|------------------|------|------------------|------|
|                                     | Number of Deaths | Rank | Number of Deaths | Rank |
| Ischemic Heart Disease              | 1,390            | 1    | 1,363            | 1    |
| Dementia and Alzheimer's Disease    | 607              | 3    | 867              | 2    |
| Cancer of Lung and Bronchus         | 627              | 2    | 447              | 3    |
| Cerebrovascular Diseases            | 394              | 4    | 383              | 4    |
| Accidental Poisoning                | 128              | 19   | 347              | 5    |
| Cancer of Prostate                  | 238              | 9    | 288              | 6    |
| Cancer of Lymph, Blood, and Related | 272              | 5    | 272              | 7    |
| Falls                               | 245              | 8    | 263              | 8    |
| Chronic Lower Respiratory Diseases  | 248              | 7    | 255              | 9    |
| COVID-19                            | -                | -    | 248              | 10   |

\*Other Top 10 lead causes in 2014: Cancer of Colon, Rectum and Anus (#6), Influenza and Pneumonia (#9), Diabetes (#10)

**Figure 3: Selected Leading Causes of Mortality, Males, Toronto, 2014-2023**



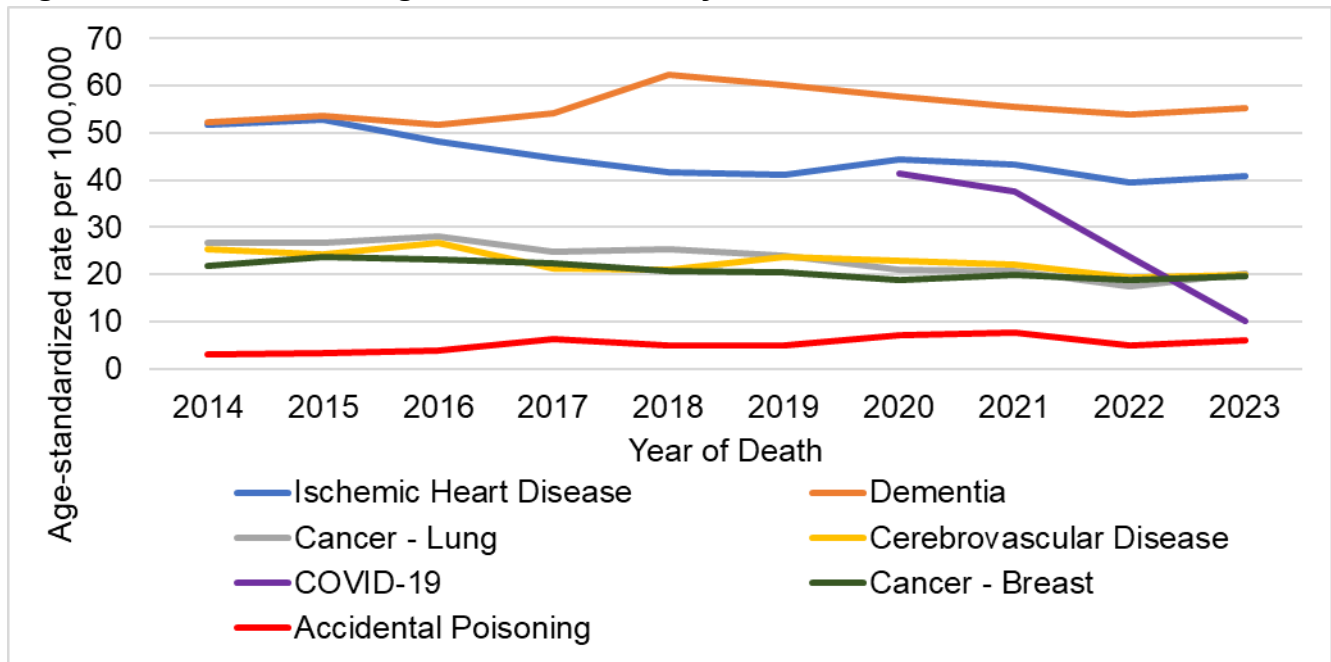
Note: Data tables are provided in Supplemental Table 1

**Table 6: Top 10 Leading Causes of Mortality, Females, Toronto, 2014/2023**

| Leading Cause of Death   | 2014*            |      | 2023             |      |
|--|------------------|------|------------------|------|
|  | Number of Deaths | Rank | Number of Deaths | Rank |
| Dementia and Alzheimer's Disease   | 1,134            | 1    | 1,509            | 1    |
| Ischemic Heart Disease   | 965              | 2    | 930              | 2    |
| Cerebrovascular Diseases   | 487              | 3    | 453              | 3    |
| Cancer of Lung and Bronchus  | 433              | 4    | 391              | 4    |
| Cancer of Breast   | 347              | 5    | 354              | 5    |
| Falls  | 265              | 7    | 287              | 6    |
| Cancer of Colon, Rectum and Anus   | 250              | 9    | 281              | 7    |
| Heart Failure and Complications; Ill-defined descriptions of heart disease | 162              | 14   | 274              | 8    |
| COVID-19   | -                | -    | 251              | 9    |
| Chronic Lower Respiratory Diseases   | 259              | 8    | 248              | 10   |

\*Other Top 10 lead causes in 2014: Influenza and Pneumonia (#6), Cancer of Lymph, Blood, and Related (#10)

**Figure 4: Selected Leading Causes of Mortality, Females, Toronto, 2014-2023**



Note: data tables are provided in Supplemental Table 2

Tables 7 and 8 display leading causes of death among Toronto residents aged 20 years and older, biannually from 2015 to 2023, for males and females, respectively. Colours are used to identify the same cause of death across different years and age groups.

Among adult males, the leading cause of death for all age groups aged 45 years and older was ischemic heart disease. This was consistent over time between 2015 to 2023, with the exception of 2023, where the leading cause of mortality among males aged 75 years and older was dementia & Alzheimer's disease. For males aged 20 to 44 years, the leading cause of death for all years considered was accidental poisoning.

Among adult females, the leading cause of death differed by age group. For females aged 20 to 44 years, the number of accidental poisoning deaths increased from 2015 to 2019 to become the leading cause of death, and it has remained the leading cause of death for that age group into 2023. Females aged 45 to 64 years primarily died due to breast cancer, and this was consistent from 2015 to 2023. Between 2015 and 2023, the leading cause of death among females aged 65 to 74 years was ischemic heart disease, except in 2021, when the leading cause of death was COVID-19. For females aged 75 and older, the primary cause of death was dementia & Alzheimer's disease consistently from 2015 to 2023.

**Table 7: Top 3 Leading Causes of Death, Males, Adults Aged 20 Years and Older, Toronto, 2015-2023**

Colours are used in this table solely to identify the same cause of death in different age groups and years

| Age (yrs)   | Rank | Cause of death, count (age-specific rate per 100,000) |   |   |   |   |
|-------------|------|---|---|---|---|---|
|             |      | 2015  | 2017  | 2019  | 2021                                      | 2023  |
| 20 to 44    | 1    | Accidental Poisoning, 65 (12.1)                       | Accidental Poisoning, 126 (22.7)            | Accidental Poisoning, 112 (19.0)            | Accidental Poisoning, 158 (26.9)          | Accidental Poisoning, 157 (23.5)            |
|             | 2    | Intentional Self-Harm, 61 (11.4)                      | Intentional Self-Harm, 76 (13.7)            | Intentional Self-Harm, 82 (13.9)            | Intentional Self-Harm, 71 (12.1)          | Intentional Self-Harm, 79 (11.8)            |
|             | 3    | Assault, 25 (4.7)                                     | Assault, 34 (6.1)                           | Assault, 31 (5.3)                           | COVID-19, 36 (6.1)                        | Assault, 29 (4.3)                           |
| 45 to 64    | 1    | Ischemic Heart Disease, 262 (72.6)                    | Ischemic Heart Disease, 271 (74.7)          | Ischemic Heart Disease, 263 (72.3)          | Ischemic Heart Disease, 249 (69.6)        | Ischemic Heart Disease, 251 (71.0)          |
|             | 2    | Cancer of Lung & Bronchus, 104 (28.8)                 | Accidental Poisoning, 115 (31.7)            | Accidental Poisoning, 105 (28.8)            | COVID-19, 207 (57.9)                      | Accidental Poisoning, 157 (44.4)            |
|             | 3    | Cirrhosis & Other Liver Diseases, 88 (24.4)           | Cancer of Lung & Bronchus, 108 (29.8)       | Cancer of Lung & Bronchus, 89 (24.5)        | Accidental Poisoning, 146 (40.8)          | Cirrhosis & Other Liver Diseases, 93 (26.3) |
| 65 to 74    | 1    | Ischemic Heart Disease, 257 (257.6)                   | Ischemic Heart Disease, 271 (253.6)         | Ischemic Heart Disease, 284 (249.1)         | Ischemic Heart Disease, 312 (257.3)       | Ischemic Heart Disease, 308 (243.4)         |
|             | 2    | Cancer of Lung & Bronchus, 187 (187.4)                | Cancer of Lung & Bronchus, 141 (131.9)      | Cancer of Lung & Bronchus, 140 (122.8)      | COVID-19, 206 (169.9)                     | Cancer of Lung & Bronchus, 134 (105.9)      |
|             | 3    | Cancer of Colon, Rectum, Anus, 66 (66.1)              | Cancer of Lymph, Blood & Related, 74 (69.2) | Cancer of Lymph, Blood & Related, 77 (67.5) | Cancer of Lung & Bronchus, 179 (147.6)    | Cerebrovascular Disease, 85 (67.2)          |
| 75 and over | 1    | Ischemic Heart Disease, 769 (959.7)                   | Ischemic Heart Disease, 778 (941.3)         | Ischemic Heart Disease, 773 (899.0)         | Ischemic Heart Disease, 770 (865.7)       | Dementia & Alzheimer Disease, 820 (850.7)   |
|             | 2    | Dementia & Alzheimer Disease, 648 (808.7)             | Dementia & Alzheimer Disease, 722 (873.5)   | Dementia & Alzheimer Disease, 747 (868.8)   | Dementia & Alzheimer Disease, 707 (794.9) | Ischemic Heart Disease, 791 (820.6)         |
|             | 3    | Cancer of Lung & Bronchus, 276 (344.4)                | Cancer of Lung & Bronchus, 296 (358.1)      | Cancer of Lung & Bronchus, 272 (316.4)      | COVID-19, 514 (577.9)                     | Cerebrovascular Disease, 240 (249.0)        |

**Table 8: Top 3 Leading Causes of Death, Female, Adults Aged 20 Years and Older, Toronto, 2015-2023**

Colours are used in this table solely to identify the same cause of death in different age groups and years.

| Age         | Rank | Cause of death, count (age-specific rate per 100,000) |   |   |   |   |
|-------------|------|---|---|---|---|---|
|             |      | 2015  | 2017  | 2019  | 2021  | 2023  |
| 20 to 44    | 1    | Intentional Self-Harm, 32 (5.8)                       | Intentional Self-Harm, 36 (6.4)               | Accidental Poisoning, 43 (7.4)                | Accidental Poisoning, 58 (10.1)               | Accidental Poisoning, 44 (6.8)                |
|             | 2    | Cancer of Breast, 18 (3.3)                            | Accidental Poisoning, 33 (5.9)                | Intentional Self-Harm, 32 (5.5)               | Intentional Self-Harm, 29 (5.0)               | Intentional Self-Harm, 22 (3.4)               |
|             | 3    | Accidental Poisoning, 15 (2.7)                        | Cancer of Breast, 18 (3.2)                    | Cancer of Breast, 13 (2.2)                    | Cirrhosis & Other Liver Diseases, 15 (2.6)    | Cancer of Breast, 18 (2.8)                    |
| 45 to 64    | 1    | Cancer of Breast, 145 (38.3)                          | Cancer of Breast, 105 (27.4)                  | Cancer of Breast, 115 (29.8)                  | Cancer of Breast, 111 (28.9)                  | Cancer of Breast, 100 (26.0)                  |
|             | 2    | Cancer of Lung & Bronchus, 80 (21.2)                  | Cancer of Lung & Bronchus, 81 (21.1)          | Cancer of Lung & Bronchus, 67 (17.3)          | COVID-19, 92 (24.0)                           | Ischemic Heart Disease, 68 (17.7)             |
|             | 3    | Ischemic Heart Disease, 65 (17.2)                     | Ischemic Heart Disease, 61 (15.9)             | Ischemic Heart Disease, 55 (14.2)             | Cancer of Lung & Bronchus, 62 (16.1)          | Cancer of Lung & Bronchus, 60 (15.6)          |
| 65 to 74    | 1    | Ischemic Heart Disease, 131 (110.6)                   | Ischemic Heart Disease, 126 (100.0)           | Ischemic Heart Disease, 118 (87.9)            | COVID-19, 140 (98.7)                          | Ischemic Heart Disease, 121 (82.4)            |
|             | 2    | Cancer of Lung & Bronchus, 107 (90.3)                 | Cancer of Lung & Bronchus, 109 (86.5)         | Cancer of Lung & Bronchus, 108 (80.5)         | Ischemic Heart Disease, 123 (86.7)            | Cancer of Lung & Bronchus, 99 (67.4)          |
|             | 3    | Cancer of Breast, 68 (57.4)                           | Cancer of Breast, 83 (65.9)                   | Cancer of Breast, 82 (61.1)                   | Cancer of Lung & Bronchus, 89 (62.8)          | Cancer of Breast, 67 (45.6)                   |
| 75 and over | 1    | Dementia & Alzheimer Disease, 1,151 (959.4)           | Dementia & Alzheimer Disease, 1,255 (1,019.8) | Dementia & Alzheimer Disease, 1,444 (1,140.6) | Dementia & Alzheimer Disease, 1,377 (1,060.1) | Dementia & Alzheimer Disease, 1,471 (1,057.6) |
|             | 2    | Ischemic Heart Disease, 827 (689.3)                   | Ischemic Heart Disease, 712 (578.6)           | Ischemic Heart Disease, 698 (551.3)           | Ischemic Heart Disease, 769 (592.0)           | Ischemic Heart Disease, 736 (529.2)           |
|             | 3    | Cerebrovascular Diseases, 398 (331.7)                 | Cerebrovascular Diseases, 370 (300.7)         | Cerebrovascular Diseases, 416 (328.6)         | COVID-19, 501 (385.7)                         | Cerebrovascular Diseases, 371 (266.7)         |

## Premature Mortality

Premature mortality is defined as a death occurring among someone under 75 years old.<sup>12</sup> Figure 5 shows the annual age-standardized all-cause premature mortality rates and the number of premature deaths among Toronto residents from 2014 to 2023. Premature mortality rates over time have remained consistent, with the exception of the increase in 2020/2021. Rates decreased to pre-pandemic levels in 2023. The number of premature deaths increased over time, with 6,692 premature deaths in 2023, however this was proportional to population growth.

**Figure 5: Age-Standardized All-Cause Premature Mortality, Toronto, 2014-2023**

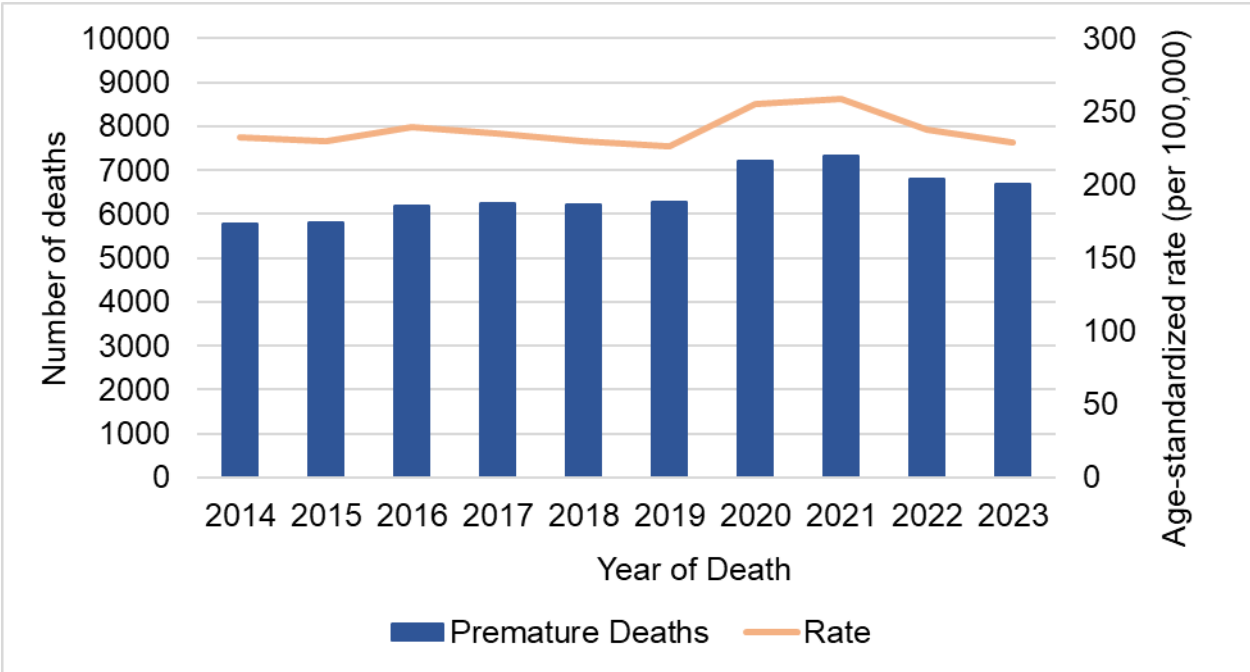


Table 9 shows the top 10 leading causes of premature mortality in 2023. The leading cause of premature mortality in 2023 was ischemic heart disease, followed by accidental poisoning.

**Table 9: Top 10 Leading Causes of Premature Mortality, Toronto, 2023**

| Rank | Leading Cause of Death             | Number of Deaths |
|------|------------------------------------|------------------|
| 1    | Ischemic Heart Disease             | 766              |
| 2    | Accidental Poisoning               | 432              |
| 3    | Cancer of Lung and Bronchus        | 370              |
| 4    | Cancer of Colon, Rectum and Anus   | 244              |
| 5    | Cerebrovascular Diseases           | 225              |
| 6    | Cirrhosis & Other Liver Diseases   | 211              |
| 7    | Intentional Self-Harm              | 199              |
| 8    | Cancer of Breast                   | 186              |
| 9    | Cancer of Lymph, Blood and Related | 185              |
| 10   | Chronic Lower Respiratory Diseases | 156              |

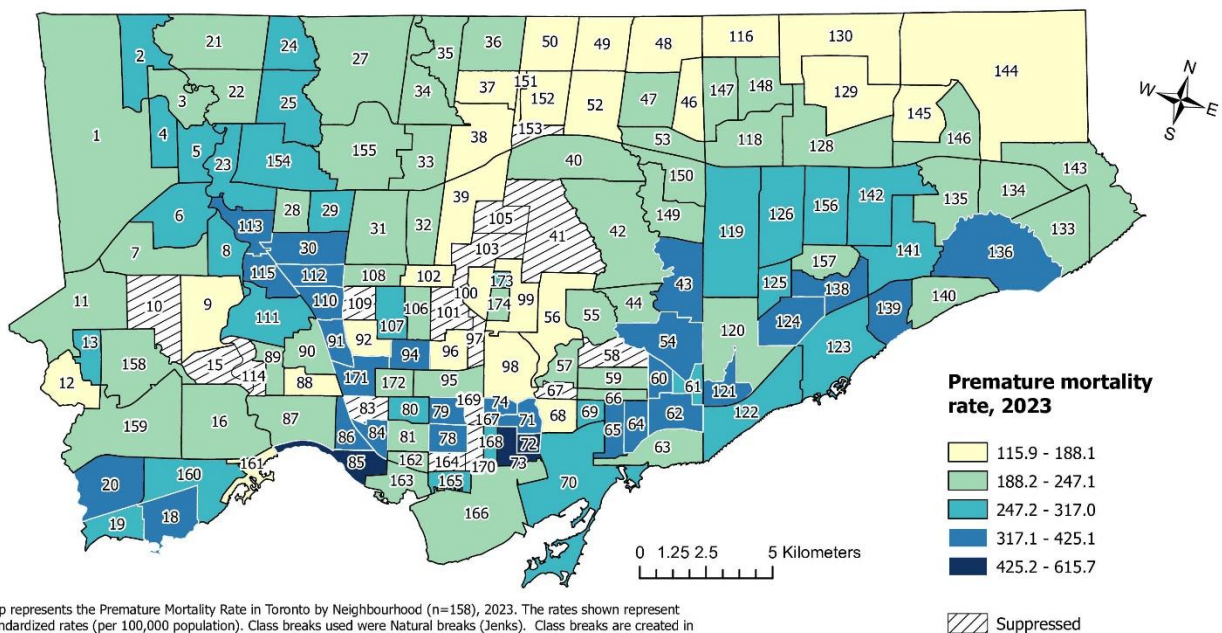
Map 2 shows the age-standardized all-cause premature mortality rates by Toronto neighbourhood (n=158).

The highest rates of premature mortality were found in:

- Moss Park (73): 615.7/100,000 population
- South Parkdale (85): 509.2/100,000 population
- Regent Park (72): 451.9/100,000 population
- Eglinton East (138): 425.1/100,000 population
- O'Connor-Parkview (54): 408.7/100,000 population

**Map 2: Age-Standardized All-Cause Premature Mortality, Toronto Neighbourhood, 2023**

## Premature Mortality among Toronto Residents by Neighbourhood (n=158), 2023



The map represents the Premature Mortality Rate in Toronto by Neighbourhood (n=158), 2023. The rates shown represent age-standardized rates (per 100,000 population). Class breaks used were Natural breaks (Jenks). Class breaks are created in a way that best groups similar values together and maximizes the differences between classes. The features are divided into classes whose boundaries are set where there are relatively big differences in the data values.

Sources: Statistics Canada 2023, City of Toronto (Geospatial Competency Centre) Numerator: Ontario Mortality Data 2023, Ontario Ministry of Health, IntelliHealth Ontario. Date Extracted: April 10, 2025. Denominator: 2021 Canada Census, Statistics Canada.

Link to the List of Neighbourhoods

<https://www.toronto.ca/city-government/data-research-maps/neighbourhoods-communities/neighbourhood-profiles/about-toronto-neighbourhoods/>

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## Limitations

- Delays in reporting deaths to the Vital Statistics registry may affect overall counts. Data for more recent years, particularly 2023, are considered preliminary.
- Data are presented at an annual level and may obscure seasonal impacts on mortality rates (e.g., those due to extreme weather events).
- Leading causes of death are assigned an ICD-10 code based off what is written in open-text fields on death certificates. Differences in documentation by physicians may lead to inconsistencies in applying standardized coding.
- Socio-demographic data collected on death records is very limited, thus limiting our ability to speak to broader social determinants of mortality (e.g., race/ethnicity, gender).
- Income-related data are based on area-level assignment to an income quintile rather than a direct measure of individuals' income. Therefore, these analyses are subject to ecological bias.

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## Technical Notes and Methods

- Greater Toronto Area (GTA) minus Toronto includes Durham, Halton, Peel, and York Region public health units
- Sex defines people based on their biological characteristics, whereas gender is a socially constructed concept. From a social determinants of health perspective, certain health conditions can be associated with gender, and from a biological perspective, health conditions can be associated with sex. Although reporting based on both concepts would be preferable, the Vital Statistics data source used here only includes information on sex, and not gender.
- Income quintiles are five groups, each containing approximately 20% of the population. For this report, they were determined by ranking Toronto's 2021 Census tracts based on the percent of residents living below the Statistics Canada after-tax Low-Income Measure (LIM), using 2022 income tax filer data.<sup>13-15</sup> Quintile 1 includes the census tracts with the highest percent of people living below the LIM and is therefore the lowest income quintile. Quintile 5 includes the census tracts with the lowest percent of people living below the LIM, making it the highest income quintile. LIM is an income level set at 50% of the median income in Canada in a given year, adjusted for household size.
- Life Expectancy is the average length of time that an individual will live if subjected to the mortality experience for the specified population and time period. The period life table approach is used, which takes into consideration the current age-specific mortality rate for the population.<sup>16</sup>
- Causes of death are coded based on an open text-based algorithm; counts may differ from those reported elsewhere.
- For leading causes of death, deaths with unknown cause or categorized as “residual” are excluded from ranking.

- The following ICD-10 codes correspond to the leading cause groups found in this report:

| Leading Cause of Mortality   | ICD-10 code        |
|--|--------------------|
| Accidental Poisoning   | X40-X49            |
| Cancer of Breast   | C50                |
| Cancer of Colon, Rectum and Anus   | C18-C21, C26.0     |
| Cancer of Lung and Bronchus  | C34                |
| Cancer of Lymph, Blood, and Related  | C81-C96            |
| Cancer of Prostate   | C61                |
| Cerebrovascular Diseases   | I60-I69            |
| Chronic Lower Respiratory Diseases   | J40-J47            |
| COVID-19   | U07.1, U07.2       |
| Dementia and Alzheimer's Disease   | F00, F01, F03, G30 |
| Falls  | W00-W19            |
| Heart Failure and Complications; Ill-defined descriptions of heart disease | I50-I51            |
| Ischemic Heart Disease   | I20-I25            |

- Accidental poisoning includes accidental overdose of drugs and alcohol; wrong drug given or taken in error or accidentally; accidents in the use of drugs (prescribed and not prescribed), medications and other substances (e.g. pesticides, gases and other chemicals) in medical and surgical procedures; self-inflicted poisoning, when not specified whether accidental or with intent to harm. Most (>90%) of accidental poisoning deaths are one of:
  - X42 Accidental Poisoning By And Exposure To Narcotics And Psychodysleptics [Hallucinogens], Not Elsewhere Classified, or
  - X44 Accidental Poisoning By And Exposure To Other And Unspecified Drugs, Medicaments And Biological Substances

## Supplemental Data

**Supplemental Table 1: Data for Selected Leading Causes of Mortality, Males, Toronto, 2014-2023**

| Cause of Death          | Age-Standardized Mortality Rate (per 100,000) |       |       |       |      |      |       |      |      |      |
|-------------------------|---|-------|-------|-------|------|------|-------|------|------|------|
|                         | 2014  | 2015  | 2016  | 2017  | 2018 | 2019 | 2020  | 2021 | 2022 | 2023 |
| Ischemic Heart Disease  | 115.4   | 106.6 | 108.1 | 103.1 | 85.8 | 98.3 | 103.3 | 95.6 | 91.8 | 92.1 |
| Dementia                | 52.1  | 56.6  | 60.0  | 59.1  | 59.4 | 57.2 | 63.6  | 53.4 | 56.8 | 57.5 |
| Cancer - Lung           | 51.6  | 46.1  | 44.6  | 42.4  | 41.2 | 37.1 | 34.5  | 35.4 | 32.4 | 30.1 |
| Cerebrovascular Disease | 32.9  | 30.0  | 30.1  | 29.6  | 28.7 | 26.9 | 31.2  | 24.8 | 23.5 | 26.0 |
| COVID-19                | -   | -     | -     | -     | -    | -    | 64.6  | 68.8 | 47.5 | 16.6 |
| Cancer - Prostate       | 20.0  | 19.8  | 20.0  | 21.3  | 21.0 | 21.9 | 19.6  | 19.4 | 17.6 | 19.2 |
| Accidental Poisoning    | 9.3   | 10.0  | 13.0  | 17.9  | 13.9 | 16.3 | 27.6  | 23.0 | 18.9 | 23.2 |

**Supplemental Table 2: Data for Selected Leading Causes of Mortality, Females, Toronto, 2014-2023**

| Cause of Death          | Age-Standardized Mortality Rate (per 100,000) |      |      |      |      |      |      |      |      |      |
|-------------------------|---|------|------|------|------|------|------|------|------|------|
|                         | 2014  | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 |
| Ischemic Heart Disease  | 51.7  | 52.9 | 48.2 | 44.6 | 41.6 | 41.0 | 44.4 | 43.3 | 39.6 | 40.8 |
| Dementia                | 52.4  | 53.5 | 51.8 | 54.2 | 62.4 | 60.2 | 57.8 | 55.5 | 54.0 | 55.4 |
| Cancer - Lung           | 26.8  | 26.6 | 28.1 | 24.9 | 25.4 | 23.9 | 21.1 | 20.8 | 17.3 | 20.1 |
| Cerebrovascular Disease | 25.4  | 24.2 | 26.8 | 21.3 | 21.1 | 23.7 | 22.9 | 22.1 | 19.2 | 20.0 |
| COVID-19                | -   | -    | -    | -    | -    | -    | 41.4 | 37.5 | 23.7 | 10.1 |
| Cancer - Breast         | 21.9  | 23.7 | 23.2 | 22.2 | 20.8 | 20.5 | 18.8 | 19.9 | 18.9 | 19.6 |
| Accidental Poisoning    | 3.1   | 3.2  | 3.9  | 6.2  | 4.8  | 4.9  | 7.2  | 7.5  | 5.0  | 5.9  |