Demographic and health profile

Sudbury and districts older adults

Public Health Sudbury & Districts
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Introduction and Background

This report was produced as a result of a request by Ontario Health North East to support The Stay on Your Feet (SOYF) strategy.

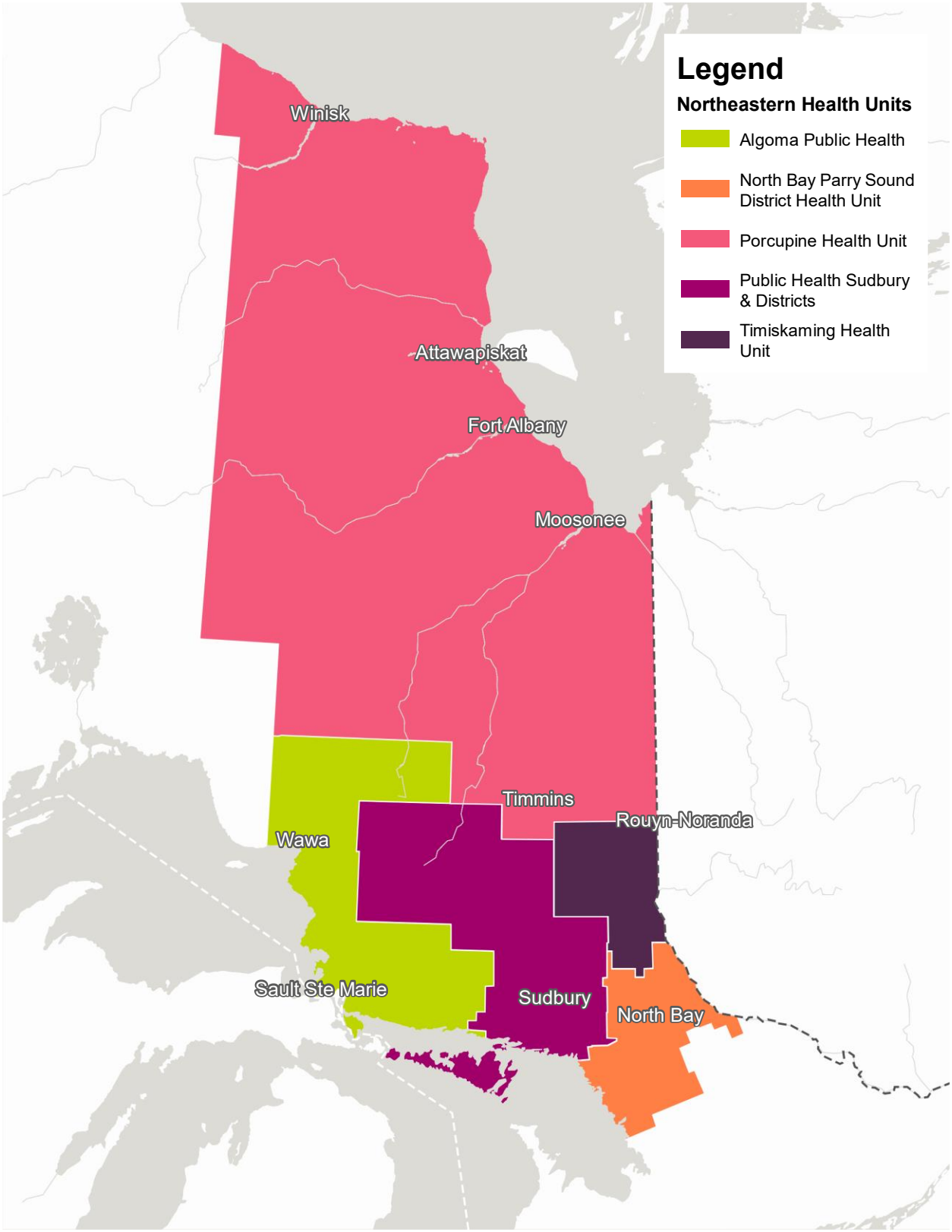
The Stay on Your Feet (SOYF) strategy is a regional working group comprised of five northeastern health units and Ontario Health North East. The group works together "to improve the quality of life of older adults in the region (northeastern Ontario) by reducing their risks, rates, and severity of falls". In recent years the strategy has expanded its focus to include healthy aging principles.

The work of public health is grounded in a population health approach. This means that public health develops programs and delivers services that promote health and prevent diseases for whole populations. This report will focus on the demographics and health profile of adults 55 years of age and older. There is much debate as to definition of "older adult". The governments of Canada and Ontario classify older adults or seniors as individuals aged 65 years and older. Many municipalities and community programs refer to individuals aged 55 and older as older adults or seniors. For the purpose of this report, we defined older adults as individuals aged 55 years of age and older unless specified otherwise.

As people age, their risks and priorities change. Many factors can impact an individual's ability to age in place. To ensure older adults can age in place, we must create environments that support healthy aging and fall prevention protective factors. Protective factors for healthy aging and fall prevention include but are not limited to; being physically active, medication management, healthy eating, refraining from smoking, moderate consumption of alcohol, getting good quality sleep, and social inclusion (CADTH, 2020; CIHI, 2014; Health Canada, 2022; Luo, Ding, Bauman et al., 2020; Ming et al., 2018; National Institute on Aging, 2007; Population Reference Bureau, 2018; Quach et al., 2020; Sherrington et al, 2011).

This report will explore various demographic, behavioural and socio-economic factors that can affect healthy aging within northeastern Ontario. While parts of this report focus on individuals' behaviours, we must recognize that these behaviours do not occur in isolation. There are various social, economic, and environmental factors that contribute to an individual's health. The SOYF strategy and Public Health Sudbury & Districts (Public Health) work together to address these systemic factors to improve the health of the older adult population across northeastern Ontario.

Figure 1: Regional map, northeastern Ontario and public health units



Data provided by: Province of Ontario, Esri, HERE, Garmin, FAO, NOAA, USGS, EPA, NRCan, Parks Canada, Public Health Sudbury & Districts, Statistics Canada.

Methods

This report consists of data from three main sources: 2021 Census data from Statistics Canada, IntelliHealth data from Ministry of Health, and Canadian Community Health Survey data from Statistics Canada. Results are presented in three sections focusing on each data source.

The socio-demographics section consists of data from the 2021 Census of Population conducted by Statistics Canada to provide a snapshot of Canada's population. Census is conducted every five years. In the 2021 Census, the net undercoverage rate (percentage of people missed less those enumerated more than once) was 3.1%, which was higher than that for the 2016 Census (2.4%). In order to provide a profile specific to older adults, a Target Group Profile, a custom dataset requested by the Community Data Portal to Statistics Canada was used. A suggested citation would be Community Data Portal (2023). Target group profile of the population by age groups, Census 2021 [Data set]. Statistics Canada. Target group profile of the population by age groups, Census, 2021 | The Community Data Program

The section of the report focusing on falls consists of data from IntelliHealth Ontario, an internet-based data portal managed by the Ontario Ministry of Health. It provides access to data on emergency department (ED) visits from the National Ambulatory Care Reporting System (NACRS), produced by the Canadian Institute of Health Information (CIHI), and hospital discharges contained within CIHI's Discharge Abstract Database (DAD).

The third section of the report focuses on health behaviours and risks. It consists of data from the Canadian Community Health Survey (CCHS) conducted by Statistics Canada and shared with public health units (share file) by Ministry of Health. Data from several cycles of CCHS ranging from 2015 to 2020 was pooled to obtain sufficient sample sizes for robust estimates where necessary. Also, certain indicators were only available for certain cycles of CCHS. Statistical significance tests were conducted to determine whether significant differences exist in estimates between Ontario, northeastern Ontario, and Public Health Sudbury & Districts' (Public Health) service area. Public Health's service area consists of Greater Sudbury, Sudbury District, and Manitoulin District, and is referred to as Sudbury and districts in the report.

Methodology for Rural Area calculations

As per the 2021 Census, Rural Areas are defined as all territory lying outside of population centres and inclusive of populations living in rural areas of Census Metropolitan Areas (CMAs). Tabular data from the 2021 Population and Dwelling Counts: Canada and population centres were joined to 2021 boundary files for population centres in ArcGIS Pro. Population centres were intersected with boundary files for Ontario, northeastern Ontario (as delineated earlier, using the northeastern Ontario health units) and per health unit boundary to determine inclusion. Population counts for population centres were recorded as urban populations. Rural populations were calculated by subtracting the urban population from the total population. Area and population density were calculated in ArcGIS Pro using 2021 boundary files and NAD83 UTM Zone 17N for the projected coordinate system.

Results

Socio-demographics

Table 1: Land area, population density, Ontario, northeastern Ontario, and Sudbury and districts, 2021

Regions	Area (km²)	Population Density (km²)	Percentage	
			Urban	Rural
Ontario	892 412	15.94	88.6%	11.4%
Northeastern Ontario	410 726	1.36	64.9%	35.1%
Sudbury and districts	50 763	3.99	69.1%	30.9%

Source: Statistics Canada, Census 2021

Sudbury and districts (3.99) has a higher population density than northeastern Ontario (1.36) and a lower population density than Ontario (15.94). Sudbury and districts (69.1%) has a higher urban population than northeastern Ontario (64.9%) and urban population lower than Ontario (88.6%).

Population

Sudbury and districts and northeastern Ontario are home to a growing population of older adults. Understanding their characteristics and needs informs strategies to keep older adults healthy and living independently.

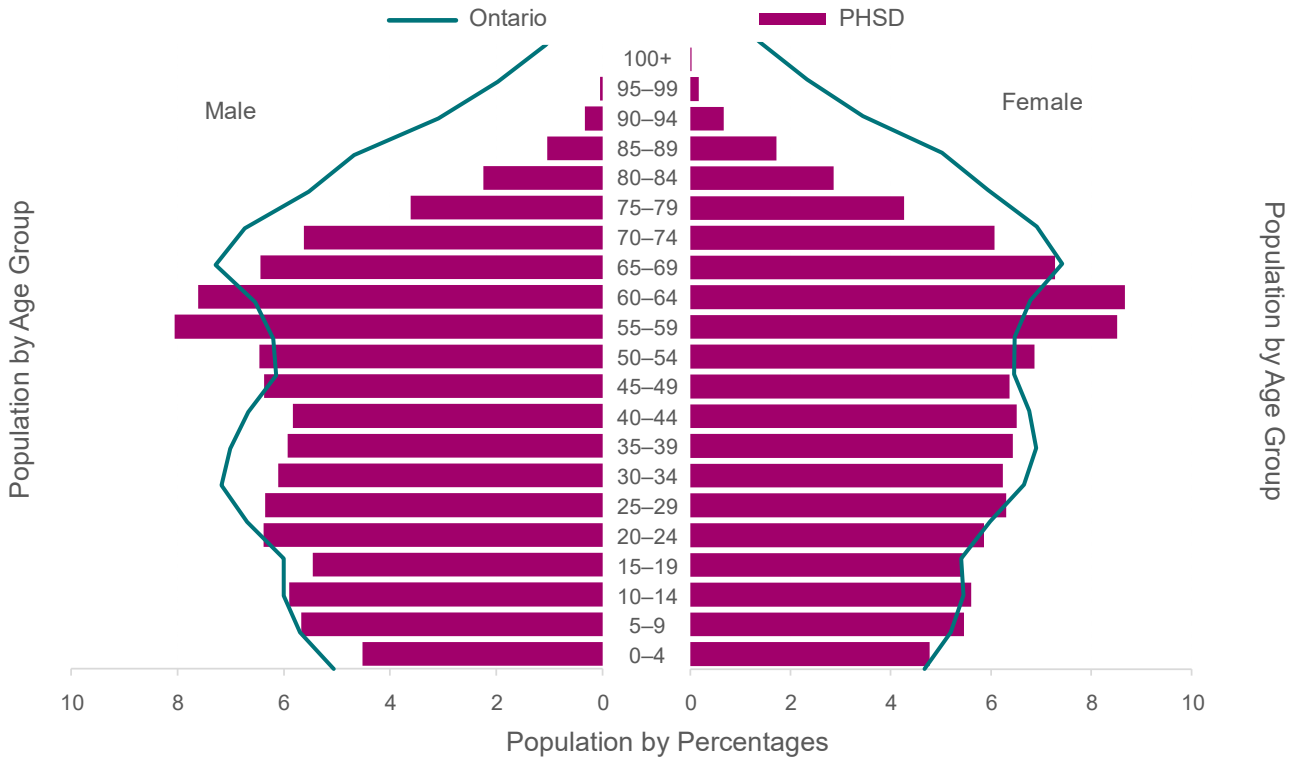
Table 2: Life expectancy, Ontario, northeastern Ontario, and Sudbury and districts, 2021

Regions	Life expectancy at birth		Life expectancy at 65	
	Males	Females	Males	Females
Canada	80.0	84.1	19.5	22.3
Ontario	80.5	84.6	19.8	22.6
Northeastern Ontario	77.2	82.1	18.2	21.1
Sudbury and districts	76.9	82.7	18.1	21.2

Source: Statistics Canada

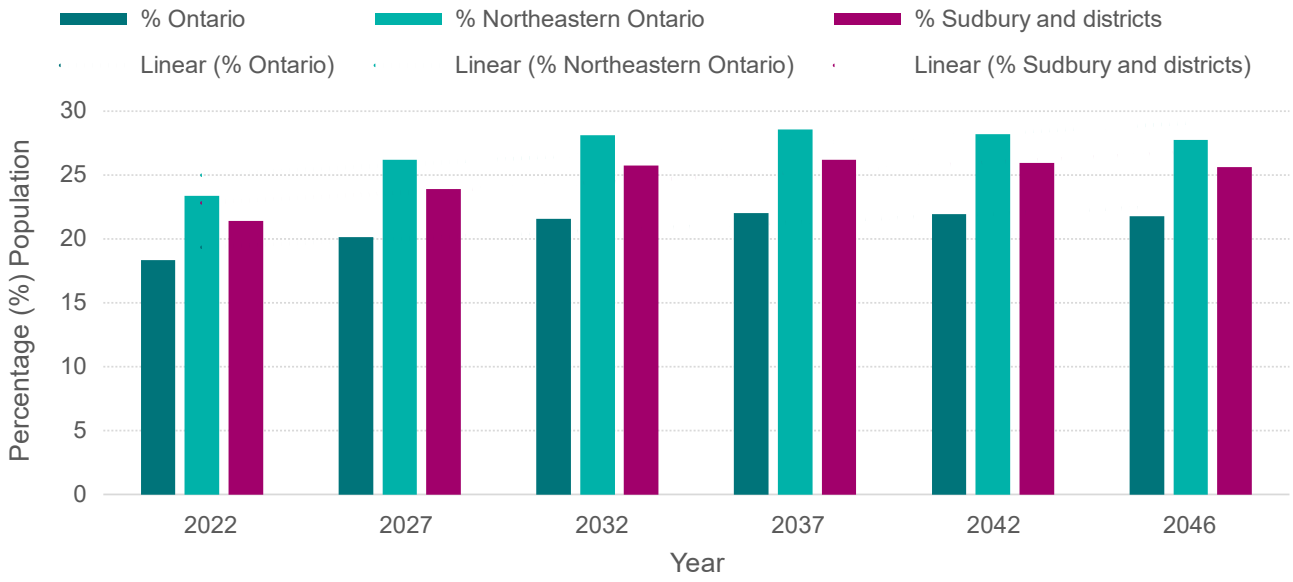
Life expectancy at birth and at 65 years of age for males and females is lower in Sudbury and districts and northeastern Ontario than in Ontario overall.

Figure 2: Population pyramid, Ontario and Sudbury and districts, 2021



Source: Statistics Canada

Figure 3: Population projection (65+), Ontario, northeastern Ontario, and Sudbury and districts, 2021

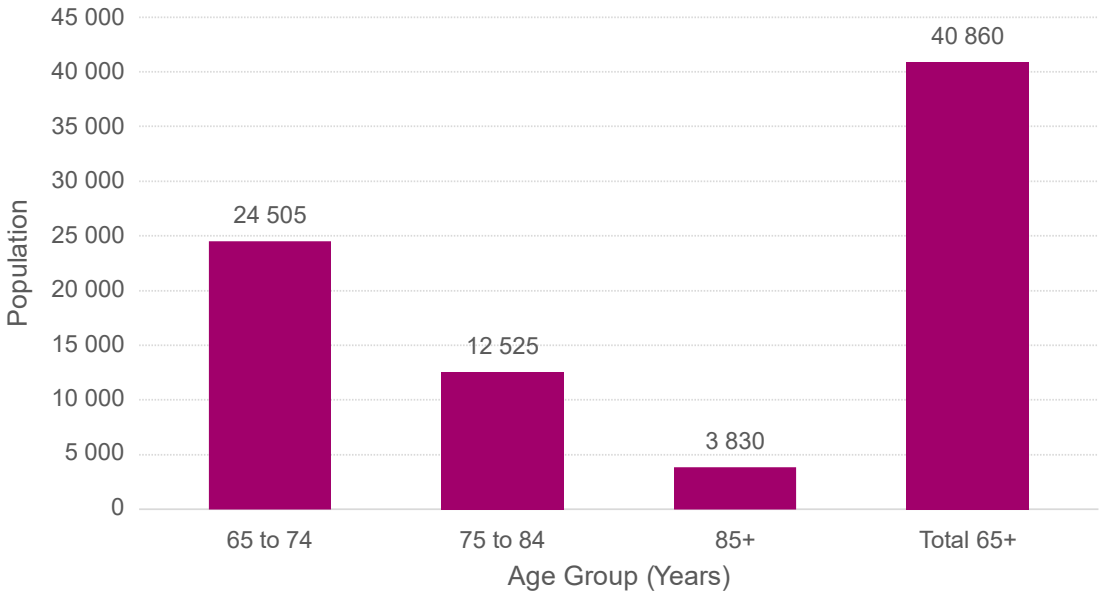


Source: Population Projections. Ontario Ministry of Health and Long-term Care, IntelliHEALTH Ontario, extracted July 28, 2023.

The population of Sudbury and districts and northeastern Ontario is older when compared to the rest of Ontario, with its younger (under 55) population proportion lower than that of Ontario. A higher proportion of the population will consist of older adults in future years.

Older adult population

Figure 4: Older adult population by age group, Sudbury and districts, 2021



Source: Statistics Canada, Census 2021

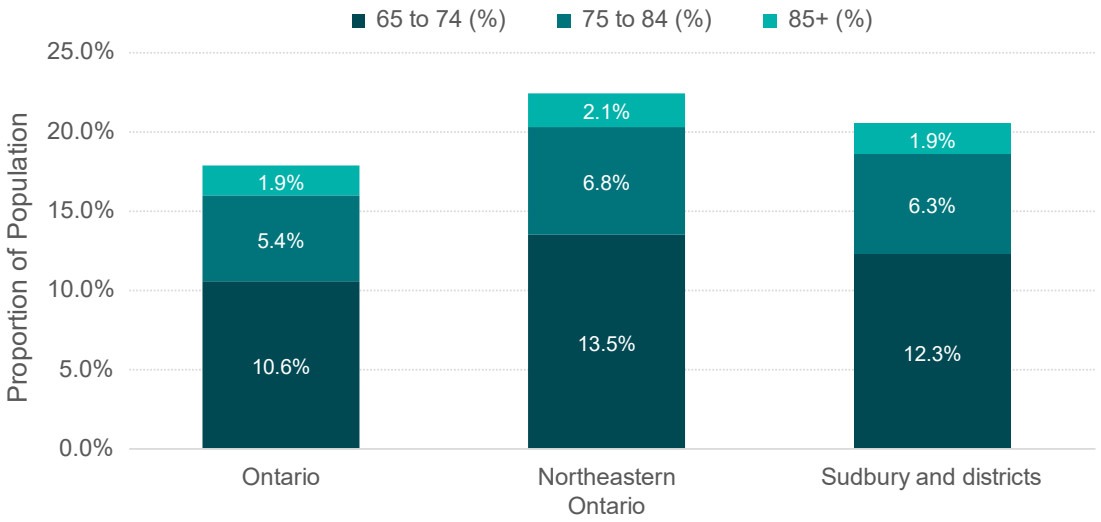
Table 3: Population for selected age groups, Ontario, northeastern Ontario, and Sudbury and districts, 2021

Regions	Total Population	Population 65+ Years	Percentage 65+ Years
Ontario	14 031 755	2 510 280	17.9
Northeastern Ontario	547 560	122 950	22.5
Sudbury and districts	198 930	40 860	20.5

Source: Statistics Canada, Census 2021

In 2021, Sudbury and districts consisted of 40 860 individuals aged 65 and over, which was 20.5% of the overall population of Sudbury and districts.

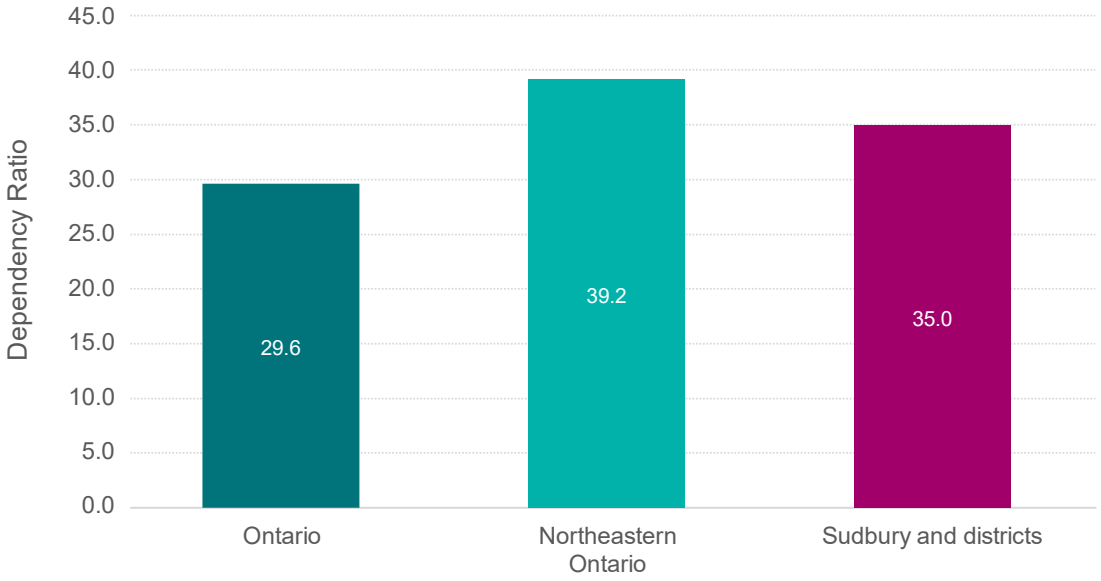
Figure 5: Proportion of older adults in total population by age groups, Ontario, northeastern Ontario, and Sudbury and districts, 2021



Source: Statistics Canada, Census 2021

The population of older adults (65+) is greater in Sudbury and districts and northeastern Ontario compared to Ontario.

Figure 6: Dependency ratio for older adults, Ontario, northeastern Ontario, and Sudbury and districts, 2021



Source: Statistics Canada, Census 2021

The dependency ratio for older adults is calculated as the number of people aged 65 years and older relative to the total number of people aged 20–64 years. The dependency ratio of older adults in Sudbury and districts (35.0) is lower than northeastern Ontario (39.2), and higher than Ontario (29.6).

Older adult households

Figure 7: Count of older adults living alone by age group, Sudbury and districts, 2021

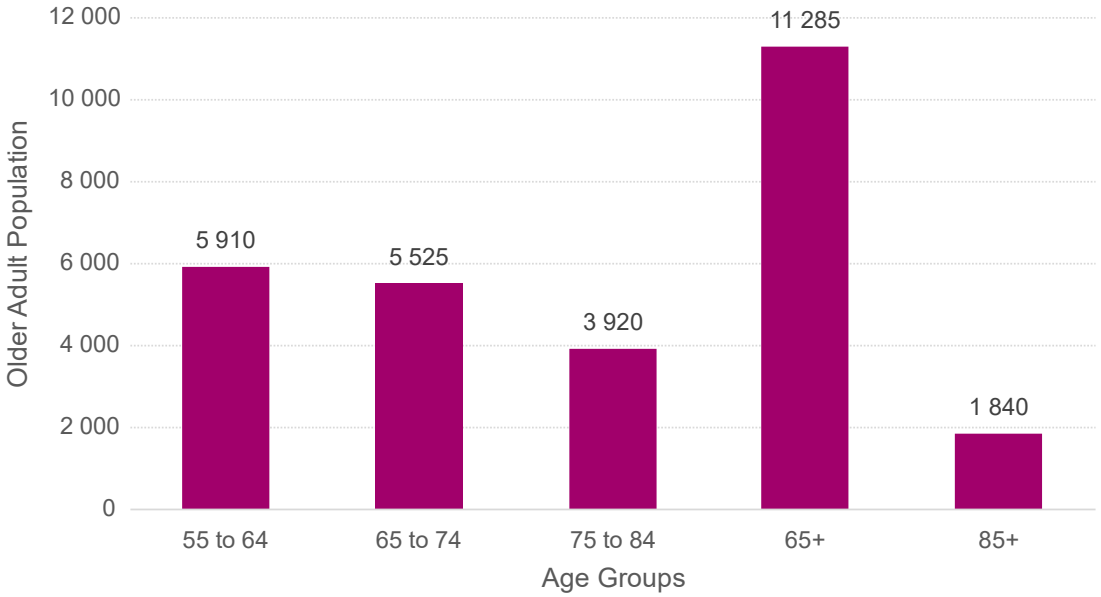
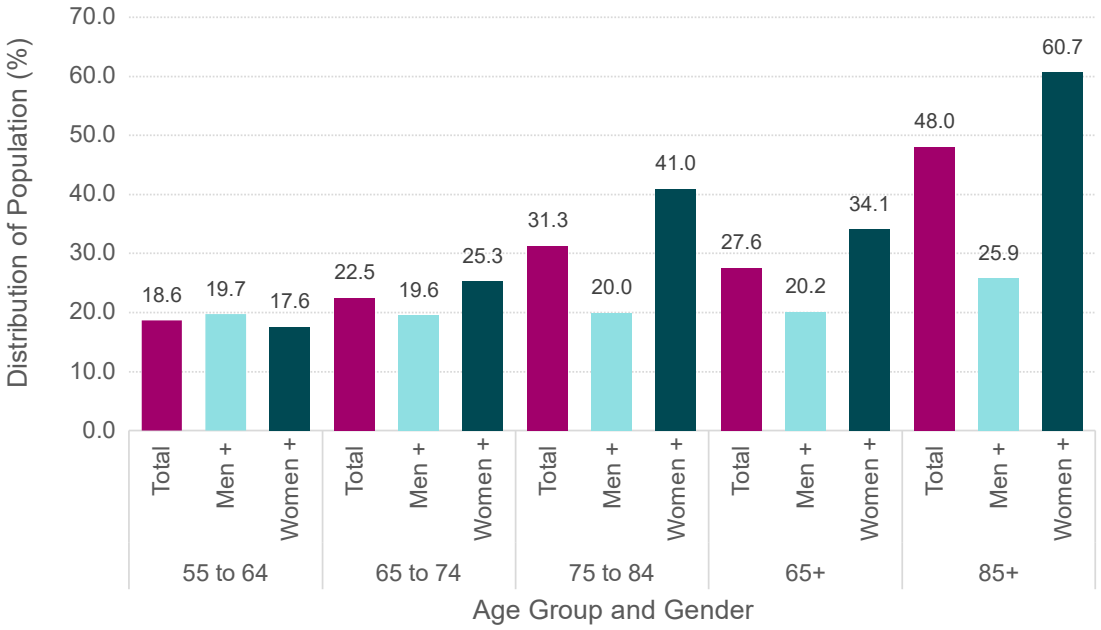
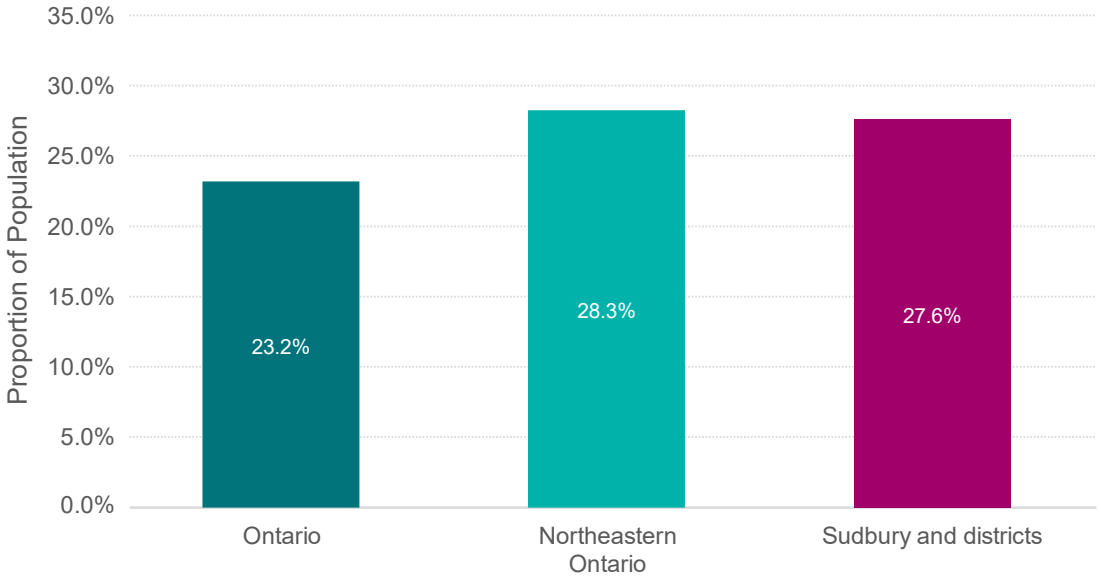


Figure 8: Percentage of older adults living alone by age group and gender, Sudbury and districts, 2021



Source: Statistics Canada, Census 2021

Figure 9: Proportion of older adults (65+) living alone, Ontario, northeastern Ontario, and Sudbury and districts, 2021



Source: Statistics Canada, Census 2021

There were 11 285 older adults over the age of 65 living alone in Sudbury and districts; 34 770 were living alone across the northeastern region. The percentage of older adults living alone is higher in Sudbury and districts (27.6%) and northeastern Ontario (28.3%) compared to Ontario (23.2%).

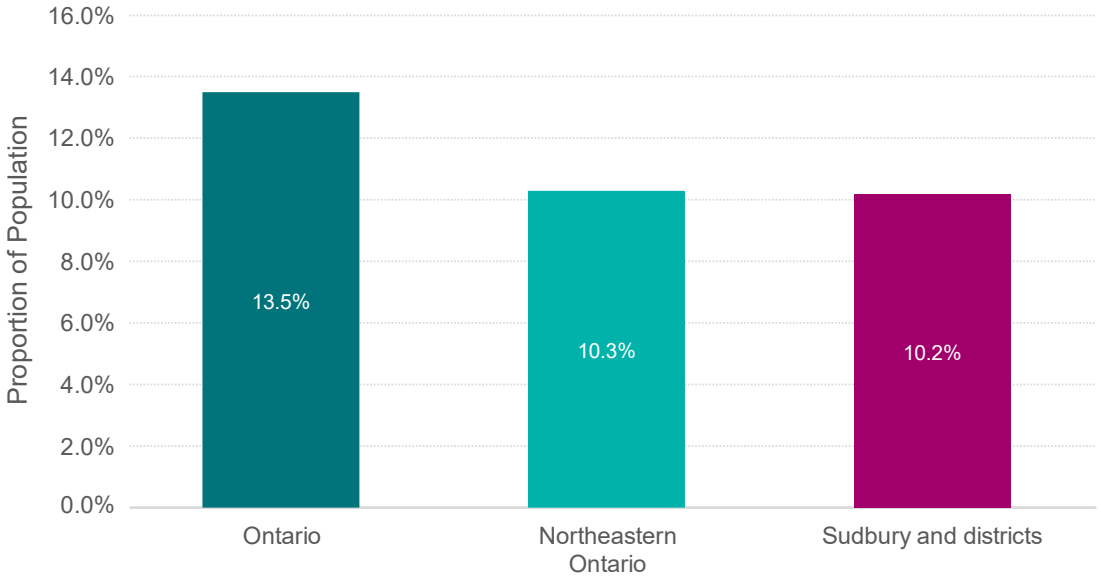
In the following table, income for northeastern Ontario overall was weighted using the number of total income recipients aged 15 years and over in private households in 2020 (25% sample data as population).

Table 4: Older adults (65+) average total income, 2020, and prevalence of low-income using LIM-AT, Ontario, northeastern Ontario, and Sudbury and districts, 2021

Regions	Average Individual After-Tax Income in 2020	*Low-Income Households	Prevalence LIM-AT
Ontario	$40,840	305 115	12.2
Northeastern Ontario	$43,130	17 230	14.0
Sudbury and districts	$45,360	4 765	11.7

**Low-income status in private households after taxes.*
Source: Statistics Canada, Census 2021

Figure 10: Proportion of older adults (65+) who are employed, Ontario, northeastern Ontario, and Sudbury and districts, 2021



Source: Statistics Canada, Census 2021

A similar percentage of older adults are employed between Sudbury and districts (10.2%) and northeastern Ontario (10.3%), and both have a lower percentage compared to Ontario (13.5%).

Older adult language

Figure 11: Distribution of knowledge of official languages among older adults (65+), Ontario, northeastern Ontario, and Sudbury and districts, 2021

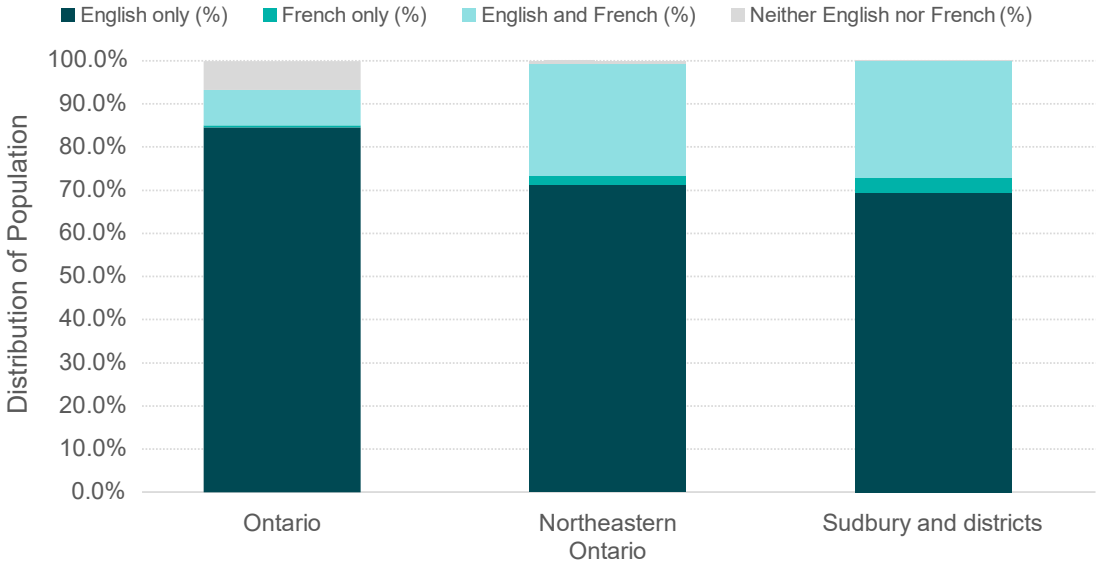


Table 5: Distribution of knowledge of official languages among older adults (65+), Ontario, northeastern Ontario, and Sudbury and districts, 2021

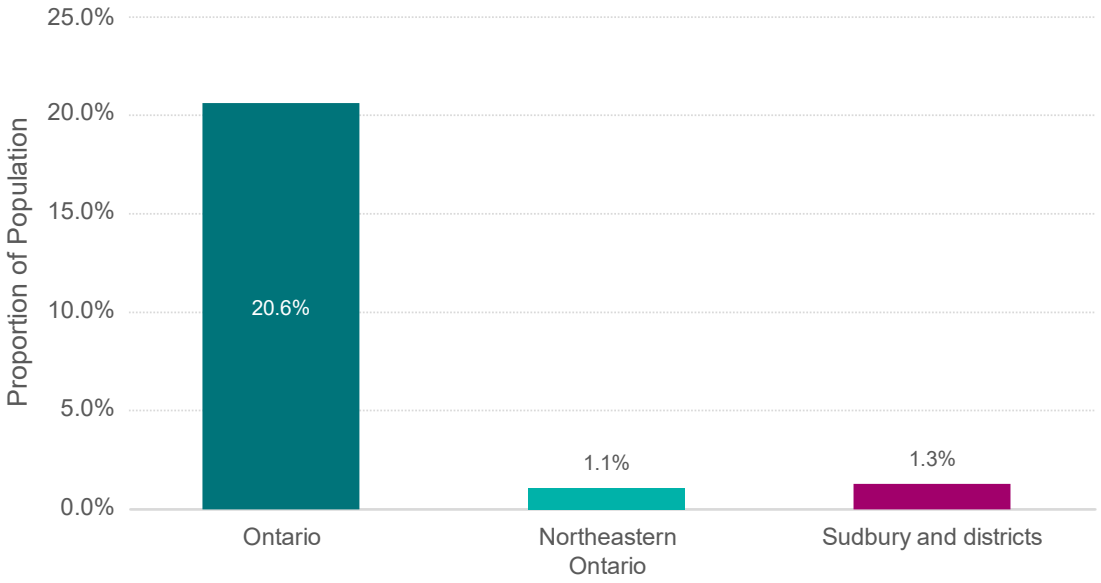
Knowledge of official languages for the population in private households	Ontario	Northeastern Ontario	Sudbury and districts
English only (%)	84.7%	71.4%	69.5%
French only (%)	0.4%	2.1%	3.3%
English and French (%)	8.2%	26.1%	27.1%
Neither English nor French (%)	6.7%	0.4%	0.0%

Source: Statistics Canada, Census 2021

Sudbury and districts (69.5%) and northeastern Ontario (71.4%) have a lower population that speak only English when compared to Ontario (84.7%). Sudbury and districts (26.1%) and northeastern Ontario (27.1%) have a higher population that speaks both English and French in comparison to Ontario (8.2%). Sudbury and districts (3.3%) and northeastern Ontario (2.1%) have a larger population than Ontario that has knowledge of the French language only (0.4%). Ontario (6.7%) has a higher population than Sudbury and districts (0.0%) and northeastern Ontario (0.4%) that has knowledge of neither of the official languages.

Older adult visible minority

Figure 12: Proportion of older adults (65+) who identify as a visible minority, Ontario, northeastern Ontario, and Sudbury and districts, 2021



Note: This figure on visible minority does not include Indigenous identity population.
Source: Statistics Canada, Census 2021

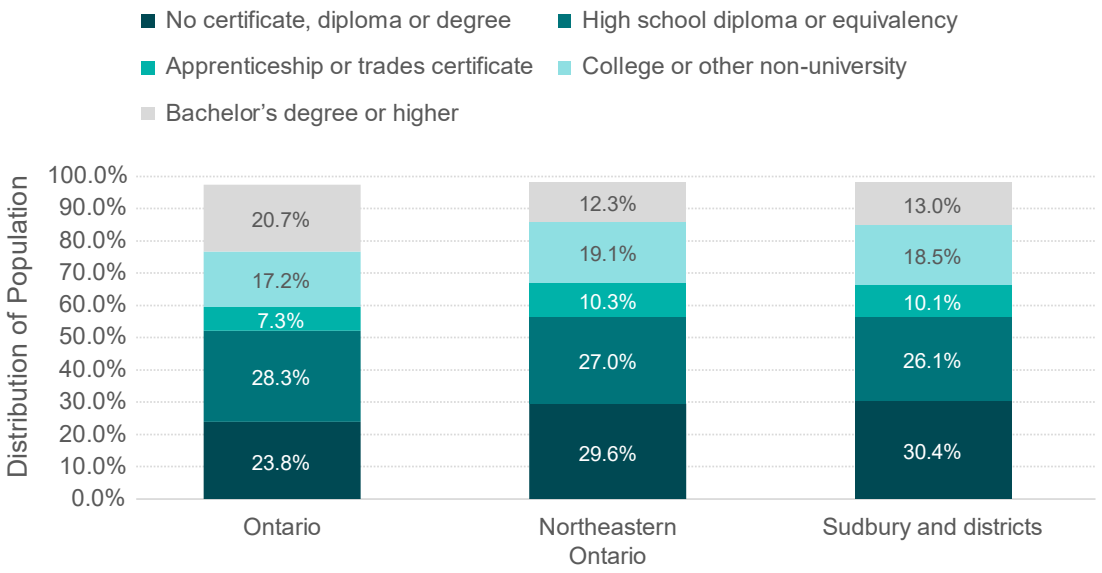
Table 6: Visible minority, Ontario, northeastern Ontario, and Sudbury and districts, 2021, age groups 0–64 & 65+

Regions	Ages 65+	Ages 0–64
Ontario	517 815	4 299 555
Northeastern Ontario	1 330	20 965
Sudbury and districts	525	10 860

Sudbury and districts (1.3%) and northeastern Ontario (4.1%) have a lower visible minority population than Ontario (34.3%) across all age groups. This pattern is reflected for the 65+ age group for visible minorities in Sudbury and districts (1.3%) and northeastern Ontario (1.1%) compared to Ontario at 20.6%.

Older adult education

Figure 13: Distribution of highest level of education among older adults (65+), Ontario, northeastern Ontario, and Sudbury and districts, 2021



Source: Statistics Canada, Census 2021

Sudbury and districts (30.4%) and northeastern Ontario (29.5%) have a higher percentage of population with no education certificate, diploma, or degree compared to Ontario (23.8%). Sudbury and districts (10.1%) and northeastern Ontario (10.3%) have a higher percentage of trades (10.1% & 10.3%) and college (18.5% & 19.1%) graduates compared to Ontario (7.3% & 17.2%). Sudbury and districts (13.0%) and northeastern Ontario (12.3%) have a lower population with a university degree than Ontario (20.7%).

Older adult recent immigration

Table 7: Older adults (65+) recent immigration, Ontario, northeastern Ontario, and Sudbury and districts, 2021

Regions	Immigrant Count (2011 to 2015)	Immigrant Count (2016 to 2021)
Ontario	35 300	27 395
Northeastern Ontario	95	65
Sudbury and districts	25	20

Source: Statistics Canada, Census 2021

Sudbury and districts and northeastern Ontario see a lower number of immigrants ages 65+ compared to Ontario.

Falls in older adults for Sudbury and districts, northeastern Ontario, and Ontario

Rate of emergency department visits due to falls

Overall, emergency department visit rates for falls rose slowly over time from 2008–2022, but peaked in or around 2019.

Rates dropped notably between 2019 and 2020, likely as a result of COVID-19, when people avoided hospitals if possible.

Age 55–64

Among those aged 55–64, the Ontario emergency department visit rate for falls rose little between 2008 and 2022, from 25.0–26.4 per 1 000 (36 926–53 967), peaking at 30.4 per 1 000 (61 078) in 2019.

Rates across the northeast were higher than Ontario, but also rose a little during this time from 33.2–35.3 per 1 000 (2 595–3 211), peaking at 40.1 per 1 000 (3 750) in 2019. A similar pattern was observed for Sudbury and districts.

Figure 14: Annual emergency department visit rate for falls, Sudbury and districts, northeastern Ontario, and Ontario, 2008 to 2022, ages 55–64

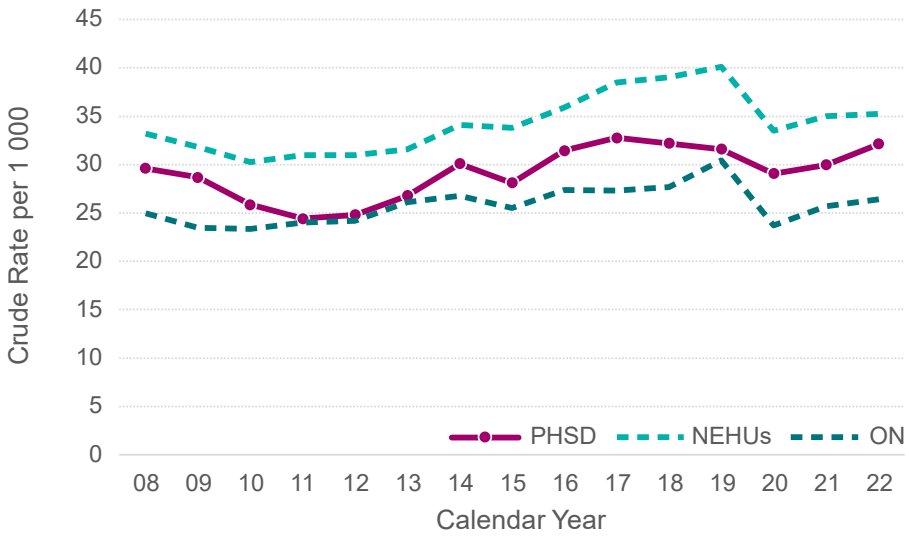


Table 8: Annual emergency department visit rate and count for falls, Sudbury and districts, northeastern Ontario, and Ontario, 2008 to 2022, ages 55–64

Year	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22
Rate per 1 000															
PHSD	29.6	28.7	25.9	24.4	24.8	26.8	30.1	28.1	31.5	32.8	32.2	31.6	29.1	30.0	32.2
NEHUs	33.2	31.8	30.3	31.0	31.0	31.6	34.1	33.8	35.9	38.5	39.0	40.1	33.5	35.0	35.3
ON	25.0	23.4	23.3	24.0	24.2	26.1	26.8	25.5	27.4	27.3	27.7	30.4	23.7	25.7	26.4
Count															
PHSD	779	774	723	695	716	783	894	849	965	1 026	1 024	1 013	936	965	1 019
NEHUs	2 595	2 555	2 511	2 622	2 650	2 736	2 991	3 016	3 253	3 537	3 633	3 750	3 135	3 244	3 211
ON	36 926	35 953	37 263	39 634	40 717	44 947	47 339	46 322	50 985	52 242	54 402	61 078	48 316	52 632	53 967

Source: Ambulatory Emergency External Cause 2008–2022 and population estimates 2008–2022, Ontario Ministry of Health and Longterm Care, IntelliHEALTH Ontario, extracted July 28, 2023.

Among those aged 55–64, the Sudbury and districts emergency department visit rate for falls was lower than the northeast and most similar to the province, rising from 29.6–32.2 per 1 000 (779–1 019) between 2008 and 2022, peaking at 32.8 per 1 000 (1 026) in 2017.

Age 65+

Among those aged 65 and older, emergency department visit rates for falls were approximately double those of age 55–64 between 2008 and 2022.

The Ontario rate rose little between 2008 and 2022, from 53.9–56.3 per 1 000 (93 594–156 201), peaking at 61.7 per 1 000 (155 057) in 2019.

Rates across the northeast were higher than Ontario, but were the same in 2008 and 2022 at 62.9 per 1 000 (5 952–8 454), and they peaked at 70.9 per 1 000 (8 486) in 2018.

Figure 15: Annual emergency department visit rate for falls, Sudbury and districts, northeastern Ontario, and Ontario, 2008 to 2022, ages 65+

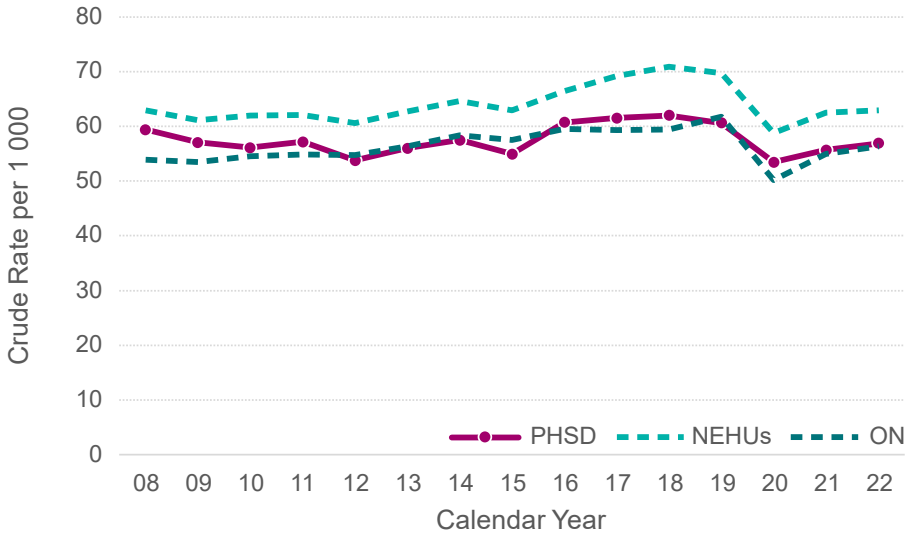


Table 9: Annual emergency department visit rate and count for falls, Sudbury and districts, northeastern Ontario, and Ontario, 2008 to 2022, ages 65+

Year	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22
Rate per 1 000															
PHSD	29.6	28.7	25.9	24.4	24.8	26.8	30.1	28.1	31.5	32.8	32.2	31.6	29.1	30.0	32.2
NEHUs	33.2	31.8	30.3	31.0	31.0	31.6	34.1	33.8	35.9	38.5	39.0	40.1	33.5	35.0	35.3
ON	25.0	23.4	23.3	24.0	24.2	26.1	26.8	25.5	27.4	27.3	27.7	30.4	23.7	25.7	26.4
Count															
PHSD	1 813	1 775	1 777	1 849	1 806	1 944	2 048	2 012	2 288	2 374	2 460	2 475	2 251	2 406	2 526
NEHUs	5 952	5 884	6 055	6 191	6 251	6 644	7 029	6 987	7 561	8 064	8 486	8 587	7 465	8 140	8 454
ON	93 594	95 370	99 879	103 510	107 737	115 398	123 796	125 787	134 553	138 992	144 058	155 057	130 579	147 621	156 201

Source: Ambulatory Emergency External Cause 2008–2022 and population estimates 2008–2022, Ontario Ministry of Health and Longterm Care, IntelliHEALTH Ontario, extracted July 28, 2023.

Among those aged 65 and older, the Sudbury emergency department visit rate for falls was lower than the northeast and most similar to the province, and actually decreased from 59.4–56.9 per 1 000 (1 813–2 526) between 2008 and 2022, but still peaked at 62.0 per 1 000 (2 460) in 2018.

Age 75+ (not shown separately)

The emergency department visit rates for falls among those age 75+ were approximately 50% higher than for those age 65+.

In 2022, among those aged 75+, the Ontario rate was 84.5 per 1 000 (102 850) and the northeast rate was 90.5 per 1 000 (5 272).

In 2022, among those aged 75+, the Ontario rate was 84.5 per 1 000 and the northeast rate was 90.5 per 1 000.

Hospitalization rates due to falls

Overall, hospitalization rates for falls were much lower than emergency department visit rates, representing about 10% between 2008 and 2022, and had more annual variation. Hospitalizations are a subset of those who had an emergency department visit based on whether they were hospitalized afterwards.

Age 55–64

Among those aged 55–64, the Ontario rate was relatively flat between 2008 and 2022, from 2.4–2.4 per 1 000 (3 509–4 849).

Rates across the northeast were higher than Ontario but fell a little during this time from 3.7–2.7 per 1 000 (287–246), peaking at 3.4 per 1 000 (319) in 2019.

Figure 16: Annual hospitalization rate for falls, Sudbury and districts, northeastern Ontario, and Ontario, 2008 to 2022, ages 55–64

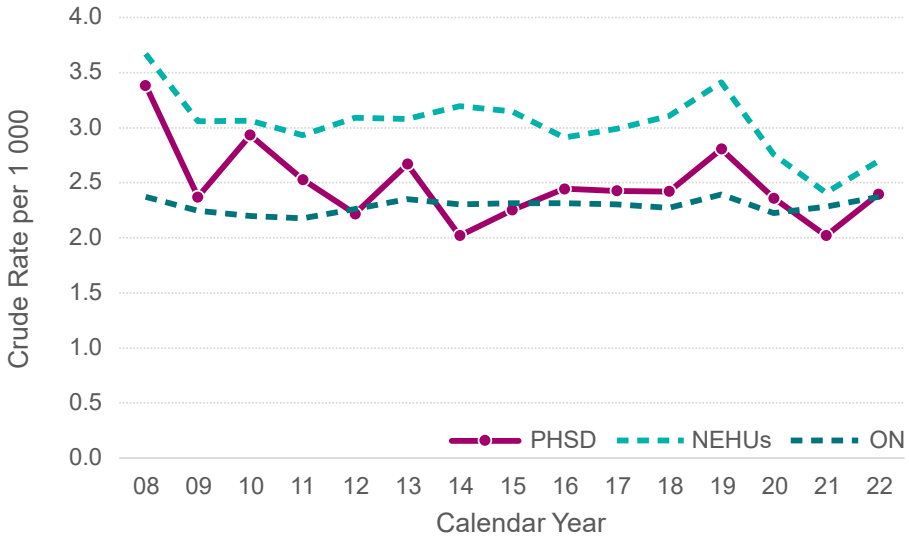


Table 10: Annual hospitalization rate and count for falls, Sudbury and districts, northeastern Ontario, and Ontario, 2008 to 2022, ages 55–64

Year	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22
Rate per 1 000															
PHSD	3.4	2.4	2.9	2.5	2.2	2.7	2.0	2.3	2.4	2.4	2.4	2.8	2.4	2.0	2.4
NEHUs	3.7	3.1	3.1	2.9	3.1	3.1	3.2	3.2	2.9	3.0	3.1	3.4	2.8	2.4	2.7
ON	2.4	2.2	2.2	2.2	2.3	2.4	2.3	2.3	2.3	2.3	2.3	2.4	2.2	2.3	2.4
Count															
PHSD	89	64	82	72	64	78	60	68	75	76	77	90	76	65	76
NEHUs	287	246	254	248	264	267	280	281	264	275	289	319	258	223	246
ON	3 509	3 443	3 511	3 591	3 801	4 049	4 073	4200	4 310	4 414	4 465	4 801	4 527	4 672	4 849

Source: Ambulatory Emergency External Cause 2008–2022 and population estimates 2008–2022, Ontario Ministry of Health and Longterm Care, IntelliHEALTH Ontario, extracted July 28, 2023.

Among those aged 55–64, Sudbury had a lower hospitalization rate for falls than the northeast, more similar to Ontario rates and decreased from 3.4–2.4 per 1 000 (89–76) between 2008 and 2022.

Age 65+

Among those aged 65 and older, hospitalization rates for falls were 5 to 6 times higher than those aged 55–64 between 2008 and 2022.

The Ontario rate rose little between 2008 and 2022, from 13.2–14.0 per 1 000 (22 974–38 804), reaching 14.0 per 1 000 (29 664) in 2014 as well.

Rates across the northeast were higher than Ontario, but decreased between 2008 and 2022 from 14.9–13.9 per 1 000 (1 410–1 869), and they peaked at 15.6 per 1 000 (1 656) in 2013, after which they were comparable to the rates across Ontario as a whole.

Figure 17: Annual hospitalization rate for falls, Sudbury and districts, northeastern Ontario, and Ontario, 2008 to 2022, ages 65+

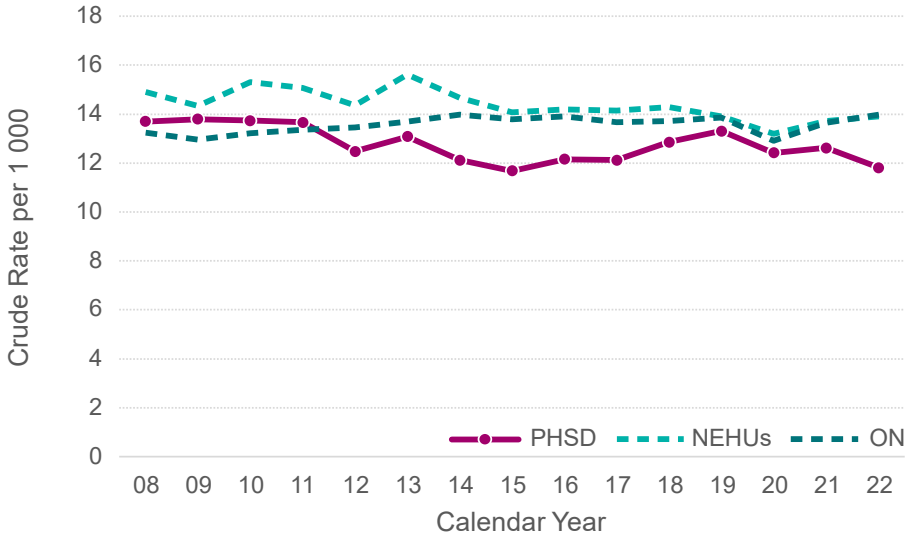


Table 11: Annual hospitalization rate and count for falls, Sudbury and districts, northeastern Ontario, and Ontario, 2008 to 2022, ages 65+

Year	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22
Rate per 1 000															
PHSD	29.6	28.7	25.9	24.4	24.8	26.8	30.1	28.1	31.5	32.8	32.2	31.6	29.1	30.0	32.2
NEHUs	33.2	31.8	30.3	31.0	31.0	31.6	34.1	33.8	35.9	38.5	39.0	40.1	33.5	35.0	35.3
ON	25.0	23.4	23.3	24.0	24.2	26.1	26.8	25.5	27.4	27.3	27.7	30.4	23.7	25.7	26.4
Count															
PHSD	418	429	435	442	419	454	432	428	458	468	510	543	523	545	524
NEHUs	1 410	1 380	1 498	1 503	1 481	1 656	1 595	1 562	1 613	1 649	1 711	1 712	1 674	1 787	1 869
ON	22 974	23 124	24 241	25 215	26 505	28 040	29 664	30 142	31 441	31 988	33 260	34 814	33 561	36 607	38 804

Source: Ambulatory Emergency External Cause 2008–2022 and population estimates 2008–2022, Ontario Ministry of Health and Longterm Care, IntelliHEALTH Ontario, extracted July 28, 2023.

Among those aged 65 and older, Sudbury had the lowest hospitalization rate for falls overall, even lower than the provincial rates, which fell slightly from 13.7–11.8 per 1 000 (418–524) between 2008 and 2022.

Age 75+ (not shown separately)

The hospitalization rates for falls were highest among those age 75+, approximately double those occurring among age 65+.

In 2022, among those aged 75+, the Sudbury and districts rate was 20.8 per 1 000, the Ontario rate was 24.7 per 1 000 and the northeastern Ontario rate was 23.9 per 1 000.

External causes of falls

All 3-digit diagnostic codes are listed in the table below and not in the data tables to save space. Note that an asterisk is used to indicate the top 5 causes that appear in most age groups.

Table 12: ICD-10 diagnostic codes (3-digit)

ICD-10 Dx Code	Description
W00	Fall on same level involving ice and snow *
W01	Fall on same level from slipping, tripping and stumbling *
W02	Fall involving ice-skates, skis, roller-skates or skateboards
W03	Other fall on same level due to collision with, or pushing by, another person
W04	Fall while being carried or supported by other persons
W05	Fall involving wheelchair
W06	Fall involving bed
W07	Fall involving chair
W08	Fall involving other furniture
W09	Fall involving playground equipment
W10	Fall on and from stairs and steps *
W11	Fall on and from ladder
W12	Fall on and from scaffolding
W13	Fall from, out of or through building or structure
W14	Fall from tree
W15	Fall from cliff
W16	Diving or jumping into water causing injury other than drowning or submersion
W17	Other fall from one level to another
W18	Other fall on same level *
W19	Unspecified fall *

Table 13: Five-year emergency department visits, 2018–2022 (number, percent, and 5-year crude rate) for falls, Sudbury and districts, ages 55–64 and 65+

Age 55–64				Age 65+			
All Dx Code	# Visits	% Visits	Rate per 1 000	All Dx Code	# Visits	% Visits	Rate per 1 000
W01	1 438	29.0%	8.9	W01	3 571	29.5%	17.0
W19	942	19.0%	5.9	W19	3 153	26.0%	15.0
W10	711	14.3%	4.4	W18	1 725	14.2%	8.2
W00	594	12.0%	3.7	W10	1 038	8.6%	4.9
W18	457	9.2%	2.9	W00	809	6.7%	3.8
W17	268	5.4%	1.7	W06	470	3.9%	2.2
W11	210	4.2%	1.3	W05	431	3.6%	2.1
Other	337	6.8%		Other	921	7.6%	
Total	4 957			Total	12 118		

Source: Ambulatory Emergency External Cause 2018–2022 and population estimates 2018–2022, Ontario Ministry of Health and Longterm Care, IntelliHEALTH Ontario, extracted July 28, 2023.

The top 5 causes of falls resulting in an emergency department visit throughout Sudbury and districts accounted for approximately 84% of all causes among those aged 55–64 and 65+ from 2018–2022, which included W01 (fall on same level from slipping, tripping and stumbling), W19 (unspecified fall), W18 (other fall on same level), W10 (fall on and from stairs and steps) and W00 (fall on same level involving ice and snow), although the order differed a little between the two age groups.

There were nearly two and a half times as many causes of visits for falls among those aged 65+ (12 118) than those aged 55–64 (4 957) between 2018 and 2022 in Sudbury and districts.

Note that 62% of all visits among those aged 65+ occurred among those aged 75+ (not shown).

Geographically (not shown), the top 5 causes of visits for falls were similar among Ontario, the northeast, and Sudbury and districts.

Between the sexes, there were some differences as well (not shown). For instance, among all those aged 55+, females (10 616) accounted for a larger number of visits for falls than males (6 459).

Among all males aged 55+ (not shown), W11 (fall from ladders) accounted for 5% of all visits for falls and W00 (fall on same level involving ice and snow) accounted for 10% of all visits, both proportions higher than among females.

The top 5 ranking of causes of visits for falls were similar between males and females for both those aged 55–64 and those aged 65+ respectively, although the order differed for those ranked fourth to fifth.

Among those aged 55–64 (not shown), males had 1 992 causes listed of visits for falls and the top 5 causes explained approximately 78% of all causes. Of note was W01 (approximately 24%), W11 (approximately

8%) and W17 (approximately 8%). Among females 55–64, there were 2 965 causes and approximately 87% were explained by the top 5, while of note was W01 (approximately 32%).

Among those aged 65+ (not shown), males had 4 467 causes listed of visits for falls; the top 5 explained approximately 83% of all causes. Of note was W01 (approximately 27%) and W00 (approximately 10%). Among females 65+, there were 7 651 causes; approximately 86% were explained by the top 5, while of note was W01 (approximately 31%) and W00 (approximately 5%).

Lastly, among those aged 75+ (not shown), males had 2574 causes listed of visits for falls. Of note was W01 (approximately 29%) and W00 (approximately 7%). W05 (fall involving wheelchair) and W06 (fall involving bed) also explained approximately 4% each. Among females 75+, there were 4 997 causes. Of note was W01 (approximately 30%) and W00 (approximately 3%), while W05 and W06 also explained approximately 5% each.

Table 14: Five-year hospitalizations, 2018–2022 (number, percent, and 5-year crude rate) for falls, Sudbury and districts, ages 55–64 and 65+

Age 55–64				Age 65+			
All Dx Code	# Hosp	% Hosp	Rate per 1 000	All Dx Code	# Hosp	% Hosp	Rate per 1 000
W19	84	21.9%	0.5	W19	722	27.3%	3.4
W10	71	18.5%	0.4	W01	641	24.2%	3.0
W01	67	17.5%	0.4	W18	548	20.7%	2.6
W18	53	13.8%	0.3	W10	200	7.6%	1.0
W00	22	5.7%	0.1	W05	141	5.3%	0.7
W11	22	5.7%	0.1	W00	112	4.2%	0.5
W17	18	4.7%	0.1	W06	101	3.8%	0.5
Other	47	12.2%		Other	180	6.8%	
Total	384			Total	2 645		

Source: Ambulatory Emergency External Cause 2018–2022 and population estimates 2018–2022, Ontario Ministry of Health and Longterm Care, IntelliHEALTH Ontario, extracted July 28, 2023.

Hospitalizations are a subset of those who had an emergency department visit based on their disposition after the visit. Note that the hospitalization rate for any particular cause is less than 1 per 1 000 summed over these five years except for the top 3 causes among those aged 65+. Nevertheless, rates are shown here per 1 000 instead of per 100 000 for consistency in the report.

The top 5 causes of hospitalizations for falls throughout Sudbury and districts accounted for approximately 77% of all causes among those aged 55–64 and approximately 85% for 65+ from 2018–2022. This included W19, W01, W18, W10 and W05, although the order differed a little between the two age groups. W00 (fall involving wheelchair) became the leading cause of falls among those aged 65+.

There were more than 6 times as many causes of hospitalizations for falls among those aged 65+ (8 753) than those aged 55–64 (1 335) between 2018 and 2022 in Sudbury and districts.

Note that 76% of all hospitalizations among those aged 65+ occurred among those aged 75+ (not shown).

Between the sexes, there were some differences as well (not shown). For instance, among all those aged 55+, females (1 964) accounted for a larger number of hospitalizations for falls than males (1 065).

The top five ranking of hospitalizations for falls were similar between males and females for those aged 55–64, although W01 exceeded W19 for females, and W00 was ranked fifth for females (not in top 5 for males) while W11 (not in top 5 for females) was ranked fifth for males. For those aged 65+, the top 5 ranking of hospitalizations for falls was the same for males and females, although W05 was ranked fifth for females (not in top 5 for males), and W00 was ranked fifth for males (not in top 5 for females).

Among those aged 55–64 (not shown), males had 179 causes of hospitalizations listed for falls, and the top five explained approximately 75% of all causes. Of note was W17 (approximately 7%) and W00 (approximately 5%). Among females 55–64, there were 205 causes and approximately 82% were explained by the top five, while of note was W17 (only 3%).

Among those aged 65+ (not shown), males had 886 causes of hospitalizations listed for falls and the top five explained approximately 81% of all causes. Of note was W19 (approximately 28%). Among females 65+, there were 1 759 causes and approximately 87% were explained by the top 5, while of note was W19 (approximately 27%).

Lastly, among those aged 75+ (not shown), males had 629 causes of hospitalizations listed for falls. Of note was W19 (approximately 31%) and W00 (approximately 5%), while W05 (fall involving wheelchair) and W06 (fall involving bed) also explained approximately 4% & 5%. Among females 75+, there were 1 369 causes and of note was W19 (approximately 28%) and W00 (approximately 2%), while W05 and W06 also explained approximately 6% & 4%.

Location of injuries

Table 15: Five-year emergency department visits, 2018–2022 (number and percent) for location of falls, Sudbury and districts, aged 55+

All Dx Place of Occurrence	# Visits	Percent
Unspecified place of occurrence	9 620	56.4%
Place of occurrence, home	3 976	23.3%
Place of occurrence, residential institution	1 768	10.4%
Other specified place of occurrence	521	3.1%
Unknown	386	2.3%
Place of occurrence, street and highway	268	1.6%
Place of occurrence, trade and service area	264	1.6
Place of occurrence, school other institution and public area	115	0.7%
Place of occurrence, sports and athletics area	113	0.7%
Place of occurrence, industrial and construction area	27	0.2%
Place of occurrence, farm	6	0.0%
Total	17 064	

Source: Ambulatory Emergency External Cause 2018–2022, Ontario Ministry of Health and Long-term Care, IntelliHEALTH Ontario, extracted Aug 25, 2023

Unspecified place of occurrence and *Home* explain approximately 80% of all locations of falls resulting in an emergency department visit. *Residential institution* explains over 10%, and *other specified place of occurrence* explains 3% of all locations of falls resulting in an emergency department visit.

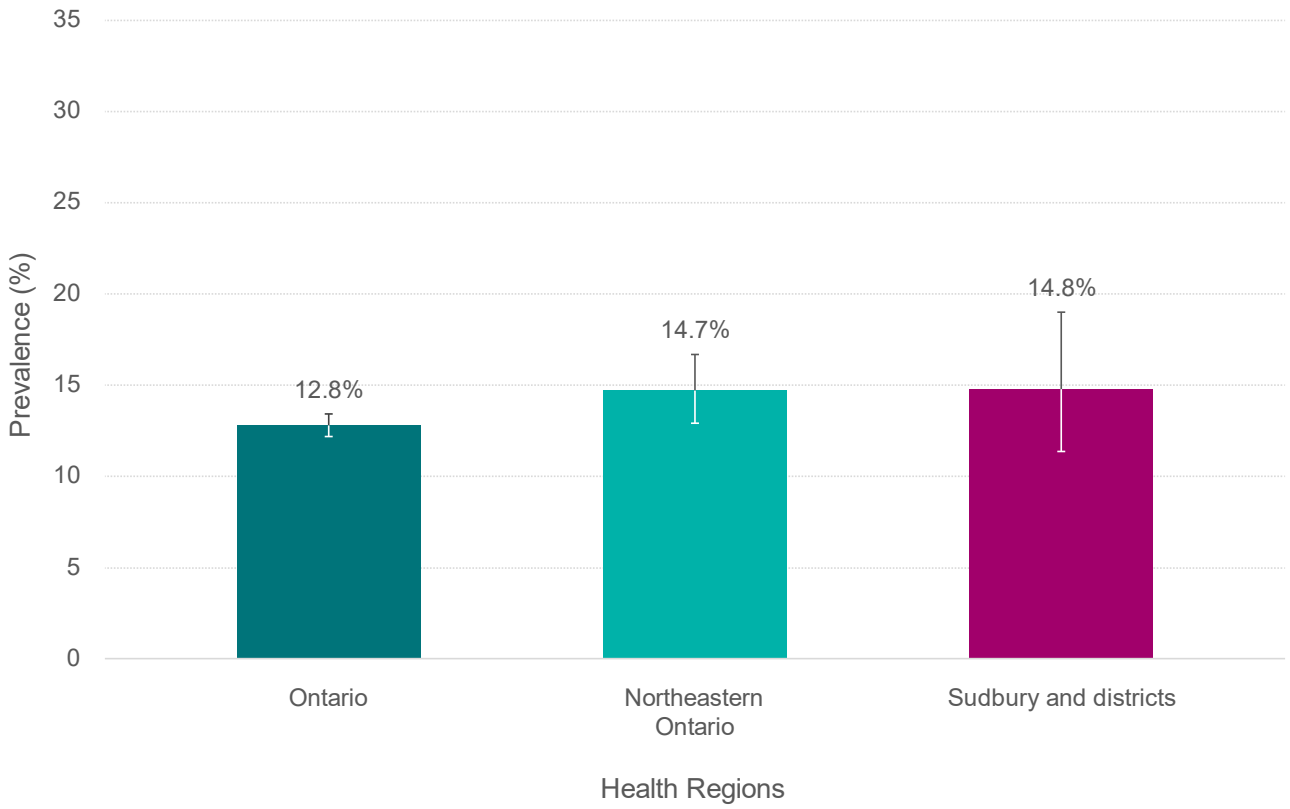
Note also, there can be more than one external cause per visit, but only one location for the fall.

The number of visits by location, however, (17 064) is relatively similar to the number of emergency department visits as a whole (17 075), suggesting that there were not many instances with more than one external cause entered per visit. This data, however, does not indicate how many unique individuals were counted. It is possible that some individuals were seen more than once during these 5 years.

Health behaviours and risks for Sudbury and districts, northeastern Ontario, and Ontario

Prevalence of asthma or COPD

Figure 18: Prevalence rate, asthma or COPD, Ontario, northeastern Ontario, and Sudbury and districts, ages 65+, 2015–2020

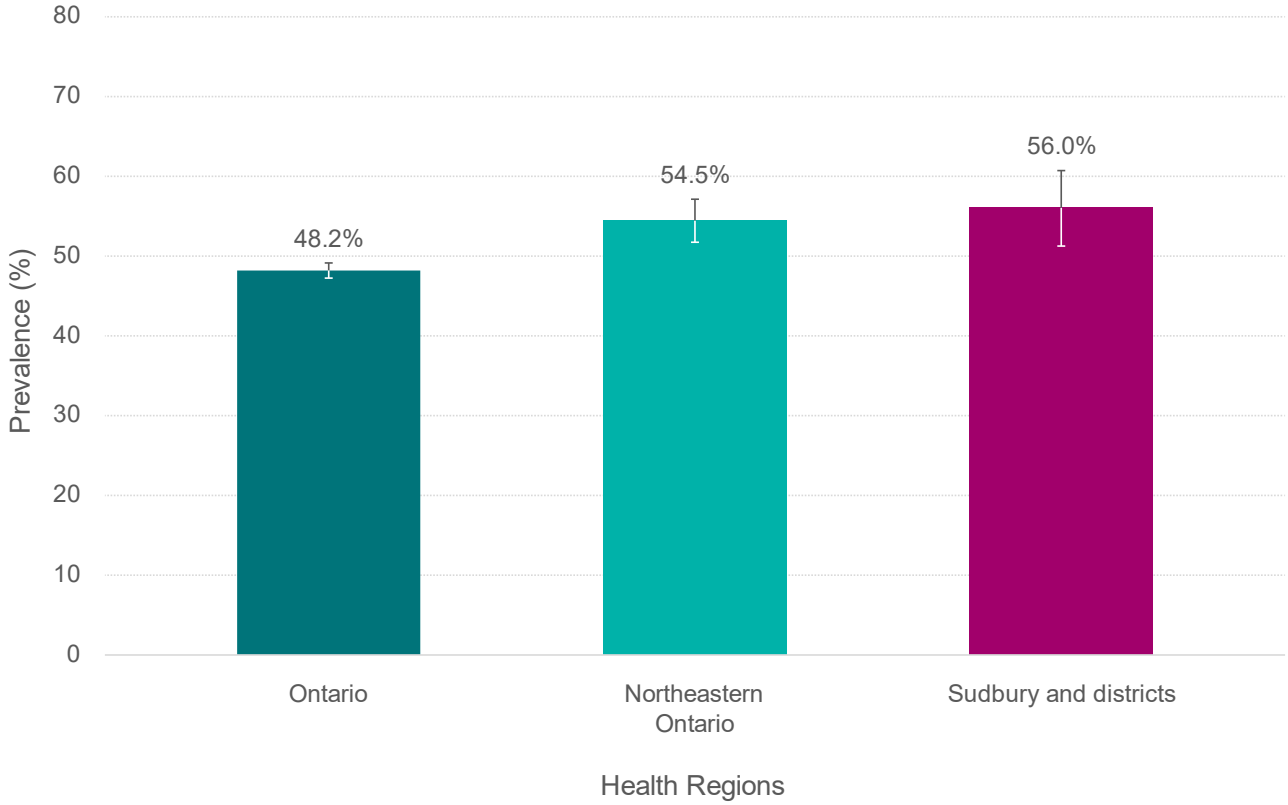


Source: Canadian Community Health Survey, 2015 to 2020, Statistics Canada, Share File, Ontario Ministry of Health.

A similar proportion of residents ages 65+ (15%) reported having asthma or COPD in Sudbury and districts compared to the rest of northeastern Ontario (15%) and Ontario overall (13%).

Prevalence of fibromyalgia or arthritis

Figure 19: Prevalence rate, fibromyalgia or arthritis, Ontario, northeastern Ontario, and Sudbury and districts, ages 65+, 2015–2020

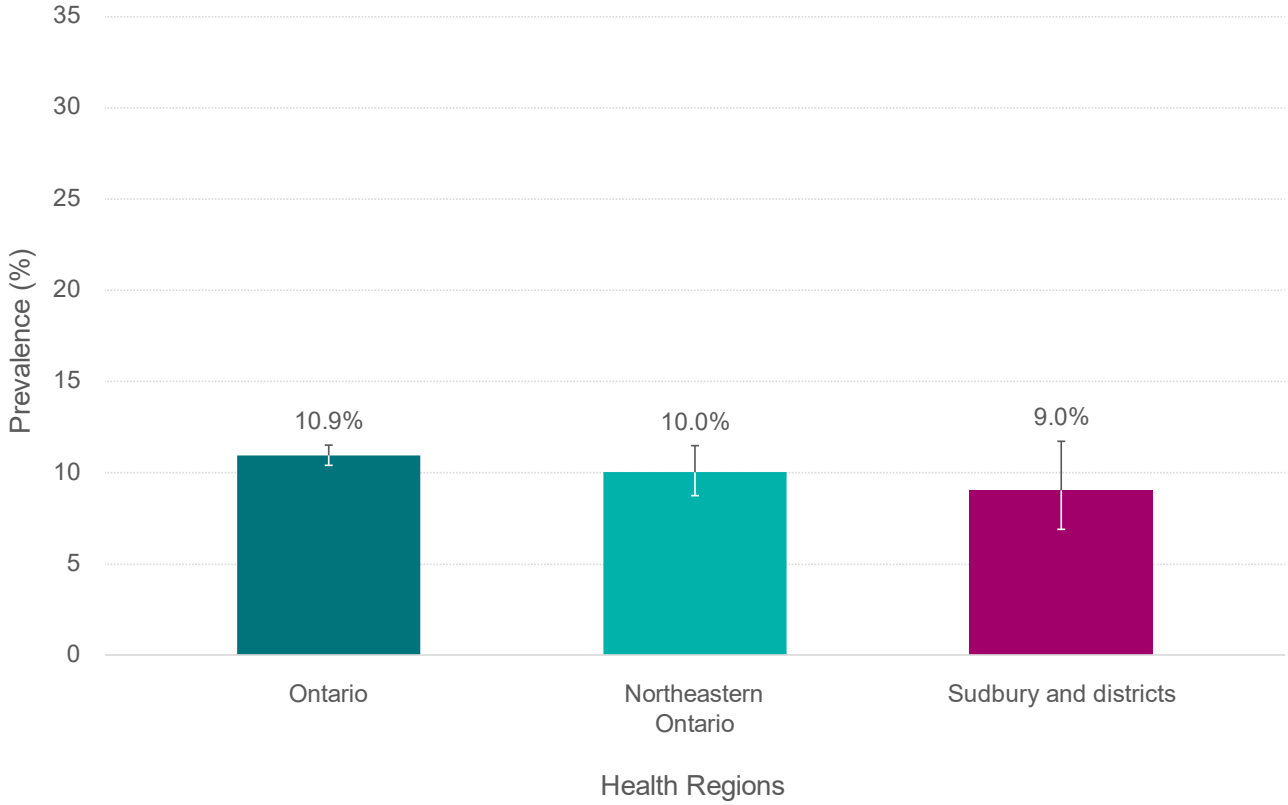


Source: Canadian Community Health Survey, 2015 to 2020, Statistics Canada, Share File, Ontario Ministry of Health.

A significantly higher proportion of residents ages 65+ (56%) reported having fibromyalgia or arthritis in Sudbury and districts compared to Ontario overall (48%), however, there was no difference between Sudbury and districts and the rest of northeastern Ontario (54%).

Prevalence of osteoporosis

Figure 20: Prevalence rate, osteoporosis, Ontario, northeastern Ontario, and Sudbury and districts, ages 65+, 2015–2020

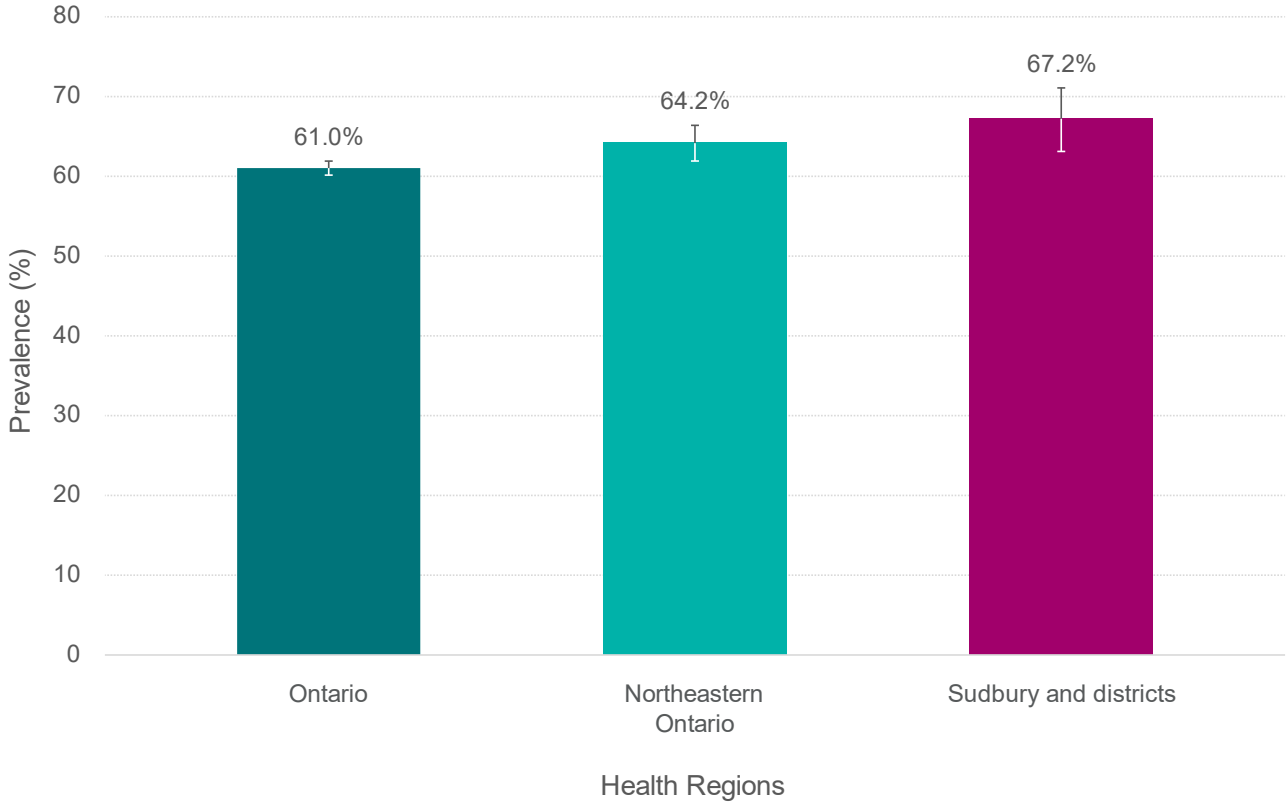


Source: Canadian Community Health Survey, 2015 to 2020, Statistics Canada, Share File, Ontario Ministry of Health.

A similar proportion of residents ages 65+ (9%) reported having osteoporosis in Sudbury and districts compared to the rest of northeastern Ontario (10%) and Ontario overall (11%).

Prevalence of high blood pressure or high cholesterol

Figure 21: Prevalence rate, high blood pressure or high cholesterol, Ontario, northeastern Ontario, and Sudbury and districts, ages 65+, 2015–2020

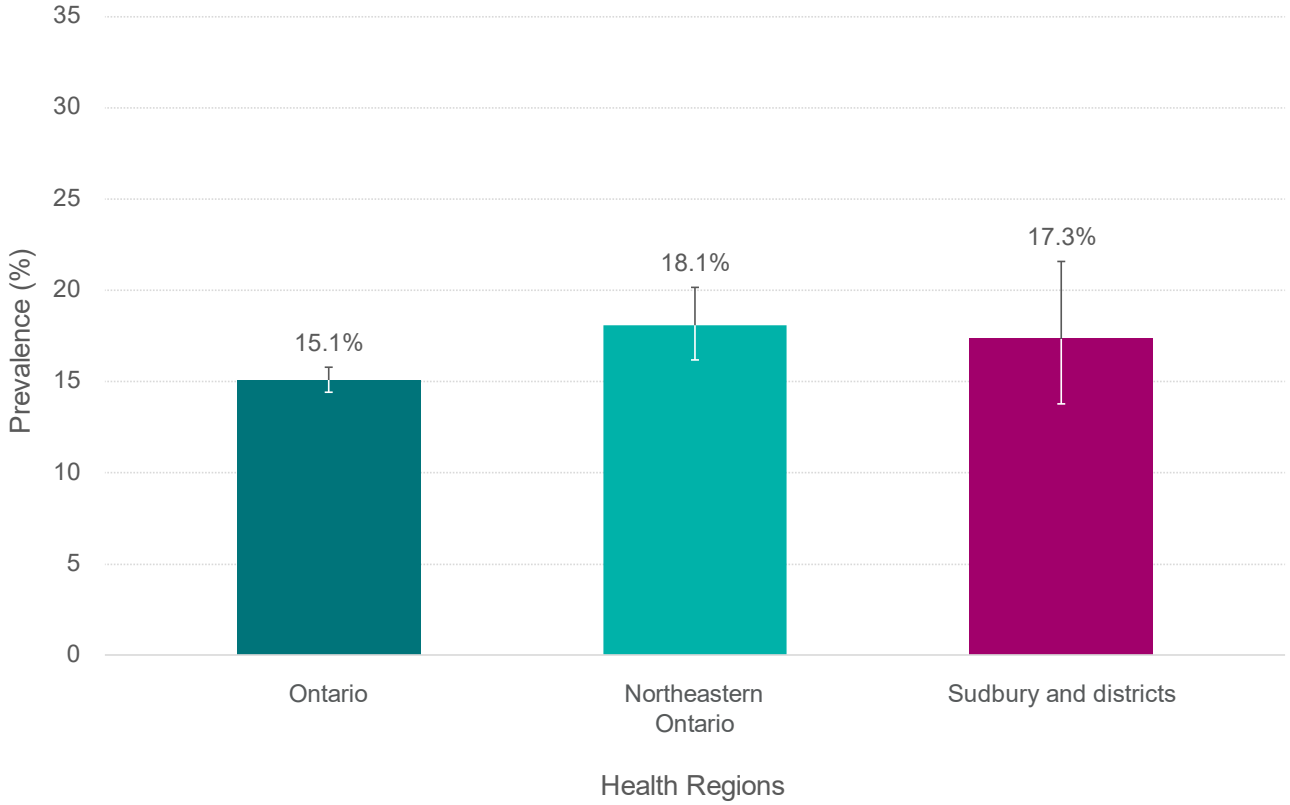


Source: Canadian Community Health Survey, 2015 to 2020, Statistics Canada, Share File, Ontario Ministry of Health.

A significantly higher proportion of residents ages 65+ (67%) reported having high blood pressure or high cholesterol in Sudbury and districts compared to Ontario overall (61%), however, there was no difference between and Sudbury and districts and the rest of northeastern Ontario (64%).

Prevalence of heart disease

Figure 22: Prevalence rate, heart disease, Ontario, northeastern Ontario, and Sudbury and districts, ages 65+, 2015–2020

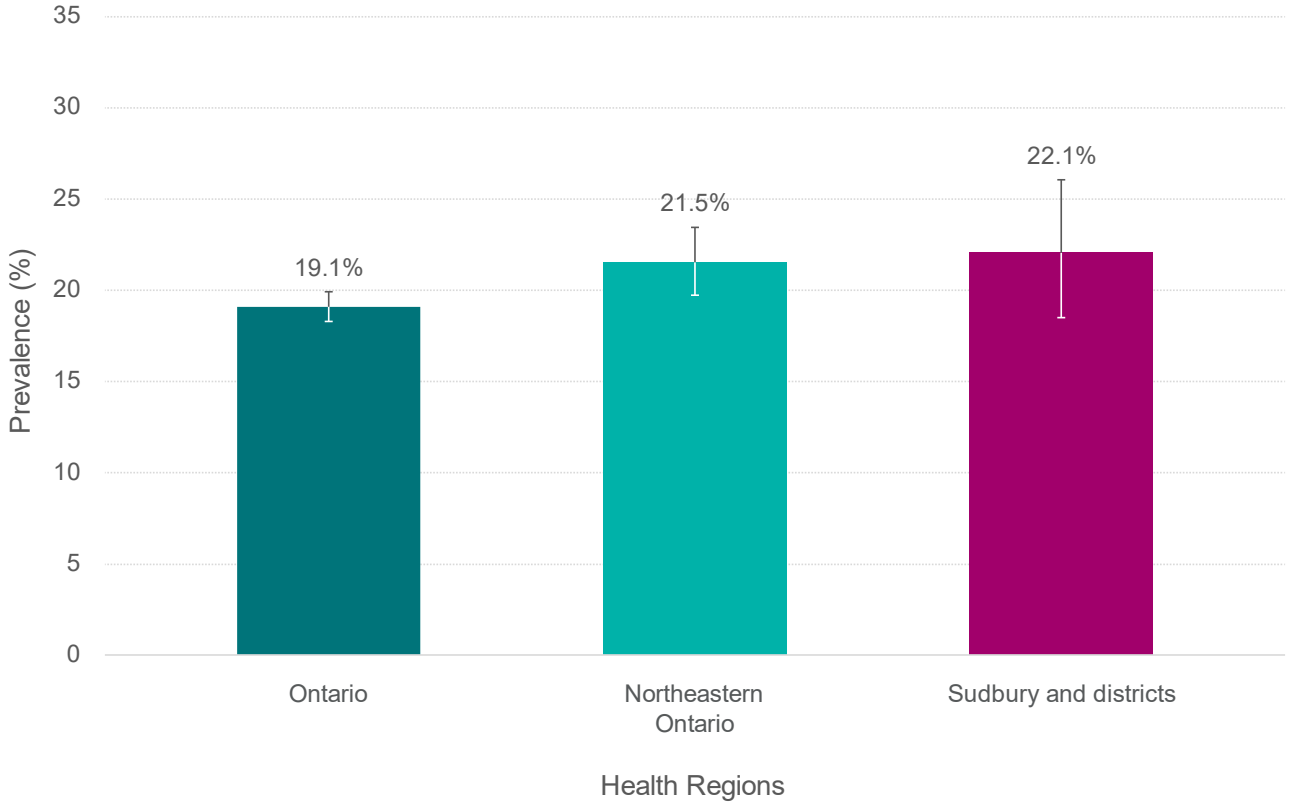


Source: Canadian Community Health Survey, 2015 to 2020, Statistics Canada, Share File, Ontario Ministry of Health.

A similar proportion of residents ages 65+ (17%) reported having heart disease in Sudbury and districts compared to the rest of northeastern Ontario (18%) and Ontario overall (15%).

Prevalence of diabetes

Figure 23: Prevalence rate, diabetes, Ontario, northeastern Ontario, and Sudbury and districts, ages 65+, 2015–2020

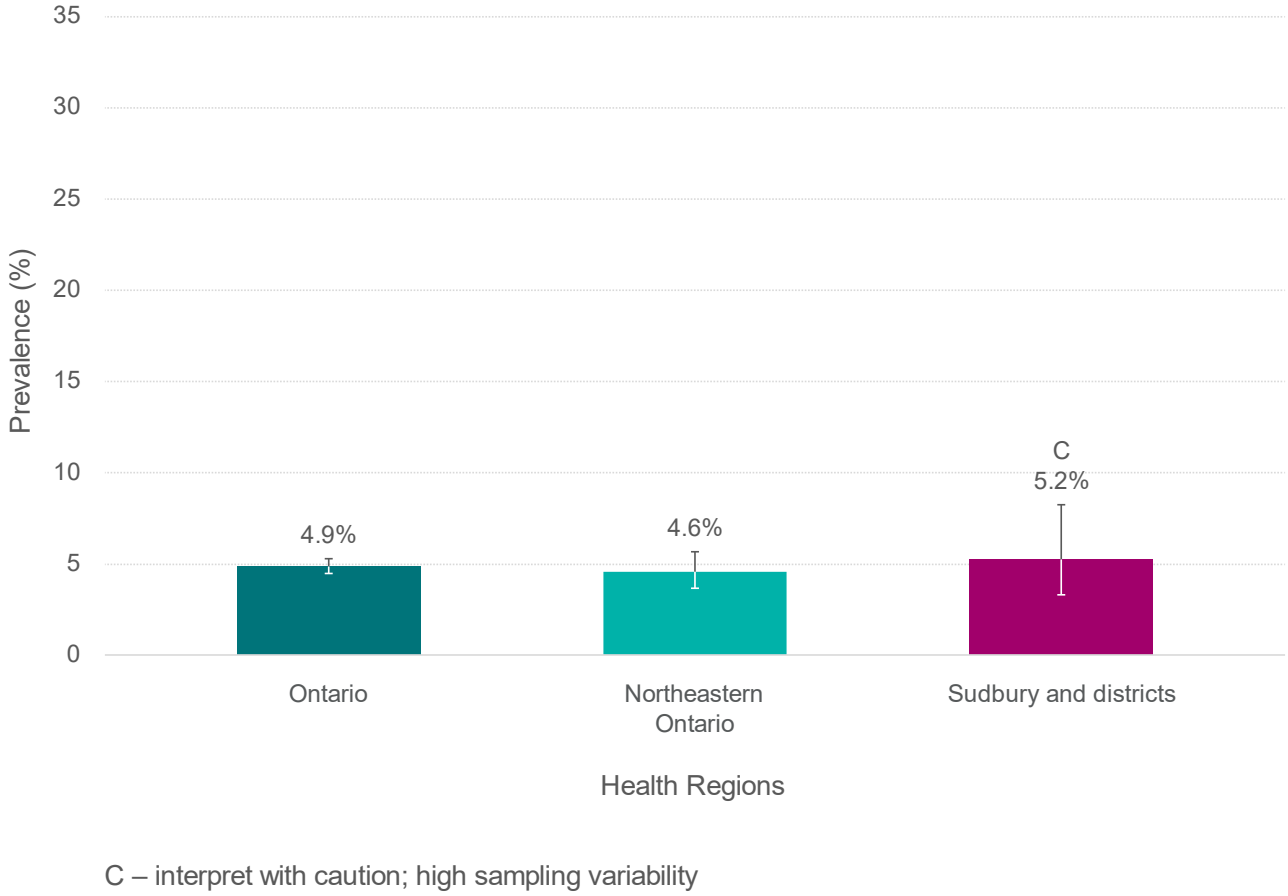


Source: Canadian Community Health Survey, 2015 to 2020, Statistics Canada, Share File, Ontario Ministry of Health.

A similar proportion of residents ages 65+ (22%) reported having diabetes in Sudbury and districts compared to the rest of northeastern Ontario (22%) and Ontario overall (19%).

Prevalence of cancer (currently)

Figure 24: Prevalence rate, cancer (currently), Ontario, northeastern Ontario, and Sudbury and districts, ages 65+, 2015–2020



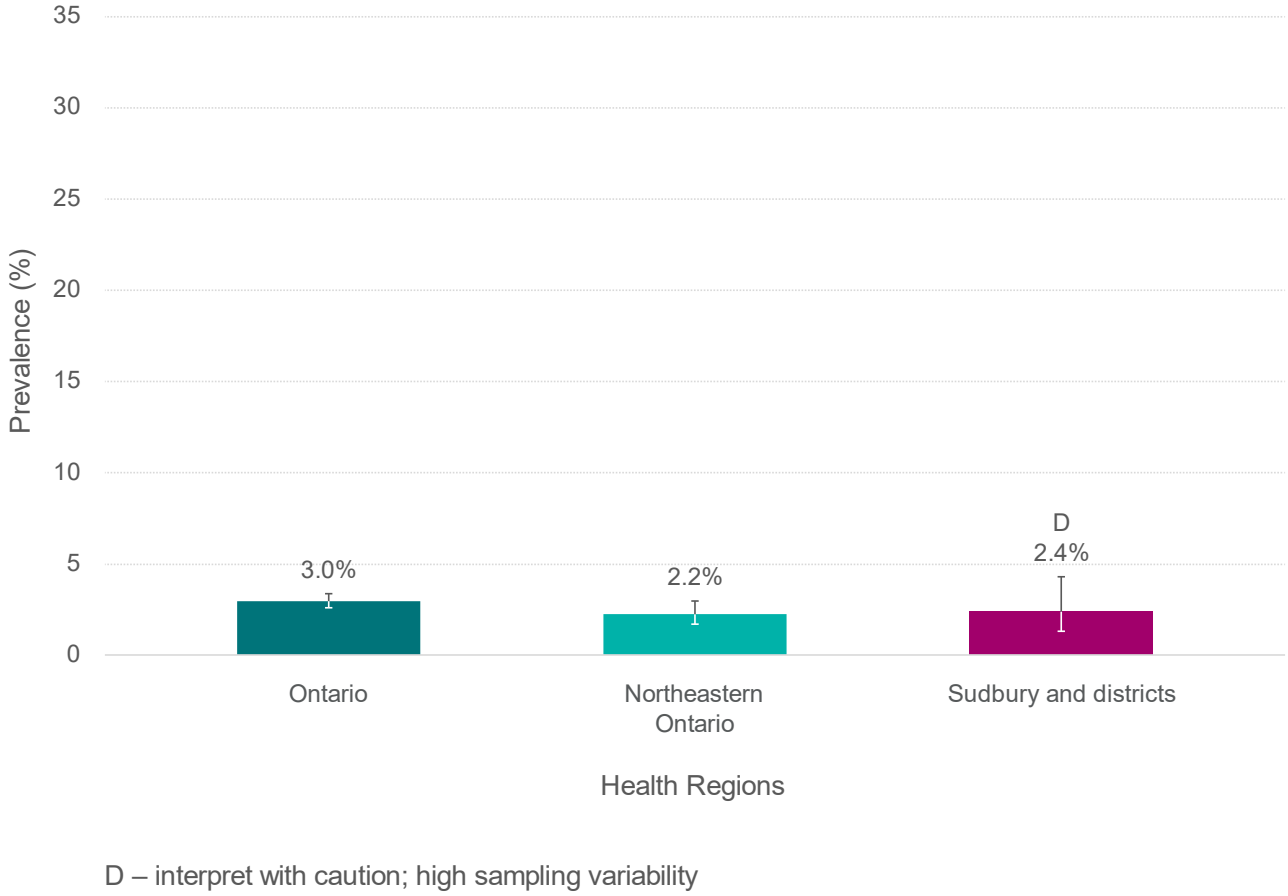
C – interpret with caution; high sampling variability

Source: Canadian Community Health Survey, 2015 to 2020, Statistics Canada, Share File, Ontario Ministry of Health.

A similar proportion of residents ages 65+ (5%) reported having cancer (currently) in Sudbury and districts compared to the rest of northeastern Ontario (5%) and Ontario overall (5%).

Prevalence of Alzheimer's or dementia

Figure 25: Prevalence rate, Alzheimer's or dementia, Ontario, northeastern Ontario, and Sudbury and districts, ages 65+, 2015–2020

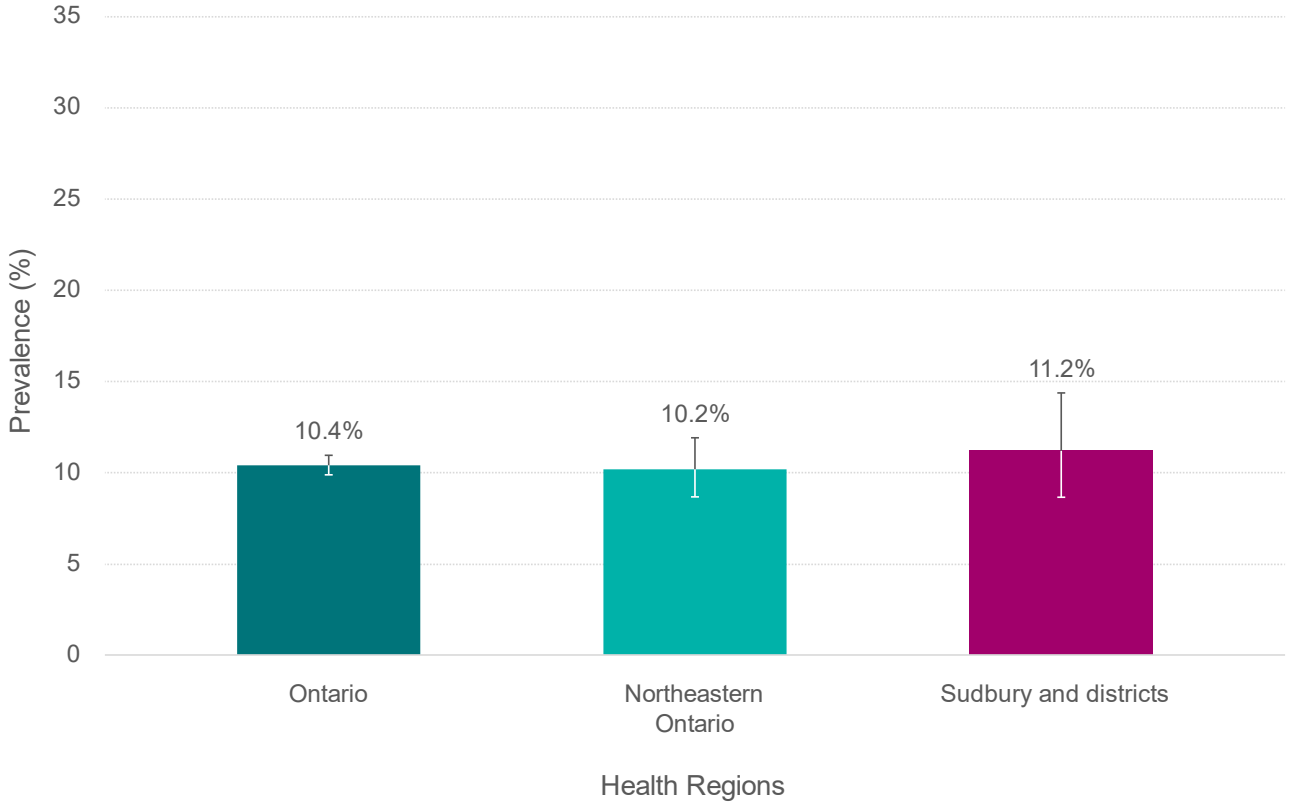


Source: Canadian Community Health Survey, 2015 to 2020, Statistics Canada, Share File, Ontario Ministry of Health.

A similar proportion of residents ages 65+ (2%) reported having Alzheimer's or dementia in Sudbury and districts compared to the rest of northeastern Ontario (2%) and Ontario overall (3%).

Prevalence of mood or anxiety disorder

Figure 26: Prevalence rate, mood or anxiety disorder, Ontario, northeastern Ontario, and Sudbury and districts, ages 65+, 2015–2020

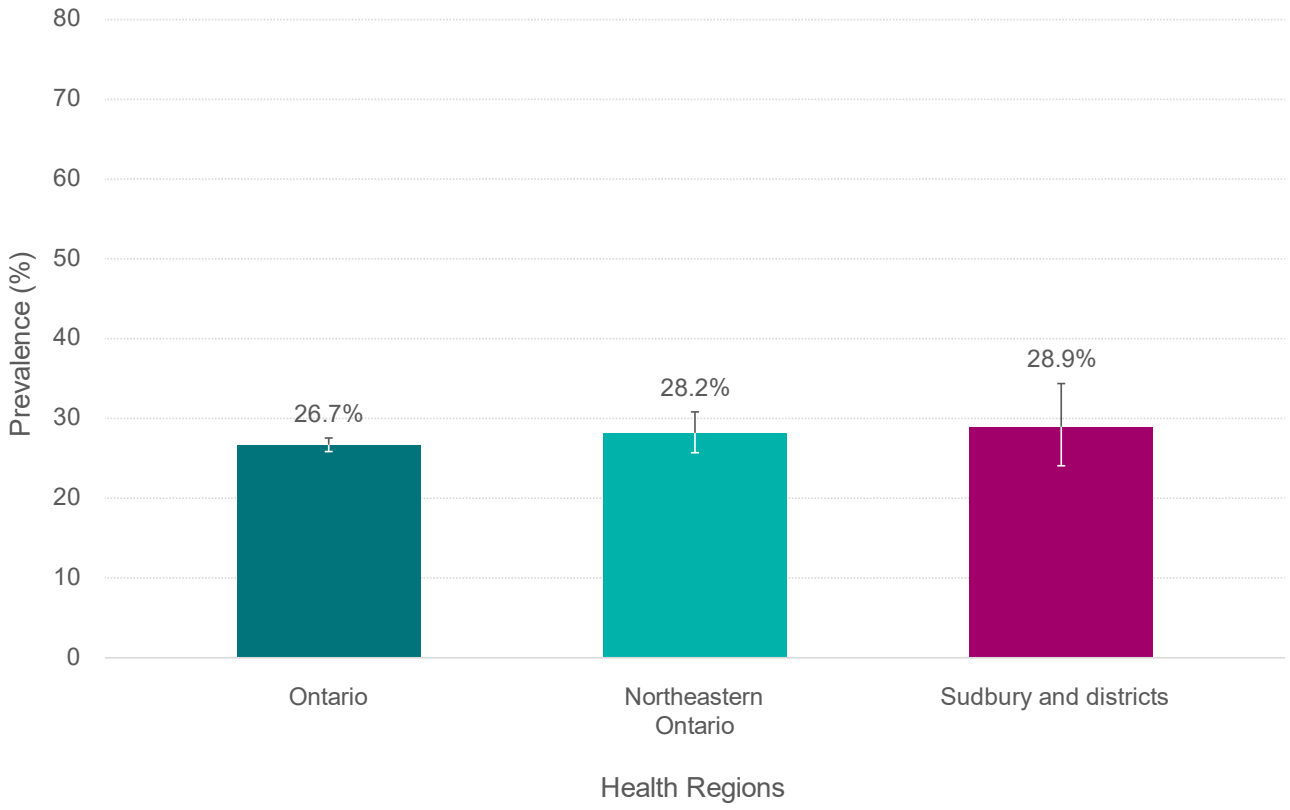


Source: Canadian Community Health Survey, 2015 to 2020, Statistics Canada, Share File, Ontario Ministry of Health.

A similar proportion of residents ages 65+ (11%) reported having mood or anxiety disorder in Sudbury and districts compared to the rest of northeastern Ontario (10%) and Ontario overall (10%).

Prevalence of exceeding 2023 low risk alcohol drinking guidelines

Figure 27: Prevalence rate, exceeding low risk alcohol drinking guidelines, Ontario, northeastern Ontario, and Sudbury and districts, ages 65+, 2015–2020

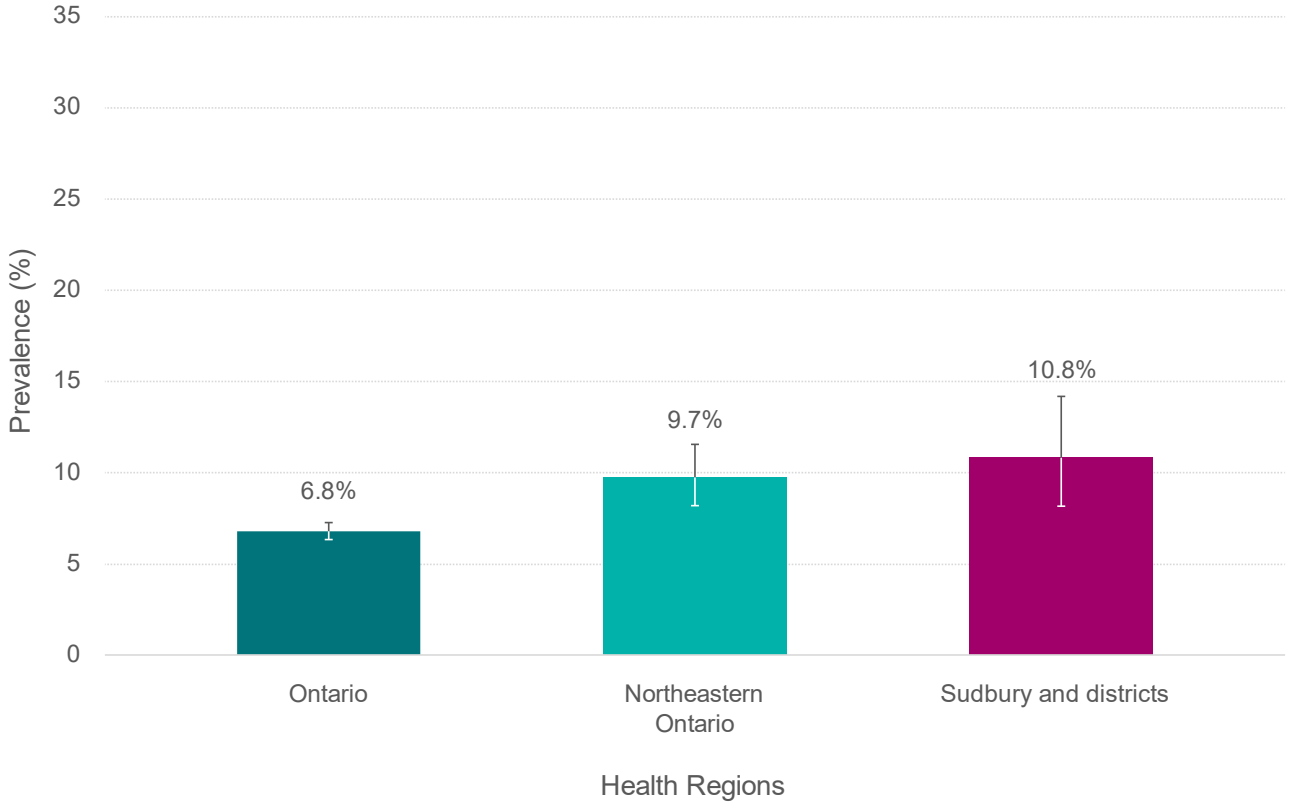


Source: Canadian Community Health Survey, 2015 to 2020, Statistics Canada, Share File, Ontario Ministry of Health.

A similar proportion of residents ages 65+ (29%) reported exceeding low risk alcohol drinking guidelines in Sudbury and districts compared to the rest of northeastern Ontario (28%) and Ontario overall (27%).

Prevalence of heavy drinking

Figure 28: Prevalence rate, heavy drinking, Ontario, northeastern Ontario, and Sudbury and districts, ages 65+, 2015–2020



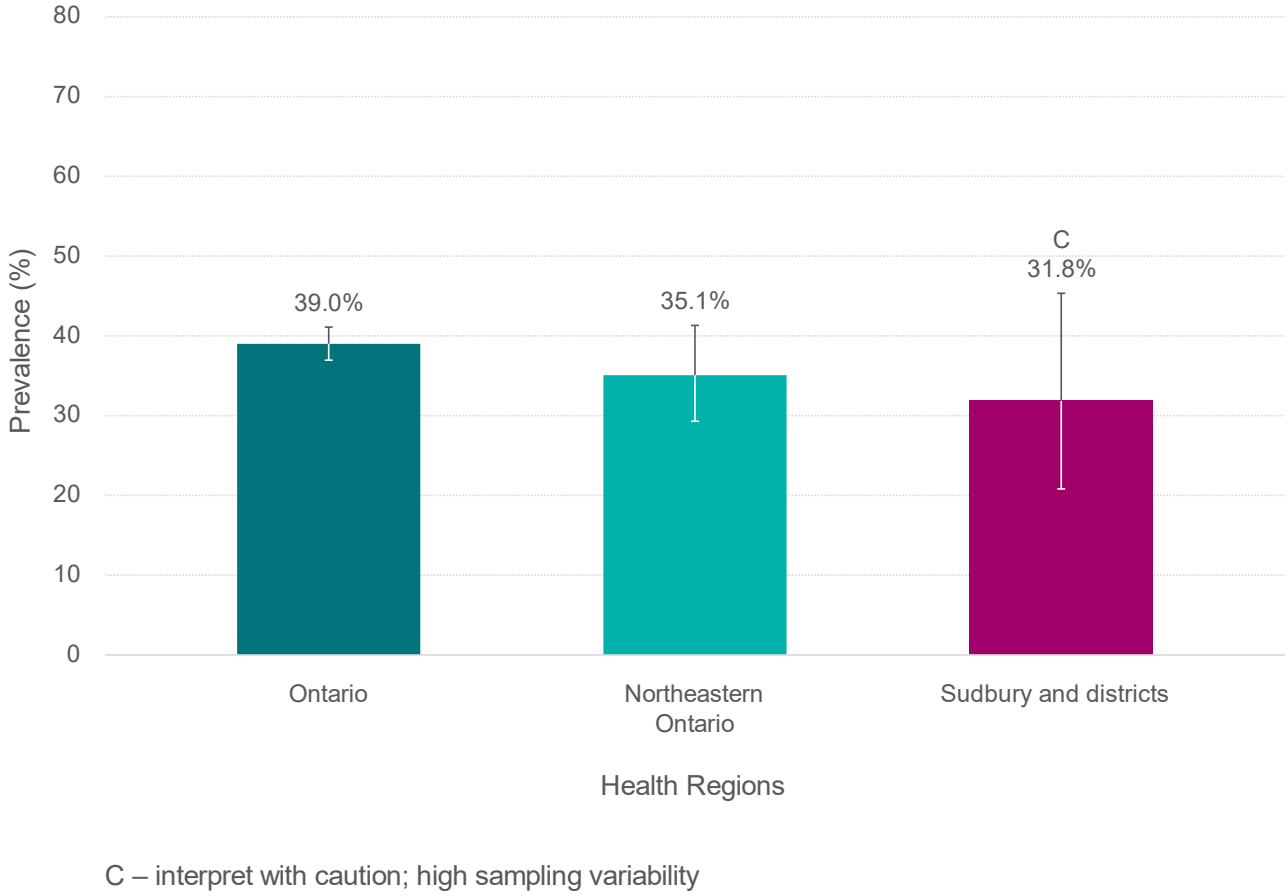
Source: Canadian Community Health Survey, 2015 to 2020, Statistics Canada, Share File, Ontario Ministry of Health.

A significantly higher proportion of residents ages 65+ (11%) reported heavy drinking in Sudbury and districts compared to Ontario overall (7%), however, there was no difference between and Sudbury and districts and the rest of northeastern Ontario (10%).

Heavy drinking was defined as having 5 or more drinks on one occasion for males and 4 or more drinks for females, 12 times a year or more.

Prevalence of meeting physical activity guidelines

Figure 29: Prevalence rate, meeting physical activity guidelines, Ontario, northeastern Ontario, and Sudbury and districts, ages 65+, 2020



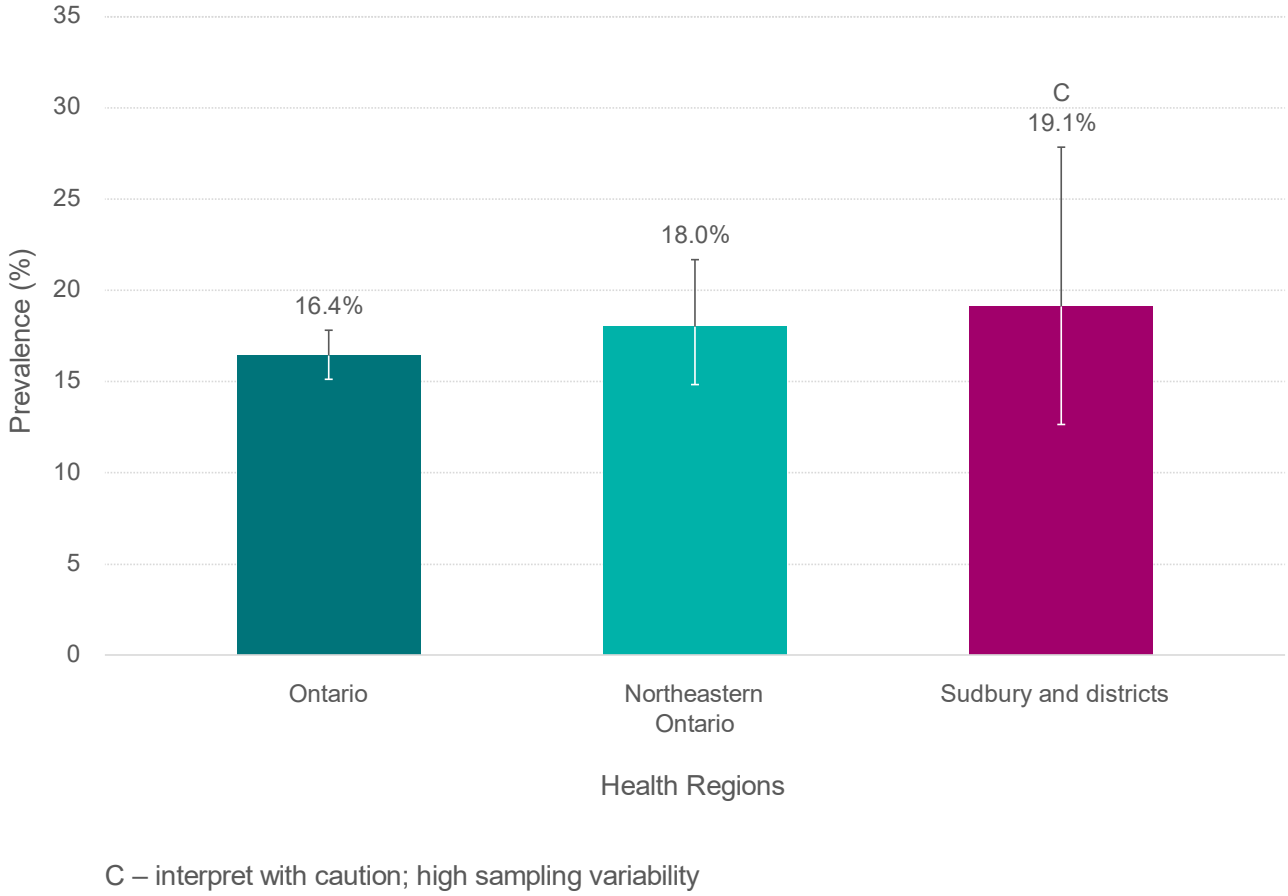
C – interpret with caution; high sampling variability

Source: Canadian Community Health Survey, 2020, Statistics Canada, Share File, Ontario Ministry of Health.

A similar proportion of residents ages 65+ (32%) reported meeting physical activity guidelines in Sudbury and districts compared to the rest of northeastern Ontario (35%) and Ontario overall (39%).

Prevalence of trouble falling or staying asleep

Figure 30: Prevalence rate, trouble falling or staying asleep (most or all of the time), Ontario, northeastern Ontario, and Sudbury and districts, ages 65+, 2015– 2016



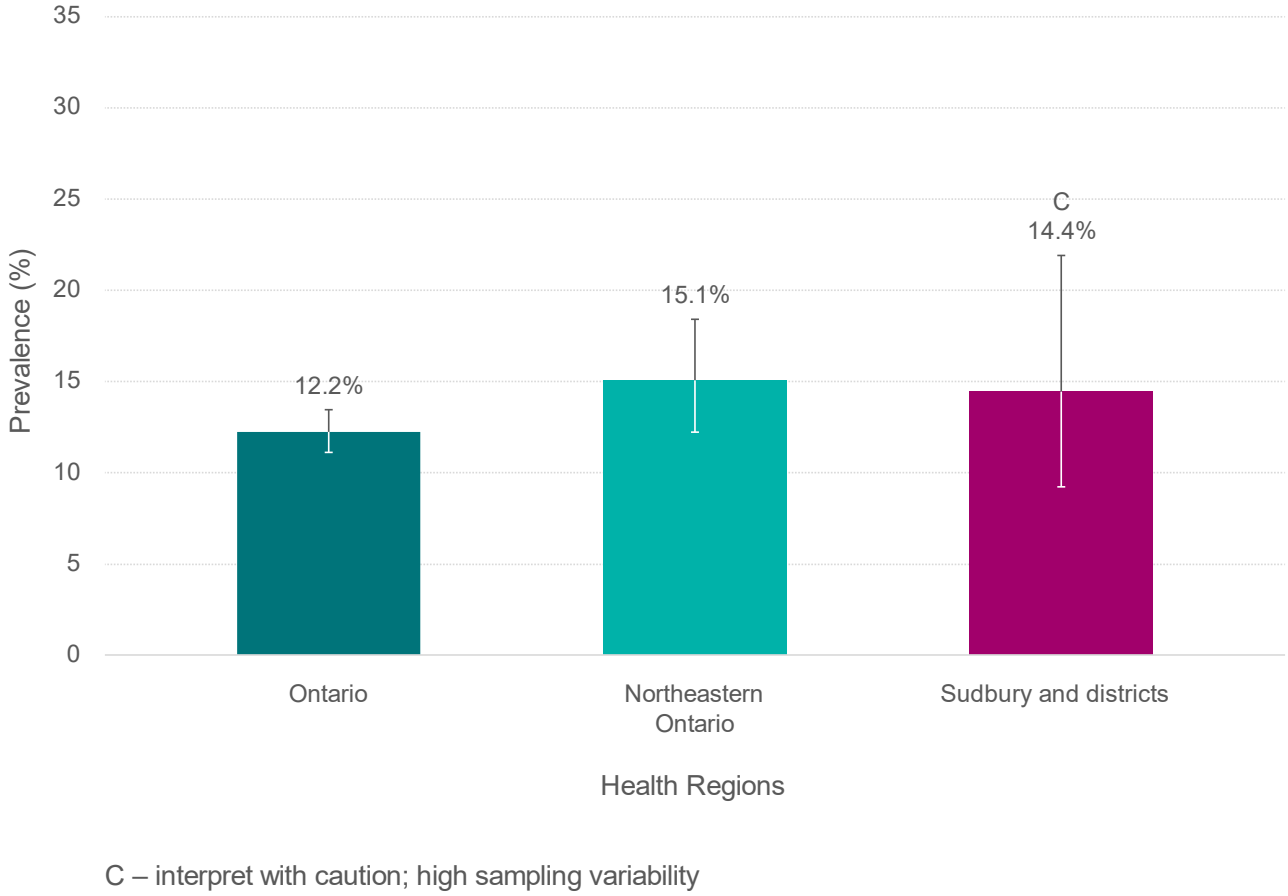
C – interpret with caution; high sampling variability

Source: Canadian Community Health Survey, 2015 to 2016, Statistics Canada, Share File, Ontario Ministry of Health.

A similar proportion of residents ages 65+ (19%) reported trouble falling or staying asleep (most or all of the time) in Sudbury and districts compared to the rest of northeastern Ontario (18%) and Ontario overall (16%).

Prevalence of refreshing sleep

Figure 31: Prevalence rate, refreshing sleep (rarely or never), Ontario, northeastern Ontario, and Sudbury and districts, ages 65+, 2015–2016



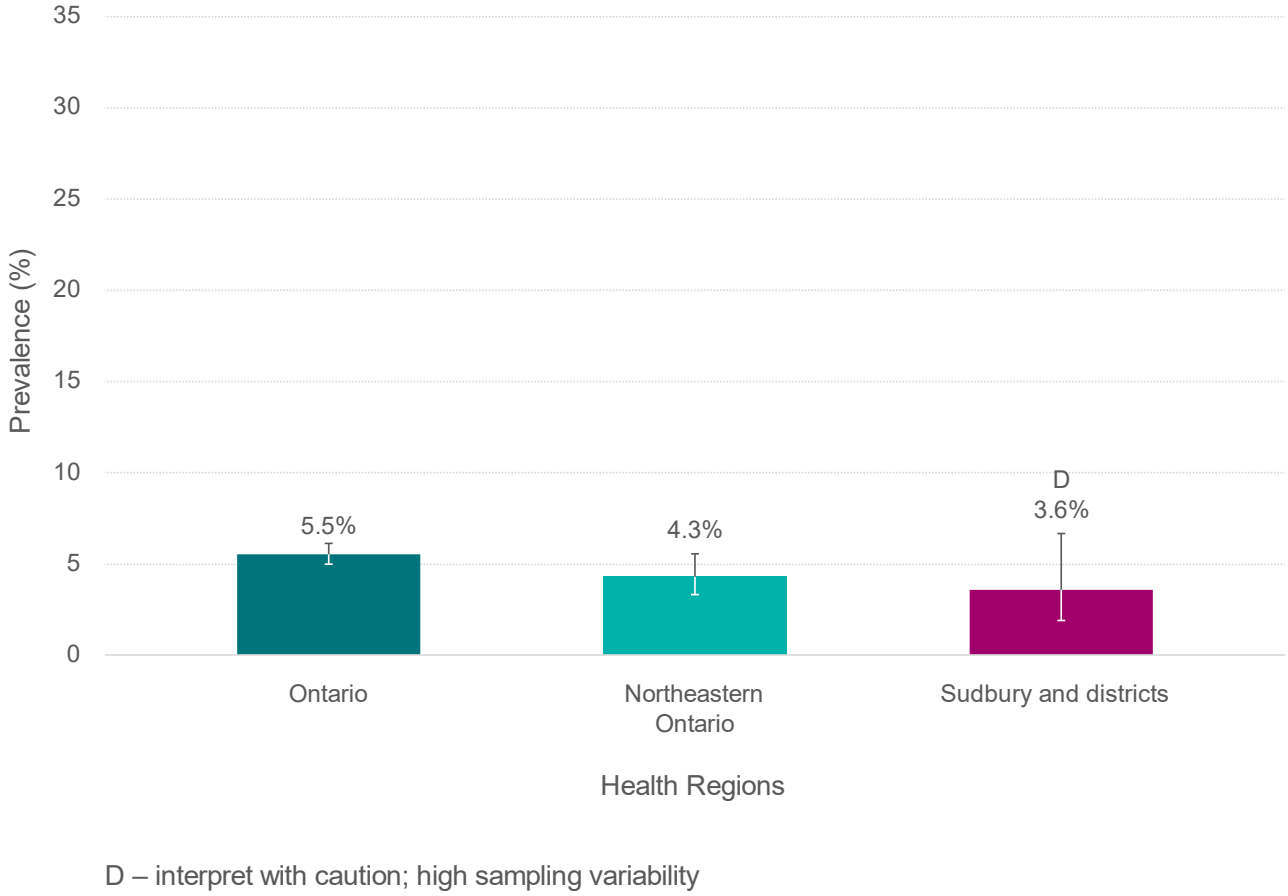
C – interpret with caution; high sampling variability

Source: Canadian Community Health Survey, 2015 to 2016, Statistics Canada, Share File, Ontario Ministry of Health.

A similar proportion of residents ages 65+ (14%) reported having refreshing sleep (rarely or never) in Sudbury and districts compared to the rest of northeastern Ontario (15%) and Ontario overall (12%).

Prevalence of food insecurity

Figure 32: Prevalence rate, food insecurity, Ontario, northeastern Ontario, and Sudbury and districts, ages 65+, 2017–2020



D – interpret with caution; high sampling variability

Source: Canadian Community Health Survey, 2017 to 2020, Statistics Canada, Share File, Ontario Ministry of Health.

A similar proportion of residents ages 65+ (4%) reported being food insecure in Sudbury and districts compared to the rest of northeastern Ontario (4%) and Ontario overall (6%).

Conclusions

The data in this report will:

- Inform the development of programs and services that promote health, prevent falls, and prevent diseases for older adults across Sudbury and districts.
- Inform the development or evaluation of policies to address a specific health issue for this population.
- Provide public health practitioners and others service providers with a better understanding of the health status of the older adult populations they serve.
- Help initiate further conversation to better understand how to best support older adults.
- Provide a baseline and allow for measurement of changes in the health of our older adult population over time.
- Support the writing of grants and letters of support.

Glossary of Terms and Guidelines for Interpretation

Census terms and definitions

Women+: Includes women (and/or girls), as well as some non-binary persons. Individuals in the "nonbinary persons" category are randomly distributed in the other 2 gender categories are denoted by the + symbol.

Men+: Includes men (and/or boys), as well as some non-binary persons. Individuals in the "non-binary persons" category are randomly distributed in the other 2 gender categories are denoted by the + symbol.

LIM-AT: Low-income measure, after tax: fixed percentage (50%) of median adjusted after-tax income of private households. This adjustment for different household sizes reflects the fact that a household's needs increase, but at a decreasing rate, as the number of members increases.

Median household income: The income value at which 50% of households are below and 50% are above.

Knowledge of official languages: Refers to the ability to conduct a conversation in English only, in French only, in both English and French, or in neither of the official languages of Canada.

Unemployment rate: Refers to the unemployed expressed as a percentage of the total labour force in the week (Sunday to Saturday) prior to census day. Data is available for persons 15 years of age and over, excluding institutional residents.

Dependency ratio: The older adult dependency ratio is the ratio of seniors to the work-age population (20 to 64 years). The ratio measures the size of the "dependent" population in relation to the "working age" population who theoretically provide social and economic support. Areas with high dependency ratios have a higher number of people who are economically dependent relative to those aged 20–64 who are likely to be earning a wage. The dependency ratio is based on age rather than employment status. The dependency ratio for older adults is calculated as the number of people aged 65 years and older relative to the total number of people aged 20-64 years.

Population density: Population density is the number of persons per square kilometre.

Net undercoverage rate: The rate is the difference between the number of persons who were not included in the census but were members of the census target population and the number of duplicates. It is the difference between undercoverage (not included) and overcoverage (duplicates).

Common statistical terms and interpretation

Count: The number of occurrences for any specific indicator. For example, there are 17 505 older adults living alone in northeastern Ontario between the ages of 55 and 64.

Rate: A rate is a measure of the frequency of occurrence of an event or condition. It generally has 3 components:

1. The number of events (e.g., the number of cases of cancer)
2. The population at risk for the event (typically, the population of the geographic area under consideration), and
3. A measure of time (usually 1 year).

The rate is often multiplied by a larger number (usually 100 000) to make it easier to understand. This is not true of prevalence rates, which are presented as a percentage (see *Prevalence*, below). The benefit of using rates is that it allows us to compare the experience of different populations.

Crude vs. age standardized rates: The crude rate is calculated based on the population under study as a whole and does not reflect changes in the age structure of the population over time, whereas age-standardization adjusted for the effect of variation in the population age structure for different years or locations.

Point estimate: Often referred to as just "estimate", is the term used to describe the calculated result for the indicator under consideration. For example, in the sentence "Twenty-five percent (25%) of Public Health Sudbury & Districts adults reported that they are current smokers", the point estimate is 25%.

Incidence: Incidence rates are a measure of the frequency of new occurrences of the disease/condition in a given time (e.g., the number of new cancer cases per 100 000 population per year.). Incidence rates are frequently presented for infectious and chronic diseases, injuries, emergency department visits, hospitalizations, and deaths, using counts.

Prevalence: A prevalence rate provides information on the number of cases of a disease/condition that existed within the population at a particular time. This is usually presented as a percentage (%) of the population but may also be shown as a proportion (i.e., a number between 0 and 1). The words percentage and proportion are often used interchangeably to describe a prevalence rate. Prevalence rates are mainly used to represent the results of health surveys but may also be used to present demographic data from the census, or in relation to chronic diseases.

Sampling variability: Results from health surveys are based on a random sample of the population. For example, each year we collect data from a sample of about 1 400 residents, which is used to make inferences about the population of interest. There is an element of chance involved, due to the random sampling, and this impacts the results. For example, in one particular year, a survey may randomly select more smokers in their sample of respondents, just by chance (this could be different in a future year). This difference, which results solely from the survey respondent, is called sampling variability.

Sampling variability decreases with increased sample size. That is, if we sample a larger proportion of the population, sampling variability goes down. Sampling variability will also be less when there is less variability among the outcome of interest among the target population - i.e., when the outcome is rare (i.e., closer to 0%) or quite common (i.e., closer to 100%). A prevalence rate of 50% maximizes the sampling variability for a given sample size.

95% confidence intervals: Confidence intervals are sometimes referred to as the "margin of error" and are represented by error bars on a graph. Usually, they are specified as 95%, but can be specified as other values of confidence (e.g., 90%, 99%). A 95% confidence interval is a range of values around the estimate within which the true value for the target population can be expected to fall 95% of the time. Note that the estimate would lie outside of this range 5% of the time and 95% confidence intervals are an indication of sampling variability (see *Sampling variability*, above). Variability in rates derived from non-survey data is also often represented by confidence intervals.

The width of a confidence interval is an indicator of the precision of the estimate (our confidence in it). Estimates with narrower confidence intervals are more precise and can be used with a higher degree of confidence.

Comparing the confidence intervals of 2 estimates is 1 method of determining if the difference between those estimates is statistically significant (see *Statistical significance*, below).

Statistical significance: Because each result calculated will have some margin of error, as represented by its confidence interval, the true difference between two groups may be larger or smaller than is calculated, simply due to chance. If there is less than a 5% chance that a calculated difference is due to chance alone, that difference is said to be statistically significant. In this report, statistically significant differences are reported as "significantly higher or lower". Note the correct interpretation of a nonsignificant difference is that there is insufficient evidence to conclude that a difference truly exists. This is NOT the same as saying that there is, in fact, no difference.

Coefficient of variation: The coefficient of variation (CV) is a unitless number between 0 and 1, representing how much variability there is in a result. It is often presented as a percentage (%). In basic statistics, the CV is calculated by dividing the standard deviation (i.e., a measure of variability in a population) by the result itself (e.g., the population's mean). CVs will be larger for estimates that have a higher degree of variability, and thus, wider confidence intervals (see confidence intervals, above). Because of the nature of the calculation, a given amount of variability (i.e., + or - 5%) will result in a larger CV if the estimate is smaller (i.e., 10%; CV=0.5) than it will for larger estimates (i.e., 90%; CV=0.055).

Suppression of estimates (or data suppression): Method used to protect the information of individual members of the population.

Indicator related definitions

Low risk alcohol drinking guidelines: Canada's Low-Risk Alcohol Drinking Guidelines recommend consuming no more than 2 standard drinks per week, and those who exceed this recommendation are at an increased risk of harms to self (e.g., cancer, heart disease, stroke) and others, including injuries and violence.

Heavy drinking: Heavy drinking refers to males who reported having 5 or more drinks or females who reported having 4 or more drinks, on one occasion, at least once a month in the past year.

Physical activity guidelines: Older adults aged 65 years and older should spend at least 150 minutes per week participating in moderate to vigorous physical activities.

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