

Incidental impacts of COVID-19 series: Emergency department visits for mental illness

Health indicator report

Background

The COVID-19 pandemic has had incidental impacts on health and well-being. **Incidental impacts of COVID-19** are defined as unintended effects that may be related to fear of exposure to COVID-19, the diversion of healthcare or public health resources, or measures to curtail viral transmission or harm (e.g., travel restrictions, physical distancing requirements, the closure of non-essential services). The indicators in this report can help to examine potential effects in Halton.

Key findings

This report contains information about emergency department (ED) visits for mental illness by residents of Halton aged 10+ to Ontario hospitals, using data from the National Ambulatory Care Reporting System. Data capture only the first wave and beginning of the second wave of COVID-19 during 2020. Continued monitoring is required to examine impacts over time including during the recovery period.



Canada

Mental health worsened for some Canadians during the COVID-19 pandemic. In April and May 2020, 24% of Canadians reported that their mental health was **fair or poor** compared to 8% in 2018.¹

More than one in five (21%) Canadian adults screened positive for **depression, anxiety disorder** and/or **post-traumatic stress disorder** in late 2020. The prevalence of mental disorders was more than four times higher among those who reported feeling **lonely or isolated** due to the COVID-19 pandemic.³

In March and April 2021, 42% of Canadians reported their mental health had **worsened** during the pandemic, an increase from 30% in September 2020.² By June, July and August 2021, this had decreased to 28%, coinciding with the easing of many public health restrictions during summer.²

Many **risk factors** associated with poor mental health including social isolation, loss of employment and income and loss of essential services increased during the pandemic.^{3,4}



Halton

The rate of emergency department (ED) visits for mental illness among Halton residents increased from 2011 to 2019 and then **decreased from 2019 to 2020**. This decrease may be related to changes in **health-seeking behaviours** associated with the pandemic.⁵

In general, residents in **younger** age groups tend to have higher rates of ED visits for mental illness compared to those in older age groups.

Among younger age groups (e.g., 10-17), rates of ED visits for mental illness tend to be **higher for females** compared to males.

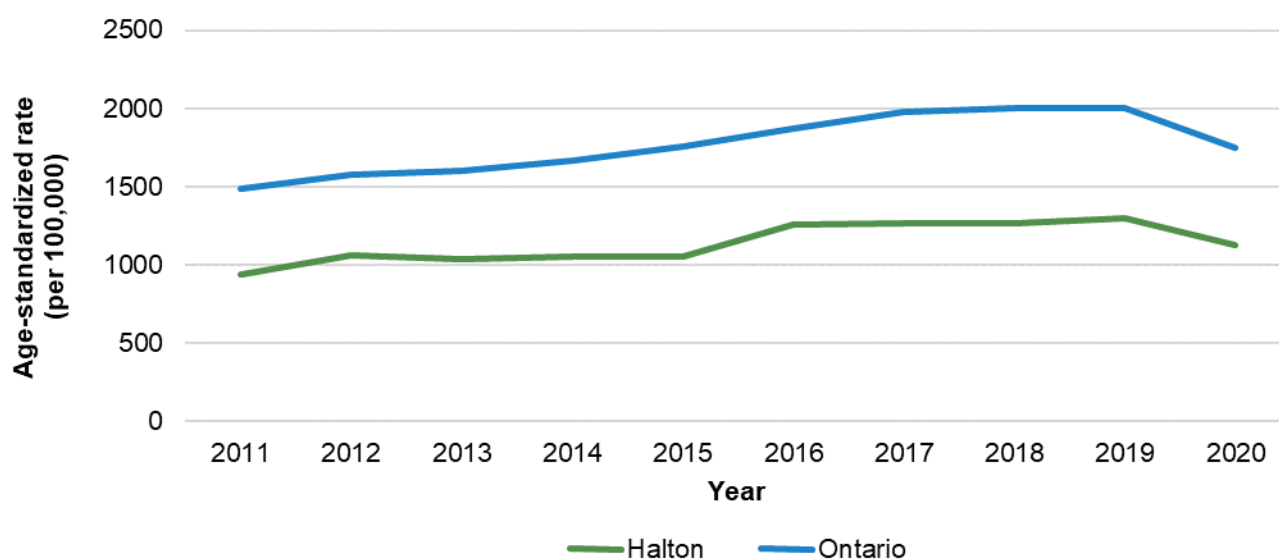
Rates of ED visits for mental illness continue to be **lower in Halton compared to Ontario**.



Incidental impacts of COVID-19: Emergency department visits for mental illness

Trends over time

- In both Halton and Ontario, the rate of ED visits for mental illness among residents aged 10 and over increased from 2011 to 2019 and then decreased from 2019 to 2020 during the COVID-19 pandemic.
- From 2011 to 2020, rates of ED visits for mental illness were consistently lower in Halton compared to Ontario.
- While the *overall* rate of ED visits in Halton decreased by 18% from 2019 to 2020, the rate of ED visits for *mental illness* decreased by only 13% (data not shown).
- At this time, the impact of the COVID-19 pandemic on rates of ED visits for mental illness is not fully understood. However it may be related to changes in health-seeking behaviours during the pandemic (e.g., perceived fear of exposure to COVID-19 or concern that health services were overwhelmed may have discouraged some individuals from seeking care).⁵



Age-standardized rate (per 100,000 population) of ED visits for mental illness, ages 10 and over, Halton Region and Ontario, 2011-2020

Number and age-standardized rate (per 100,000 population) of ED visits for mental illness, ages 10 and over, Halton Region and Ontario, 2011-2020

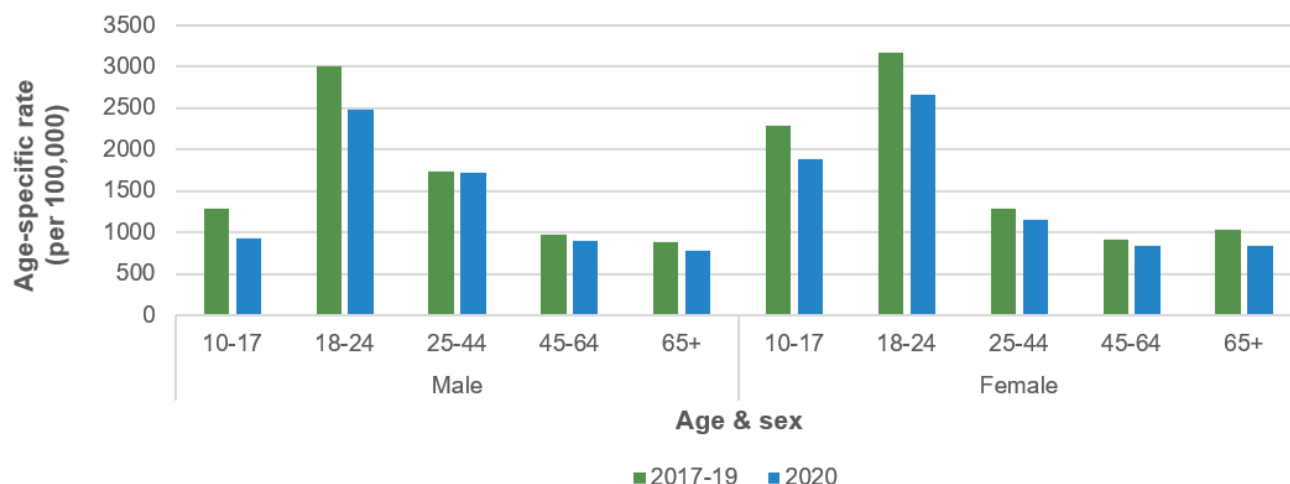
	Measure	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Halton	# Visits	4,755	5,527	5,496	5,709	5,772	7,040	7,306	7,457	7,844	6,927
	Rate (per 100,000)	937	1,061	1,032	1,056	1,052	1,254	1,268	1,262	1,297	1,124
Ontario	# Visits	199,877	213,282	219,445	229,871	244,303	262,915	281,912	291,162	294,538	260,429
	Rate (per 100,000)	1,489	1,572	1,604	1,667	1,760	1,871	1,976	2,006	2,001	1,745



Incidental impacts of COVID-19: Emergency department visits for mental illness

Age and sex

- The rate of ED visits for mental illness among Halton residents was lower in 2020 compared to the previous three-year average with the exception of males aged 25-44 or 65+ and males and females aged 45-64, where rates were similar between the two time periods.
- Across both time periods, rates were highest among males and females aged 18-24 compared to all other age groups.
- Among residents aged 10-17, rates were higher for females compared to males during 2020 and 2017-19. Conversely, rates were higher for males than females among those aged 25-44 during both time periods.



Age-specific rate of ED visits (per 100,000 population) for mental illness, by age group and sex, Halton Region, 2017-19 (average) and 2020

Number and age-standardized rate (per 100,000 population) of ED visits for mental illness, ages 10 and over, Halton Region, 2017-19 (average) and 2020

Age group	Measure	Male		Female	
		2017-19 (average)	2020	2017-19 (average)	2020
10-17	# Visits	412	309	702	601
	Rate (per 100,000)	1,285	931	2,287	1,888
18-24	# Visits	824	720	835	731
	Rate (per 100,000)	2,998	2,485	3,169	2,655
25-44	# Visits	1,321	1,355	1,045	963
	Rate (per 100,000)	1,743	1,715	1,290	1,149
45-64	# Visits	787	748	737	700
	Rate (per 100,000)	979	905	907	833
65+	# Visits	353	343	518	456
	Rate (per 100,000)	881	778	1,034	844
10+	# Visits	3,697	3,475	3,836	3,451
	Rate (per 100,000)	1,280	1,152	1,271	1,097

Data notes

Definitions: **Emergency department (ED) visits** include only unscheduled visits to the ED and visits made by Ontario residents, where the patient's main problem or diagnosis as determined by the emergency department was a mental illness. **Mental illness** in this report refers to a wide range of conditions including organic disorders like dementia and Alzheimer's disease, mental and behavioural disorders due to substance use, mood disorders, and various other disorders of psychological development (ICD-10-CA codes F00-F99, G30, O993).

Data Source: **ED Visits:** National Ambulatory Care Reporting System, Ontario Ministry of Health and Long-Term Care: IntelliHEALTH ONTARIO; extracted June, 2021. **Population:** Population Estimates and Projections. Ontario Ministry of Health and Long-Term Care: IntelliHEALTH ONTARIO; extracted March 2021.

Interpretation: **Age-standardized** rates are rates that have been adjusted to ensure that any differences in rates between populations are not due to differences in the age distributions between the populations. Age-standardized rates were calculated using the 2011 population of Canada as the standard population. **Age-specific rates** are calculated by dividing the number of emergency department visits by the population in that age group. **Statistical significance** between groups was determined using non-overlapping confidence intervals. Statistically significant differences are differences that are unlikely to be due to chance alone. Trends over time were tested for significance using linear regression and adjusting for auto-correlation. Differences described in this report are statistically significant, unless otherwise stated. For more information on the methodology used to analyze mental illness data, please refer to the [Halton Region Mental Health report](#).

Limitations: ED visits do not include visits made by Halton or Ontario residents to hospitals outside of Ontario. Individuals who visit an ED or are hospitalized may have more than one mental illness (all visits have one main problem and up to nine other problems). Only the "Main Problem" – the patient's main problem or diagnosis as determined during the ED visit – is included in this report. People who visit the ED and have a mental illness, but whose main problem diagnosis is not related to mental health would not be captured in this report. This report only includes mental illness that resulted in an emergency department visit, and does not capture those who did not seek care or sought care from other providers (e.g. primary care, psychologists). Therefore, this report only represents a portion of mental illness within the population.

References

1. Statistics Canada. 2020. Canadians' Mental Health during the COVID-19 Pandemic. Retrieved June 2020 from <https://www150.statcan.gc.ca/n1/daily-quotidien/200527/dq200527b-eng.htm>
2. Statistics Canada. 2021. Canadians' Health and COVID-19: Interactive Dashboard. Retrieved June 2021 from <https://www150.statcan.gc.ca/n1/pub/71-607-x/71-607-x2021003-eng.htm>
3. Statistics Canada. 2021. Survey on COVID-19 and Mental Health, September to December 2020. Retrieved May 2021 from <https://www150.statcan.gc.ca/n1/daily-quotidien/210318/dq210318a-eng.htm>
4. Canadian Mental Health Association. COVID-19 and Mental Health: Heading off an Echo Pandemic. Retrieved May 2021 from <https://cmha.ca/brochure/covid-19-and-mental-health-heading-off-an-echo-pandemic/>
5. Public Health Agency of Canada. 2020. From Risk to Resilience: An Equity Approach to COVID-19. Retrieved June 2021 from <https://www.canada.ca/en/public-health/corporate/publications/chief-public-health-officer-reports-state-public-health-canada/from-risk-resilience-equity-approach-covid-19.html>

For more health indicator and health status reports, visit the Halton Health Statistics webpage at halton.ca.

Last updated: March 2022