



Unintended Consequences of COVID-19

Impact on Self-Harm Behaviour



Canadian Institute
for Health Information

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This report discusses suicide and self-harm. Help is available 24/7 if you need it:

- **9-1-1**
- **Your local crisis centre**
- **Kids Help Phone: 1-800-668-6868**
- **First Nations and Inuit Hope for Wellness Help Line: 1-855-242-3310**
- **1-866-APPELLE (Quebec residents)**
- **Crisis Services Canada: 1-833-456-4566**

Introduction

The COVID-19 pandemic and the resulting provincial and territorial government policies and interventions have had an unprecedented effect on the lives of Canadians.¹ The Canadian Institute for Health Information (CIHI) is collecting, analyzing and sharing credible health data related to the unintended consequences of the COVID-19 pandemic.² As part of this work, this report examines the impact on Canadians' mental health as indicated by self-harm.

Survey data has shown a steady decline in mental health. Prior to the pandemic, 67% of people reported very good to excellent mental health.³ In the fall of 2020, 32% of people reported that their current mental health was worse than it was pre-pandemic.⁴ Ratings of life satisfaction hit an all-time low since the measure began, with only 40% of Canadians reporting high satisfaction during the pandemic, down from 72% in 2018.⁵

Only a small number of people who are mentally distressed will take action to self-harm (i.e., deliberately self-inflict bodily injury either with the intent to die or not). In May 2020, 14% of people surveyed reported having trouble coping, 6% reported suicidal thoughts and 2% reported acting to harm themselves.⁶

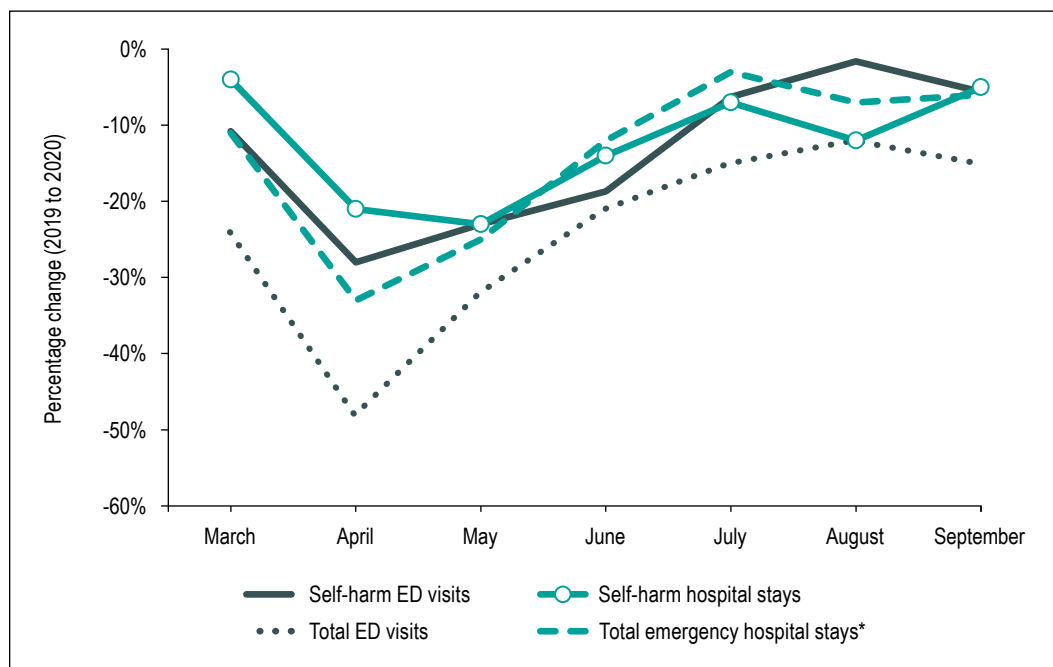
In this analysis, we provide information on emergency department (ED) visits and hospitalizations for self-harm that happened between March 1 and September 30, 2020 (referred to here as the pandemic period), compared with the same period in 2019. While hospital stays and ED visits do not account for all cases (i.e., self-harm where no care is sought, or deaths occurring in the community), they do provide insight into self-harm. We will augment these findings with suicide deaths as information becomes available.

Key findings

Fewer people visited hospitals and EDs for self-harm

There was a 14% drop in emergency department (ED) visits for self-harm (or 2,310 fewer people) for the period March to September 2020 compared with the same period in 2019. During the pandemic period, there was a general decrease in people seeking help for any reason in EDs. ED visits for self-harm generally followed the pattern for all ED visits, although they decreased less (see figure).

Figure Percentage change in ED visits and hospitalizations for self-harm, by month, March to September 2020 compared with March to September 2019



Notes

* Total emergency hospital stays are hospital stays for people who entered the hospital through the ED (e.g., because of an accident) versus a planned hospital stay (e.g., for a hip repair).

Full regional coverage is available for EDs in Ontario, Alberta and Yukon. Partial regional coverage is available for Prince Edward Island, Nova Scotia and Saskatchewan. Combined, these regions represent about 50% of Canada's ED visits.

Volumes are based on the province/territory where the patient is located.

Hospitalization data for Quebec was not available at the time of analysis.

Reflects data for March to September, submitted as of January 1, 2021.

Data for 2020–2021 is provisional; for more information, see the Notes to readers tab in the companion data tables.

Sources

National Ambulatory Care Reporting System, Discharge Abstract Database and Ontario Mental Health Reporting System, 2018–2019 to 2020–2021, Canadian Institute for Health Information.

From March to September 2020, 43% of those who went to an ED for self-harm were admitted to hospital. The decision to admit to hospital is a reflection of severity of injury, severity of mental health concern, bed availability and how mental health care is delivered in a province or region (i.e., inpatient versus community-based care). There was no difference in the proportion of people admitted to hospital from the ED in 2020 relative to 2019.

Overall, there was a 12% decrease in self-harm–related hospitalizations (or 1,170 fewer people hospitalized). There was a similar decrease (12%) for overall unplanned or emergency hospitalizations.

Some populations show early signs of being more affected by the impacts of COVID-19

While fewer people received hospital care for self-harm from March to September 2020, the pattern varied by age and gender. In particular, men age 80 or older saw increases in both ED visits and hospital stays (see table). While these numbers are small (an estimated 168 men in EDs in Canadaⁱ), they are important to monitor. Previous studies on self-harm and suicide deaths highlight that middle aged and older men are more likely to die from self-harm than younger populations.⁷ Without an estimate of deaths from suicide, we may be underestimating the impact on this older age group.

Table Percentage change in ED visits and hospitalizations for self-harm, by age and sex, March to September 2020 compared with March to September 2019

Age group	ED visits		Hospitalizations	
	Female	Male	Female	Male
10–19	-10%	-10%	-9%	-18%
20–29	-10%	-15%	-6%	-10%
30–39	-16%	-19%	-22%	-7%
40–49	-21%	-21%	-10%	-24%
50–59	-22%	-4%	-20%	-17%
60–69	-19%	-18%	-2%	-25%
70–79	-14%	-7%	-13%	-14%
80+	-31%	27%	2%	15%

Notes

Full regional coverage is available for EDs in Ontario, Alberta and Yukon. Partial regional coverage is available for Prince Edward Island, Nova Scotia and Saskatchewan. Combined, these regions represent about 50% of Canada's ED visits.

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i. Extrapolated from submitting regions that represent approximately 50% of the Canadian population.

Discussion

Pandemic context for self-harm and suicide

Historically, there has been an association between pandemics and suicide. During the 1918 flu, decreased social interaction and fear of contracting the virus played strong roles in suicide.⁸ Research from SARS also showed that in Hong Kong, death by suicide reached historic highs⁹ and those 65 years and older were most significantly impacted.¹⁰ While data on suicides is not yet available for the 2020 pandemic, recent surveys also report declining mental health among Canadians. Distress call centres in Alberta reported a slight dip in suicide-related calls in April followed by a rapid increase from June to September.¹¹ While our results show a decrease in hospitalizations and ED visits for self-harm during the first 7 months of the pandemic, it is likely an incomplete picture. The data represents only a small portion of all self-harm and does not include self-harm and suicide deaths that occur in the community when there is no ED visit or hospital stay. Given that suicide can lag major events, continued monitoring of this and other sources of data over time will provide a more complete picture.

Notes and limitations

- This analysis is based on provisional data. Provisional data refers to any preliminary data received and used before the official annual submission deadline, or closing date, for a data holding. Prior to this closing date, data collection, submission and data quality activities are ongoing. Provisional data is therefore not final and results should be interpreted with caution.
- Data on self-harm was collected from administrative databases not specifically designed to look at mental health issues. This limits our ability to differentiate between intents of self-harm. We can differentiate between intentional self-harm and accidental self-harm but cannot differentiate between the intent to end one's life as opposed to other reason for self-harming.
- Reporting on deaths lags behind reporting on hospitalizations, particularly when the cause of death needs investigating or there are legal concerns (15% to 20% of cases¹²). CIHI typically begins reporting on deaths after 18 months.

Acknowledgements

The Canadian Institute for Health Information (CIHI) would like to acknowledge and express our gratitude to experts from the Centre for Surveillance and Applied Research, Public Health Agency of Canada; provincial ministries of health; Ontario Health; and Shared Health Manitoba for their insights and experience that contributed to the development of this report.

Please note that the analyses and conclusions in the present document do not necessarily reflect those of the organizations mentioned above.

Appendix

Text alternative for figure

Table: Percentage change in ED visits and hospitalizations for self-harm, by month, March to September 2020 compared with March to September 2019

Month	Percentage change in total ED visits	Percentage change in ED visits for self-harm	Percentage change in total emergency hospital stays*	Percentage change in hospital stays for self-harm
March	-24%	-11%	-11%	-4%
April	-48%	-28%	-33%	-21%
May	-32%	-23%	-25%	-23%
June	-21%	-19%	-12%	-14%
July	-15%	-6%	-3%	-7%
August	-12%	-2%	-7%	-12%
September	-15%	-6%	-6%	-5%

Notes

* Total emergency hospital stays are hospital stays for people who entered the hospital through the ED (e.g., because of an accident) versus a planned hospital stay (e.g., for a hip repair).

Full regional coverage is available for EDs in Ontario, Alberta and Yukon. Partial regional coverage is available for Prince Edward Island, Nova Scotia and Saskatchewan. Combined, these regions represent about 50% of Canada's ED visits.

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