



# Hospital Stays for Harm Caused by Substance Use

Across the country, mental illness and addictions are serious issues for Canadians. Federal, provincial and territorial governments are working together to improve access to mental health and addictions services; they have identified a number of indicators to help target these improvements over the next 10 years, including **Hospital Stays for Harm Caused by Substance Use**.



## Indicator definition

This indicator measures harm caused by using substances including alcohol, opioids, cannabis, other central nervous system depressants (e.g., benzodiazepines), cocaine, other stimulants (e.g., methamphetamine), other substances (e.g., hallucinogens, solvents) and unknown/mixed substances. It examines how many hospital stays in a year are a direct result of using these substances.

## Why report on Hospital Stays for Harm Caused by Substance Use?

This data can be used to

- Assess whether Canadians are getting access to the information and help they need to prevent or manage harm caused by substance use;
- Bring awareness to the extent of harms caused by substance use;
- Estimate the burden that problematic substance use puts on health systems; and
- Assist in monitoring the effectiveness of treatment and prevention policies and services.

## Data limitations and caveats

The indicator does not include

- Hospital stays for conditions only partially attributable to substance use;
- Harm to bystanders who did not use a substance;
- Treatment or deaths that occurred outside of hospital settings; and
- Children younger than 10, including neonatal abstinence.

The stigma associated with substance use may influence what is recorded in hospital records and contribute to under-reporting of cases.

## What is harm?

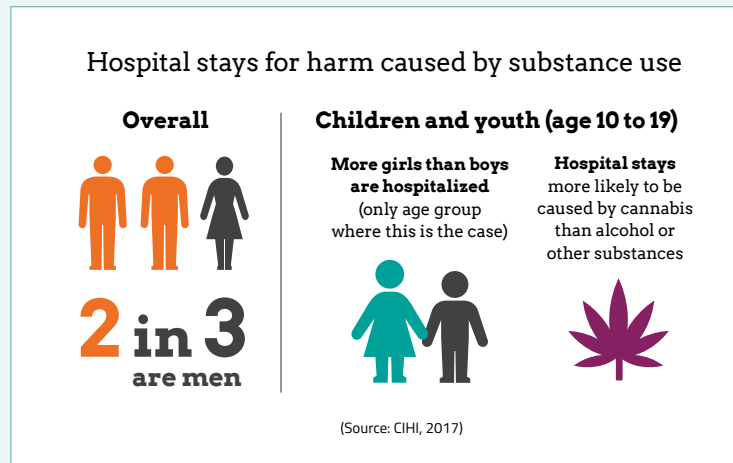
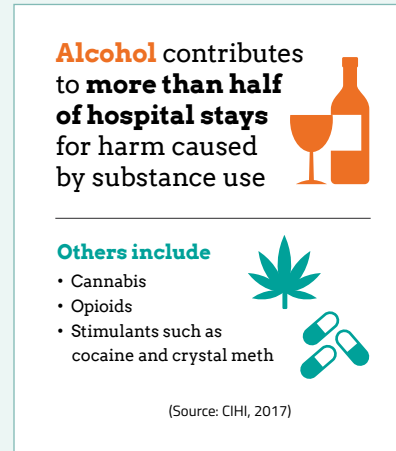
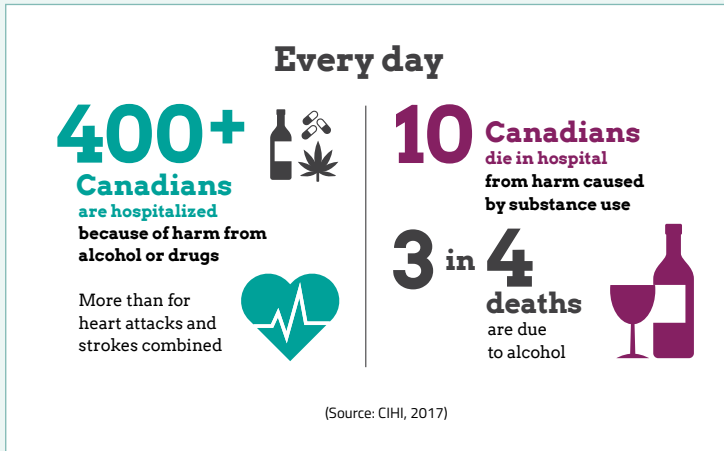
The indicator includes hospital stays in general, psychiatric and day surgery facilities for harm caused by substance use; examples could be

- A person with liver cirrhosis due to alcohol who is at the end of their life;
- Someone who was injured while under the influence of a substance;
- A person in the intensive care unit due to an opioid overdose;
- A person with psychosis after using cannabis; and
- Someone experiencing seizures due to substance withdrawal.





## At a glance



## Additional findings

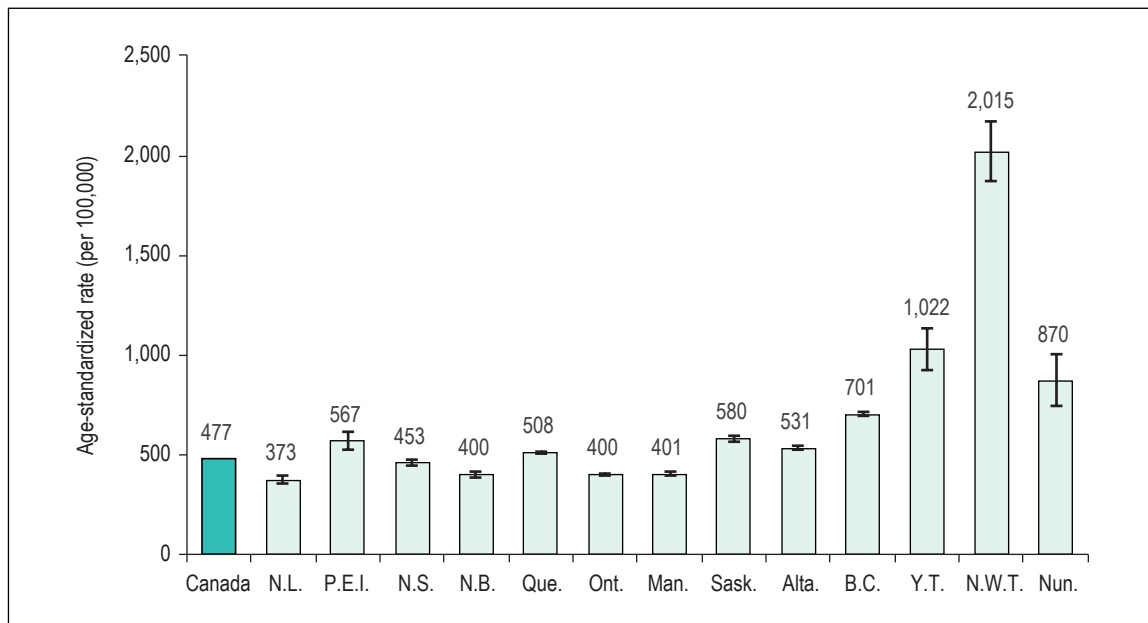
### More than 1 in 3 of those with a hospital stay for substance use also have a mental health condition

- More than a third (40%) of patients hospitalized for harm caused by substance use also received care for a mental health condition during their hospital stay.
- People hospitalized for cannabis or stimulant use were more likely to be treated for schizophrenia, while those hospitalized for depressant use (e.g., benzodiazepines) were more likely to be treated for anxiety.

## Provincial/territorial results

There is wide provincial and territorial variation in rates of hospital stays. Many factors impact rates of hospital stays, including access to harm reduction and treatment services, population health, the availability of certain substances, and the availability and effectiveness of paramedic and emergency services.

**Figure** Age-standardized hospitalization rate for substance use, by jurisdiction, 2017–2018



**Note**  
The line at the top of each bar graph shows the confidence interval (CI), which is used to establish whether the indicator result is statistically different from the average. The width of the CI illustrates the degree of variability associated with the rate. For example, a province or territory might have a wide CI if there is a small number of cases and the results are less stable. Indicator values are estimated to be accurate within the upper and lower CI 19 times out of 20 (95% CI). Rates with CIs that do not overlap with the Canada result can be considered statistically different.

**Sources**  
Hospital Morbidity Database, Ontario Mental Health Reporting System and National Ambulatory Care Reporting System, 2017–2018, Canadian Institute for Health Information.



Explore results for this indicator in the [Your Health System: In Brief](#) web tool.

More information about this indicator is available in [Common Challenges, Shared Priorities: Measuring Access to Home and Community Care and to Mental Health and Addictions Services in Canada](#).

## Appendix: Text alternatives for images

### At a glance image 1

Every day, more than 400 Canadians are hospitalized because of harm from alcohol or drugs. This is more than for heart attacks and strokes combined. And every day, 10 Canadians die in hospital from harm caused by substance use. 3 in 4 of these deaths are due to alcohol.

### At a glance image 2

Alcohol contributes to more than half of hospital stays for harm caused by substance use. Other substances linked to hospital stays include cannabis, opioids and stimulants such as cocaine and crystal meth.

### At a glance image 3

4 in 10 Canadians who are hospitalized for harm caused by substance use also have a mental health condition such as anxiety, depression or schizophrenia.

### At a glance image 4

Overall, men have 2 in 3 hospital stays for harm caused by substance use. However, when examining children and youth age 10 to 19, more girls are hospitalized than boys. This is the only age group where this is the case. Hospital stays by children and youth age 10 to 19 are more likely to be caused by cannabis than by alcohol or other substances.

**Figure Age-standardized hospitalization rate for substance use, by jurisdiction, 2017–2018**

Jurisdiction	Rate	Lower confidence interval	Upper confidence interval
Canada	477	—	—
N.L.	373	355	391
P.E.I.	567	526	608
N.S.	453	439	468
N.B.	400	385	415
Que.	508	503	513
Ont.	400	397	404
Man.	401	390	413
Sask.	580	565	595
Alta.	531	524	539
B.C.	701	693	709
Y.T.	1,022	917	1,127
N.W.T.	2,015	1,869	2,162
Nun.	870	740	1,000

#### Notes

— Not applicable.

The confidence interval (CI) is used to establish whether the indicator result is statistically different from the average. The width of the CI illustrates the degree of variability associated with the rate. For example, a province or territory might have a wide CI if there is a small number of cases and the results are less stable. Indicator values are estimated to be accurate within the upper and lower CI 19 times out of 20 (95% CI). Rates with CIs that do not overlap with the Canada result can be considered statistically different.

Rates are age-adjusted.

#### Sources

Hospital Morbidity Database, Ontario Mental Health Reporting System and National Ambulatory Care Reporting System, 2017–2018, Canadian Institute for Health Information.