

Emergency department visits for conditions entirely caused by alcohol

SECTION 1: HEADER

Indicator Type: Core Indicator

Description

- **ED visits for conditions entirely caused by alcohol (NACRS):** The number of emergency department visits for conditions entirely caused by alcohol.
- **Crude rate of ED visits for conditions entirely caused by alcohol:** the number of ED visits for conditions entirely caused by alcohol per 100,000 population.
- **Age-specific rate for ED visits for conditions entirely caused by alcohol:** the number of ED visits for conditions entirely caused by alcohol in a given age group per 100,000 population in that age group.
- **Age-standardized ED rate (SRATE) for ED visits for conditions entirely caused by alcohol:** the number of ED visits for conditions entirely caused by alcohol that would occur if the population had the same age distribution as the Standard Canadian population, per 100,000 population (please see the currently recommended [standard population](#)).

Related OPHS Topics

This section cross-links the indicator to related Core Indicators products, by referencing the OPHS Alignment tables. List all OPHS topics where this indicator would be used; these will be linked to the appropriate OPHS Standard pages.

Population Health Assessment

Substance Use and Injury
Prevention

SECTION 2: METHOD OF CALCULATION

Method of Calculation

Crude Rate for ED Visits for conditions entirely caused by alcohol ED Visits

$$\frac{\text{Number of ED visits for conditions entirely caused by alcohol}}{\text{Total population}} \times 100,000$$

Age-specific rate

$$\frac{\text{Number of ED visits for conditions entirely caused by alcohol in an age group}}{\text{Total population in that age group}} \times 100,000$$

Age-standardized Rate (SRATE)

$$\frac{\text{Sum of (age-specific rate} \times \text{standard population in that age group) across all age groups}}{\text{Total standard population}} \times 100,000$$

Recommended Subset Analysis Categories

Basic Categories

- Suggested Age Groups:
 - 0-14, 15-24, 25-44, 45-64, 65+ *Note: Health units may choose to merge age categories due to small numbers, or change age categories depending on the specific analysis questions.
- Sex: male, female and total
- Geographic areas of residence: Ontario, public health unit, Ontario excluding your public health unit, municipality, county and smaller areas of geography based on aggregated postal code
- Temporal: year, quarter, month

SECTION 3: DATA SOURCES

Data Sources Table

Numerator	Denominator
<div style="background-color: #0070C0; color: white; padding: 5px; display: inline-block;">Emergency Department Visits</div>	<div style="background-color: #0070C0; color: white; padding: 5px; display: inline-block;">Population Estimates</div>
Original Source: National Ambulatory Care Reporting System (NACRS), Canadian Institute for Health Information (CIHI)	Original Source: Statistics Canada
Distributed by: Ontario Ministry of Health and Long-Term Care (MOHLTC): IntelliHEALTH ONTARIO (IntelliHEALTH)	Distributed by: Ontario Ministry of Health and Long-Term Care (MOHLTC): IntelliHEALTH ONTARIO (IntelliHEALTH)
Suggested Citation (see Data Citation Notes) Ambulatory Emergency conditions entirely caused by alcohol [years], Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: [date].	Suggested Citation: Population Estimates [years], Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: [date].

ICD Codes

Consider using a three digit code as opposed to pulling four digit codes for individual conditions for codes included as 3 digit codes* in the table (i.e., F10 versus include F10.1, F10.2, etc) unless otherwise specified.

Classification	ICD-10-CA
Conditions entirely caused by alcohol	*3-digit All Dx ICD code = F10, K70, T51, X45, X65, Y15 4-digit All Dx ICD code = E24.4, G31.2, G62.1, G72.1, I42.6, K29.2, K85.2, K86.0, O35.4, Q86.0, R78.0 Ambulatory case type = EMG (emergency) ICD-10-CA E24.4 Alcohol-induced pseudo-Cushing's syndrome F10 Mental and behavioural disorders due to use of alcohol F10.0 Mental and behavioural disorders due to use of alcohol, acute intoxication F10.1 Mental and behavioural disorders due to use of alcohol, harmful use F10.2 Mental and behavioural disorders due to use of alcohol, dependence syndrome F10.3 Mental and behavioural disorders due to use of alcohol, withdrawal state F10.4 Mental and behavioural disorders due to use of alcohol, withdrawal state with delirium F10.5 Mental and behavioural disorders due to use of alcohol, psychotic

	<p>disorder</p> <p>F10.6 Mental and behavioural disorders due to use of alcohol, amnesic syndrome</p> <p>F10.7 Mental and behavioural disorders due to use of alcohol, residual and late-onset psychotic disorder</p> <p>F10.8 Mental and behavioural disorders due to use of alcohol, other mental and behavioural disorders</p> <p>F10.9 Mental and behavioural disorders due to use of alcohol, unspecified mental and behavioural disorder</p> <p>G31.2 Degeneration of nervous system due to alcohol</p> <p>G62.1 Alcoholic polyneuropathy</p> <p>G72.1 Alcoholic myopathy</p> <p>I42.6 Alcoholic cardiomyopathy</p> <p>K29.2 Alcoholic gastritis</p> <p>K70 Alcoholic liver disease</p> <p> K70.0 Alcoholic fatty liver</p> <p> K70.1 Alcoholic hepatitis</p> <p> K70.2 Alcoholic fibrosis and sclerosis of liver</p> <p> K70.3 Alcoholic cirrhosis of liver</p> <p> K70.4 Alcoholic hepatic failure</p> <p> K70.9 Alcoholic liver disease, unspecified</p> <p>K85.2 Alcohol-induced acute pancreatitis</p> <p>K86.0 Alcohol-induced chronic pancreatitis</p> <p>O35.4 Maternal care for (suspected) damage to fetus from alcohol</p> <p>Q86.0 Fetal alcohol syndrome (dysmorphic)</p> <p>R78.0 Finding of alcohol in blood</p> <p>T51 Toxic effect of alcohol</p> <p> T51.0 Toxic effect of ethanol</p> <p> T51.1 Toxic effect of methanol</p> <p> T51.2 Toxic effect of 2-Propanol</p> <p> T51.3 Toxic effect of fusel oil</p> <p> T51.8 Toxic effect of other alcohols</p> <p> T51.9 Toxic effect of alcohol, unspecified</p> <p>X45 Accidental poisoning by and exposure to alcohol</p> <p>X65 Intentional self-poisoning by and exposure to alcohol</p> <p>Y15 Poisoning by and exposure to alcohol, undetermined intent</p>

Analysis Checklist

General

- The IntelliHEALTH (1) licensing agreement does not require suppression of small cells, but caution should be used when reporting at a level that could identify individuals, (e.g. reporting at the postal code level by age and sex). Please note that privacy policies may vary by organization. Prior to releasing data, ensure adherence to the privacy policy of your organization.
- Aggregation (e.g. combining years, age groups, categories) should also be considered when small numbers result in unstable rates.
- Individuals whose sex is categorized as “other” in IntelliHealth are included in the total number of alcohol-related emergency department visits, but are excluded in data presented by sex.
- Individuals whose age is categorized as “999” are included in the total number of alcohol-related emergency department visits, but are excluded in data presented by age group.
- Comparisons over time within a community or between communities/geographies need to consider the effect that an underlying demography may have. Please refer to the **Standardization of Rates** methodology resource page for analytic recommendations and sample calculations.

For ED visits for conditions entirely caused by alcohol:

- Add a filter on “All Dx Code” to **equal** the ICD-10 codes for the indicator of interest (available in the Glossary for the specific indicator).

Indicator Comments

General Comments

- Data from emergency department visits only capture those who visit the emergency department and may not reflect the total burden in the population
- Data for Ontario residents who visit an emergency department outside of the province are not included
- Individuals may have made more than one visit on different occasions, and therefore the number of visits should not be interpreted as the number of distinct individuals.
- The indicator measures ed visits due to conditions wholly attributable to alcohol. Conditions partially attributable to alcohol (e.g., cancers, strokes, respiratory diseases, liver disease not linked to alcohol) are not directly captured. This should be taken into consideration while interpreting the indicator results.
- The stigma associated with alcohol influences the documentation of conditions associated with alcohol use. The increasing caution of clinical staff and the sensitivity of patients around documentation of alcohol use may affect the proportion of certain conditions with a documented link to alcohol (2).

- Accidents and injuries to self or others are major consequences of harmful use of alcohol; however, this indicator's focus is on mental and medical conditions attributable to alcohol. Injuries to others are not captured, but patients visiting because of the conditions attributable to alcohol may have physical injuries as well.(2)
- Since treatment for alcohol-attributable conditions may happen at different levels of the health care system, including clinics, emergency departments, and general and psychiatric hospitals, variations in indicator results are influenced by service delivery and capacity, access to care, and type of delivery and provider.(2)

SECTION 5: REFERENCES

Glossary

ED visits for conditions entirely caused by alcohol — Emergency department visits resulting from conditions entirely caused by alcohol.

General References

1. IntelliHealth Ontario: Inpatient Discharge User Guide [2017], Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: [October 25, 2019].
2. Hospitalizations entirely caused by alcohol available from Canadian Institute of Health Information [Hospitalizations Entirely Caused by Alcohol | CIHI](#), extracted on 2024-10-10

SECTION 6: CREDITS

Acknowledgements

Use the following table structure to lists all individuals (with their permission) that have contributed to the indicator as authors or reviewers:


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Revision History

Complete the standard text, and link it to the subgroup webpage:
 This Core Indicator Product webpage is maintained by the [Subgroup Name] Subgroup.

Use the following table structure to document changes made to the indicator over time, and by whom:

Date	Review Type	Author	Changes	PDF
[Month DD, YYYY]	[Type of Indicator Review, as listed below*]	[Author Name] OR [Author Name], on behalf of the [Workgroup Name or Acronym]	> [List all substantive changes made to the indicator]	[Insert PDF Symbol]
<i>Most recent changes added to bottom of table.</i>				
EXAMPLE: April 23, 2019	Website Update: No Review of Content	James Lane, on behalf of the CIWG	<p>No changes made to indicator definitions or documentation. Migrated to new website structure and format, including:</p> <ul style="list-style-type: none"> > Reorganized content to provide high-level information at a glance, and move in-depth analytic information into dedicated sections. > Reworded formulas for plain language. > Added descriptive sub-headings to the Analysis Checklist and Indicator Comments sections. > Added Revision History table with PDF copy of previous version for reference. 	

***Review Type Options:**

- | | | |
|-------------------|---------------|-------------|
| New Indicator | Ad hoc Review | Full Review |
| New Indicator Gap | etc. | |