

# About the Data: Emergency Department (ED) Care visits

[2018/20](#), [2015/17](#), [2014/15](#) (Archived)

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## Introduction

The following information was derived from documentation available from ICES:

<https://www.ices.on.ca/>

This document provides an overview of methods used to generate data for Emergency Department (ED) Care visits rates.

Emergency Department (ED) utilization data was abstracted from The National Ambulatory Care Reporting System (NACRS), produced by Canadian Institute for Health Information (CIHI) and maintained by ICES. NACRS contains information on outpatient visits to hospital and community based ambulatory care, including emergency departments.

## Emergency Department (ED) Care visits, 2018/19 to 2019/20

(April 1, 2018 – March 31, 2020)

The 2018/20 data are provided at the following levels of geography:

- City of Toronto
- Ontario Neighbourhoods
  - 158 City of Toronto Neighbourhoods
  - 108 Neighbourhoods in Central LHIN
  - 94 Neighbourhoods in Hamilton Niagara Haldimand Brant (HNHB)
  - 37 Neighbourhoods in South West (SW)
  - 38 Neighbourhoods in Erie St. Clair (ESC)
- 76 Ontario Sub-Regions:
  - 14 Ontario Local Health Integration Networks (LHINs)
  - 5 Ontario Health Interim and Transitional Regions (Interim Regions)
- Province of Ontario

Rates are Age-Standardized using the direct method and the 2011 Canada population as the standard population

## Numerator

Data source: National Ambulatory Care Reporting System (NACRS), Canadian Institute for Health Information (CIHI).

All unscheduled ED visits (Toronto Neighbourhoods):

All unscheduled visits to emergency departments in Ontario by Toronto residents in 2018/20. Individuals were included if they had a City of Toronto postal code at the time of admission and if they had a valid health number.

All unscheduled ED visits (Interim Regions, LHINs, Sub-Regions, and Neighbourhoods in Central LHIN, Erie St. Clair, South West, Hamilton Niagara Haldimand Brant):

All unscheduled visits to emergency departments in Ontario by Ontario Interim Regions, Ontario LHINs, Ontario Sub-Regions, and Neighbourhoods in Central LHIN, Erie St. Clair, South West, Hamilton Niagara Haldimand Brant residents in 2018/20. Individuals were included if they had a province of Ontario postal code at the time of admission and if they had a valid health number.

High Urgency visits: Number of all unscheduled ED visits to emergency departments that are High Urgency. High Urgency was defined as Canadian Triage and Acuity Scale (CTAS) levels 1, 2 and 3 excluding those who were subsequently admitted to hospital

Low Urgency visits: Number of all unscheduled ED visits to emergency departments that are Low Urgency. Low Urgency was defined as Canadian Triage and Acuity Scale (CTAS) levels 4 and 5 excluding those who were subsequently admitted to hospital.

Mental Health and Addiction-related visits: Number of all unscheduled ED visits to emergency departments that are Mental Health and Addiction-related visits (please check [APPENDIX 1](#)).

## Denominator

Data source: Total Population - Registered Persons Database (RPDB) 2019 population estimates.

2019 Denominator: Ontario Ministry of Health and Long-Term Care Registered Persons Database, persons who were alive and living in Ontario on April 1, 2019.

We excluded persons with no health system contact for the previous ten years as many of those people would no longer be alive and living in Ontario.

To generate population counts for area (Neighbourhoods in City of Toronto, Central LHIN, ESC, SW, HNHB and Sub-Regions, LHINs, Interim Regions), Postal Code level data were aggregated into Dissemination Areas (DAs) and then allocated within each area (Neighbourhoods in City of Toronto, Central LHIN, ESC, SW, HNHB and Sub-Regions, LHINs, Interim Regions) (REF: Postal CodeOM Conversion File Plus (PCCF+), Version 7A, June 2017)

DAs within each segment are completely contained within their higher geographies (the Neighbourhood segment, the Sub-Region boundary and the LHINs), except at the southwest boundary of LHIN 12 where five DAs that form Neighbourhood 203 and Sub-Region 805 cross the boundary but are uniquely assigned to Central LHIN.

Neighbourhoods 6, 7 and 43 are truncated at the Central LHIN boundary. For those

three neighbourhoods, only dissemination areas (DAs) that are inside the boundaries of Central LHIN are included in population statistics for the neighbourhood and for the Central LHIN.

**Additional stratifications:**

- Males/Females
- All, High and Low Urgency ED visits:  
     Age groups: 0-4, 5-19, 20-44, 45-64, 65-74, 75+, All Ages 0+

**APPENDIX 1:**

**ICD 10 codes for Mental Health ED visits among adults ages 20+**

<b>Codes</b>	<b>Diagnostic Categories</b>	<b>ICD-10-CA codes</b>
	Substance-related disorders	F55, F10-F19
	Schizophrenia, delusional and non-organic psychotic disorders	F20 (excluding F20.4), F22, F23, F24, F25, F28, F29, F531
	Mood/affective disorders	F30, F31, F32, F33, F34, F39, F530
	Anxiety disorders	F40, F41, F42, F43, F48.8, F48.9, F93.0
	Other selected childhood-disorders	F80, F81, F82, F83, F84, F88, F89, F90, F91, F92, F93 (excluding F93.0), F94, F95, F98
	Behaviour disorders	F60, F61, F62, F68, F69, F21

## Emergency Department (ED) Care visits, 2015/16 to 2016/17

(April 1<sup>st</sup>, 2015 – March 31<sup>st</sup>, 2017)

Rates are Age-Standardized using the direct method and the 1991 Canada population as the standard population

### Numerator

Data source: National Ambulatory Care Reporting System (NACRS), Canadian Institute for Health Information (CIHI).

All unscheduled ED visits (Toronto Neighbourhoods): All unscheduled visits to emergency departments in Ontario by Toronto residents in 2015/17.

Individuals were included if they had a City of Toronto postal code at the time of admission and if they had a valid health number.

All unscheduled ED visits (Ontario Local Health Integration Networks (LHINs), Ontario Sub-Regions, and Neighbourhoods in LHIN 8):

All unscheduled visits to emergency departments in Ontario by Ontario LHINs, Ontario Sub-Regions, and Neighbourhoods in LHIN 8 residents in 2015/17. Individuals were included if they had a province of Ontario postal code at the time of admission and if they had a valid health number.

High Urgency visits: Number of all unscheduled ED visits to emergency departments that are High Urgency. High Urgency was defined as Canadian Triage and Acuity Scale (CTAS) levels 1, 2 and 3 excluding those who were subsequently admitted to hospital

Low Urgency visits: Number of all unscheduled ED visits to emergency departments that are Low Urgency. Low Urgency was defined as Canadian Triage and Acuity Scale (CTAS) levels 4 and 5 excluding those who were subsequently admitted to hospital.

Mental Health and Addiction-related visits: Number of all unscheduled ED visits to emergency departments that are Mental Health and Addiction-related visits.

Mental Health ED visits that are Non-Addiction-related.

Mental Health ED visits that are Addiction-related.

### Denominator

Data source: Total Population - Registered Persons Database (RPDB) 2016 population estimates.

2016 Registered Persons Database (RPDB)-based population denominators

Demographics: Ontario Ministry of Health and Long-Term Care Registered Persons Database (RPDB), population who were alive and living in the Ontario on April 1<sup>st</sup>, 2016. To generate population counts for area (Neighbourhoods in City of Toronto and LHIN 8, Sub-Regions, and LHINs), Postal Code level data were aggregated into Dissemination Areas (DAs) and then allocated within each area (Neighbourhoods in City of Toronto and Central LHIN (LHIN 8), Sub-Regions, and LHINs) (REF: Postal

CodeOM Conversion File Plus (PCCF+), 2015. Statistics Canada Catalogue no. 82F0086X).

DAs within each segment are completely contained within their higher geographies (the Neighbourhood segment, the Sub-Region boundary and the LHINs), except at the southwest boundary of LHIN 12 where five DAs that form Neighbourhood 203 and Sub-Region 805 cross the boundary but are uniquely assigned to LHIN 8. Neighbourhoods 6, 7 and 43 are truncated at the LHIN 8 boundary. For those three neighbourhoods, only dissemination areas (DAs) that are inside the boundaries of LHIN 8 are included in population statistics for the neighbourhood and for the LHIN 8.

The data are provided at the following levels of geography:

-City of Toronto

-Ontario Neighbourhoods

- 140 Toronto Central and City of Toronto Neighbourhoods (LHIN 7)
- 104 Neighbourhoods in Central LHIN (LHIN 8)

-76 Ontario Sub-Regions:

-14 Ontario Local Health Integration Networks (LHINs)

-Province of Ontario

Additional stratifications:

- Males/Females
- Age-Groups: 0-4, 5-19, 20-44, 45-64, 65-74, 75+, Total Population (All Ages 0+)

### Emergency Department (ED) Care visits, 2014/15 (Archived)

(April 1<sup>st</sup>, 2014 – March 31<sup>st</sup>, 2015)

Rates are Age-Standardized using the direct method and the 1991 Canada population as the standard population

#### Numerator

Data source: National Ambulatory Care Reporting System (NACRS), Canadian Institute for Health Information (CIHI).

All unscheduled ED visits (Toronto Neighbourhoods): All unscheduled visits to emergency departments in Ontario by Toronto residents in 2014. Individuals were included if they had a City of Toronto postal code at the time of admission and if they had a valid health number.

All unscheduled ED visits (Ontario Local Health Integration Networks (LHINs), Sub-LHINs in LHIN 7 and LHIN 8, Health Links, and Neighbourhoods in LHIN 8): All unscheduled visits to emergency departments in Ontario by Ontario LHINs,

Sub-LHINs in LHIN 7 and LHIN 8, Health Links, and Neighbourhoods in LHIN 8 residents in 2014. Individuals were included if they had a province of Ontario postal code at the time of admission and if they had a valid health number.

High Urgency visits: Number of all unscheduled ED visits to emergency departments that are High Urgency. High Urgency was defined as Canadian Triage and Acuity Scale (CTAS) levels 1, 2 and 3 excluding those who were subsequently admitted to hospital

Low Urgency visits: Number of all unscheduled ED visits to emergency departments that are Low Urgency. Low Urgency was defined as Canadian Triage and Acuity Scale (CTAS) levels 4 and 5 excluding those who were subsequently admitted to hospital.

## Denominator

Data source: Based on 2011 Census population estimates, Statistics Canada.

### 2011 Census-based population denominators: Toronto Neighbourhoods

The data sets we used to calculate population denominators were derived from the Statistics Canada from the “2011 Census of Canada: Topic-based tabulations” section and contain 1-, 5- and 10- year age and sex specific population counts by Census Tract (CT), as well as totals for males, females and total population.

When calculating custom age/sex groups for specific indicators we used sums of the largest possible census age groups in order to minimize rounding errors.

When showing total populations for males, females and total population we used relevant total variables from the census data. Males plus females does not equal the total due to rounding at the census tract level.

When generating population counts for Toronto Neighbourhoods, we used CT-level data to minimize the effects of suppression and rounding.

### 2011 Census-based population denominators: Neighbourhoods in LHIN 8, Ontario Health Links, Sub-LHINs in LHIN 7 and LHIN 8, and Ontario LHINs (Local Health Integration Networks)

The data sets we used to calculate population denominators were derived from the Statistics Canada from the “2011 Census of Canada: Topic-based tabulations” section and contain 1-, 5- and 10- year age and sex specific population counts by Dissemination Area (DA), as well as totals for males, females and total population.

When calculating custom age/sex groups for specific indicators we used sums of the largest possible census age groups in order to minimize rounding errors.

When showing total populations for males, females and total population we used relevant total variables from the census data. Males plus females does not equal the total due to rounding at the dissemination area level.

When generating population counts for Neighbourhoods in LHIN 8, Ontario Health Links, Sub-LHINs in LHIN 7 and LHIN 8, and Ontario LHINs, we used DA-level data to minimize the effects of suppression and rounding.

The data are provided at the following levels of geography:

- City of Toronto Neighbourhoods,
- Neighbourhoods in Central LHIN (LHIN 8),
- Ontario Health Links,
- Ontario Sub-LHINs in LHIN 7 and LHIN 8,
- Ontario Local Health Integration Networks (LHINs)

Additional stratifications:

- Males/Females
- Age-Groups: 0-4, 5-19, 20-44, 45-64, 65-74, 75+, Total Population (All Ages 0+)