

INJURY-RELATED EMERGENCY DEPARTMENT VISITS BY CHILDREN AND YOUTH (0-19 YEARS)

Data sources:

NBPSDHU Counts: Ambulatory Emergency External Cause 2004-2013, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: 2015/03/12.

NBPSDHU Population Estimates: Population Estimates 2004-2013, Ontario Ministry of Health and Long-Term Care, IntelliHEALTH ONTARIO, Date Extracted: 2015/08/24.

Ontario Counts and Population Estimates: Public Health Ontario Snapshots: Ontario: Emergency department visits for all injuries-age specific crude rate (age 0 to 19) 2004-2013. Toronto, ON: Ontario Agency for Health Protection and Promotion; 2014/11/05 [cited 2015/03/12].

Interpretation of a significant difference:

A statistic interpreted as 'significantly different' from another is an estimate found to be statistically meaningful, in such a way that the difference between two estimates is unlikely due to chance and represents a real difference. Error bars noted in figures within this report illustrate 95% confidence intervals. If there is no overlap in range, the difference can be described as statistically significant.

Emergency department (ED) visit:

An ED visit occurs when a person presents at the emergency department, or a hospital-based urgent care centre, either by their own means or by ambulance, and without a prior scheduled appointment.

Age group definitions:

Preschool- 0 to 3 years

School-aged- 4 to 12 years

Adolescent- 13 to 19 years

All Injuries

In the North Bay Parry Sound District Health Unit (NBPSDHU) region, there was an average of 5885 (range: 5289-6563) injury-related emergency department (ED) visits per year by children and youth aged 19 years and younger between 2004 and 2013.

The age-specific rate of injury-related ED visits by children and youth was lower in 2013 as compared to 2004 for both the NBPSDHU region and Ontario. The rate for NBPSDHU was significantly higher than the rate for Ontario throughout this time (Figure 1, Table 1).

Figure 1. Age-specific rate (per 10,000 population) of all injury-related ED visits by children and youth aged 19 years and younger for NBPSDHU and Ontario, 2004-2013.

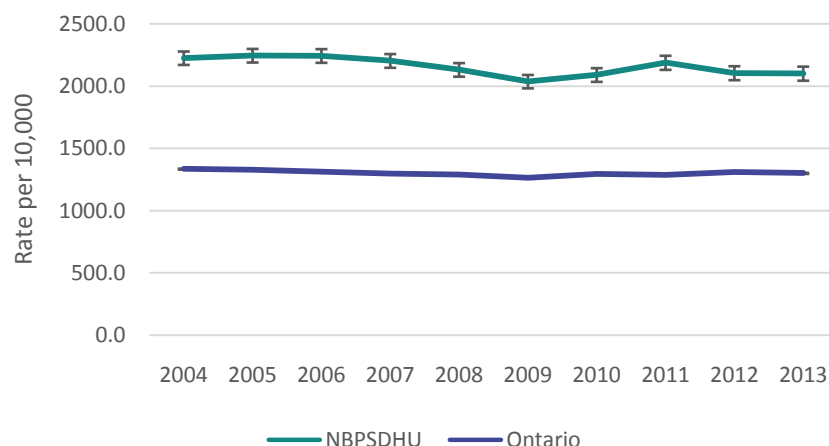


Table 1. Age-specific rate (per 10,000 population) of all injury-related ED visits by children and youth aged 19 years and younger for NBPSDHU and Ontario, 2004-2013.

Year	NBPSDHU	Ontario
2004	2224.3	1334.2
2005	2244.3	1327.7
2006	2242.5	1310.6
2007	2202.5	1296.0
2008	2130.5	1288.1
2009	2036.2	1262.4
2010	2089.3	1292.6
2011	2187.2	1285.2
2012	2103.9	1308.6
2013	2100.1	1299.7

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Injuries by Age

The age-specific rate of all injury-related ED visits in the NBPSDHU region was significantly lower in 2013 as compared to 2004 for the school age (4-12 years) and adolescent (13-19 years) age groups, but was not significantly different for the preschool (0-3 years) age group (Figure 2, Table 2). The rate for the adolescent age group was significantly higher than both the preschool and school-age groups from 2004-2013 in the NBPSDHU region (Figure 2, Table 2).

Figure 2. Age-specific rate (per 10,000 population) of all injury-related ED visits by children and youth aged 19 years and younger, by age group for NBPSDHU, 2004-2013.

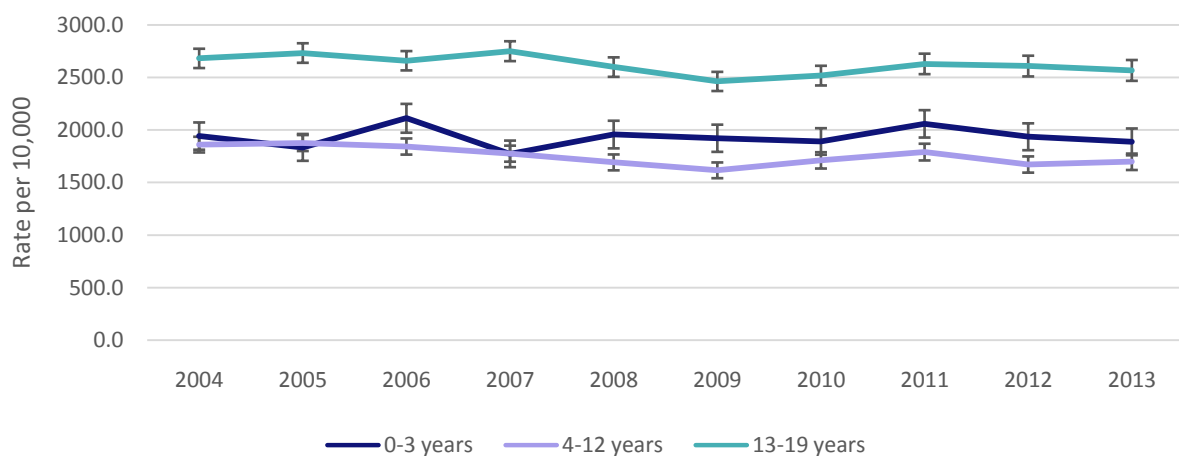


Table 2. Age-specific rate (per 10,000 population) of all injury-related ED visits by children and youth aged 19 years and younger, by age group for NBPSDHU, 2004-2013.

Year	0-3 years	4-12 years	13-19 years
2004	1942.8	1861.7	2681.7
2005	1835.2	1876.8	2732.9
2006	2112.1	1843.3	2659.5
2007	1773.7	1775.5	2750.5
2008	1957.4	1692.6	2598.9
2009	1922.1	1617.2	2462.6
2010	1891.6	1711.8	2517.9
2011	2059.2	1790.6	2629.2
2012	1936.3	1672.2	2608.7
2013	1887.6	1698.3	2567.3

Type of Injury

In preschool children, three years of age and younger, the highest age-specific rates of injury-related ED visits in the NBPSDHU region in 2013 were due to falls, struck by or against, and unintentional poisoning (Table 3). In school-aged children, aged four to twelve years, the highest age-specific rates of injury-related ED visits in the NBPSDHU region in

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2013 were due to falls, struck by or against, and sports and recreation related injuries (Table 3). In adolescents, aged 13 to 19 years, the highest age-specific rates of injury-related ED visits in the NBPSDHU region in 2013 were due to struck by or against, sports and recreation related injuries, and falls (Table 3).

Table 3. Age-specific rate (per 10,000 population) of injury-related ED visits by children and youth aged 19 years and younger, by type of injury for NBPSDHU, by age group, 2013.

Type of injury	0-3 years	4-12 years	13-19 years	0-19 years
All injuries	1887.6	1698.3	2567.3	2100.1
Unintentional injuries	1880.9	1690.8	2428.7	2018.3
Intentional injuries	6.7	8.4	143.6	61.9
Sports and recreation related	62.9	344.7	586.4	391.1
Struck by or against	184.3	372.7	694.9	467.7
Falls	761.8	579.2	528.4	591.2
Cut or pierced by an object	56.2	97.2	169.5	118.7
Exposure to smoke or fire or contact with heat or hot substances	36.0	22.4	33.9	29.4
Motor vehicle collisions	20.2	33.6	147.6	76.6
Overexertion	56.2	104.6	229.3	145.7
Unintentional poisoning	96.6	15.9	31.9	36.5

Falls: The rate of fall related ED visits in the preschool age group is significantly higher than both the school-aged and adolescent age groups, which do not differ significantly. The rate of fall related visits has not changed significantly for the preschool age group from 2004-2013.

Unintentional Poisoning: The rate of unintentional poisoning related ED visits is significantly higher in the preschool age group as compared to the other age groups from 2004-2013. Adolescents also had a higher rate of ED visits when compared to school-aged children in 2004, 2011, and 2012, but was still significantly lower than the preschool age group. The rates for all age groups did not significantly change from 2004 to 2013.

Sports and Recreation: The rate of sports and recreation related injuries is similar to the rates of fall-related and struck by or against related injuries in school-aged children and adolescents, as many (70-82%) of the sports related injuries in these age groups each year involve falls or being struck. There was a significantly higher rate of ED visits due to sports and recreation related injuries in school aged children and adolescents, as compared to preschool children in the NBPSDHU region in 2004 to 2013.

Motor Vehicle Collisions: The rate of ED visits for motor vehicle collision related injuries in NBPSDHU in 2013 is significantly higher in adolescents, as compared to the other age groups, which do not differ significantly. The rate of ED visits has not changed significantly from 2004 to 2013 for any of the age groups.

Intentional Injuries: The rate of intentional injury related ED visits, including injuries related to assault and intentional self-harm, was significantly higher in adolescents as compared to preschool and school-aged children in 2004 through 2013. The rate did not change significantly from 2004 to 2013 for any age group.