

Violence Among Children

Every four hours in Ontario, one child visits an emergency department and every four days one child is hospitalized due to a violence-related injury. Injuries to the head are most common.

Results

For the purposes of this analysis, violence is defined as injuries inflicted by another person with intent to injure or kill, and children are defined as ages 0-14. During the 2005/06 fiscal year, there were a total of 2,208 emergency department visits and 98 hospitalizations due to violence-related injuries among children under 15 years (See Methods Section for Data Sources). These numbers translate into provincial rates of 96.2 per 100,000 population for emergency department visits and 4.3 per 100,000 for hospitalizations (Table 1). Injury rates varied by region with the highest rates reported in Northern Ontario (Tables 1 & 2).

For emergency department visits, violent injuries among children increased with age. Males 14 years of age had the highest number of injuries (Figure 1). In contrast, for hospitalizations among children under 15 years, 46% of the violent injuries occurred to infants under one year of age (data not shown due to small sample size). The highest rate for emergency department visits was seen among the 10-14 year age group and for hospitalizations the highest rate was observed for those under 5 years of age (Table 2).

Assault with bodily force (e.g., not with a weapon) was the most common type of violence for emergency department visits, accounting for about 77% of all violence-related injuries among children. In contrast, for hospitalizations, neglect, abandonment, and other maltreatment syndromes were the leading types of violence, accounting for 58% of violent injuries among children, followed by assault with bodily force, which accounted for 29% of violent injuries.

For both emergency department visits and hospitalizations, injuries to the head were most common (Figure 2). More specifically, superficial injuries and open wounds were the most common types of head injury for emergency department visits and intracranial injuries were most frequent for hospitalizations.

FIGURE 1. Emergency department visits due to violence among children, by age and sex (Ontario, 2005/2006)

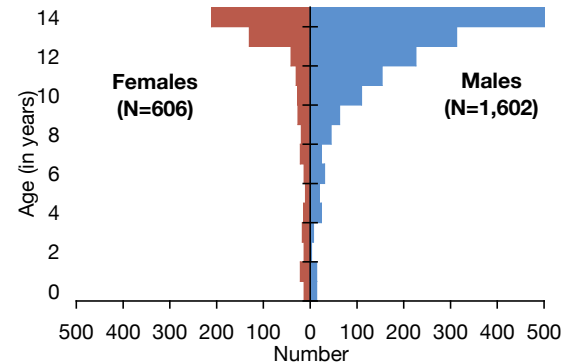
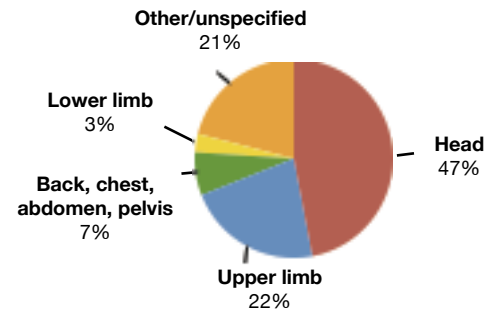


FIGURE 2. Nature of injury for violence among children (Most responsible diagnosis, Ontario, 2005/2006)

Emergency Department Visits



Hospitalizations

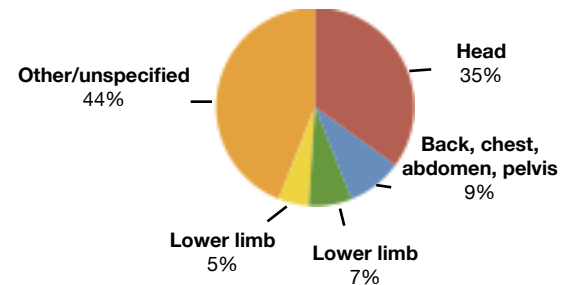


TABLE 1. Regional comparison of violence among children (Ontario, 2005/06)

	South West	Central South	Central West	Central East	Toronto	East	North	Ontario
Emergency Department Visits								
Number	361	280	256	395	281	288	337	2,208
Rate per 100,000 ^a	124.0	130.4	53.8	92.7	63.7	98.5	220.9	96.2
% male	75	72	75	71	75	77	64	73
Hospitalizations								
Number	14	13	11	14	18	12	13	98
Rate per 100,000 ^a	4.8	6.1	2.3	3.3	4.1	4.1	8.5	4.3
% male	36	77	73	50	89	83	69	68

a. Age-specific rate per 100,000 population. Note: Region of residence unknown/outside of Ontario for 10 emergency department visits and 3 hospitalizations.



Ontario Injury Prevention Resource Centre

1-888-537-7777
info@oninjuryresources.ca
www.OnInjuryResources.ca

Produced by

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SAVIE QUI-PENSE
preventing injury with smart thinking

in collaboration with

OPIA
Ontario Public Health Association
Association pour la santé publique de l'Ontario

Ontario Injury Compass

is produced by

SMARTRISK

with support from

The Ontario Public

Health Association

and

The Government of Ontario



Edited by

Philip Groff, PhD

Director,

Research and Evaluation

Ontario Injury Prevention Resource

Centre at SMARTRISK

(416) 596-2718

pgroff@smartrisk.ca

Principal Analyst

Kelly Cimek, MSc

Research Associate

Ontario Injury Prevention Resource

Centre at SMARTRISK

(416) 596-2720

kcimek@smartrisk.ca

With thanks to the
OPHA Violence Prevention Workgroup
for their input on this issue.



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Resource Centre

1-888-537-7777

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www.OnInjuryResources.ca

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TABLE 2. Regional comparison of violence among children by age group (Ontario, 2005/06)

	South West Central South	Central West	Central East	Toronto	East	North	Ontario
Emergency Department Visits- Rate per 100,000^a							
0-4 years	27.6	16.5	8.3	35.0	8.3	16.6	20.6
5-9 years	51.4	38.3	19.6	32.2	26.2	35.6	34.8
10-14 years	264.8	299.3	126.3	191.0	154.8	218.1	215.2
Hospitalizations- Rate per 100,000^a							
0-4 years	13.2	14.8	2.8	6.7	5.6	10.7	8.8
5-9 years	1.0	2.7	0.6	1.4	1.3	1.0	1.4
10-14 years	1.8	2.5	3.6	2.5	5.4	1.8	3.2

a. Age-specific rate per 100,000 population. Note: Region of residence unknown/outside of Ontario for 10 emergency department visits and 3 hospitalizations.

About 91% of children who visited an emergency department due to a violent injury were discharged to their place of residence. For hospitalized cases, about 76% were discharged home. Fewer than 1% of children died after arrival in the emergency department and about 2% died after hospital admission. The 98 hospitalized cases accounted for more than 600 days in acute care hospitals with an average length of stay of 6.2 days.

Discussion

This Compass highlights patterns of injury for emergency department visits and hospitalizations due to violence among children in Ontario. Several provincial and national analyses have also examined patterns of violence among children.¹⁻⁸ It is important to note that emergency department visits and hospitalizations represent only one dimension of the issue. There are numerous additional cases of violence that are not represented in this analysis, as many incidents go unreported or do not require medical attention in the hospital setting. For example, in a Canadian analysis of police data, over one-third of children reported a physical injury.²

The statistics included in this Compass were also limited in terms of detail around risk and protective factors and circumstances surrounding the events. Other sources of information can be used to shed light on the nature and extent of the cases. For example, according to police data in Canada, the majority of physical assaults against children were perpetrated by someone the child knew, most commonly a parent.²⁻³

References

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Managing the risk

To reduce violence, it is important to examine the root causes using a comprehensive and multi-faceted approach. A public health approach will focus on the precursors of the society, community, and individual, such as building resiliency, early identification, and harm reduction.

According to the World Health Organization, a systematic and multi-sectoral approach should be employed. Several prevention strategies are outlined by level of influence:

- ❖ **Societal and Community Level:** e.g., promote protective environments, build healthy public policy, change cultural norms, reduce economic inequalities, and reduce environmental risk factors, such as decreasing access to alcohol
- ❖ **Relationship Level:** e.g, home visiting programs, training for parents about child development and coping skills, Supporting Caring Schools, Roots of Empathy, 4th R, Choices
- ❖ **Individual Level:** e.g., increasing access to prenatal and postnatal services

For Further Information

Canadian Paediatric Society
www.cps.ca
Centre for Children and Families in the Justice System
www.lfcc.on.ca
National Clearinghouse on Family Violence
www.phac-aspc.gc.ca/ncfv-cnivf/
Ontario Association of Children's Aid Societies
www.oacas.org
Ontario Neurotrauma Foundation
www.onf.org
OPHA Violence Prevention Workgroup
www.opha.on.ca/advocacy/workgroups/violence.html
Public Safety Canada
www.publicsafety.gc.ca
SMARTRISK
www.smartrisk.ca
World Health Organization- Violence and Injury Prevention
www.who.int/violence_injury_prevention/en/

Methods

Emergency department data were obtained from the National Ambulatory Care Reporting System and acute care hospitalization data were obtained from the Discharge Abstract Database at the Canadian Institute for Health Information for the 2005/06 fiscal year. All cases for children under 15 years of age were included in this analysis. Violence was classified using International Classification of Diseases, 10th revision (ICD-10) codes X85-Y09. Note that some persons were seen in an emergency department and then admitted to hospital; however, persons can be admitted to hospital without visiting an emergency department. Regions were defined according to place of residence using the Ontario Ministry of Health Region Codes. Deaths occurring outside of the hospital setting were not included in this analysis.