

Childhood Injury

Introduction

Information in this report is presented from the Rapid Risk Factor Surveillance System (RRFSS). RRFSS is an on-going telephone survey occurring in various public health units across Ontario. On a monthly basis, a random sample of adults in Leeds, Grenville and Lanark counties, aged 18 years and older, is interviewed regarding a variety of risk behaviours, knowledge, attitudes and awareness about health related topics of importance to public health. The survey was conducted by the Institute for Social Research (ISR) at York University, on behalf of the Leeds, Grenville and Lanark District Health Unit.

This report focuses on:

1. **Childhood Injury Beliefs and Perceptions:** The purpose of this module is to determine public beliefs and perceptions about childhood injury prevention.
2. **Childhood Mechanisms of Injury:** The purpose is to determine public awareness of the common causes of injury in early childhood. This module was not based upon any existing survey tool designed to gauge public awareness of childhood injury risk. The validity of the tool as a yardstick for childhood injury knowledge has not been established. However, the results are consistent with current theory and research and, therefore, possess a measure of construct validity. The module also incorporated an “educational” aspect, as respondents who answered incorrectly or “don’t know” were informed of the correct answer by the interviewer. This may have had some effect on the respondents answered as the module progressed. Hypothetically, such feedback could undermine the respondent’s confidence and may have induced a rise in the number of don’t knows.

Questions pertaining to childhood injury beliefs and perceptions were collected from January to August 2006, January 2004 and March-July 2004, and May to December 2003. There were a total of 805 respondents in 2003, 555 respondents in 2004 and 696 respondents in 2006. Questions pertaining to childhood mechanisms of injury were collected from July 2004 through January 2005 inclusive, with a total sample of 748 adults 18 years or older.

Data from RRFSS are analyzed following standard data analysis protocols. All results are weighted to adjust for household size. Estimates are presented with 95% Confidence Intervals (C.I.). A 95% Confidence Interval indicates that there is a 95% probability that the true value of the variable measure (proportion) is contained within the interval. When the data is presented in a table, a * indicates that the estimate must be treated with caution due to sampling variability and a ** indicates the estimate is suppressed due to small cell size/high sampling variability.

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Data Results: Childhood Injury Beliefs and Perceptions_____

Question 1 – First we want to ask you about the leading cause of death in children, from one to six years of age in Ontario over the last year. Please tell me which ONE you think was the leading cause.

Males and females showed some differences in their beliefs about the leading cause of death in children, although for both sexes the largest group correctly identified injuries and accidents.

Opinion of the leading cause of death in children, by gender

	Males (n=322) % (95% C.I.)	Females (n=374) % (95% C.I.)	Overall (n=696) % (95% C.I.)
Illnesses and diseases	14.6 (10.7-18.5)	9.1 (6.2-12.0)	11.6 (9.2.- 14.0)
Injuries and accidents	36.6 (31.3-41.9)	46.8 (41.7-51.9)	42.1 (38.4-45.8)
Child abuse and neglect	13.4 (9.7-17.1)	17.6 (13.7-21.5)	15.7 (13.0-18.4)
Health problems children are born with	27.0 (22.2-31.8)	14.7 (11.1-18.3)	20.4 (17.4-23.4)
Don't know	8.4* (5.4-11.4)	11.8 (8.5-15.1)	10.2 (8.0-12.4)

Question 2 – Generally would you say injuries to children aged birth to six are not at all preventable, somewhat preventable, very preventable, or completely preventable?

Opinion on how preventable injuries are to children, n=696

	%	95% C.I.
Not at all preventable	**	
Somewhat preventable	43.8	40.1-47.5
Very preventable	40.9	37.2-44.6
Completely preventable	11.6	9.2-14.0
Don't know	2.3*	1.2-3.4

Question 3 – What do you think is most likely to prevent a child, from birth to six years from being injured: active supervision by a parent, safe toys and furniture, or special products to keep children safe?

Opinion on what is most likely to prevent childhood injuries, n=696

	%	95% C.I.
Active supervision by a parent	81.5	78.6-84.4
Safe toys and furniture	5.5	3.8-7.2
Special products to keep children safe	6.8	4.9-8.7
Don't know	4.5*	3.0-6.0



Question 4 – How much difference can parents or caregivers make in preventing injuries from happening to children from birth to six years?

Opinion on how much difference caregivers make in preventing injuries, n=696

	%	95% C.I.
No difference	**	
Very little	**	
Some	12.8	10.3-15.3
Lot of difference	81.8	78.9-84.7
Don't know	2.7*	1.3-3.7

Beliefs and Perceptions, by Year

The table below summarizes the indicators for this module for each year of data collection. Dramatic differences between years are not apparent, although there appears to be a decline in the % of adults able to correctly identify the leading cause of death in young children. A key indicator about the value of adult supervision in preventing injuries is highlighted in the table.

Beliefs and Perceptions Relating to Childhood Injuries, by year

Injury Beliefs and Perception Statements	2003 n=805 (95%CI)	2004 n=454 (95%CI)	2006 n=696 (95% CI)
% of adults who identify injuries and accidents as the leading cause of death in children 1-6	51.9 (48.4-55.4)	45.6 (41.0-50.2)	42.1 (38.4-45.8)
% of adults who say injuries to children from birth to six years of age are very or completely preventable	55.9 (52.5-59.3)	59.3 (54.8-63.8)	52.5 (48.8-56.2)
% of adults who say active supervision by an adult is most likely to prevent a child, from birth to six years, from being injured	83.6 (81.0-86.2)	80.2 (76.5-83.9)	81.5 (78.6-84.4)
% of adults who say parents or caregivers make a lot of difference in preventing injuries from happening to children from birth to six years	83.0 (80.4-85.6)	85.5 (82.3-88.7)	81.8 (78.9-84.7)

Beliefs and Perceptions by Education Level

The 2006 data were examined in some detail by variables including education, income, age group, and whether or not the respondent had children in the home. The analysis by education level yielded some interesting results. As education levels increased, injuries were seen as increasingly preventable. All groups saw parental supervision as the most important safety factor by a wide margin. However those with less than high school education were significantly less likely than others to think that parents could make a lot of difference in preventing injuries. In this group a larger proportion also saw a more important role for safe products/toys.



Childhood injury beliefs and perceptions, by education level

Opinion of the leading cause of death in children	< High School n=121 % (95% C.I.)	High School n=257 (95% C.I.)	Post secondary Graduate, n=309 % (95% C.I.)
Illnesses and diseases	8.3* (3.4-13.2)	14.4 (10.1-8.7)	10.4* (7.0-13.8)
Injuries and accidents	20.7* (13.5-27.9)	40.5 (34.5-46.5)	52.4 (46.8-58.0)
Child abuse and neglect	25.6 (17.8-33.5)	17.1 (12.5-21.7)	10.7 (7.3-14.1)
Health problems children are born with	33.1(24.7-41.5)	17.5 (12.9-22.1)	17.8 (13.5-22.1)
Don't know	12.4*(6.5-18.3)	10.5* (6.8-14.2)	8.7* (5.6-11.8)
Opinion on how preventable injuries are to children	< High School n=122 % (95% C.I.)	High School n=257 (95% C.I.)	Post secondary Graduate, n=310 % (95% C.I.)
Not at all preventable	51.6 (42.7-60.5)	**	**
Somewhat preventable	25.4 (17.7-33.1)	45.5 (39.4-51.6)	39.4 34.0-44.8
Very preventable	12.3* (6.5-18.1)	36.6 (30.7-42.5)	51.0 45.4-56.6
Completely preventable	12.3* (6.5-18.1)	16.0 (11.5-20.5)	8.1* 5.1-11.1
Don't know	8.2* (3.3-13.1)	**	**
Opinion on what is most likely to prevent childhood injuries	< High School n=122 % (95% C.I.)	High School n=256 (95% C.I.)	Post secondary Graduate, n=310 % (95% C.I.)
Active supervision by a parent	65.6 (57.2-74.4)	79.7 (74.8-84.6)	89.4 (86.0-92.8)
Safe toys and furniture	9.0* (3.9-14.1)	4.3* (1.8-6.8)	4.8* (2.4-7.2)
Special products to keep children safe	16.4* (9.8-23.0)	7.0* (3.9-10.1)	2.9* (1.0-4.8)
Don't know	**	6.6* (3.6-9.6)	**
Opinion on how much difference caregivers make in preventing injuries	< High School n=123 % (95% C.I.)	High School n=256 (95% C.I.)	Post secondary Graduate, n=310 % (95% C.I.)
No or very little difference	7.3* (2.7-11.9)	**	**
Some	18.7* (11.8-25.6)	13.3 (9.1-17.5)	10.6 (7.2-14.0)
Lots of difference	67.5 (59.2-75.8)	81.3 (76.5-86.1)	88.1 (84.5-91.7)
Don't know	**	3.5* (1.2-5.8)	**

The other stratifying variables, including presence of a child under 17 in the household, did not appear to have a significant impact on response proportions.

Data Results: Mechanisms of Childhood Injury_____

Question 1: When it comes to injuries that result in hospital admission, what do you think is the most common cause of injuries for children under the age of 4 years in Ontario?

In Leeds, Grenville and Lanark just over 55% of adults identified falls as the most common cause of injury. A substantial proportion of adults answered that they were not sure or did not know the most common cause of injury. A total of 4.4% of respondents answered lack of supervision, poor supervision, poor parenting etc.



*Perception of the Most Common Cause of Injuries
Resulting In Hospital Admission, n= 748*

	%	95% C.I.
Falls	55.5	51.9-59.1
All other responses except don't know	27.3	24.1-30.5
Don't know	17.2	14.5-19.8

Question 2: Do you think that children between the age of 1 and 4 years are more likely to drown in a bathtub, in a back yard swimming pool, or is this something that you are not sure about?

In Leeds, Grenville and Lanark about 35% of adults correctly identified swimming pools as the most common site of drowning in this age group. An almost identical proportion thought bathtubs were the most common site. A similar percentage answered that they did not know. Interestingly, adults who had children under the age of 17 in the home were more likely than those without children to mistakenly think the bathtub was the most common site of drowning (45.0% C.I. 38.7-51.3 compared to 29.1% C.I. 25.2-33.0).

*Perception of the Most Common Cause of Drowning
in Children 1 to 4 Years n= 748*

	%	95% C.I.
Bathtub	34.2	30.8-37.6
Back yard swimming pool	35.2	31.8-38.6
Not sure/don't know	30.6	27.3-33.9

Question 3 – Do you think children under the age of 7 years are more likely to be burned by a hot liquid such as a cup of tea, by flames from a fire such as a candle, or is this something that you are not sure about?

In Leeds, Grenville and Lanark about 55% of adults surveyed thought that hot liquids were the most common cause of burns in the specified age group. Again, close to a third responded that they were not sure or did not know the answer. Those with children under 17 in the home were more likely than those without children in the home to correctly identify hot liquids as the more likely burn hazard. (69.2% C.I. 63.4-75.0 compared to 52.6% C.I. 48.3-56.9).

*Perception of the Most Common Cause of Burns
in Children Under the Age of 7 Years, n=747*

	%	95% C.I.
Hot liquid such as cup of tea	57.9	54.4-61.4
Flames from fire such as a candle	14.4	11.9-16.9
Not sure/don't know	27.5	24.3-30.7

Question 4 –Do you think that children under the age of 7 years are more likely to be poisoned by eating vitamins or medications they found or by drinking household cleaning products, or is this something you are not sure about?

About 35% of adults in Leeds, Grenville and Lanark correctly identified vitamins or medication as the most common cause of poisoning in the under 7-age group. A very similar proportion thought that



poisoning by drinking household cleaners was more common. Those with children under 17 in the home were more likely to correctly identify the most common cause of poisoning (42.1%, C.I. 35.9-48.3) compared to respondents without children in the home (30.9% C.I. 26.9-34.9).

*Perception of the Most Common Cause of Poisoning
in Children Under the Age of 7 Years, n=748*

	%	95% C.I.
Eating vitamins or medication	34.5	31.1-37.9
Drinking household cleaning products	36.6	33.1-40.1
Not sure/don't know	28.9	25.7-32.1

Question 5 – If left unattended, infants [under the age of 1] who are not yet able to roll over by themselves can still fall off a high surface such as a change table, bed or sofa, if left unattended?

Over 95% of respondents were in agreement with this statement.

