# Heath Index



# Childhood Injury Prevention: Parental Knowledge & Attitudes

Issue 7. October 2003

# **Key Points:**

- Less than half of the general population knows that injuries and accidents are the leading cause of death in children 0 to 6 years old, however ¾ of parents are aware of this.
- Less than half of parents are aware that falls are the most common injury leading to hospitalization in children.
- Nearly a third of parents still feel that injuries are only "somewhat" preventable.
- Active supervision is correctly identified as the strategy most likely to prevent injuries by 90% of parents of young children.
- Parents indicated it would be equally helpful to obtain information on how to decrease their children's risk of being injured and free access to first aid training.

#### INDEX

Background	1
General Population Knowledge	2
Parental Knowledge	3
Parental Attitudes	3
Information Needs	4
Summary and Implications	4
Methods	5
Contacts	6

#### **BACKGROUND**

Injuries are the leading cause of death in children 0-6 years of age and a major cause of hospitalization and disability. Among young children, injuries resulting in hospitalizations are most often caused by falls. These falls usually occur in and around the home.

The year 2002 witnessed a renewed focus on injury prevention and safety in public health. That year the Ontario Chief Medical Officer of Health Report, "Injury: Predictable and Preventable", outlined that a 20 per cent reduction in the incidence of falls for children age 0 to 9 would result in:

- almost 500 fewer hospitalized children in Ontario.
- more than 4,000 fewer non-hospitalized injuries and
- 185 fewer injuries resulting in permanent disability.

The monetary savings would amount to approximately \$44 million annually. Furthermore, this report identified that there is a widespread-and mistaken-belief that injuries are unavoidable "accidents". To prevent young children from being injured, parents are encouraged to conceptualize "injuries" not as "accidents" but as lifethreatening events that they can help to prevent.

The year 2002, also marked the funding of the local "Early Childhood Injury Prevention Project" (ECIPP) through the Ministry of Health and Long-Term Care (MOHLTC) and the Government of Canada. The focus of this four-year Project is to ensure safer homes, child-care settings and communities, in order to reduce childhood injuries, disabilities and deaths for children from 0 to 6 years of age. The Middlesex-

London Health Unit (MLHU) conducted a community consultation in February 2002, to assess local child safety and injury prevention needs. Three priorities were identified:

- Raise parent and caregiver awareness of the types of injuries that occur in young children and the strategies to prevent these injuries,
- Establish a coalition of local agencies interested in the safety of children in London and Middlesex County,
- Develop and implement a media campaign to create safer environments for children including the reduction of injury prevention barriers and provision of injury prevention training opportunities.

Since that time a comprehensive media campaign has been planned in collaboration with four other public health units in the Southwest Region (Elgin-St. Thomas, Lambton, Oxford and Perth).

Prior to the onset of the campaign, two complementary surveys were developed to assess attitudes and beliefs about the prevention of childhood injury in the population focusing on parents and caregivers. The first survey built on the Rapid Risk Factor Surveillance System (RRFSS). RRFSS is an ongoing, monthly telephone survey of the general population conducted by the Institute of Social Research. York University on behalf of the Middlesex-London Health Unit. The second survey was developed in partnership with the London Safe Communities' Child Safety Committee. It was a written survey distributed through the school boards and day cares to ensure response from parents and caregivers of young children. Both surveys included four common questions and the written survey included additional questions on child injury prevention. This report outlines the key findings of the surveys including a description of parents'

and caregivers' baseline knowledge of childhood injury and attitudes towards injury prevention prior to the first phase of the media campaign. This information will be used to tailor the development of the ECIPP Project and in conjunction with ongoing monitoring, assessing the impact of the Project on the general population, parents and caregivers.

# **GENERAL POPULATION KNOWLEDGE**

Overall, 48.1% ( $\pm$  5.8%) of the population knows that injuries and accidents are the leading cause of death in children 0 to 6 years old. Females were more likely than males to indicate injuries and accidents as the leading cause of death (61.5%  $\pm$  7.5% versus 43.4%  $\pm$  7.9%). A greater proportion of males than females incorrectly selected illness and disease as the leading cause of death in children 0 to 6 years old (26.5%  $\pm$  7.0% versus 10.8%  $\pm$  4.8%). Figure 1 shows the distribution of the responses for potential causes of death.

Cause of Death in Children 0-6 Years of Age

Don't Know 9.6%
Health Problems
Children are Born
With
11.8%
Illinesses & Diseases
14.6%
Child Abuse &

Figure 1. General Population's Perceptions of the Leading Cause of Death in Children 0-6 Years of Age

Source: RRFSS 2003, Waves 28-30

When asked how preventable injuries are for children 0-6 years old, just under half of the population indicated that injuries were only "somewhat" preventable (43.8%  $\pm$  5.6%). Another 56.2% ( $\pm$  5.6%) chose "very" or "completely" preventable.

Most respondents believed parents and/or caregivers can make "a lot of difference" in preventing injuries to children (83.4%  $\pm$  4.2%). An equally high number also

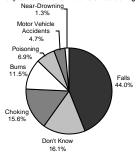
indicated "active supervision" as the strategy most likely to prevent a child from being injured ( $85.8\% \pm 3.9\%$ ).

### PARENTAL KNOWLEDGE

A significantly greater proportion of parents and caregivers (77.1%  $\pm 3.5\%$ ) correctly identified childhood injury as the leading cause of death in children 0-6 years old than did the general population. Parents who had completed post secondary education were more likely to identify injuries and accidents (82.1%  $\pm$  4.0%) than those who had less formal education (68.3%  $\pm$  6.5%).

Falls were correctly identified by less than half of parents  $(43.5\% \pm 4.2\%)$  as the most common injury that results in hospital admission of children 0-6 years old. The distribution of responses for the complete list of types of injuries is shown in Figure 2.

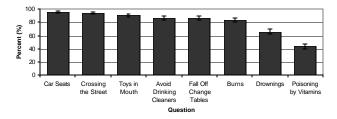
Figure 2. Parents' Perception of the Most Common Injury Leading to Hospitalization for Children 0-6 Years of Age



Source: Parent Attitude Survey, 2003

Knowledge of specific risky situations that might lead to a child being injured varied widely among parents. Only 43.3% ( $\pm$  4.2%) of parents correctly identified that vitamins are a common source of poisoning. Similarly, a low percentage of parents identified that drownings in young children did not usually occur in swimming areas like pools and lakes (65.6%  $\pm$  4.0%). Whereas nearly all parents (96.2%  $\pm$ 1.6%) identified that infants were not as safe in your arms as they were in a car seat. (see Figure 3.).

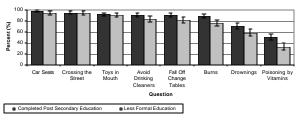
Figure 3. Parental Knowledge of Risky Situations



Source: Parent Attitude Survey, 2003

Although not significant, there was a tendency for mothers to score slightly higher on these questions related to risk situations than fathers. There was also a tendency for those who had completed post secondary education to score higher on these questions than those who had less formal education (see Figure 4).

Figure 4. Parental Knowledge of Risky Situations by Education Level



Source: Parent Attitude Survey, 2003

#### **PARENTAL ATTITUDES**

Almost all parents indicated that injuries to their children were, to some degree, preventable (97.3%  $\pm$ 1.3). Nearly a third of parents, however, felt that injuries were only "somewhat" preventable. "Completely preventable" was selected by 6.6% ( $\pm$ 2.1), "very preventable" by 59.1% ( $\pm$ 4.1) and "somewhat preventable" by 31.6% ( $\pm$ 3.9).

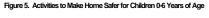
Parents with post secondary education were more likely than those with less formal education to indicate child injuries to be "very preventable" (66.0%  $\pm$  5.0 versus 47.8%  $\pm$  6.9) and less likely to select "somewhat preventable" (26.1%  $\pm$  4.6 versus 40.4%  $\pm$ 6.8).

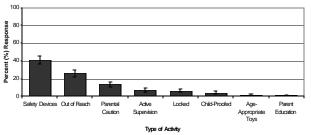
The majority of parents believed that parents and/or caregivers can make "a lot" of difference in preventing injuries from happening to their children 0-6 years old (84.0%  $\pm 3.1$ %). Another 15.1% ( $\pm$  3.0%) believed that they could make "some" difference.

Most parents chose "active supervision" as the strategy most likely to prevent a child from being injured (90.3%  $\pm$  2.5%). Parents with post-secondary education were more likely to select active supervision (93.6%  $\pm$  2.6%) than those with less formal education (85.2%  $\pm$  4.9%).

Most parents indicated that children are taught by adults to act cautiously in situations where they could get hurt (91.4%  $\pm 2.3$ %). When parents were asked to list an activity they have undertaken to make their home safer for their children, however, few parents indicated active supervision (7.0%  $\pm 2.2$ ) or parental caution (13.4%  $\pm 3.0$ ).

Figure 5 illustrates the responses grouped into common themes. Parents were most likely to indicate the use of safety devices  $(40.9\% \pm 4.3\%)$  and avoidance strategies such as putting things out of reach of their children  $(25.7\% \pm 3.8\%)$  as activities they used in the home to prevent injuries to their children.





Source: Parent Attitude Survey, 2003

#### **INFORMATION NEEDS**

When asked what kind of information or service would be most helpful, parents were equally likely to select more information on how to decrease the risk of injuries to their children ( $36.3\% \pm 4.2\%$ ) and free access to first-aid training ( $36.9\% \pm 4.2\%$ ). Although not statistically significant, fathers ( $51.1\% \pm 14.6\%$ ) were more likely than mothers ( $34.8\% \pm 4.3\%$ ) to want information on decreasing their child's risk of being injured.

#### **SUMMARY AND IMPLICATIONS**

Overall parents demonstrated higher levels of childhood injury knowledge than did the general population. Approximately 1 out of every 4 parents, however, did not recognize that injuries and accidents are the leading cause of death for children 0 to 6 years old. Moreover, half of parents did not know that falls are the type of injury that is most likely to lead to the hospitalization of young children. The two questions, potential for poisoning from ingesting vitamins and drowning in non-swimming areas, were not answered correctly as frequently as the other questions concerning risky situations. Parents need more information regarding these risks.

Generally, parents expressed the opinion that childhood injuries were preventable and that they could contribute to the prevention of child injuries. Parents do recognize that they play a key role in protecting their children from injury and they expressed a desire to learn more about reducing the risk of injury to their children. Approximately one third of parents, however, indicated that they felt injuries were only "somewhat preventable". When asked to provide a specific strategy used in the home to prevent their children from being injured. few parents offered "active supervision." This indicates that parents belief in their ability to prevent childhood injury through active supervision and risk reduction

strategies may need to be reinforced through media messaging.

There may also be some inconsistency between parental beliefs and attitudes and their preventive behaviours regarding childhood injury. Parents were as interested in receiving information regarding first-aid procedures (an intervention that is helpful after an injury has occurred) as they were in receiving information on decreasing the chance of injury to their children.

Increasing parent and caregiver's knowledge about childhood injury prevention may not be sufficient to ensure the implementation of appropriate safety precautions in the home. Future work on identifying barriers to initiating appropriate safety measures and ways to overcome these barriers may assist in decreasing the incidence of preventable childhood injury and death. Planning of the Early Childhood Injury Prevention Project should focus on the identified knowledge gaps, perceptions that reduce parent's abilities to take actions as well as parental requests for practical injury prevention tips and first-aid training.

#### **METHODS**

Two complementary surveys were conducted to assess child injury awareness and attitudes, a general population telephone survey and a targeted written questionnaire for parents and caregivers.

Four questions on childhood injury prevention beliefs and perceptions were incorporated into the Rapid Risk Factor Surveillance System (RRFSS). These multiple-choice questions asked about:

- Knowledge of the leading cause death in children from one to six years of age
- Perception of the ability to prevent childhood injuries
- Opinions on the most likely action that will prevent child injury, and

 Perceptions of how much difference a parent or caregiver can make in preventing child injury.

The RRFSS is an ongoing population health telephone survey conducted by the Institute of Social Research, York University on behalf of the Middlesex-London Health Unit. Approximately 100 responses are collected for the Middlesex-London Health Unit area each month. Households are randomly selected from all households with telephones in London and Middlesex County. Respondents are systematically selected from each household by identifying the individual aged 18 and older who has the next birthday. Every effort is made to complete the interview with this person. An average of 5 calls are made to a single household in order to complete the interview, however, as many as 12 attempts is standard practice. A total sample of 314 respondents answered these RRFSS questions between April 10<sup>th</sup>, 2003 and July 10<sup>th</sup>, 2003. All percentages are weighted to approximate a random sample and provided with 95% confidence intervals. The full questionnaire is available at www.cehip.org/rrfss.

A targeted written survey was conducted in May and June of 2003 with parents and caregivers in London and Middlesex County who cared for children 0 to 6 years of age. This questionnaire incorporated the questions from RRFSS and augmented them with additional questions on:

- Leading cause of injury hospitalizations in young children
- Understanding or motivation of child to act cautiously
- Activities taken to make home safer
- Knowledge of specific injury risks
- Information needs

The full questionnaire is available upon request.

Schools were randomly selected to reflect the proportion of students attending the

Thames Valley District School Board (TVDSB) and the London and District Catholic School Board (LDCSB). All students registered in Junior Kindergarten, Senior Kindergarten and Grade 1 in these schools were given a survey to take home. A sample of the area day care centres was obtained from those participating as partners in London Safe Communities. A total of 1,638 surveys were distributed through these agencies. Of these, 794 were returned. Eighty of the surveys were returned unanswered and another 164 were eliminated from further analysis because they were incomplete or questions were misinterpreted. Surveys completed by nonparents were excluded from the sample. The remaining 550 surveys were analyzed. The overall response rate was 33.6%.

The majority of the respondents were from TVDSB (63.1%) and LDCSB (22.7%) and the remainder was from the day care

centres (14.2%). The majority of surveys were completed by mothers (91.1%) and the remaining were completed by fathers (8.9%). Unequal sample sizes for mothers as compared to fathers were observed on the written survey. Comparisons of these groups, therefore, must be viewed cautiously. Respondents who had completed a degree beyond high school accounted for 63% of the sample while 36.5% indicated they had less formal education. County residents constituted 24.6% of the survey sample.

There are some issues that need to be addressed when contemplating the results of this survey. As with all self-report surveys, responses are subject to desirability bias. Parents may report having knowledge about preventing injury to their children but do not necessarily use safe practices at home.

#### CONTACTS

#### Authors:

Tracey D. Idle BA, MA, Program Evaluator, Middlesex-London Health Unit Jan Tomlinson BScN, RN, Public Health Nurse, Middlesex-London Health Unit Muriel Abbott BScN, RN, Public Health Nurse, Middlesex-London Health Unit

**Contact:** Tracey D. Idle, Program Evaluator

Research, Education, Evaluation and Development (REED) Services

Middlesex-London Health Unit

50 King Street London, Ontario

N6A 5L7

Phone: (519) 663-5317 ext. 2555

Fax: (519) 432-9430 tracey.idle@mlhu.on.ca

This report is also available at: www.healthunit.com. Document disponible en français.

The authors would like to extend their thanks to the Thames Valley District School Board, the London and District Catholic School Board and the participating day cares for their assistance in the distribution and collection of surveys.

Thanks to the London Health Sciences Centre for supplying the emergency room visit data and in recognition of your continued collaboration in monitoring childhood injury prevalence.

Thanks for reviewing and proof reading the final draft of this report to:

- Ruth Sanderson, Health Unit Epidemiologist, Middlesex-London Health Unit
- Charlene Beynon, Director, REED Services, Middlesex-London Health Unit
- Mary Lou Albanese, Manager, Chronic Disease & Injury Prevention Team

Thanks for formatting and revising drafts of this report to:

- Nancy Forbes, Administrative Assistant, REED Services, Middlesex-London Health Unit
- Lori Mercer, Administrative Assistant, REED Services, Middlesex-London Health Unit

We would especially like to thank all the mothers, fathers and caregivers who took time out of their busy schedules to complete the survey. Their assistance is invaluable to the development and implementation of childhood injury prevention programs in Middlesex County and the City of London.