PARENTAL ATTITUDES TOWARD UNINTENTIONAL CHILDHOOD INJURIES

Prepared for the Family and Child Health Unit, Health Canada
by SAGE Research Corporation

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PREFACE

Childhood injury prevention is one of the key action areas under the Child Development Initiative which was designed to address the conditions of risk faced by young children in Canada. This study is one of many projects supported under this Initiative. While we know that the prevention of injuries is a priority health issue, relatively little is known about parental knowledge and attitudes towards preventing injuries for their children. This project addresses this research gap and provides information that will be helpful in the development of effective injury prevention programs and policies.

Many people contributed to this study and deserve recognition.

Our thanks go to the dedicated injury prevention stakeholders across the country who assisted in recruitment of the parents who participated in this research. Many of these stakeholders also expressed their interest in this work by attending some of the focus group sessions.

Further thanks go to the team of professionals who created the research instruments, conducted the focus groups sessions, and analyzed the data - Anita Pollak, Barbara Morrongiello and their colleagues affiliated with Sage Research Corporation.

For the initial project development we would like to extend our appreciation for the support of Hélène Bleau, Vicki Rutledge, and Greg Vickers of the Advertising and Public Opinion Research Sector of Public Works and Government Services Canada.

Several members of the Family and Child Health Unit contributed at different stages of the project. Thanks go to the efforts of Sally Lockhart, Margo Craig Garrison, Debbie Hull, and Marie Labrèche.

And most importantly we would like to extend our gratitude to the parents who agreed to participate in this study and who generously shared their experiences so that childhood injuries will be prevented in the future.

Readers interested in preventing childhood injuries might wish to refer to other resources developed by members of the Canadian Children's Safety Network with support from the Child Development Initiative.

* The Directory of Canadian Child/Youth Injury Prevention Programs and Researchers lists many of the injury prevention programs and researchers active across the country. It can be obtained through the Canadian Children's Safety Network via the national online service - CCSN Online. Since the number of people active in injury prevention continues to increase, regular updates of the Directory will be available through CCSN Online.

* Copies of the Compendium of Canadian Data Sources for Childhood Injury Prevention can be ordered through the Injury Prevention Centre in Edmonton. This Compendium is a non-technical resource which profiles the Canadian data sources relevant to childhood injury prevention.

* The Health of Canada's Children: A CICH Profile (2nd ed.) overviews the trends and statistics examining the broad areas of health and illness, particularly childhood injuries. This resource can be ordered from the Canadian Institute of Child Health.

Lorie Root
Family and Child Health Unit
Health Canada

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BACKGROUND AND PURPOSE

Despite substantial decreases in injury-related deaths over the last 20 years, more Canadian children continue to die from unintentional injuries than all other childhood diseases combined. In 1990, unintentional injuries accounted for more than 60% of all deaths of children and youth ages 1 to 19 years. While preventing injury is recognized as a priority health issue for all Canadian children, we have limited understanding of the reasons why there is differential risk for injury across certain population groups.

Available data indicate that Aboriginal children and those living in the lowest income neighbourhoods are at the greatest risk of dying from their injuries. However, it is important to note that socioeconomic status per se does not directly correlate with injury rates once child and parent variables have been partialled out (Matheny, 1980, 1986). Rather, socioeconomic status is best considered a proxy variable that serves to signal the increased probability of other characteristics being present in the home that predispose children to injury. Specifically, childhood injuries are more likely when there is:

- confusion, disorganization and high noise levels (Matheny, 1986, 1987)
- a predominance of dysfunctional interactions and lack of social support for parents (Plionis, 1977), and
- marital conflict, lack of cohesion and lack of rules for children (Langley *et al.*, 1983).

There are gender and geographic differences as well. For all ages beyond 2 years, boys die from unintentional childhood injuries at approximately twice the rate of girls. The reasons for these sex differences in injuries are not well understood. Investigators often attribute these sex differences to behavioural differences, such as increased activity level (Eaton, 1989) and impulsivity (Manheimer & Mellinger, 1963) in boys, which presumably lead to boys having more opportunity for injury. However, greater incidence of injuries to boys than girls is found in virtually all injury categories, even those unlikely to relate to activity level (e.g., poisonings). Furthermore, controlling for opportunity statistically, one still observes this sex difference (Routledge *et al*., 1974). In short, we have little insight into why boys have more — and more severe — injuries than girls. One of the collaborators on this project, Barbara Morrongiello, is engaged in a program of research aimed specifically at determining factors that contribute to boys having more injuries than girls. Regional comparisons across the country indicate too that the territories have child injury rates much higher than the national average.

The injuries children incur range from burns, scalds, and household poisonings to falls, drowning, bicycle and motor vehicle mishaps and are as varied as the organizations interested in their control. Canadians are actively working to prevent children from injury-related mortality and morbidity through public awareness campaigns, health education, legislation, consumer protection standards and research. Injury prevention has become a priority for many non-governmental organizations, educators, researchers, members of the voluntary and corporate sectors, and federal, provincial/territorial, and municipal governments.

The Population Health Directorate works with partners to help build the capacity of stakeholders involved in injury prevention programming and research across the country. Under the Child Development Initiative, the Family and Child Health Unit focuses on the application of health promotion principles in injury prevention programming, community mobilization, and the enhancement of data collection. Several projects have been accomplished with partner agencies who are members of the Canadian Children's Safety Network. This Network has been created, with support from Health Canada, to enhance communication and collaboration among childhood injury prevention stakeholders representing the government, community, and corporate sectors.

Research was required with parents of children between the ages of 1 and 6 years to explore awareness, attitudes, perceived role expectations and actions of parents to prevent unintentional childhood injuries.

Perhaps the most consistent finding in research on parents' attitudes and practices related to childhood injury prevention is that parents overestimate the capabilities of their children to act in safe ways and their children's knowledge of how to handle emergency situations (e.g., Rivara *et al.*, 1989). Extending these results, parents may assume falsely that children can themselves act to avoid injuries, and that the parent's own role in preventing childhood injuries is minimal. Coupled with this, parents may demonstrate poor knowledge of child safety practices (e.g., Halperin *et al.*, 1989; Hsu *et al.*, 1991). In light of these results, in this study we incorporated measures to tap aspects of parents' knowledge about child safety practices relevant to 1- to 6-year-olds, as well as their expectations for their children's abilities to keep themselves safe, and their own role expectations with respect to preventing childhood injuries.

Drawing on theories shown to be relevant to adult risk-taking behaviours (Health Belief Model – Janz & Becker, 1984; Theory of Planned Behaviour – Azjen, 1991), we also incorporated measures to assess parents' awareness of the scope of the problem, their beliefs about their child's personal vulnerability for injury, their beliefs about the preventability of injuries, and how prepared they feel to reduce child injury risk in a number of contexts relevant to the target age group (home vs. car vs. pedestrian vs. playground).

In the literature examining influences on adults' health decisions, it is evident that knowledge of general risk is not sufficient to evoke a change in many adults' behaviours. Rather, what is essential is that the person believes they are personally vulnerable to the negative health outcome being considered, that action could result in one avoiding the negative outcome, and that they have the means to execute the action. In the present research, we considered that it could be the case that parents appreciate the scope of the problem and have sufficient knowledge about safety practices, but resist accepting that their child is personally vulnerable to injury and therefore do not consistently act on this knowledge. In fact, in the adult literature such an "optimism bias" is well documented and is recognized as a barrier to changing health-risk behaviours (DeJoy, 1989). The extent to which parents maintain an optimism bias for their own children's safety was assessed in this research.

A focus on what parents report doing to reduce the risk of child injury, and what they believe are the best strategies for injury prevention, was also incorporated into the approach. The literature indicates that when parents are asked to list effective prevention strategies, they (particularly those of low socioeconomic status) often talk in vague terms, such as "being more careful" and they are not able (or willing) to articulate what this would translate into in terms of behaviours (e.g.,

Eichenberger *et al.*, 1990). With this in mind, particularly in these high-injury groups where parents may be especially reticent to discuss risky choices they have made, we planned a different approach to gathering information on parent awareness of risk and alternative behavioural choices they could make to reduce risk of child injury. Specifically, we used a scenario-based discussion for part of the focus group.

Using more conventional discussion techniques, we also explored parents' awareness of information sources (including community resources, such as agencies that provide car seats for rent), their ideas about what could be done (by themselves, the immediate community, government) to reduce child risk of injuries, and the barriers they see to ensuring safe environments for their own children.

The following were the specific study objectives:

- How aware are parents of the risk of childhood injuries relative to other childhood diseases?
- Do parents think that injuries among children are preventable?
- Do parents feel that they have sufficient information to prevent injuries, and what additional information do they seek?
- What are parents' attitudes towards preventing childhood injuries and what do they perceive to be their role in the prevention of child-related injuries?
- What are parents doing to minimize the risk of injuries to their children?
- What are the barriers/difficulties parents face in ensuring safe environments for their children?
- What are parents' sources of prevention information, and which ones stimulate them to change their environment or behaviour?
- What do parents believe to be the best strategies to prevent childhood injuries? Are the strategies congruent with the message currently being communicated by injury prevention stakeholders?

METHOD

DESCRIPTION

A total of 14 discussion groups were conducted between March 23 and April 19, 1995, with "mainstream" Canadians, Aboriginals and Metis (we will refer to both groups in the report as Aboriginals), those of East Indian and Chinese descent. Study participants met the following qualifications:

- have at least one child 1- to 6-years of age
- the majority of participants had a maximum of a high school education and/or a household income of less than $30,000 (Note: Chinese immigrants had a household income of $35,000 or less)
- Exclusion of those who:
  - either have had a child who has died or been hospitalized due to an injury, or have had a severe injury in the past 3 months that has required either medical or dental treatment as a result;
  - work in any of the following areas: in a healthcare or childcare setting; marketing or advertising; marketing research, media;
  - have participated in a focus group in the past 6 months, or ever attended a focus group discussion on any subject matter relating to child-related injury.

In each group, we targeted for an equal representation of parents of boys and girls, as well as a good cross-section of individuals along the following dimensions:

- Occupation and working status
- Marital status
- Family composition
- Age (both in terms of the age of the parent and the age(s) of the child(ren))

The following further qualifications were added for East Indian and Chinese study participants:

- **East Indian Immigrants:** (conducted in English)
  - a mix of parents from Punjab, Pakistan, Sri Lanka and East Africa
  - immigrated to Canada between 1987 and 1995, without a stayover in U.S. or U.K.
- **Chinese Immigrants:** (conducted in Cantonese; observers provided with simultaneous translation)
  - immigrated to Canada from Hong Kong in 1987 or later.

The 14 groups conducted are as follows:

	Location	Type
"Mainstream" (7)		
	Renfrew, Ont.	Rural
	Bay Roberts, Nfld.	Rural
	Battleford, Sask.	Rural
	Deauville, Que. (French)	Rural
	St. John's, Nfld.	Urban
	Winnipeg, Man.	Urban
	Montreal, Que.	Urban
Aboriginals (5)		
	Vancouver, B.C.	Urban - men only
	Yellowknife, N.W.T.	Urban - 1 men only 1 women only
	Winnipeg, Man.	Urban - women only
	Battleford, Sask.	Rural - women only
East Indian Immigrants (1)	Vancouver, B.C.	Urban
Chinese Immigrants (1)	Toronto, Ont.	Urban

Respondents were recruited by telephone using a combination of techniques — random recruiting and referrals, particularly in the case of Aboriginal and East Indian groups.

An honorarium of $50 was paid to all participants.

PROCEDURE

Each session lasted between 2 and 2 1/2 hours, and consisted of the following three parts:

1) Self-completion questionnaire
2) Discussion of "risky" scenarios
3) Discussion of issues related to the prevention of child injury

Self-Completion Questionnaire

The self-completion questionnaire was designed to assess parents' knowledge, attitudes and beliefs related to child injury-risk, and to assess parents' injury prevention practices.

The purpose of including this component was to "stretch" the amount of information that could be collected from participants in a time-efficient manner; further, we judged that there were certain types of information that would be more easily collected in this private and confidential format than in a group discussion (e.g., assessment of any "optimism bias" in parents' judgment of their own child's injury risk in comparison to other children his/her age).

Please note that the data collected by means of this questionnaire, is not statistically projectable in a technical sense since it was collected in a "qualitative" environment. Nonetheless, the data provides an important context for understanding and elaborating upon the discussion in the groups. Moreover, since the questionnaire is self-administered, and completed prior to any discussion by the group, it is valid to report the summaries across groups.

Discussion of Risky Scenarios

A total of 6 scenarios were developed for the research. Each consisted of a very short story that described an event involving a child and parent. The story in each presented an injury-risk situation applicable to 1- to 6-year-olds and a risky choice that is made by the parent. The participants are asked to project themselves into this situation and discuss such questions as:

Why did the parent make the choice he/she did?

What might the parent have done instead?

Why didn't the parent make one of these other choices?

Whose fault would it be if the child was injured?

How severe would any injury likely be? (this could be especially informative for the groups targeted, since they may not realize the severity of injury that could result)

How common is the type of choice made by the parent? (this is a good indirect measure of their own likelihood of making this choice)

How should we try to make parents aware of the risks of their choices?

This approach was used to tap parents' attitudes about their behaviours relevant to child safety/injury issues indirectly — i.e., to reduce "socially desirable" responses by allowing participants to discuss their opinions in the third person. This indirect approach encouraged discussion of why a parent might engage in risky behaviour, without any concern on the part of the parent of presenting himself/herself as a "bad parent" to the other participants.

Each of the 6 scenarios are described below:

Scenario	Detailed Description
#1 – Poison	A parent is kneeling on the kitchen floor and cleaning the outside of the refrigerator with a spray cleaner that is poisonous. A 2 1/2-year-old is sitting next to the parent playing with toys. Every once in a while the child rolls a ball to knock the cleaner over, and then squeals with delight when the parent stands the cleaner bottle up again.

	The telephone starts to ring in the next room. The parent puts the rag and cleaner down on the kitchen floor and goes to take the child's hand. The child screams to keep playing. The parent leaves the child playing and hurries to answer the phone in the next room. The bottle of cleaner is still on the floor.
#2 – Falls	The parent of a 2 1/2-year-old places a cake on the kitchen counter. The child pleads to see it. The parent lifts the child to show them the cake and lets them taste the icing. The parent then puts the child down and leaves the kitchen to answer the doorbell. The child pulls a chair over and tries to climb onto the counter top to get the cake.
#3 – Choking	A parent is paying bills while a 14-month-old is playing on the floor with some toys. An older brother and his friend come in and ask the parent if they can play marbles in the room. The parent says yes but tells them to play at the far end of the room, away from where the baby is playing. Unknown to the boys and the parent one of the marbles rolls away and lands in front of the baby.
#4 – Burns	A parent is sitting and drinking a cup of hot coffee. A 2 1/2-year-old starts whining and crying to sit on the parent's lap. The parent lets the child do so and continues to drink the hot coffee. When the child drops their toy and the parent reaches over to pick it up off the floor, the child reaches for the hot cup of coffee.
#5 – Drownings	A 2 1/2-year-old is playing in the bathtub. The child starts crying and carrying on for a favorite tub toy that was left upstairs. The parent tells the child to stay sitting in the tub and hurries upstairs to find the toy.
#6 – Motor Vehicle	The parent of a 5 1/2-year-old is driving about 6 blocks to the local grocery store for milk. The child refuses to sit with a seat belt in place. The parent agrees to let the child sit in the back seat without a seat belt, after the child promises to stay seated and not to jump around in the car.

In any one group, participants discussed three different scenarios, with situation #1 and #2 being common scenarios in all groups, with the exception of the Aboriginal women in Winnipeg. A third scenario was rotated from group to group, to ensure coverage of all the different types of hazards.

All sessions were audiotaped, and some were videotaped – none of the Aboriginal sessions were videotaped.

REPORT ORGANIZATION

The report is divided into 5 main sections:

1) Executive Summary
2) Conclusions
3) Results based on the self-completion questionnaire
4) Results based on discussions of the scenarios – the results for each scenario are presented individually, followed by a discussion of the themes and findings that were common across scenarios.
5) Results from the discussion group.

EXECUTIVE SUMMARY

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INJURIES AS A THREAT TO CHILD HEALTH

The low socioeconomic parents who participated in this research generally were unaware that injuries are the number one cause of death among children. Furthermore, nearly 1/4 of the participants showed an optimism bias, that is, a belief that their child was **less** likely to be injured than other children.

Taken together, these findings suggest that a focused concern about childhood injuries, and awareness of the significance of this threat to their child's health, is not well established among these parents.

ATTITUDES TOWARDS THE PREVENTABILITY OF CHILDHOOD INJURIES

The participants generally endorsed statements indicating that parents could do much to reduce the likelihood of childhood injuries, and that childhood injuries were fairly preventable. However, Aboriginals were less certain of the control they could exercise over preventing childhood injuries, in comparison to the attitudes expressed by mainstream groups.

These results suggest that most parents conceptualized 'injuries' not as 'accidents' that are uncontrollable, but as negative events over which they can exercise some control. However, the parents also strongly expressed the opinions that:

- Constant supervision of children by parents, which was recognized as a way to decrease childhood injury, was not a realistic expectation, therefore children were **always** going to be at some risk of injury.
- Individual child characteristics influenced the likelihood of children being injured almost regardless of what the parent did with respect to child proofing and supervision.
- Children's risk-taking and getting hurt were naturally occurring aspects of play (i.e., that risk-taking in this context was somehow **less** modifiable than risk-taking in non-play contexts).

Thus, while most parents expressed the opinion that childhood injuries were fairly preventable, if parents made the efforts to do so, they also comfortably accepted the assumptions that:

- children **will** get hurt during play, some children more so than others depending on the individual characteristics of the child, and
- that it was legitimate that parents not be expected to provide constant supervision of children, thereby placing children at some risk of injury.

KNOWLEDGE OF SAFETY ISSUES RELEVANT TO CHILDHOOD INJURIES

Parents were aware of the **types of injuries** that could occur at different ages. However, in general, parents were not very knowledgeable about the **sources** of common injuries at different ages.

Parents were of the opinion that **degree of risk** in a situation was determined, in part, by individual child characteristics, such as:

- the developmental level of the child in question
- personality attributes of a child
- child gender, to a more limited extent.

Most participants felt that they had sufficient knowledge with which to act to prevent injuries to their children. However, urban "mainstream" parents felt less sure of having sufficient knowledge to prevent injuries, in comparison to rural "mainstream" parents.

Parents did not identify specific gaps in their knowledge, nor did they mention the need for particular types of information. Nonetheless, when specifically requested to answer the question of what types of information might be most helpful to them, they were more interested in information on how to reduce injuries at different ages, than they were in information on types of injuries common at different ages. About 1/4 of the respondents also were interested in free first-aid training.

With respect to specific safety topics, participants scored uniformly high on knowledge of measures related to automobile and pedestrian safety, recognizing the importance of:

- using safety seats for infants
- supervising preschoolers crossing streets
- close supervision of toddlers since they might run into the street.

Nonetheless, respondents' discussion of the car seat scenario illustrated that parents did **not** consistently act with knowledge of automobile safety in mind. Specifically, the parents were willing to consider not insisting on the child wearing a seat belt, depending on the immediate demands and circumstances (e.g., distance and speed of travel, degree of resistance by child). Thus, knowledge of safety rules that should be followed (e.g., always wear a seat belt) did **not** necessarily have a direct influence on parents' thinking about what were acceptable practices to follow in real-life situations.

BELIEFS ABOUT INFLUENCES ON CHILDREN'S RISK-TAKING AND CAUTIOUSNESS BEHAVIOURS

Parents endorsed statements that children learn to **recognize a risky situation** based on grownups teaching them to do so and by their own everyday experiences (e.g., getting hurt, observing others get hurt). They did not agree that children are born with a natural sense of danger that helps them to recognize risky situations.

Parents did not feel that **a sense of cautiousness** was something that just naturally developed as children aged. Direct teaching (by grownups) and learning based on getting hurt were judged as more significant influences on children acting in cautious ways and avoiding risk. In comparison to "mainstream" groups, more Aboriginals felt strongly that injuries teach children to avoid risk subsequently.

Parents felt strongly that grownups can have a significant impact to teach children to **avoid risk-taking**. Mothers, more so than fathers, felt especially committed to the fact that grownups have a responsibility to teach children to act cautiously and avoid risk-taking. However, none of the parents suggested that children should be taught to take calculated risks, to reason about risk-taking – i.e., to balance the potential consequences relative to the personal desire to perform that activity.

Participants also felt that children's **acting in risky ways** during play reflected a number of factors, including:

- children naturally having a lot of energy and therefore being very active during play
- children not thinking sufficiently about danger during play
- children imitating the risk-taking behaviour of others during play
- child characteristics, such as:
  - age (younger children are naturally curious)
  - gender (boys are more likely to engage in risk-taking than girls)
  - personality attributes (some children are more reckless than others).

INFLUENCES ON PARENTS' AWARENESS OF INJURY-RISK IN SITUATIONS

Parents proffered two possibilities with respect to awareness of the risk of injuries in the situations presented in the various scenarios (which in themselves were considered to be fair representations of real-life situations):

- lack of awareness of the risk on the part of parents, or,
- conscious dismissal or downplay of the degree of injury-risk on the part of parents.

Some parents are aware of the injury-risk but decide to accept the risk on a rational basis. Common explanations for accepting the risk included:

- The parent has a 'false sense of security' that nothing would happen, because they had performed the risky behaviour many times previously with no negative consequences.
- The parent being stressed and distracted by a crying or upset child and deciding to accept a more risky behaviour in order to minimize, or put an end to, the child being upset.

Sometimes parents are distracted by something that they feel requires their immediate attention (e.g., phone, doorbell), or taxes either their attention (e.g., paying bills) or their emotions (e.g., distressed child). This results in their not stopping to think in terms of safety before acting. Sources of distraction were mentioned as reasons why parents may **not** be aware of the injury risk.

INFLUENCES ON PARENTS' ASSESSMENT OF DEGREE OF INJURY-RISK IN SITUATIONS

A number of factors influenced parents' judgments about the degree of injury-risk, including:

- Individual child characteristics, such as:
  - The age of the child
  - The extent to which parents 'knew' their child and how likely he/she was to act either to avoid risk or pursue it.
  - Child gender, to a more limited extent (about 50% of participants felt boys engaged in more injury risk behaviour than girls and were therefore more likely to be injured more often).
- Beliefs about how common the injury is (i.e., that most if not all children have these types of injuries at one time or another during their childhood) influenced their attitudes about the likelihood of their child experiencing the injury in the situation.

INFLUENCES ON PARENTS' JUDGMENTS ABOUT RESPONSIBILITY FOR CHILDHOOD INJURIES

Participants did not necessarily assign full responsibility for childhood injuries to parents. Participants' decisions about responsibility for injuries to children were influenced by a number of factors, including:

- The individual characteristics of the child, such as age, personality, and gender, which were assumed to influence the extent to which the parent could have foreseen an injury outcome.
- The degree to which the danger was self-evident (e.g., poison versus a cake as the source of the danger).
- The extent to which the injury outcome was likely (e.g., any child in that circumstance would likely wind up injured).
- The judged appropriateness of the parent's level of supervision (i.e., under some circumstances, it **was** deemed appropriate to expect constant supervision of a child by parents).

PARENTS' BELIEFS ABOUT THE BEST WAY TO TEACH ABOUT SAFETY

The most commonly reported approach to teaching about safety was to use lots of repetitions of safety principles. In short, to "preach" again and again.

Some parents also mentioned the importance of setting a good example. However, surprisingly, this point was not often emphasized as especially significant. Parents seemed to think that what they **said to** children was more critical than the example they set.

A number of factors influenced how parents taught their children about safety and avoiding injury-risk, including:

- The potential severity of the injury outcome – harsher discipline was endorsed when the severity of the potential injury was great
- Child characteristics, especially age – one could reason more with older children than younger ones, and older children had better memory for safety information.

Surprisingly, child gender was not endorsed as a factor that influenced how parents taught children about safety. Although half the participants felt that boys engaged in more risk-taking than girls, most parents did not report teaching sons differently from daughters.

Parents disagreed as to when was the best time to teach about safety, with some endorsing teaching when the child is in the act of risk-taking, and others supporting the idea that anticipatory teaching is better. Generally, parents thought that anticipatory teaching, if used at all, was most appropriate for older children, since they had better memory abilities than younger children.

Those that favoured waiting until the child was in the act of risk-taking seemed to believe that anticipatory teaching might *"give children the idea"* of risk-taking, as opposed to decrease the chances of their risk-taking.

PARENTS' SOURCES OF SAFETY INFORMATION

Parents were able to identify a number of sources of safety information that they themselves used. However, the fact that it took some time for them to think about and identify their sources, suggests that they do not often use these sources to seek out safety information. Consistent with this very frequent response was that safety was *"common sense"* and did not require specific educational materials.

The most common sources of safety information mentioned included:

- other parents, family
- written materials (e.g., child rearing books, pamphlets, parent magazines)
- family doctor and/or public health personnel
- shows on television (e.g., Rescue 911).

The general consensus was that there are a lot more sources of, and much more, information on keeping infants safe, in comparison to what is available with respect to the post-infancy years.

CONCLUSIONS

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OVERALL GENERAL COMMUNICATION

- That parents believe that the likelihood of injury is somewhat under their personal control is an essential first step to mobilize parents to take greater precautions to avoid injuries to their children. Communications aimed to further promote the basic attitude that **"childhood injuries are not accidents"** should focus on the following:
  - Encouraging parents to make better choices and make prevention of childhood injuries a primary goal in all they do involving their children (e.g., stop and think first about how the choice one is considering may put a child at risk for injury).
    - Information aimed at encouraging parents to realize how a false sense of security, (i.e., risk-taking behaviour that has not resulted in an injury to their child previously) can lead to "poor judgment" by parents, and place their child at risk of injury.

      The essential points to stress are:
      - expect the unexpected, and act to prevent an injury outcome by not continuing risk-taking behaviours;
      - consciously and actively create as safe environments as possible for children.
    - Information aimed at stressing the importance of setting a good example for children by avoiding risk-taking activities oneself. Parents consistently endorsed the statement that children learn risk-taking from observing others. Yet, they failed to realize the potential significance of their own risk-taking influencing the behaviour and/or attitudes of their young children.
  - Specific information, guidelines and examples of strategies that parents might use to teach children to avoid risk-taking, stressing the importance of both anticipatory or proactive teaching (before the risk-taking occurs), as well as reactive teaching (that which occurs when they engage in risk-taking activities).

    Further work may be required in this area to clearly identify both the strategies and the methods of teaching that may be more effective with boys and with girls.

    It may also be of value to explore the nature and extent to which parents use different teaching methods depending on the specifics of the injury situation.
- The issue of developmental milestones and the significance of these in terms of injury potentials need to be included. An overt discussion and highlighting of this issue may result in better supervision and childproofing to reduce injuries among children.

The essential points to stress are:

- Each new skill enables new potential sources of danger. One cannot know when a new skill will emerge in one's own child. Consequently, one needs to act in an anticipatory way at all times. If one does not do so, then the first time a parent knows their child has a new skill may be when he/she exercises this skill, and gets injured.
- Parents need to be conscious of and consider both the cognitive and physiological development of the child, and the implications of these for potential injuries.

- Aboriginal parents may specifically benefit from information that fosters the development of a sense of control over the likelihood of childhood injuries.

SPECIFIC INFORMATION ABOUT CHILD HAZARDS

- Based on the areas covered in this research, information aimed at alerting and better informing parents about the need for better supervision and childproofing are suggested in the following areas that represent common "sources" of typical injuries to children:
  - Poisoning by vitamins and perfume as opposed to just cleaners
  - Drowning in tubs and toilets and planters as opposed to just pools
  - Burns by food and beverages as opposed to from matches and fire-related sources, etc.

- Information about the severity of injury that can result from a fall is clearly needed. Falls were **NOT** considered a serious threat to child health. Instead they were assumed to just be a natural part of childhood.

- Reinforcement about the importance of applying some rules unconditionally (rules that apply to injuries that are potentially life-threatening) regardless of child attributes or extenuating circumstances. Examples of these are:
  - **ALWAYS** use vehicle safety restraints
  - **NEVER** leave a child alone in the bathtub.

- Communication targeted to parents needs to focus specifically on educating parents about the preventability about play-based injuries. Importantly, play was the one context in which parents genuinely 'expect' risk-taking behaviour, tolerate this, and further expect that injuries are a 'natural' part of children's play. A sharing of real-life injury experiences may be a particularly salient way to make the point that play injuries can be deadly serious.

  More work may also be required to understand the actual activities parents categorize as 'play', with emphasis on both the gender of the child and the parent supervising that activity, in view of the perceived differences in risk-taking between boys and girls, and the differential in tolerance levels demonstrated by mothers and fathers in this context.

DETAILED FINDINGS

SUMMARY OF QUESTIONNAIRE DATA

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INTRODUCTION

As discussed in the section on Method, participants were asked to complete a questionnaire prior to any discussion in the group about unintentional childhood injury prevention.

The overall objectives of the questionnaire were to measure:

- Awareness of injuries as a key threat to child health
- Attitudes and beliefs that contribute to child injuries
- Beliefs about preventability of childhood injuries
- Knowledge about safety issues relevant to childhood injuries

In this section, we have summarized the results from the questionnaire based on 97 respondents (Note: a total of 101 individuals participated in the study, but 4 of the questionnaires were deemed unusable) as follows:

Total	**97**
	#
Mothers	55
Fathers	42
Chinese immigrants	8
East Indian immigrants	6
Aboriginals	32
"Mainstream"	51
Rural	29
Urban	22
English	38
French	13
One child	15
Two children	24
Three or more children	12

Where differences emerged between any of the groups, they are referred to in the relevant section. Notably though, the largest and most systematic differences were seen between Aboriginal and "mainstream" parents. Note: Neither Chinese immigrants nor East Indian immigrant parents are referred to because the results to the questionnaire and to the subsequent discussions very closely mirrored the results for "mainstream" Canadians on this particular subject matter. There were also no differences noted between Anglophones and Francophones.

RECOGNITION OF INJURIES AS A KEY THREAT TO CHILD HEALTH

A number of questions were included in the self-completion questionnaire designed to gauge parents awareness of injuries as a threat to their child in general, their child specifically, and the perceived difference between the likelihood of injuries to boys vs. girls:

- ***What do you think is the #1 cause of death in children 1 to 6 years of age? (PLEASE "X" ONE ANSWER ONLY)***

  Illness or disease *[ ]1*
  Injuries *[ ]2*
  Child abuse or neglect *[ ]3*
  Health problems that they are born with - for example, heart defects *[ ]4*

- ***Did you guess when you answered the above question?***

  Yes *[ ]1*
  No *[ ]2*

- ***Think about your child between 1 and 6 years of age. How likely do you think it is that he or she will need to see a doctor because of an injury some time in the next year or so? (PLEASE "X" ONE ANSWER ONLY)***

  Not at all likely *[ ]1*
  Somewhat likely *[ ]2*
  Fairly likely *[ ]3*
  Very likely *[ ]4*
  Most certain to happen *[ ]5*

- ***Think about how often your child between 1 and 6 years of age has gotten injured. Which ONE of these sentences do you think is most true?***

  My child is **more** *likely to be injured than others his/her age* *[ ]1*
  My child is **less** *likely to be injured than others his/her age* *[ ]2*
  My child is **as** *likely to be injured as others his/her age* *[ ]3*

- ***Which ONE of the following sentences do you most agree with? (PLEASE "X" ONE ANSWER ONLY)***

  Boys and girls are equally likely to act in ways that could lead to their being injured *[ ]1*
  Boys are more likely than girls to act in ways that could lead to their being injured *[ ]2*

Girls are more likely than boys to act in ways that could lead to their being injured *[ ]3*

The results for these questions are summarized below.

- In general, respondents were **not** aware that injuries are the number one cause of death in children 1 to 6 years of age. Only 45% endorsed "injuries" as the number one cause of death, and 64% indicated that they had "guessed" as to the primary cause of death among young children. Thus, this was not a knowledgeable sample with respect to influences on child mortality rates. (Note: these parents were aware that they were being asked to attend a group discussion on the subject of child safety.)

#1 Cause of Death in Children	**Total 97 %**
Injuries	45
Illness or disease	27
Child abuse or neglect	15
Congenital health problems	9
All equal	4

- With reference to the likelihood of **their own children** being injured, about half the sample (52%) felt that it was not highly likely that they would need to take their child to a doctor within the next year due to an injury. Consistent with this, 22% of the respondents showed an 'optimism bias', that is, the belief that their children were **less** likely than other children to be injured. In fact, based on the subsequent discussion of the scenarios, we suggest that for some it went beyond an 'optimism bias' to outright denial of the possibility of death resulting from a household injury, despite evidence to the contrary. In particular, in discussions about 'falls', parents often played down the potential seriousness of such injuries, seeing them typically as everyday events.

  Evidence of an 'optimism bias' has been found before in literature on adults' beliefs about their own likelihood of injuries but has not previously been assessed in literature on parents' beliefs about child injuries. The presence of an 'optimism bias' could predispose parents towards less-than-adequate supervision of child activities, thereby leading to more child injuries among families in which parents evidence this bias.

	Total
	97 %
Likelihood of Their Child Seeing a Doctor in Next Year Due to an Injury	
Not at all likely	10
Somewhat likely	42
Fairly likely	24
Very likely	17
Most certain to happen	7
Likelihood of Their Child Being Injured Relative to Other Children the Same Age	
My child is **as** likely to be injured as others his/her age	71
My child is **less** likely to be injured than others his/her age	22
My child is **more** likely to be injured than others his/her age	7

- About half the respondents also showed a bias towards believing that boys were more likely than girls to behave in risk-taking ways that could lead to injury. The remaining half of respondents felt that boys and girls were equally likely to behave in risk-taking ways that could lead to injury. Very few participants felt that girls behaved in risk-taking ways more than boys.

  More fathers than mothers supported the bias towards risk-taking in boys, and more rural than urban participants endorsed this belief.

	Total	Mothers	Fathers	Rural	Urban
	97 %	55 %	42 %	29 %	22 %
Likelihood of Boys vs. Girls to Act in Risk-Taking Ways					
Boys are more likely than girls to act in ways that could lead to their being injured.	50	42	58	68	41
Boys and girls are equally likely to act in ways that could lead to their being injured.	48	55	40	32	55
Girls are more likely than boys to act in ways that could lead to their being injured.	2	3	2	–	4

The issue of parents' beliefs about sex differences in risk-taking behaviour is discussed further in the sections on Scenario Data and Discussion Group data. Perhaps the most interesting finding to emerge in this study with respect to the topic of sex differences in children's injuries is that, although half the parents believed that boys behave in more risk-taking ways than do girls, the majority of parents did **not** report supervising children differently or teaching children differently about safety and avoiding risk (see Discussion Group section for further discussion). Thus, parents who hold a belief in boys taking risks more than girls do **not** report taking different approaches to socializing sons versus daughters about safety.

BELIEFS ABOUT THE PREVENTABILITY OF CHILDHOOD INJURIES

Three questions were posed to participants to assess their viewpoint on preventability of injuries to children, their own ability to impact on their child being injured in the home, and the extent to which they believe they have sufficient information to prevent child injury in their home:

- ***Which ONE of the following sentences do you most agree with?***

  Injuries to children are not at all preventable *[ ]1*
  Injuries to children are somewhat preventable *[ ]2*
  Injuries to children are fairly preventable *[ ]3*
  Injuries to children are very preventable *[ ]4*
  Injuries to children are completely preventable *[ ]5*

- ***Which ONE of the following best states your opinion about what you personally can do to decrease the chances of your child being injured?***

  I do not have a lot of control over this *[ ]1*
  I can do things but what I do will not make a big difference *[ ]2*
  I can do things that will very much decrease the chances *[ ]3*

- ***How sure are you that you have enough information to prevent your child from being injured at home? (PLEASE "X" ONE BOX ONLY)***

  Not at all sure *[ ]1*
  Somewhat sure *[ ]2*
  Fairly sure *[ ]3*
  Very sure *[ ]4*
  Completely sure *[ ]5*

The predominant view expressed by parents was that injuries to children were "somewhat" or "fairly" preventable (74%), that they could do things to "very much" decrease the risk of injury to their child (77%), and that they felt "fairly" or "very" confident that they had sufficient information to prevent injuries (69%). Thus, parents generally saw childhood injuries as events over which they could exercise some control, and not as 'accidents' (i.e., chance events) about which they could do nothing.

One group difference to emerge was for Aboriginal respondents. These groups showed a weaker belief in the control they could exercise over preventing childhood injuries, relative to "mainstream" groups: 63% of Aboriginals supported the statement that they could do things to "very much decrease" the likelihood of childhood injuries, in comparison to 88% of the "mainstream" groups. Consistent with this, only 11% of the Aboriginal groups supported the statement that injuries were "very" preventable, whereas 20% of the "mainstream" groups did so. Thus, generally speaking, the Aboriginal groups expressed a feeling of having less impact on the likelihood of preventing childhood injuries, as compared to the "mainstream" groups.

Given that injury rates among children in Aboriginal communities are as much as four times higher than in the general population (Canadian Institute of Child Health, 1994), the beliefs expressed by Aboriginal parents in this sample may reflect the reality of the injury rates which they have experienced in their communities (i.e., if there are a lot of injuries, one may come to believe that one can have little control over preventing these from happening). Alternatively, the belief that one can do little to prevent injuries may lead one to be less vigilant in supervising children, thereby allowing for more opportunity for child injuries.

A group difference also emerged for rural versus urban "mainstream" groups. Urban parents felt less prepared to prevent injuries than did rural parents: 38% of rural parents indicated that they were "very sure" they had enough information to prevent injuries to their children, as compared to 18% of urban respondents. Also, 42% of urban parents responded to this question by endorsing "not at all sure" and "somewhat sure", in comparison to 14% of rural parents feeling this uncertain about their having sufficient knowledge to prevent childhood injuries.

It is noteworthy, however, that urban and rural parents did not differ in their beliefs about the preventability of injuries or their ability to control the likelihood of childhood injuries. Thus, the difference was specific to the issue of preparedness to act to prevent childhood injuries.

	Total	Aborig.	Main	Rural	Urban
	97	**32**	**51**	**29**	**22**
	%	**%**	**%**	**%**	**%**
Preventability of Injury to Children					
Injuries to children are not at all preventable	7	12	6		
Injuries to children are somewhat preventable	32	26	39		
Injuries to children are fairly preventable	42	50	35		
Injuries to children are very preventable	17	12	20		
Injuries to children are completely preventable	2	–	–		
Parent's Control over Decreasing Chances of Their Child Being Injured					
I can do things that will very much decrease the chances	77	63	88		
I can do things but what I do will not make a big difference	14	29	6		
I do not have a lot of control over this	9	8	6		
Certainty to Have Enough Information to Prevent Child from Being Injured at Home					

KNOWLEDGE OF SAFETY ISSUES RELEVANT TO CHILDHOOD INJURIES

Participants were provided with a list of nine statements relating to causes of child injury. For each they were asked to indicate whether the statement was true or false, with a "don't know" response category also provided for each. They were also asked to indicate the sources of information that they would find most useful in preventing childhood injuries:

- ***For the following questions, indicate if you think the statement is True or False or you don't know. Again, remember that we are referring to children 1 to 6 years of age. PLEASE 'X' THE BOX FOR YOUR ANSWER.***

	True	***False***	**Don't *Know***
Most burns to young children are fire related	*[ ]1*	*[ ]2*	*[ ]3*
Vitamins are a very common source of poisoning in young children	*[ ]1*	*[ ]2*	*[ ]3*
Very young babies are not likely to fall off a change table until they can turn over by themselves	*[ ]1*	*[ ]2*	*[ ]3*
Drownings in young children usually occur in swimming areas like pools and lakes	*[ ]1*	*[ ]2*	*[ ]3*
Even by 3 years of age, children do not know to avoid drinking cleaners and things that smell badly	*[ ]1*	*[ ]2*	*[ ]3*
By the age of 2 1/2 years, children have a good sense of what is safe to eat and are not likely to put small toys in their mouth	*[ ]1*	*[ ]2*	*[ ]3*
By the time they turn 3 years, children know not to run out in the street and do not need to be restrained or have their hand held constantly	*[ ]1*	*[ ]2*	*[ ]3*
Even at 5 years of age, most children are not able to cross streets safely without supervision	*[ ]1*	*[ ]2*	*[ ]3*
When riding in a car, as long as you are in the back seat with an infant, they are as safe when held tightly in your arms as they are in a car seat	*[ ]1*	*[ ]2*	*[ ]3*

- ***Which ONE of the following would you find most helpful?***

Having more information about what injuries are likely to happen to 1- to 6-year-olds	*[ ]1*
Having more information on what I can do to decrease my child's chances of being injured	*[ ]2*
Having free access to things that help keep children safe (like cupboard locks, car seats)	*[ ]3*
Having free access to a first aid training session	*[ ]4*

A '% correct' score was calculated for each statement, and the results are summarized below in rank order from most correct to least correct:

	Total 97 %
When riding in a car, as long as you are in the back seat with an infant, they are as safe when held tightly in your arms as they are in a car seat	95
By the time they turn 3 years, children know not to run out in the street and do not need to be restrained or have their hand held constantly	87
By the age of 2 1/2 years, children have a good sense of what is safe to eat and are not likely to put small toys in their mouth	83
Even at 5 years of age, most children are not able to cross streets safely without supervision	82
Even by 3 years of age, children do not know to avoid drinking cleaners and things that smell badly	74
Very young babies are not likely to fall off a change table until they can turn over by themselves	73
Most burns to young children are fire related	54
Drownings in young children usually occur in swimming areas like pools and lakes	47
Vitamins are a very common source of poisoning in young children	21

- Generally, knowledge of safety issues varied with the issue in question. Respondents showed high '% correct' scores for questions related to car seat use for infants (95%), to avoid the risk of children running into the street (87%), and the need for supervision of young children to cross streets (82%). Thus, street/car safety knowledge was well established in the sample.

- Respondents also had a solid knowledge base with respect to the need to consider developmental level of a child when evaluating risk of child injury. They obtained high '% correct' scores for understanding that: at 2 1/2 years children still often put inedible objects into their mouths (83%), even 3-year-olds will drink cleaning fluids (74%), and young infants can fall from heights even before they can roll over on their own (73%).

  Not surprisingly, for these types of questions, there was a trend for increases in percent correct scores with increases in the number of children in the family from 1 to 3 or more. Thus, it seemed that increasing experience with children served to enhance one's ability to give ample consideration to development level when evaluating risk for injury:

	1 Child	2 Children	3 or More Children
	15 %	24 %	12 %
By the age of 2 1/2 years, children have a good sense of what is safe to eat and are not likely to put small toys in their mouth	71	83	100
Even by 3 years of age, children do not know to avoid drinking cleaners and things that smell badly	60	79	83
Very young babies are not likely to fall off a change table until they can turn over by themselves	80	75	100

The skill of being able to reason about risk in light of a child's developmental status is critical for parenting in a way to prevent child injuries. Certainly, it is important to realize that what is acceptable for a 6-year-old may place a 4-year-old at risk of injury and most certainly lead to injury in a 2-year-old. As was evident also in the scenario data, the participants recognized that risk was determined, in part, by the developmental status of the child, and not often just by the activity or behaviour per se (see section on Scenario Data).

- By contrast, respondents were less aware of facts regarding common types of childhood injuries. Their '% correct' scores were relatively low with regards to facts such as: most burns to children are not caused by fires (54% correct), drownings in young children do not usually involve swimming areas (47%), and vitamins are a common source of poisoning in young children (21%).

- Overall, Aboriginal and "mainstream" Canadians had similar levels of knowledge about safety issues. The only difference that emerged related to knowledge about young infants being able to fall from heights even before they can turn over on their own. In this respect, Aboriginal participants had a lower '% correct' score than did "mainstream" Canadians – 37% vs. 73%, respectively.

- The average % correct score across the total sample was 68%. The only group that scored significantly lower on this overall basis are urban parents – 43% overall correct score. Notably though, they were not statistically different from their rural counterparts on any of the individual items included in the list to assess knowledge levels about child related safety issues.

- Consistent with the variability in knowledge scores, when asked what information would be most helpful to prevent childhood injuries, 53% said information on how to decrease children's risk of specific injuries and 10% sought more information on the specific types of injuries that are likely to occur. These parents wanted more information on what types of injuries to watch out for with respect to their children. Respondents also sought to increase knowledge about first aid to enhance their knowledge of how to treat injuries. Therefore most parents wanted preventive information rather than information on how to deal with the consequences of injuries.

Type of Information Parents Would Find Helpful	**Total** **97** **%**
Having more information on what I can do to decrease my child's chances of being injured	53
Having free access to a first aid training session	23
Having free access to things that help keep children safe (like cupboard locks, car seats)	14
Having more information about what injuries are likely to happen to 1- to 6-year olds	10

- The Aboriginal groups also were more interested in free access to safety devices (20% of respondents) than were "mainstream" groups (8%).

ATTITUDES AND BELIEFS RELEVANT TO CHILD INJURIES

Respondents were given 4 broad questions related to how injuries to children could occur. For each question, three statements were presented that could account for child injuries and parents were asked to indicate the extent to which they agreed or disagreed following these instructions:

> ***After each question there are 3 sentences. Read each sentence and then pick a number from the list below (a number between 0 and 5) to tell us how much you agree with the sentence. Pick one number for each sentence and "X" the box that matches your answer. It is okay if you pick the same number for a lot of the sentences.***
>
> ***NUMBERS TO USE:*** *0 = I **disagree with the sentence***
> *1 = I **agree a little** with the sentence*
> *2 = I **agree somewhat with the sentence***
> *3 = I **agree a fair amount** with the sentence*
> *4 = I **mostly agree with the sentence***
> *5 = I **completely agree** with the sentence*

The broad questions and possible answers were:

- ***What makes children act cautiously in situations where they could get hurt?***

  They are born with a fear of danger
  They learn from getting hurt to pay attention to signs of danger
  They are taught by grownups to recognize danger and avoid it

- ***How do children come to realize the consequence of behaving in "risky" ways?***

  This just develops as children grow older
  Their day-to-day experiences teach them about what actions can result in injury
  Grownups teach children about dangerous actions

- ***Children do things when they play that could lead to getting hurt, such as jumping from heights or throwing things. Why is that?***

  Children naturally have a lot of energy and need to be active
  They do not think enough about danger
  They learn to do so from others (TV, friends, etc.)

- ***Why do children sometimes get injured when they play?***

  It is just part of being a child; it just happens
  They do not think about safety before they act
  Grownups have not taught the child to be careful enough

The results for each of these broad questions and its components are summarized below.

What Makes Children Behave Cautiously?

Parents largely disagreed with the explanation that children behave cautiously because they are naturally born with a fear of danger (81% endorsed "disagree" and "agree a little"). By contrast, parents mostly agreed that children **learn** to act cautiously from getting hurt, and by being **taught** these behaviours by grownups. Thus, they saw injuries as serving a useful function for children, and they also believed that grownups can have an impact to make children act more cautiously.

	Born with Fear of Danger	Taught by Grownups	Learn from Getting Hurt
	97 %	97 %	97 %
Disagree a little	61	2	12
Agree a little	20	2	13
Agree somewhat	6	14	22
Agree a fair amount	6	17	39
Mostly agree	6	32	15
Completely agree	1	32	9

The only group difference to emerge was for Aboriginals who more strongly agreed that children learn from getting hurt. In fact, 68% agreed "a fair amount", "mostly" and "completely" that children learn from injuries to act more cautiously, as compared to 43% for the "mainstream" groups.

This result for Aboriginals may reflect a rationalization on their part that allows them to explain to themselves the large number of injuries in their community in a way that does not promote guilt (i.e., injuries are not completely 'bad' events, since children learn from them). Their beliefs may also lead to more injuries in their community: they may be less vigilant about preventing injuries owing to their belief that some good results from injuries (i.e., children learn about acting cautiously) and they have less control over these (as discussed in the section on Beliefs About the Preventability of Childhood Injuries).

How Do Children Come To Recognize A Situation As Risky?

Participants primarily felt that children learn to recognize a situation as risky based on grownups **teaching** them about risk and also on day-to-day **experiences**. They agreed less with the statement that recognition of risk naturally develops as the child ages. Thus, they believed that children's perception of risk was alterable, based on teaching and everyday experiences. This is consistent with their general belief that they could do things to reduce the risk of injury to their children.

	Grownups Teach	Taught by Day-to-Day Experiences	Develops as Child Grows Older
	97 %	97 %	97 %
Disagree a little	3	2	16
Agree a little	3	10	18
Agree somewhat	18	20	21
Agree a fair amount	18	40	21
Mostly agree	26	21	15
Completely agree	32	7	9

The only group difference to emerge was for mothers versus fathers, with more mothers agreeing "completely" (42%) that grownups need to teach children about risk, in comparison to fathers (20%). Thus, mothers believed that grownups were very responsible for teaching children about risk, whereas fathers did not endorse this belief as strongly.

Why Do Children Play In Risky Ways That Could Lead To Injury?

Parents attributed risky play almost equally to the three factors presented to them: that children **do not think** sufficiently about danger in deciding how to behave during play, that children **learn from others** to play in risky ways (e.g., television), and that children naturally have a lot of **energy** (i.e., it is natural and typical that children play in risky ways that could lead to injury). Endorsement of these explanations by parents suggests that they believe that risk-taking is a **natural part** of play activity in children. (The results to the next question discussed in the next section, confirm this interpretation.)

	Don't Think About Danger	Learn from Others	Natural Energy
	97 %	97 %	97 %
Disagree a little	3	–	3
Agree a little	6	10	4
Agree somewhat	13	12	23
Agree a fair amount	16	28	28
Mostly agree	31	26	25

Why Do Children Get Injured While Playing?

Parents believed that being injured during play results from children **not thinking** sufficiently about safety before acting and that it is just a **natural** part of being a child. They agreed much less with the explanation that parents have not taught the children sufficiently about risk, and that this results in children being injured during play.

	Not Thinking About Safety	Natural Part of Being a Child	Not Taught by Grownups
	97 %	97 %	97 %
Disagree a little	2	13	27
Agree a little	10	16	24
Agree somewhat	10	11	18
Agree a fair amount	23	23	10
Mostly agree	31	21	10

This latter result contrasts with their acknowledgment of the importance of parent teaching in promoting cautiousness in behaviour (see section on What Makes Children Behave Cautiously) and most likely relates to the 'play' context within which the child's risk-taking behaviour is presented in this question. Apparently, parents see themselves being less responsible for children's risk-taking behaviour in play situations. To the extent parents supervise children less closely because of their belief that they can have less impact on children's risk-taking during play, this attitude could certainly predispose children toward more risk of injury. It is noteworthy that these beliefs were expressed with respect to children 1 to 6 years of age, that is children who are not capable of judging for themselves what is risky and likely to lead to injury.

The only difference to emerge was for mothers versus fathers, with 59% of mothers, as compared to 42% of fathers, "disagreeing" or agreeing "a little" with the notion that children behave in risky ways during play because grownups have not taught them to do otherwise. Thus, again, mothers showed more tendency than fathers to assign responsibility for injury prevention to grownups.

SUMMARY OF DATA FROM SCENARIOS

SUMMARY OF DATA FROM SCENARIOS

INTRODUCTION

In this section of the report, we will summarize the results for each of the scenarios parents discussed in the groups, followed by an overall summary in which the themes and findings common across the scenarios are discussed.

The discussion of each scenario has been organized into 7 areas:

1) How typical was the parent's behaviour in the scenario?
2) Was the parent in the scenario aware that 'risk/danger' was an issue in the situation?
3) Did the groups take the child's age into account at all in evaluating the risk in the scenario?
4) What statements, if any, did the groups offer to explain the parent's behaviour or to play down the issue of 'risk/danger' in the scenario?
5) Did the groups recognize the injury/injuries that could occur, and how quickly did they recognize these?
6) What 'alternative' parent behaviours were identified?
7) What did the groups decide about responsibilities for any injuries that might occur to the child in the scenario?

Based on the discussions that were held, we noted very few differences between "mainstream" parents, Aboriginals, East Indian and Chinese parents, Anglophones and Francophones. The few that were observed are noted in the appropriate scenario. Moreover, there were no systematic differences noted by other characteristics such as mothers vs. fathers, rural vs. urban, or by the number of children in the family.

SCENARIO 1: POISON – SPRAY CLEANER ON FLOOR (COMMON TO ALL GROUPS)

A parent is kneeling on the kitchen floor and cleaning the outside of the refrigerator with a spray cleaner that is poisonous. A 2 1/2-year-old is sitting next to the parent playing with toys. Every once in a while the child rolls a ball to knock the cleaner over, and then squeals with delight when the parent stands the cleaner bottle up again.

The telephone starts to ring in the next room. The parent puts the rag and cleaner down on the kitchen floor and goes to take the child's hand. The child screams to keep playing. The parent leaves the child playing and hurries to answer the phone in the next room. The bottle of cleaner is still on the floor.

How typical was the parent's behaviour in the scenario?

The majority of participants in all groups judged the parent's behaviour in this scenario to be *"very typical"*. *"It happens all the time"* and *"This is definitely not unusual"* were frequent themes reflected in participants' comments.

The only group that disagreed with this viewpoint was the women-Aboriginal group in Yellowknife. They felt the parent's behaviour was *"unreasonable"* and that most parents would know better and either take the child with them or move the cleaner away from the child, or use non-toxic cleaners like baking soda.

Was the parent in the scenario aware that 'risk/danger' was an issue in the situation?

Participants provided evidence of two views with respect to this question. Common to both views was the notion that the parent did not give sufficient thought to the issue of child safety:

- The first view was that the parent acted *"instinctively"* to answer the phone and did not realize the cleaner was left behind where the child might reach it. In short, the parent did not give sufficient thought to all aspects of the situation and therefore did not realize the danger.

- The second view was that the parent recognized the danger but chose to leave the child and answer the phone because they could justify doing so in their own mind (see section of explanation of parents' behaviour).

Did the groups take the child's age into account at all in evaluating the risk in the scenario?

The only discussion of the child's age, and it was not frequently mentioned, was that 2-year-olds are *"naturally curious"* and cannot be expected to comprehend the danger associated with the cleaner. The implication of this was that the parent should have realized the potential danger of leaving the cleaner there with the child, and it was fully their responsibility to do so. In essence, the participants felt the parent should not have expected a 2-year-old to know better and not touch the cleaner, regardless of what they told the child when they left him/her alone in the kitchen.

What statements, if any, did the groups offer to explain the parent's behaviour or to play down the issue of 'risk/danger' in the scenario?

The participants talked about the *"reflex"* of going to answer the phone and of being *"preoccupied with all that needs to get done"* and *"responding to the immediate pressures"* in the situation – child whining to stay put, phone ringing for the parent to come answer it. Many felt that the *"parent wasn't thinking about the danger"* or *"forgot about the child's safety for a second"*.

Two opposing views were offered:

- One common view therefore was that the parent was not really aware of the risk/danger. Rather, the parent *"acted impulsively"*, was *"distracted"* by other concerns (e.g., getting cleaning done, answering phone), and even experiencing stress because of the demands of the situation (e.g., *"competing responsibilities"*), resulting in the parent unintentionally placing the child at risk by acting in ways to decrease their own stress (i.e., leave child alone so he/she stops whining, go answer the phone), and failing to consider the implications of their own behaviour for the child's safety.

- Another common view was that the parent recognized the risk, as reflected in the fact the parent tried to take the child with him/her. However, the parent was able to provide a rationale for hurrying to the phone nonetheless. The types of rationales mentioned were those related to:

  - child-based attributes (e.g., *"she thought her child wouldn't touch it"*)
  - convenience (e.g., *"easier to leave child playing than having a screaming fit while the parent tried to talk on the phone"*)
  - time the child would be unsupervised (e.g., *"she figured she would only be gone a few seconds"* or *"on the phone for a minute and a half"*).

These two broad types of explanations of parents' behaviours emerged repeatedly in the discussion of the scenarios.

Did the groups recognize the injury/injuries that could occur, and how quickly did they recognize these?

The participants across groups quickly mentioned the key hazards (poison, damage to skin, eyes, etc., from spraying poison on self or inhaling fumes), and less frequently mentioned those that reflected the more general hazards of kitchens (e.g., knives, stove, etc.).

What 'alternative' parent behaviours were identified?

The two key alternatives identified involved either taking the child to answer the phone (i.e., the parent following through on their initial inclination that the child remain with them) or removing the key hazards (cleaner, rag) while leaving the child behind in the kitchen — an alternative that fails to acknowledge that other hazards could be present in the kitchen.

Participants also mentioned, though less frequently so:

- putting the child in a playpen or crib
- cleaning at another time when the child is not around
- having another adult watch the child
- refocusing the child's attention to another toy in the kitchen before leaving him/her alone to answer the phone
- using a cordless phone which decreases the likelihood of parents having to choose between proper child supervision and the desire to answer the phone
- letting the phone ring.

It is of interest to note that, except for *"letting the phone ring"*, every other alternative mentioned would still allow the parent to achieve their goal of 'answering the phone'. Thus, the type of alternatives that predominantly came to mind were not those that required the parent to alter their own goal. Rather, they were alternatives that would have resulted in the parent achieving their goal, albeit in different ways.

A few participants mentioned too that the parent should not have been playing the game he/she was with the child knocking over the cleaner. They viewed this as inconsistent with teaching the child not to touch poisons like cleaners. It is interesting, however, that not many participants mentioned this as an issue. And, in fact, the ones that did also supported the idea that parents sometimes do things that are not especially safe for their child but are convenient for the parent — e.g., *"we are all guilty of that"*, that is, letting a child play with something not totally safe because it keeps them quiet and is convenient for the parent. Thus, participants acknowledged that decisions they make as parents are driven, in part, by goals they have which are unrelated to issues of child safety. And, in fact, sometimes the issue of child safety is willingly laid aside in order to achieve some other goal such as answering the phone.

What did the groups decide about responsibilities for any injuries that might occur to the child in the scenario?

The general consensus was that the parent would be responsible for any injury that would result to the child. The participants felt the child was too young to know better or to be expected to be anything other than curious-to-explore interesting things (e.g., spray cleaner). Some participants discussed this in terms of the parent showing *"bad judgment"* which they felt was a less disparaging way to assign blame to the parent. However, generally, most participants felt strongly that the parent would be fully to blame if anything were to happen to the child from being left alone in the kitchen under these circumstances.

Interestingly in the context of discussing responsibility for injury in this scenario, a few advocated a very strong view: if the child is under your care, then the parent is responsible for what happens to the child, **regardless** of the situation. However, for the majority of participants the responsibility of the parent was **tempered** by other factors (e.g., child attributes, the circumstances leading to the injury). Thus, attributions about blame for child injury were influenced by a variety of factors. It was not the case that parents necessarily assigned complete responsibility for injury to parents of injured children.

SCENARIO 2: FALLS – CAKE ON THE COUNTER (COMMON TO 13 OF 14 GROUPS)

> The parent of a 2 1/2-year-old places a cake on the kitchen counter. The child pleads to see it. The parent lifts the child to show them the cake and lets them taste the icing. The parent then puts the child down and leaves the kitchen to answer the doorbell. The child pulls a chair over and tries to climb onto the counter top to get the cake.

How typical was the parent's behaviour in the scenario?

The participants were in agreement that in the scenario, the parent's behaviour (to go answer the door), and even the child's behaviour were *"very typical"* and *"common"*.

Was the parent in the scenario aware that 'risk/danger' was an issue in the situation?

The consensus was that the parent was not aware of the risk because there is nothing obviously harmful to the child in the scenario, particularly since the focus in on a cake (*"It is only a cake"*. *"A cake is certainly not a dangerous situation"*.). Furthermore, it was considered *"reasonable"* that the parent in the scenario would assume the child's interest in the cake was adequately dealt with, since he/she had given the child a taste of the icing and let the child see the cake. Thus, most judged the risk in the scenario as *"unforseeable"* by the parent. However, a few did feel that the parent had created a 'temptation' for the child, and the child would pursue the cake as a result.

It is noteworthy that virtually no one recognized the danger per se of leaving the young child alone in the kitchen.

Did the groups take the child's age into account at all in evaluating the risk in the scenario?

There was not extensive discussion of the age of the child as a contributing factor per se.

Many discussed the idea that children this age are *"naturally curious"*. They offered this, however, as an explanation for the child's behaviour, not as a justification for why the parent should not have left the child in this situation. Furthermore, in several groups there was endorsement of the parent's behaviour as completely acceptable: *"It is quite normal to leave a 2 1/2-year-old alone for a few minutes when there is no immediate danger"*.

Although age was not treated as a determining factor in this scenario, what emerged in several groups, was the notion that the parent should 'know their own child' and how they might act (e.g., *"If the child was in the habit of climbing on chairs to get things, this should stick in the mother's*

mind"). Of course, this logic would suggest that children will be at particular risk of injury 'the first time' they evidence a new skill that the parent is unaware they are capable of and that can lead to injury (e.g., climbing on a chair and onto the counter).

What statements, if any, did the groups offer to explain the parent's behaviour or to play down the issue of 'risk/danger' in the scenario?

As in the scenario about the cleaner, the predominant view was that the parent *"was not thinking"* about danger and just *"automatically"* went to answer the door when the bell rang. The participants also felt that there was no clear danger imminent in the situation and the parent's lack of awareness of danger was therefore legitimate. There also was acknowledgment that the parent would likely not be gone long, and that the parent might expect that the child would even follow after them.

Did the groups recognize the injury/injuries that could occur, and how quickly did they recognize these?

Generally, the groups did not immediately acknowledge the fall hazard in this situation. In fact, often, the immediate concern identified was that the child would pull the cake down onto themselves (dirtying themselves, ruining the cake, etc.). Furthermore, when participants recognized that a fall could occur, they often did not immediately interpret this as a significant threat to the child's physical well-being. In fact, many participants talked about the fact that *"falling is just something kids do"* and that *"all children will fall off counter tops a few times"*. Thus, participants did not recognize falling as a significant threat to the physical well-being of young children (*"He could fall and hurt himself but it wouldn't be dangerous"*). Rather, it was considered a natural consequence of being a child. In fact, it may be precisely because participants had many experiences with their own children falling and not getting hurt that they had difficulty appreciating the potential severity of injury that could result from children falling from heights (*"My child falls all the time. It seems to be normal for him. I'm used to it"; "I have six kids and they have all fallen off chairs and they are all okay"*).

What 'alternative' parent behaviours were identified?

Many participants felt that the decision the parent made was appropriate and was the right thing to do, and was what they would do. With further questioning they eventually mentioned alternatives such as: bring child to the door, let the doorbell ring, move cake somewhere else, put the child in a playpen. However, it was apparent that most did not feel that alternative behaviours were warranted.

What did the groups decide about responsibilities for any injuries that might occur to the child in the scenario?

Most participants attributed injury to bad luck (*"It's unavoidable, kids are very active"*; *"You can't anticipate this"*; *"It is bad luck, you would never think this could happen"*). The lack of a clear dangerous item seemed to be the determining factor for participants **not** assigning blame to the parent (*"There is nothing dangerous about a cake"*). The participants' failure to recognize the severity of injury that could result from children falling (*"It is not too serious, kids fall even walking on a flat road"*), obviously also played a role in how they allocated blame in this scenario. (This is despite the fact that the leading cause of injury hospitalization of pre-schoolers – age 1 to 4 – is falls. This clearly underlines parents' underestimation of the potential severity of the injury in these types of situations.)

Another factor that likely also contributed to their not assigning blame to the parent was their belief that *"kids are natural climbers"* and *"you can't be there constantly"* to supervise them. Along these lines, some felt that while the parent **was** responsible for deciding to leave the child in the kitchen, that did **not** make them responsible for the injury outcome per se, since there was no way to anticipate this possibility which resulted from the child behaving unpredictably.

SCENARIO 3: CHOKING – PLAYING MARBLES NEAR TODDLER

A parent is paying bills while a 14-month-old is playing on the floor with some toys. An older brother and his friend come in and ask the parent if they can play marbles in the room. The parent says yes but tells them to play at the far end of the room, away from where the baby is playing. Unknown to the boys and the parent one of the marbles rolls away and lands in front of the baby.

How typical was the parent's behaviour in the scenario?

There were two views on this issue:

1) The minority position was that marbles are inherently dangerous objects for young children, and the scenario therefore was not realistic.

2) The majority viewpoint, however, was that the scenario depicted a very natural situation, and the parent's behaviour was typical of what most parents would likely do in the situation.

Participants also often commented on the issue of expecting an older sibling to look after a younger one. This was *"common"*, with many participants admitting to having done this in the past.

Was the parent in the scenario aware that 'risk/danger' was an issue in the situation?

The parent was judged by some participants to be aware of the danger of the marbles, since the parent insisted the older children play with the hazard (the marbles) away from the area where the toddler was located. However, it was acknowledged too that the parent was *"not really thinking"* and was *"preoccupied with paying bills"*. Thus, some participants felt that it occurred to the parent that the child could get hurt, whereas others felt the parent was not sufficiently attentive to the potential risk for injury inherent in the situation due to their focus on their own goals (paying bills).

Most groups judged the parent's preoccupation with paying bills as a legitimate reason for not giving their full attention to the child; the only exception was the Chinese Immigrant group in Toronto, which felt that the parent was *"negligent"* and that parents should *"sacrifice work"* to offer children full attention.

Did the groups take the child's age into account at all in evaluating the risk in the scenario?

The groups generally felt that it was the age of the child that led to their judging the object in question as a danger. In other words, in general, marbles were not considered inherently dangerous. Rather they were judged to be dangerous (or not) depending on the age of the child in contact with them. Thus, again, the participants reasoned about risk, depending on contextual factors present in the scenario. The participants did not generally voice 'rule-based' (e.g., marbles are hazardous for any child) rationales for what constituted risk factors for child injury. The risk was defined, in part, by attributes of the child (e.g., age, sex, personality).

What statements, if any, did the groups offer to explain the parent's behaviour or to play down the issue of 'risk/danger' in the scenario?

The parent was judged as distracted and not supervising in a way to keep the child safe. Of interest is that the distraction was seen as legitimate (i.e., paying bills is something that *"must get done"*) by most groups, and it was acknowledged that this aspect of the scenario especially typified risk situations. In short, participants recognized that when parents are distracted, children are likely to be at increased risk for injury.

They also acknowledged, however, that children also get injured even when under a parent's supervision due to no fault of the parent's (*"You have to have eyes in the back of your head"*). The view was that children are *"too fast for us"* and *"even if you check on them, the minute you look the other way, there they go*! *That is when it's dangerous."* Related to this, participants also often 'lamented' the fact that parents cannot supervise children 100% of the time; this was just not judged to be a reasonable expectation. Thus, while the responses on the self-completion questionnaire indicated that participants generally felt they did have some control over the likelihood of childhood injury, the participants also seemed to believe that there were 'limits' on how much they could do given they could not be *"looking constantly"* after their child.

A few also felt that kids will 'find' things (e.g., small objects like marbles, etc.,) even while under parental supervision (i.e., no one vacuums that well).

With respect to this latter point, it is also of interest to note that some participants expressed the view that if the parent had made it clearer to the older children to be careful with the marbles because of the baby (choking hazard) this would have been better than what was done. The implication seems to be that if one is not going to carefully supervise, then pass the responsibility on to someone else who could do so.

The issue of an older sibling supervising a younger one emerged now and again in the scenarios, and the appropriateness of this was sometimes open to discussion, often because of the relative inappropriateness of these decisions in light of the apparent age of the older sibling in the scenarios. Some participants settled on 15-years-old as a cut-off age for appropriate assignment of responsibility for supervision in this particular scenario, although the basis for this age choice was not clear.

In discussions about an older sibling supervising a younger one, participants also talked about child-based attributes of the older sibling as a consideration. For example, they considered how being *"responsible"* and *"trustworthy"* were important attributes for the older sibling to have if they were to supervise a younger child. Thus, again, participants' judgments about risk and supervision issues involved a careful consideration of attributes of their own child.

In some cases though, the older sibling was simply assigned the responsibility of 'watching the younger child and alerting the parent of any sign of danger', rather than supervising.

Did the groups recognize the injury/injuries that could occur, and how quickly did they recognize these?

The group automatically recognized the choking hazard and they saw this as the sole risk for injury in this scenario.

What 'alternative' parent behaviours were identified?

No consistent alternatives were endorsed by all the groups:

- A few participants mentioned that marbles should never be allowed in the same room as a toddler
- A few others mentioned using a playpen.

It is interesting that parents did **not** say that one should pay full attention to the baby all of the time. Quite the opposite occurred, that is, the legitimacy of the bill paying suggested to parents that one had *"competing responsibilities"* (child vs. necessary errands) and this was a common fact of life, making it impossible to provide constant supervision to children. In fact, most participants very clearly expressed their belief that constant supervision of their child was not a reasonable expectation given the realities of their lives. Consistent with this, when asked what else the parent could have done, a few said that the parent could pay the bills at some other time when they did not have to watch over the baby as well. Thus, again, when considering alternatives, the participants tended to focus on options that would still have the parent achieve their immediate goal (e.g., paying bills), as opposed to considering alternatives that would have achieved child safety outcomes by altering the parent's immediate goals.

What did the groups decide about responsibilities for any injuries that might occur to the child in the scenario?

Most felt the parent would be responsible for any injuries to the child but there were some who disagreed with this 'hard line' position. Those participants who saw the injury outcome as attributable to the parent, expressed this as the parent showing *"poor judgment"*. The rest blamed injury outcome on bad luck (*"it just happened"*). The issue seemed to be that the parent had

recognized the risk and tried to act appropriately. However, they had shown *"poor judgment"* by not better supervising or putting a plan in place that would keep the child safer (e.g., using a playpen, or telling the older sibling to supervise).

They acknowledged developmental issues that the parent should have been aware of, such as, that most young children put everything in their mouth – 83% identified this danger in the self-completion questionnaire. Thus, again, there was a sensitivity to considering child factors, like child age, in evaluating the appropriateness of what the parent decided in the scenario. This type of reasoning about risk in light of contextual factors (e.g., child age, legitimacy of parent's distraction) emerged in a number of scenarios and seemed to reflect a common approach parents take to judging risk in real life situations.

The 'legitimacy' of the parent not paying full attention to the child was also a factor in judging responsibility for injury outcome. They seemed reticent to label the parent in this situation as fully responsible given the legitimacy of the distraction. Instead, those who did assign blame to the parent, labeled it as having shown *"poor judgment"*.

SCENARIO 4: BURNS – HOT COFFEE

A parent is sitting and drinking a cup of hot coffee. A 2 1/2-year-old starts whining and crying to sit on the parent's lap. The parent lets the child do so and continues to drink the hot coffee. When the child drops their toy and the parent reaches over to pick it up off the floor, the child reaches for the hot cup of coffee.

How typical was the parent's behaviour in the scenario?

Both the scenario and the parent's behaviour were judged as being typical, *"happening all the time"*, *"every morning"*, *"This happens every day, more than once a day"*. Most participants, in fact, commented that they themselves had done this repeatedly with their children i.e., drink a hot cup of coffee with the child on their lap.

Was the parent in the scenario aware that 'risk/danger' was an issue in the situation?

Most participants acknowledged that the child could be in danger **but** they did not feel this was imminent and that the parent was fully aware of the risk. Most participants seemed to believe that the parent knew that something **could** happen, but they did not expect it to. Furthermore, they seemed to feel that this was acceptable, and reflected a choice they would likely make themselves, and that many admitted to having made with their own children ("*There is always a danger but we have a right to live. Otherwise, we'd never do anything.*").

Many participants felt that the parent's immediate goal in the scenario was to get the child to stop crying, and the parent therefore acted with this in mind. The parent was not attending to the potential danger in the situation.

Did the groups take the child's age into account at all in evaluating the risk in the scenario?

Age of the child was not a topic that came up often in discussion of this scenario. The only mention of age was around the issue that 2 1/2-year-olds are sometimes unpredictable in what they will do. Because of this, some participants felt that the parent could not have anticipated that child would reach for the cup of hot coffee, and therefore should have considered that this was a possibility to worry about.

What statements, if any, did the groups offer to explain the parent's behaviour or to play down the issue of 'risk/danger' in the scenario?

The frequency with which the scenario happens in the real world seemed to be what made it acceptable to participants. Other explanations included that the parent was tired or feeling pressured (i.e., that the parent was *"thinking of their own satisfaction"*), that coffee is not inherently dangerous, and the parent had probably had the child sit on their lap many times before, and without incident, while he/she drank coffee.

Did the groups recognize the injury/injuries that could occur, and how quickly did they recognize these?

The participants immediately recognized the potential for injury due to burns from the coffee. In fact, several participants had their own stories to share regarding burns related to hot foods/beverages. Nonetheless, they still judged the risk as minimal in terms of the likelihood of it happening, **and**, they still said they would **not** forego the pleasure of a relaxing cup of coffee with their child on their lap because of that risk. Thus, again, when parents act in light of their own needs and immediate goals (enjoying a cup of coffee), they are willing to accept some degree of risk to their child's safety.

What 'alternative' parent behaviours were identified?

The most popular alternative behaviours included: moving the coffee further from the child, and letting the child pick up the toy, both of which allow the parent to continue their goal of drinking coffee. A less frequently mentioned option was to stop drinking the coffee with the child on one's lap.

What did the groups decide about responsibilities for any injuries that might occur to the child in the scenario?

For the most part, the parent was deemed responsible for any injuries to the child in this situation. The sentiment seemed to be that the parent is the only one in the scenario that can evaluate the risk, and he/she has a responsibility to do so.

There was some discussion of attributions, however, related to the typicality of this scenario. Participants felt that any injury would be due to *"bad luck"*, and that it would be hard to *"fault the parent"* if one time the child got burned, given how many times they had probably done this and nothing had happened. Thus, for some participants, when the injury outcome was an exception to a common practice it was more likely to be attributed to bad luck, even though the outcome had occurred **because** of a decision the parent made.

SCENARIO 5: DROWNING – TODDLER IN BATHTUB

A 2 1/2-year-old is playing in the bathtub. The child starts crying and carrying on for a favourite tub toy that was left upstairs. The parent tells the child to stay sitting in the tub and hurries upstairs to find the toy.

How typical was the parent's behaviour in the scenario?

The participants felt this was a common scenario but there was disagreement on how common the parent's behaviour was. Some interpreted the behaviour as *"negligence"* and others took a less extreme view and felt that it was typical of decisions parents might make.

Was the parent in the scenario aware that 'risk/danger' was an issue in the situation?

Most participants felt that the parent *"absolutely did not"* realize the child could get hurt in this situation. The consensus was that the parent's primary goal was to get the child to stop crying, and they acted accordingly to achieve this.

Did the groups take the child's age into account at all in evaluating the risk in the scenario?

Age of the child was considered a feature of the situation that influenced the degree of risk created by the parent's behaviour. Most participants felt that the child was too young to be left alone even for an instant, whereas an older child might be left briefly, depending on his/her age and other attributes such as the likelihood of following directions and staying seated.

What statements, if any, did the groups offer to explain the parent's behaviour or to play down the issue of 'risk/danger' in the scenario?

Participants felt the parent was distracted by the crying child and was not thinking in terms of safety. In essence, the parent failed to consider the danger of leaving the child alone in the tub briefly. They also felt that time may have been a consideration, the parent assuming that they would be right back and that nothing would happen in that short time period.

Did the groups recognize the injury/injuries that could occur, and how quickly did they recognize these?

The danger of drowning, the child falling and hitting his/her head, and possibly scalding himself/herself by turning on the hot water tap, all were readily mentioned as potential injuries in this situation.

What 'alternative' parent behaviours were identified?

The parent could have taken the child to go for the toy, given the child another toy (tried distraction), called someone else to get the toy from upstairs, or prepared in advance and gotten the favorite toy before the child got into the tub. Again, the predominance of alternative behaviours involved the parent doing something different to achieve their desired goal of pacifying the child, as opposed to altering their goal.

What did the groups decide about responsibilities for any injuries that might occur to the child in the scenario?

The parent was deemed completely responsible if anything were to happen in this situation. The consensus was that a parent should know not to leave a child this young alone in a tub, no matter what the circumstances. There was unanimous agreement on this point, and participants felt strongly that it was extremely dangerous for the parent to have done this. In fact, several labeled the parent's behaviour as *"negligent"*.

SCENARIO 6: MOTOR VEHICLE HAZARD – CAR SEAT

The parent of a 5 1/2-year-old is driving about 6 blocks to the local grocery store for milk. The child refuses to sit with a seat belt in place. The parent agrees to let the child sit in the back seat without a seat belt, after the child promises to stay seated and not to jump around in the car.

How typical was the parent's behaviour in the scenario?

The scenario was judged as common. Surprisingly, the parent's behaviour was similarly labeled as common **because** of specific aspects of the scenario: distance and speed. The participants felt that when parents were going a short distance, and at a slow speed, they were most likely not to insist their children wear seatbelts if the children were resisting doing so. It was also acknowledged that it was more convenient and easier for the parent not to hassle with the child about the seatbelt. Thus, even though this was a sample who scored at very high levels on the survey questions about car seat use and vehicle-related safety (see section on Questionnaire Data: Knowledge of Safety Issues Relevant to Childhood Injuries), they apparently do not apply these rules unconditionally and consistently. Rather, the extent to which they enforce these rules depends on situation-specific factors (e.g., how far are they going, how fast they will drive) and convenience issues (e.g., is the child complaining or not about wearing a seat belt).

Was the parent in the scenario aware that 'risk/danger' was an issue in the situation?

The parent was presumably aware of the danger, since he/she was insisting on the child wearing a seat belt. However, other factors obviously influenced his/her decision not to strictly enforce this rule. The participants also considered that parents may judge that the possibility of accidents is very low. In other words, an accident **could** happen but was a low probability event (*"yes, but chances are minimal"*).

Did the groups take the child's age into account at all in evaluating the risk in the scenario?

Age of the child was a factor in the sense that participants mentioned that older children can repeatedly harass parents, and even create a hazardous driving situation due to stress on the parent. Thus, it may be more sensible sometimes to give in to their wishes than to fight with them, particularly if the risk of injury is judged to be a low probability event.

What statements, if any, did the groups offer to explain the parent's behaviour or to play down the issue of 'risk/danger' in the scenario?

The parent's behaviour was explained as being rational in the sense that he/she was only driving a short distance (not in car long) and at a low speed. In addition, the parent probably assumed he/she would not get into a car accident (e.g., optimism bias), and was not therefore thinking about a car accident as a possible outcome (*"It's not going to happen to me"*). Under the tension of the moment (child complaining, need to go, etc.), the parent may have just been focused on getting to the store quickly (i.e., their goal did not consider the issue of safety).

Did the groups recognize the injury/injuries that could occur, and how quickly did they recognize these?

The possibility of car injury was readily recognized, and this was considered as potentially serious. Unlike the scenario with the cake, in which the participants minimized the potential severity of any resulting fall-related injury, there was no such minimization of potential injury in this scenario. Participants recognized that the child could die, or be disabled. There was no mention of less serious outcomes.

What 'alternative' parent behaviours were identified?

The parent could have let the child scream, tried to distract the child with a toy in the car, stopped the car until the child wore the seatbelt.

What did the groups decide about responsibilities for any injuries that might occur to the child in the scenario?

There was consensus that the parent would be fully responsible for any injury that might result.

THEMES AND RESPONSES COMMON TO ALL SCENARIOS

Effectiveness of scenarios in capturing 'typical' parent behaviour

In general, all the scenarios were judged to be common situations that parents face on a regular basis. Furthermore, both the behaviour of the child and the decision of the parent were also judged as typical and realistic. This was reflected not only in the richness of the discussion that ensued about each scenario, but also by the extent to which participants often placed themselves in the situation and the many who shared stories of how they had reacted in similar situations.

In summary, the use of scenarios proved to be a very effective approach for discussing this difficult topic with parents. Allowing participants the opportunity to share their opinions on parenting about safety, without requiring them to personalize the discussion (i.e., discuss their own decisions which may have placed their child(ren) at risk of injury), avoided the potential problem of 'social desirability' biasing responses on the role played by parents in childhood injury prevention. The clear impression one obtained from observing and listening to the groups was that participants spoke candidly about the role of parents in childhood injury prevention and that they did not feel uncomfortable at all in doing so.

Factors influencing parents' awareness of 'risk/danger' in the scenarios

A few common themes emerged across scenarios:

1) Parents are often unaware of risk because they are distracted by something that they feel requires their immediate attention – e.g., phone, doorbell, getting something they need to complete a task, etc. Similarly, if they are engaged in an activity that may be stressful (e.g., paying bills) and therefore taxing their attention, they are also unlikely to consider injury risk at all. The theme of parents *"not thinking"* in terms of the possibility of injury to their children emerged in all the group discussions.

2) Parents are sometimes aware of the risk of injury to their child, but they have a false sense of security that nothing will happen. This false sense of security may come from having taken the risk many times before as part of everyday events (e.g., child on lap while drinking a hot beverage) and also not having experienced any serious negative consequences from taking these risks. Thus, while they are aware that injury is possible, they do not believe it to be a highly likely outcome.

3) Parents are sometimes aware of the risk of injury to the child but the child is behaving in ways that make it difficult for the parent to select a non-risky course of action. The stress of a crying child seems consistently to result in parents refocusing from a long-term goal that poses no threat to the child's safety (e.g., complete child's bath under supervision, drive to store with seatbelt on), to a more immediate short-term goal that is a greater source of stress, namely, getting the child to stop carrying on. Under these circumstances, parents will sometimes 'take the risk' if this will put an immediate end to the child's crying or whining. It seemed apparent too that the stress of a child carrying on could also undermine the parent's ability to think clearly about the situation and perhaps to fully consider or recognize the inherent risk factors.

Child attributes as sources of influence on parents' risk assessment

The **age** of the child consistently influenced parents' judgments about risk of injury. Appropriately so, parents realized that certain activities (e.g., alone in the bath briefly, playing with marbles) were not inherently hazardous events. Rather, the degree of danger, and likelihood of injury risk, **depended** on the age of the child in question. What would be completely negligent for a parent to do with a 2-year-old, was likely to be a perfectly reasonable decision with a 6-year-old (e.g., leaving alone in the tub briefly).

Parents also considered the notion of ***"knowing your own child"***, having a sense of what your child is likely to do in different situations, as being critical in determining the extent to which a parent needed to worry about potential danger. Consistent with this, parents also talked about different **personality attributes**, such as *"trustworthiness"* and *"responsibility"*, as influencing their judgments about risk for their child in any given situation. These personality attributes also played a large part in their judgments about the appropriateness of having an older sibling look after a younger one.

Child gender was another dimension that influenced parents' expectations about risk-taking behaviour. About half the sample believed that boys engaged in more risk-taking that could lead to injury than girls. Furthermore, although they did not indicate that they teach boys differently than girls, parents often commented that boys were harder to teach about safety and risk avoidance than were girls.

In summary, most parents did not favour blanket endorsement of 'rules' for safety. Rather, risk depended in large part on **child attributes** (age, sex, personality attributes, physical abilities). Along these same lines, generally, parents were not willing to enforce safety rules unconditionally. The best illustration of this is seatbelt use for their child. Although knowledge of the importance of using this safety device was almost universal, parents still felt that this was something that was open to 'discussion' with their child — depending on how far they were going, how fast they would be driving, and how much resistance the child was putting up about wearing the safety device!

Explanations given for parents' risky behaviour

Generally, there were two types of explanations:

1) Those that reflected a belief that the parent had not recognized the risk involved
2) Those that felt the parent was aware of the risk but proceeded anyway with the behaviour.

When the parent was judged as being **unaware** of the risk, it was typically because the parent was presumed to be distracted with some other pressing goal, and to act impulsively to achieve the goal (e.g., answer phone or doorbell).

When the parent recognized the risk and proceeded anyway with a behaviour that placed their child at risk of personal injury, the participants explained the parent's behaviour in a number of ways, including:

- more convenient to do what the parent did
- less stressful for the parent than doing otherwise
- false sense of security that nothing would really happen
- beliefs that their child was 'different' from other children their age and therefore there was no risk of injury
- a belief that the child would be left unattended for too short a time to get hurt.

In all scenarios, except for the one about the 'cake', the participants quickly recognized the key injury threat. For the cake scenario, although they recognized the danger of falling, they did not interpret this as having 'serious injury' potential. The most common remarks were along the lines of:

Recognition of potential injuries

"Children (including mine) fall all the time" and *"Nothing serious happens"* (i.e., the belief that falling is just a natural part of being a child).

Participants had little difficulty identifying alternative behaviours that the parent in each situation could have adopted. Interestingly, the majority of the alternatives suggested had the parent obtaining

Specification of 'alternative' parent behaviours

their original goal (e.g., answering the phone or the doorbell) rather than a modification in the parent's goal (e.g., letting the phone ring).

When these results are considered in light of the types of explanations participants gave for parents' behaviours, it seems that preoccupation with their own immediate goals (e.g., paying bills, getting to the store) often results in lack of recognition of the potential dangers to the child emanating from the behavioural choices made by parents.

It is noteworthy too that parents seldom mentioned that they should pay full attention to the child all of the time, as an alternative behaviour that would keep the child safe. In fact, the participants were clear in emphasizing that they did not see constant supervision of their child as a reasonable expectation. A few suggested the use of safety devices such as a playpen.

Factors influencing judgments about responsibility for injury

1) Child attributes

If the age of the child or the child's personality, for example, implied certain things about how the child was likely to behave in the situation (e.g., *"toddlers are naturally curious"*), then the parent was held responsible for placing the child at risk by not giving these likely events due consideration.

2) Extent to which the cause of the injury was an obvious danger

For sources of injury that would be inherently dangerous, such as poison, participants judged parents fully responsible for the injury, as compared to when sources of danger could not have been anticipated as such (e.g., cake on the counter).

3) Extent to which the injury outcome was likely

If the injury occurs infrequently (i.e., only once out of every 200 times they do something such as let their child sit on their lap while they drink a hot beverage), then participants were inclined to interpret the parent's behaviour as showing 'poor judgment', or even being 'bad luck', rather than assigning blame to the parent.

4) The judged appropriateness of the parent's level of supervision

If the parent was to be distracted in a 'legitimate' way (e.g., paying bills) then participants were less likely to hold the parent responsible for injury to the child. By contrast, if the distraction was considered less legitimate and the child was left unsupervised or in a potentially dangerous situation as a result (e.g., a desire to answer the phone), then participants were more likely to assign blame for the injury to the parent.

DISCUSSION GROUP RESULTS

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BELIEFS ABOUT THE BEST WAY TO TEACH CHILDREN ABOUT SAFETY

The general consensus was that one needs to be repetitive with children (*"preach over and over"*), and to emphasize the potential injury consequences, in order for them to learn about safety. An appreciation of the need to use simple language that children can understand was also mentioned by participants. Some parents supported the use of "keywords" such as 'danger' to teach children about potential injury sources.

Some parents tried to simulate the potential injury outcome of certain situations, and model the child's behaviour, prior to the child attempting the act. As an example of this approach, some parents went as far as to hold the child's hand over a hot stove to communicate the inherent danger and possible injury that could result from the child touching the stove.

The importance of setting a good example was mentioned by some (*"follow what you preach"*) but, surprisingly, this point was not stressed as particularly significant, and some groups did not mention it at all. Along these same lines, participants talked about the educational role played by older siblings, but this was discussed in terms of older siblings' injuries illustrating for younger siblings to avoid risk-taking. There was little mention of older siblings actually tutoring younger ones in safety issues per se. In fact, some older siblings were given roles as "spies" on behalf of the parent (i.e., *"watch him/her"*) rather than being in charge of supervising the activities of the younger child.

Some participants also felt that discipline in response to risk-taking was a means by which children learned about safety (*"You have to use a reasonable amount of discipline to teach children not to touch"*). The consensus seemed to be that harsher discipline made the point more salient for children. For example, although the participants typically mentioned they did not believe in physical discipline, several mentioned that they had slapped their child on the bottom when he/she ran into the street.

IMPACT OF INJURY SEVERITY ON TEACHING ABOUT SAFETY

The issue of injury severity was also discussed in light of teaching children about safety and risk. Potentially severe injury outcomes were judged by parents as requiring more severe forms of discipline to teach children about dangers. Participants also felt that, for some children (though not all), an injury experience resulted in them avoiding the risk in the future (*"Pain is more memorable than words"*), and that the more severe (*"painful"*) the injury, the more the avoidance of risk learned by the child.

IMPACT OF CHILDREN'S AGE ON TEACHING ABOUT SAFETY

It was generally acknowledged that the child's age influences how one teaches children about safety, and also what one expects children to learn and remember based on efforts to teach them about safety. Older children are judged more likely to remember what they have been told, thereby requiring less repetition of information than younger children. Also, it was expected that one has to

be more concrete in explaining about safety to younger children. The fact that one can reason more with older children, as opposed to just stating rules for safety, was also mentioned as an issue influencing how one teaches children about safety.

It was also suggested that age of the child influences **when** one teaches children about safety. Younger children need to be taught about risk when they are about to, or are, engaged in risk-taking that could lead to injury. Older children, however, can learn even from anticipatory guidance about risk-taking and injury risk. There was extensive discussion on the issue of whether anticipatory teaching would, in fact, lead to more risk-taking by virtue of "giving children the idea". There was no consensus on this issue.

It was also evident that some parents did not have a good idea of the cognitive and physical development of their child. One example was the mother who expected her 9-month-old not to follow her down the stairs because she told her to stay put.

IMPACT OF CHILD'S GENDER ON TEACHING ABOUT SAFETY

Even though half the participants were of the opinion that boys engage in more risk-taking than girls (see section on Questionnaire Results), participants nonetheless felt that boys and girls should be taught about safety in the same way. They did not see that more risk-taking by boys should have implications for how they teach children about safety. Related to this, some participants were of the opinion that *"Boys are harder to teach. Girls are more understanding."* However, they were unable to articulate the implications of this belief on how they actually taught boys, as compared to girls, about safety. In general, the participants did not seem aware of any need to teach boys and girls differently about safety.

Participants acknowledged that parents often react differently to boys and girls when they get hurt, with more *"cuddling"* of girls and more *"laughing off"* of injuries to boys. Participants felt that this kind of differential reaction to children depending on their gender probably impacts on risk- taking behaviours. However, they were not able to formalize how this indirect teaching might impact on children's learning about injury risk.

In the context of questioning about whether they taught boys and girls differently, the issue of child personality was raised in many groups. Participants commented on how, even within girl (or boy) groups, there was great variability in risk-taking behaviour and the need to teach about safety. Thus, although child gender was acknowledged as an important factor with respect to risk-taking, the individual personality attributes were also seen as critical both with respect to risk-taking and the need for education about safety issues.

MATERIALS FOR TEACHING CHILDREN ABOUT SAFETY

Participants felt a number of different tools were available to help children learn about safety (TV shows, books, education at school). There was no indication that they felt children needed more sources of information to expose them to safety issues.

SOURCES OF INFORMATION USED BY PARENTS

With respect to sources of information they used in learning about child safety issues, the primary sources mentioned were: family, other parents, written materials such as books and pamphlets (e.g., via public health), shows on television, common sense, and family doctor. Some participants expressed a need for pamphlets to be translated into a greater variety of languages. The Aboriginal groups mentioned the problem of illiteracy as a barrier to parents gaining access to information about child safety.

There was not a clear consensus on what additional information is needed, or even that additional information is needed. Some participants were of the opinion that a lot of safety involving children was "common sense", and that one did not have to formally be taught or made aware of this type of information (i.e., having children was tantamount to becoming aware of safety issues).

ENVIRONMENTAL RISK ISSUES

Throughout the discussion about the various scenarios, most parents clearly indicated their awareness and responsibility for reducing environmental risks around their children. This was reflected in comments like *"put the child in a playpen"*, and high awareness and usage of safety devices.

In this light, parents also made comments that indicated their knowledge that environmental risks were age-related (i.e., some that are of risk to toddlers are not to older children), or resulted from a child's interaction with the environment rather than something that is inherently dangerous in its own right (e.g., a cake).

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