

Assessment of a Child Passenger Safety Program

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ABSTRACT

Despite significant increases in child safety seat use, many children are still not properly restrained. The Saskatchewan model for addressing child passenger safety consists primarily of targeted education of parents and caregivers through the training of certified Child Passenger Safety Technicians; child passenger safety clinics; distribution of educational resources supplemented with some distribution of car seats; and enforcement of child restraint laws. This assessment aimed to determine whether the Saskatchewan model compares to international best-practices; the program increases use in general, and specifically, proper use of child passenger restraints; the demographics of parents and caregivers involved in interventions match the demographics of the Saskatchewan population; there are segments of the Saskatchewan population being missed; and there is a match between the parents and caregivers targeted by the program and those of the children injured in motor vehicle collisions in Saskatchewan. These research questions were addressed via a systematic review; a child passenger roadside survey and parking lot inspections; a child passenger safety clinic client survey; and secondary analysis of the Saskatchewan Traffic Accident Information System (TAIS) data. Overall, child passenger safety seat use in Saskatchewan is high and in general, seats are used correctly. An exception to this is the low use of booster seats among 5 to 9 year old children. Improper restraint use is decreasing among children injured in motor vehicle crashes. Low socioeconomic status families, Aboriginal and immigrant families warrant focused efforts in order to be reached. Specific recommendations are made.

RÉSUMÉ

INTRODUCTION

Motor vehicle crashes are the leading cause of death and injury among Canadian children younger than 14 years of age [1]. According to Transport Canada, 3,500 children are injured and 61 children are killed each year in motor vehicle crashes [2]. The Canadian Paediatric Society and the American Academy of Paediatrics recommend appropriate child safety seat use to reduce injury risk [3, 4]. Despite significant increases in child safety seat use over the past 25 years, many children are still not properly restrained. Appropriate use of child safety seats has been shown to reduce the risk of death and serious injury by roughly 70 percent [5], however, it has been estimated that as many as one-third of Canadian children are not properly restrained [6, 7].

Injury is the leading cause of death among children ages 0 to 9 years in Saskatchewan, excluding perinatal illness and congenital issues [8]. Motor vehicle crashes are the leading cause of injury resulting in these childhood deaths. It is also the second leading cause of hospitalization among children in Saskatchewan, accounting for 18.2 percent. Among ages 0 to 4 years specifically, motor vehicle crashes tie with fire and flame-related injury as the second leading cause of death after falls [8].

Furthermore, in 2004 Saskatchewan had the third highest per capita injury-associated health care costs in Canada [9]. These unintentional injuries, including those resulting from motor vehicle crashes, totalled \$629 million. Injuries claimed the lives of 399 people living in Saskatchewan, left 192 people with permanent disability, and a further 2,348 people with permanent partial disability. Of these, transport related incidents were the leading cause of death per capita (12.9 per 100,000) and were responsible for 13 percent of injury hospitalizations, nine percent of all emergency department visits, and 13 percent of permanent disability, costing the health care system approximately \$147 million.

The Saskatchewan Model

The model for addressing child passenger safety within Saskatchewan consists primarily of education – the education of parents and caregivers through the training of certified Child Passenger Safety Technicians, child passenger safety clinics, and the distribution of resources – supplemented with some distribution of car seats to particular high risk populations through community grants, and the enforcement of child restraint laws.

Critical partners in child passenger safety within Saskatchewan include Saskatchewan Government Insurance (SGI), the Ministry of Health Acquired Brain Injury (ABI) Partnership Project, the Saskatchewan Prevention Institute, St. John Ambulance, and community-based partners such as emergency services. Each organization plays a key role in child passenger safety, such as funding, expertise, personnel, and resources. Both the Saskatchewan Safety Council and the Transportation Centre at the University of Saskatchewan have also played key roles in the past.

The Community Liaison position was located at the Saskatchewan Safety Council from July 2000 to March 2009, at which time it transitioned to the Saskatchewan Prevention Institute as the Child Traffic Safety Coordinator. While housed at the Safety Council, the Community Liaison position addressed child passenger safety by: chairing the *Provincial Interagency Committee on Child Passenger Safety*; offering local contacts guidance to plan clinics; maintaining a database of the

clinics held; maintaining a technical knowledge of child restraints and serving as a provincial resource on child passenger safety; maintaining a relationship with the Saskatchewan Prevention Institute on their initiatives to develop a network of trained child restraint community resource people and distribute information on new initiatives to the child passenger network in Saskatchewan; maintaining a relationship with St. John Ambulance on the ongoing progress of the National Child Restraint Program to accommodate the requests for technician and instructor training courses; and providing communication to Child Passenger Safety Technicians through the Saskatchewan Prevention Institute's Child Passenger Safety Connection.

The CARE (Children Are Restrained Every Ride) program was also offered by the Saskatchewan Safety Council for three years, ending in February of 2009 [10]. This program allowed caregivers to rent a seat for two weeks for a \$20 fee. Over the three year period, approximately 100 loans were made [11].

Today, the Child Passenger Safety Program within Saskatchewan consists of the Child Traffic Safety Coordinator funded through SGI, and the Child Injury Prevention Program Coordinator funded by the ABI Partnership Project. SGI provides child passenger safety materials for public clinics; promotes public clinics via radio announcements and newspaper advertisements; develops and distributes resources; and funds the program.

The Saskatchewan Prevention Institute began its focus on Child Passenger Safety Training in 1990. In 1997, the Saskatchewan Prevention Institute received funding from Health Canada and led a national advisory committee in developing the first Canadian curriculum on Child Passenger Safety. This work was the basis of the National Child Passenger Safety Technician Training program. The Institute also received funding from the ABI Partnership Project to continue its work in child injury prevention in 1997 [12]. Use of the new National Child Passenger Safety Technician Training program was established in 2003. The Saskatchewan Prevention Institute encompasses child passenger safety, bicycle safety, and general injury prevention. It organizes the Technician training sessions; produces continuing education materials such as e-mail updates (formerly newsletters) and annual Technician training updates; develops and distributes resources; and organizes public clinics. Child passenger safety information handouts and loaner videos are currently available through the Saskatchewan Prevention Institute.

Staff at the Saskatoon Prevention Institute is also trained in car seating for special needs children, and the Institute has hosted two training sessions by Dr. Marilyn Bull from the Riley Hospital for Children, Indianapolis, Indiana. The Saskatchewan Prevention Institute is currently working with the Department of Paediatric Orthopaedics for loaner seats while children are in casts following surgery. These loaner seats are currently available via the Saskatchewan Cerebral Palsy Association and the Kinsmen Children's Centre in Saskatoon, and the Wascana Rehabilitation Centre in Regina.

First Nations and Inuit Health (FNIH) Branch of Health Canada partners with the Saskatchewan Prevention Institute to offer child passenger safety Technician mentoring and updating for several First Nations communities. Child passenger car seats are also provided to each of these Technicians to take back to their communities.

The Child Traffic Safety Coordinator from the Saskatchewan Prevention Institute works regularly with municipal police forces and SGI in their Selective Traffic Enforcement Program to provide the expertise in the area of child passenger safety.

The Child Passenger Safety Technician training is currently offered as a three-day in-person training course by the Saskatchewan Prevention Institute and SGI, with both classroom learning and practical training. A written exam is administered at the end of the training period, and Technicians are required to inspect at least ten child seats each year in order to retain their certifications. There are currently 170 certified Technicians, including instructors, who support communities in reducing child safety seat misuse by educating parents and caregivers about the best evidence for appropriate child safety seat use. This service may be in the form of a booked appointment, a drop-in clinic, or contact by telephone. Community-based and other critical partners combine efforts to host drive-through infant and child car seat clinics. Over the past five years, 11,289 child safety seats have been checked.

Saskatchewan Child Passenger Safety Program Assessment Questions

This study is the assessment of the Saskatchewan Child Passenger Safety Program, addressing the following questions:

- Q1 How does the Saskatchewan model compare to international best-practices?
- Q2 Does the Saskatchewan model increase usage of child passenger restraints?
- Q3 Does the Saskatchewan model increase PROPER usage of child passenger restraints (to be assessed with both increased knowledge of proper usage AND improved behaviour)?
- Q4 Do the demographics of caregivers involved in Saskatchewan interventions match the demographics of the Saskatchewan population? Are there segments of the population being missed?
- Q5 Is there a match between the caregivers targeted by the Saskatchewan model, and the parents/guardians of the children injured in motor vehicle collisions? If not, what other method (from the international best-practice review) could be used to target these parents/guardians?

METHODS

To answer the project evaluation questions, six discrete methodologies were used:

- A. Systematic Review of International Best-Practices for Improving Child Passenger Safety
- B. Saskatchewan Child Passenger Roadside Survey
- C. Secondary Data Analysis of Saskatchewan Traffic Accident information System (TAIS) data
- D. Saskatchewan Child Passenger Parking Lot Inspection
- E. Saskatchewan Child Passenger Safety Clinic Client Survey

The results of this assessment will be used to provide guidance for improving the Saskatchewan model, and through these improvements, reducing the number and severity of child passenger injuries in Saskatchewan.

Q1. THE SASKATCHEWAN MODEL COMPARED TO INTERNATIONAL BEST-PRACTICES

The Saskatchewan model for child passenger safety is based primarily upon the education of the parents and caregivers of young children. This education is provided by certified Child Passenger Safety Technicians via appointment, drop-in clinics, and telephone; along with resources (printed/video) available from the Saskatchewan Prevention Institute and SGI. Secondary to education, some distribution of free or discounted seats is offered through community grants provided by the ABI Partnership Project and SGI, and work by First Nations and Inuit Health (FNIH) in conjunction with the Saskatchewan Prevention Institute and SGI.

The systematic review of the literature (Method A) found that the available evidence focuses on specific interventions with short-term outcomes, rather than larger, long-term programming [13-22]. For example, the ability of a home safety visit targeted to families attending a Head Start preschool to increase booster seat use from baseline to 3-months post visit. No evidence was found evaluating the use of certified Child Passenger Safety Technicians in delivering education, or the evaluation of Technician training.

The systematic review confirmed that education alone is not effective in enhancing child passenger safety. A multifaceted approach that includes education coupled with other interventions was demonstrated most likely to be effective in promoting child passenger safety. This approach emphasizes a systems approach to improving road safety and questions an over-reliance on education. Specifically, strong evidence was found supporting the effectiveness of education when coupled with either incentive/distribution programs or enforcement campaigns (Figures 1 – 3). All meta-analysis results consistently demonstrated that education and distribution of child passenger safety seats is an effective measure to increase child safety seat use. A similar systematic review evaluating education-only interventions for child passenger safety reached similar conclusions. Zaza et al., 2001 found strong evidence for safety seat legislation and distribution coupled with education programs, sufficient evidence for community-wide information coupled with enhanced education campaigns, and economic incentives coupled with education programs. Insufficient evidence was found for education-only [23].

Q2 & 3. USE AND PROPER USE OF CHILD PASSENGER RESTRAINTS

Child passenger restraint use has been measured in the Transport Canada roadside surveys in 1997, 2006, and most recently in 2010 (Method B) [24-26]. Of these three surveys, only the 2010 survey reported the proportion of Saskatchewan child passengers to be unrestrained, at 8.7 percent. Overall, the national proportions of unrestrained children have decreased since 1997 from 12.9 percent to 5.4 percent in 2006 and 4.2 percent in 2010. According to SGI TAIS data, among children sustaining mild or moderate injury in a motor vehicle crash, the proportion of improper restraint use, which includes non-use, was observed to decrease between 1988 and 2010 for both age groups: 0 to 4 years and 5 to 9 years (Method C). Furthermore, the use of rear-facing seats was seen to increase in recent years among the 0 to 4 year olds, along with an increase in the use of booster seats among the 5 to 9 year olds. Therefore, we conclude that the Saskatchewan model is associated with a decrease in the number of children not restrained.

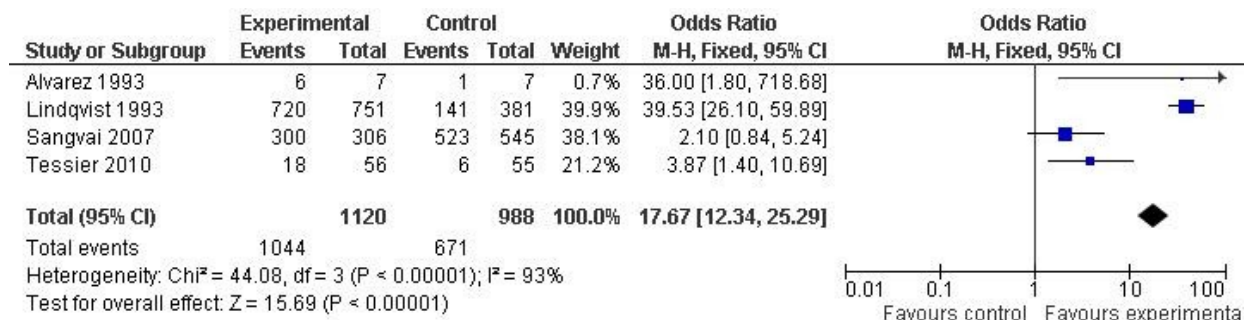


Figure 1 – Education & Distribution Meta-Analysis: Infant Seat Use

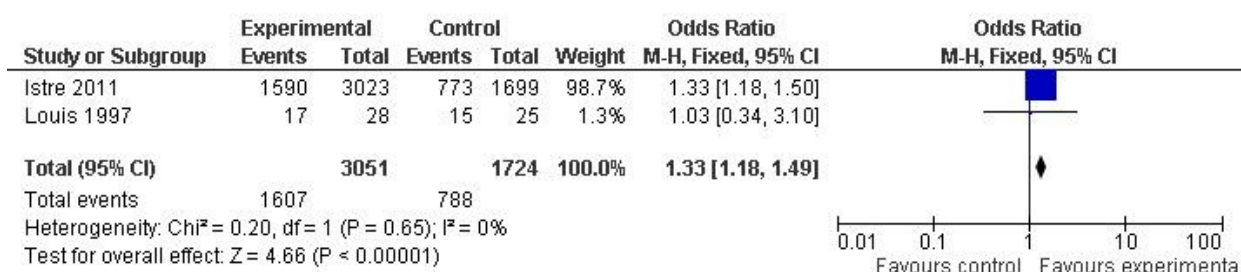


Figure 2 – Education & Distribution Meta-Analysis: Forward Facing Seat Use

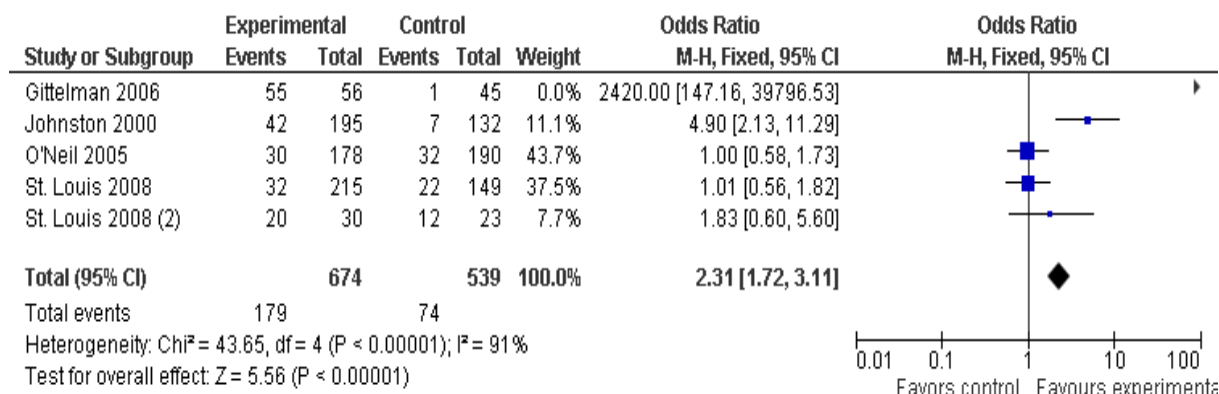


Figure 3 – Education & Distribution Meta-Analysis: Booster Seat Use

Parent and Caregiver Behaviour with Child Safety Seat Use

The rate of correct use of child passenger safety seats in Saskatchewan has continuously declined since the 1997 Transport Canada survey was conducted (Table 1, Method B). At that time, proper use of proper restraints was estimated to be 81.2 percent for all age groups in Saskatchewan [24]. Since then, the definitions of both 'proper use' and 'appropriate restraint' have changed, and the provincial rate has decreased significantly to a weighted estimate of 69.7 percent in 2006 [25]. Currently, the rate is estimated to be 53.5 percent among all age groups in Saskatchewan [26].

Province	1997	2006	2010
SK	81.2%	69.7%	53.5%
MB	81.3%	55.0%	57.2%
AB	77.2%	64.0%	71.2%
BC	80.6%	56.3%	68.2%

Table 1: Transport Canada roadside surveys of overall correct child passenger restraint use for 1997 (Transport Canada, 1998), 2006 (Snowdon et al., 2006), and 2010 (Snowdon et al., 2010) in Western Canada: SK, MB, AB and BC.

It is important to recognize that although the Transport Canada roadside surveys typically use students trained to estimate child age and to identify use of the right seat for that child, and the correct use of that seat, in Saskatchewan, the 2010 survey was conducted by certified Child Passenger Safety Technicians. Working with contacts at the Saskatchewan Prevention Institute and SGI, technicians and trained SGI summer students undertook the roadside data collection. The lower rates of correct child passenger restraint use observed in Saskatchewan during the 2010 survey may in part be due to a more critical eye than was used in the other provinces.

Another key point affecting the measurement of correct child passenger restraint use in Saskatchewan is the absence of a booster seat law in this province. Although legally correct, the use of seat belts is generally no longer deemed appropriate use among children over 40lbs until they have attained one of the following: 80lbs in weight; 4'9" in height; 9 years of age. British Columbia adopted its booster seat legislation in 2008 with Manitoba following in 2012, while Saskatchewan and Alberta continue to have no provincial booster seat laws.

The SGI TAIS data for the period 1988 to 2010, where proper use is determined by the attending police officer at the crash site, demonstrates a decrease in inappropriate restraint use among children injured or killed in a motor vehicle crash (Method C). While there is an overall decrease in improper use, minor and moderate injury to 0 to 4 year olds demonstrates a higher rate of decline during the program period, visualized by a shift in slope in Figure 1. However, small numbers limit the ability to support this positive trend through statistical analysis.

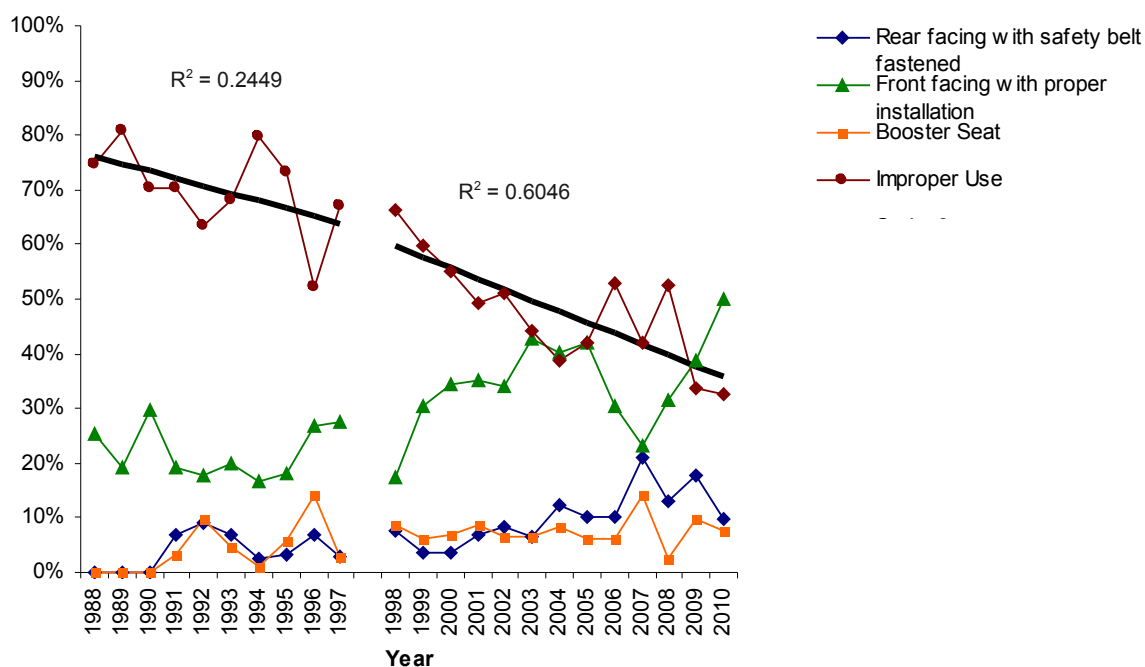


Figure 4: Proportion of minor and moderate motor vehicle crash-related injuries by year and type of child passenger restraint used, ages 0-4 years, SK, TAIS 1988-2010.

A limitation of the TAIS data is that it only captures children who were injured in a crash. As restraint use is intended to prevent injury, it is more likely that proper use was seen among children who were in a motor vehicle crash who did not sustain an injury.

Parent and Caregiver Knowledge and Experience with Child Safety Seat Use

The Parking Lot Inspection conducted for this assessment only recruited a small sample of 17 drivers with child passengers in rural Saskatchewan (Method D). The majority of participants had not attended a child passenger safety clinic. None of these participants were able to identify all of the criteria for moving a child from a rear-facing infant seat to a forward-facing seat. Less than half of the drivers with forward-facing seats (5 of 11) had correctly anchored the tether strap for their forward-facing child seat. A Child Passenger Technician involved in this inspection commented that most parents and caregivers seek child safety seat information from unreliable online sources. One mother suggested that there should be an educational program to guide parents and caregivers about best evidence practices of child safety seat use.

Among the participants with rear-facing seats, the Universal Anchorage System (UAS) routing was an issue as well as the tightness of UAS or seat belts used to install the seat. Fewer than half (3 of 8) of the infants had their harnesses sufficiently snug, and 5 did not have the chest clip in the correct location. Among the 11 participants with forward-facing seats, almost all were correctly routed with the UAS or seat belts, but not all were sufficiently tight. All harnesses were fastened although one was not properly positioned over the shoulders. Most of the harnesses were not sufficiently snug and more than half of the chest clips were not in the correct position. Fewer than half (5 of 11) of the tether straps were correctly anchored to the vehicle.

There has been one recent telephone survey by the Saskatoon Prevention Institute, and two student-lead evaluations of Child Passenger Safety Clinics looking at the change in knowledge of the clinic participants. The Saskatchewan Prevention Institute conducted a post-clinic telephone survey in 2004 to measure the perceived usefulness and change in knowledge and behaviour one year after attending a car seat clinic [27]. A total of 150 participants reported a perceived increase in knowledge from an average score of 6.03 out of 10 at pre-clinic to 8.58 at post-clinic; with 62 percent reporting post-clinic that they had changed how they install their child safety seat in the vehicle and 43 percent how they secure their child in the seat.

Wallace, 2006 evaluated clinics held by the Saskatoon Public Health Services [28], while Trinder, 2007 evaluated child passenger safety clinics encompassing all of Saskatchewan [29]. Both studies employed a pre-post survey design, although Trinder allowed respondents to answer “I do not know” on the true/false knowledge questions, which had not been available on Wallace’s survey. Both studies found that participants reported a high self-perceived knowledge of child passenger safety following their clinic experience, yet actual knowledge remained low for some specific elements such as knowing if the seat was installed sufficiently tight.

The Child Passenger Safety Clinic Client Survey conducted for this assessment found that this had been the first clinic experience for three-quarters of participants (Method E). Seventy-seven percent of participants attending for rear-facing seats self-rated their child passenger safety knowledge at 8 out of 10 or higher. This proportion dropped to 61 percent for participants attending for forward-facing seats, and 54 percent for those with booster seats.

Basic installation and harnessing knowledge was higher among respondents attending for a rear-facing seat than for a forward-facing seat. Knowledge regarding how to determine if a seat was installed tightly enough was higher among respondents attending for a rear-facing seat (72%) than forward-facing seats (59%). Knowledge regarding which harness slot to use was higher for rear-facing seats (80%) than forward-facing seats (49%). Fewer than 70 percent of respondents knew how to test whether the harness straps were tight enough for both seat types. Knowledge regarding the placement of the chest clip was high for both rear-facing and forward-facing seats. Sixty percent of respondents knew when to move a child from a rear-facing seat to a forward-facing seat; while 67 percent knew when to move a child from a booster seat to the seat belt.

Q4. MATCH BETWEEN DEMOGRAPHICS OF PARENTS AND CARE-GIVERS INVOLVED IN INTERVENTIONS AND THE DEMOGRAPHICS OF THE SASKATCHEWAN POPULATION; SEGMENTS OF THE SASKATCHEWAN POPULATION BEING MISSED

The Saskatchewan Child Passenger Safety program targets the parents and caregivers of children between the ages of 0 and 4 years. FNIH has partnered with the Saskatchewan Prevention Institute to provide child passenger safety Technician mentoring and updating in First Nations communities. Two child passenger car seats are also provided to each of these Technicians to take back to their communities.

According to the 2006 Census data for Saskatchewan [30]:

- There were approximately 57,500 children between the ages of 0 and 4 years old; and 61,070 children ages 5 to 9 years.
- 94.0% of the population spoke English only in the home, 4.0% French, and 4.9% spoke an “other” language.
- 14.9% of the population were Aboriginal, and 5.0% were immigrants.
- 16.8% of the immigrant population arrived in Saskatchewan after the year 2000.
- 17.1% of residents aged 15 to 54 years had a University education, with a further 14.6% with a College education.
- 16.7% of Census Families were lone-parent families
- The median annual income of all “couple household with children” was \$76,494; and of lone-parent families was \$29,547.

From the Child Passenger Clinic Client Survey (Method E), respondents of the survey were:

- Mothers (85.0%); fathers (8.6%); and others including aunt, foster parents and Program Supervisor for clients.
- 94.3% were in married or common-law relationships.
- Between 30-39 years of age (53.6%) and 20-29 years (35.7%).
- Caucasian (92.1%) and self-identified Aboriginal (4.3%), with the remainder Asian, Ukrainian or Multiple.
- Recent Immigrants since 2001 accounted for 3.5 percent.
- English was spoken in the home among 97.9% with the remainder speaking German, Hindi and Cree.
- Highly educated, with 79.4% with Apprentice, Trades, College or University.
- High income levels, with 75.7% with an annual income of \$60,000 or more.

Comparing the survey demographics with the 2006 Census for Saskatchewan (Table 2), it appears that the lower socioeconomic status population, consisting of lower education levels, lower income and single parents, may not be accessing the services of the Child Passenger Safety Clinics to the same degree as their wealthier, more educated married counterparts. Further, although the Aboriginal community makes up 14.9 percent of the population, only four percent of the Child Passenger Safety Clinic Client survey self-identified as Aboriginal. Recent immigrants may also be a vulnerable population with regard to child passenger safety, however the proportion of the Saskatchewan population (5.0%) and of the proportion completing the survey (3.5%) are very similar.

2006 Census	Clinic Client Survey
94.0% English	97.9% English
14.9% Aboriginal	4.3% Aboriginal
5.0% Immigrant	3.5% Immigrant
31.7% High Education	79.4% High Education
16.7% Single Parents	5.7% Single Parents

Table 2: Comparison of 2006 Census population in Saskatchewan with the participants of the Child Passenger Safety Clinic Client Survey.

Q5. MATCH BETWEEN THE PARENTS AND CAREGIVERS TARGETED BY THE PROGRAM AND THOSE OF THE CHILDREN INJURED IN MOTOR VEHICLE COLLISIONS

The SGI TAIS data analysis revealed that the drivers involved in crashes resulting in child passenger injury or death are predominantly females aged 25 to 44 years; while the drivers of single vehicle crashes causing child passenger injury or death are predominantly younger females (Method C). No other demographic or socioeconomic information pertaining to these drivers is available.

Contributing factors to single vehicle crashes causing child passenger injury or death include speed, inattentive driving, and impaired driving. Looking at single vehicle crashes only, female drivers aged 25 to 44 years are predominantly involved in speed-related crashes causing child passenger injury or death. Younger male drivers aged 16 to 34 years and females aged 16 to 44 are predominantly involved in inattentive-related crashes; and young male drivers aged 16 to 24 years are predominantly involved in impaired-related crashes causing child passenger injury or death.

Regarding the roadways where child passengers are injured in conjunction with these three contributing factors, the highest proportion of single vehicle speed-related crashes causing child passenger injury or death occurred on rural roads. The highest proportion of impaired driving-related crashes causing child passenger injury or death occurred on rural/urban highways; and the highest proportion of inattentive-related crashes causing child passenger injury or death occurred on rural/urban highways.

The systematic review of the literature did not reveal any specific target populations for child passenger safety programming, nor did it identify methods for targeting specific populations where risk factors are specifically associated with child passenger injury and death (Method A).

DISCUSSION

The Saskatchewan Child Passenger Safety Program is a valuable program with a trained cadre of well over 100 passionate volunteers. Through the Child Passenger Safety Clinics, technicians work with parents and caregivers of young children, educating them on the importance of child passenger safety and providing practical instruction for the installation of safety seats and their

use. This model is also supplemented with limited distribution of free or discounted child safety seats available through community grants and a partnership with First Nations and Inuit Health, Health Canada. Overall, child passenger safety seat use in Saskatchewan is high and, in general, seats are used correctly, protecting children from motor vehicle crash injuries. An exception to this is the low use of booster seats among 5 to 9 year old children. Among those children who are injured in motor vehicle crashes, improper child passenger restraint use is decreasing. Some segments of the target demographic warrant focused efforts in order to be reached, and include low socioeconomic status families, Aboriginal and new immigrant families.

There are several potential methods that can be used for targeting the Child Passenger Safety Program to the parents and guardians of young children in Saskatchewan. To reach new parents, a closer association could be established with hospitals and Public Health units. To reach the Aboriginal or new immigrant population, partnering with one or more Aboriginal-serving and Immigrant-serving organizations such as Friendship Centres will support the adaptation of the Child Passenger Safety Program in culturally appropriate and language-specific manners.

The current Saskatchewan Child Passenger Safety program model focuses on technician training, parent and caregiver education with limited car seat distribution through the community grants program as well as through First Nations and Inuit Health. The systematic review results provide strong evidence that education coupled with distribution or with enforcement is considered best practices to increase child occupant safety in communities. Insufficient evidence was found for education-only programs.

For the distribution of discounted or free safety seats to low socioeconomic families, a partnership could be established with an existing aligned NGO, such as the Saskatchewan Abilities Council. This could entail conducting an environmental scan to determine where current loaner programs are operating, and how to combine resources to fill-in the currently disparate coverage in Saskatchewan.

According to the conclusions from our systematic review, the following specific recommendations are made to further enhance child passenger safety through continued and enhanced education strategies including reliable online child passenger safety information, coupled with equipment incentive and distribution, as well as enforcement of current child passenger restraint laws and the promotion and enactment of child booster seat laws.

Education

- Use social media to the fullest. Credible information can be disseminated via social media: YouTube channel, Facebook, Twitter and LinkedIn. The Saskatchewan Prevention Institute has accounts with all four of these social media platforms.
- Enlist the support of 'Mommy Bloggers'. The influence of Mommy Bloggers should not be underestimated in their ability to influence behaviour among their peers. This is a credible audience for spreading child passenger safety messages.
- Develop web-based/DVD instructional videos, e.g. Step 1, 2, 3 on how to install a car seat; how to adjust the straps securing your child, etc.
- Increase police education. The Child Safety Link located in the Maritimes has Child Passenger Safety Information and Resources for Enforcement Personnel.
- Review the upcoming Child Passenger Safety Tool Box for its potential to support or enhance Child Passenger Safety Technician training.

Equipment Incentive/Distribution

- Formalize distribution programs. A provincially co-ordinated program targeted at low socioeconomic families, Aboriginal and recent Immigrant families for the distribution of discounted or free child safety seats, should be considered.
- Use child seats that will serve the passenger safety needs of the child over several years, e.g. convertible (rear to forward-facing), or combination (forward-facing to booster seats), or 3-in-1 seats.
- Partner with the Saskatchewan Abilities Council, who has an established Special Needs Equipment Loan Program.
- Partner with Aboriginal organizations such as Friendship Centres.
- Partner with Immigrant organizations providing services to new immigrants to Saskatchewan.

Enforcement / Enactment

- Increase enforcement and child passenger safety blitzes. Strengthen partnerships with the RCMP and municipal police forces to increase the profile of child passenger safety and the enforcement of child passenger safety seat use.
- Support the enactment of legislation of booster seat use for children ages 5 to 9 years of age. Political lobbying is required to support a provincial politician. Other provinces have typically passed this law with little adversity when backed by a legislative champion.

CONCLUSIONS

This assessment of the Saskatchewan Child Passenger Safety Program found that the current state of use and proper child passenger restraint use is difficult to assess; the road side and parking lots surveys as well as the TAIS data were insufficient to completely describe current child passenger safety practices. The Child Passenger Safety Clinic Client Survey was able to provide insight into the clinic experience and the need for continued child passenger safety education. International best-practices for improving child passenger safety support education in combination with other strategies and incentives.

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