

# Child Passenger Safety in Taxis in Nova Scotia: A Report and Recommendations



## **Purpose**

*The intent of this document is to provide an overview of car seat exemptions in taxis in Nova Scotia, and to outline recommendations and next steps.*

## **Introduction**

Motor vehicle collisions are a leading cause of death and injury to children in Canada<sup>1</sup>. To promote the safety of children in motor vehicles, Child Passenger Safety (CPS) initiatives have been adopted by many jurisdictions across the globe using education, advocacy, and training<sup>2,3</sup>. CPS initiatives save lives and benefit the economy, as injuries associated with motor vehicle collisions are costly to the health care system and society<sup>4</sup>. When car seats are used properly, they reduce the risk of a child being injured or killed by up to 71%<sup>4</sup>. This reduction in injuries and fatalities is significant - every dollar spent on a booster seat saves society \$71, and every dollar spent on a child safety seat saves society \$42<sup>4</sup>. While there has been substantial progress in promoting the safety of children in motor vehicles, some gaps remain that must be addressed.

In 2004, the World Health Organization published a World Report on Road Traffic Injury. The purpose of the report was to bring attention to the need for governments and other stakeholders to increase and sustain action to prevent road traffic injury<sup>2</sup>. The Canadian Council of Motor Transport Administrators (CCMTA) echoed these sentiments in 2010. First, they recommended that each jurisdiction aim to achieve and maintain a minimum seatbelt rate of 95 percent and the proper use of child restraints by all motor vehicle occupants. They also recommended that every jurisdiction should eliminate any remaining exemptions in seat belt and child restraint laws<sup>5</sup>. However, exemptions from child restraint laws are common in jurisdictions around the world. They do not apply to the average person in the average motor vehicle, but rather passengers of certain motor vehicles, such as a taxi.

## **Child Passenger Safety in Canada**

Canada's most recent Road Safety Strategy was released in 2015 to continue through to 2025<sup>6</sup>. Unrestrained occupants, including improper use of car seats, is a key contributing factor to injuries and death in collisions<sup>6</sup>. As a result, child passenger safety is an important component to road safety strategies. To ensure all child passengers have safe rides, laws have been enacted and organizations and programs have been developed.

## **Child Passenger Safety in Nova Scotia**

### ***Child Passenger Safety Legislation***

To ensure all children are transported safely in motor vehicles, the Motor Vehicle Act of Nova Scotia includes requirements for child restraint use. The law states that:

“(3) No person shall operate a motor vehicle on a highway unless every passenger in the motor vehicle who is under sixteen years of age is secured:  
(a) in the prescribed manner in a child restraint system, where the passenger is of an age, height or weight for which such a system is prescribed; or  
(b) where the passenger is not of an age, height or weight for which a child restraint system is prescribed, in a seat belt if a seating position with a seat belt is available to that passenger”<sup>7</sup>.

The legislation goes on to state exemptions to child restraint requirements for a number of motor vehicle drivers including **“a driver operating a taxicab for hire, in respect of the use of a seat belt by the driver or a passenger”**<sup>7</sup>. This exemption in child restraint legislation is not unique to Nova Scotia. Aside from Newfoundland & Labrador, all other provinces territories in Canada have this exemption written into legislation (see Appendix A). In fact, most countries and their respective jurisdictions have a taxi exemption for child restraints. With this exemption in place, children may travel unsafely in taxis.

## **Taxis**

Taxis are a mode of transportation in a motor vehicle separate from public transit, and requires a fee paid to the driver<sup>8</sup>. Families and caregivers use taxis for transport and therefore children are often passengers in taxis. Children should be restrained in taxis as they are in other motor vehicles<sup>2</sup>. To provide context, 194 motor vehicle collisions in 2015 in Nova Scotia were with taxis and in these collisions, 15 passengers (all ages) were injured<sup>9</sup>. Separately, 90 tickets were issued for operating a motor vehicle (not a taxi) while a passenger under 16 was not properly restrained<sup>9</sup>. In a recent survey conducted in the Halifax Regional Municipality (HRM), and of the 13% of respondents who indicated they don't take taxis in the HRM, just over 5% (96 respondents) said it was due to a lack of car seats available<sup>10</sup>. However, many families still take taxis, and approximately 33% of families travelling by taxi do not use the proper restraint their infant child<sup>11</sup>. These statistics indicate the need to prevent injuries in motor vehicles, and specifically taxis, through the use of proper child restraints.

## **Child Safety Link**

Child Safety Link (CSL) is a Maritime-wide children's injury prevention program of the IWK Health Centre<sup>12</sup>. CSL has many priorities in injury prevention, including safety in the home, at play, and on the road<sup>12</sup>. Child passenger safety is one component of CSL's road safety priority area, and CSL is a leader in child passenger safety in Nova Scotia the Maritimes. The goal of child passenger safety is to decrease injuries and deaths among children and youth while in cars as passengers<sup>13</sup>. Child passenger safety strategies are guided by Child Safety Link's pillars, as follows:

Pillars of Child Safety Link				
	Partnership & Capacity Building	Communication & Public Relations	Advocacy & Healthy Public Policy	Research & Evaluation
<b>Example</b>	Training technicians	Distributing culturally diverse educational resources	Advocating for booster seat legislation (NS)	Supporting CPS-related research projects (e.g. IWK Health Centre, Dalhousie)

Partnerships & Capacity Building is a particularly important pillar in the CPS Strategy and over the years, Child Safety Link has trained a variety of agencies who work with young families, such as police officers and Family Resource Centre employees. Taxi companies and their drivers have not yet received this training.

### The IWK Health Centre

The IWK Health Centre is a women and children’s hospital serving the Maritime Provinces. All families leaving the IWK Health Centre for either the first time or who are less than 12 months old receive education about car seat safety<sup>14</sup>. This includes what constitutes as a safe seat, how to properly buckle a child, and how to properly install the car seat<sup>14</sup>. The IWK Health Centre encourages families to use a CMVSS (Canadian Motor Vehicle Safety Standard) rear-facing car seat, however, the IWK Health Centre and other health centres across Nova Scotia do not rent or lend car seats<sup>14</sup>. As a result, there may be situations where families with young children leave health centres without a car seat<sup>15</sup>.

### Issues and challenges regarding car seat use

Proper restraints are needed for children and youth and vary based on height and weight requirements. A goal has been set by the Canadian Council of Motor Vehicle Administrators (CCMTA) to reach a target of 95% occupant restraint use across Canada<sup>5</sup>. From Transport Canada’s Child Restraint survey conducted in 2010, 91.4% of the population was using some type of child restraint in a moving vehicle and 1.7% were not restrained at all<sup>5</sup>. During a 2012 study which included roadside checks in Nova Scotia, most children (99.6%) were restrained by at least a seat belt, however for those in a car seat, only 48% of seats were installed correctly<sup>16</sup>. There are many reasons children may not be properly restrained, such as the lack of car seat availability in taxis. These issues and other challenges by families, caregivers, and taxi drivers will inform future recommendations.

## **Challenges for taxi drivers**

Legislative exemption aside, there are many reasons taxi companies and their drivers may not provide car seats. First, there may be logistical concerns for taxi drivers including where they would store car seats; the time required to install/uninstall the seat from the vehicle; and ensuring all children riding in the taxi can be properly restrained<sup>11,17</sup>. There may also be issues for navigating liability of an unrestrained child in a taxi. In a privately own vehicle, for example, the driver is usually responsible for young passengers being properly restrained. In a taxi, the liability is not as clear. If the legislation was to change, a variety of stakeholders would be affected and would need to be consulted. Police officers, for example, would be an important stakeholder if the legislation changes because they would be enforcing the new law. Presently, there is little to no research on the challenges facing taxi drivers or other stakeholders, and therefore the challenges specific to taxi drivers in Nova Scotia are unknown.

## **Challenges for Families and Caregivers**

To address confusion and frustration of car seat installation, Child Safety Link conducts Child Passenger technician training throughout the province to support local families. However, many challenges still remain for families and caregivers regarding car seat use in any vehicle. Challenges include the social determinants of health and a lack of research on other barriers.

## ***Social Determinants of Health***

More than lifestyle choices, the environments in which we live, work, and play are what impact health<sup>18</sup>. These factors are known as the social determinants of health. In order to affect the social determinants of health, policies and programs need to be examined and considered in relation to the issue at hand. In this case, the exemption of taxi drivers from being responsible for child restraints and any subsequent recommendations must be considered with the social determinants of health in mind. Selected social determinants of health priorities are outlined below.

### ***Income and Income Distribution***

Income is a complex social determinant of health and injury, and can be explored either on a high level (e.g. income inequality) or on a more individual level (e.g. household income)<sup>19</sup>. The Canadian Institute for Health Information reported in 2010 that the rate of injury for the poorest Canadians is 1.3 times higher than the wealthiest<sup>20</sup>. Similarly, car seat use is the lowest among low income and rural families<sup>21</sup>. A family's income or financial situation should not determine the safety of a child in a taxi. Therefore, every effort should be made to consider income as a barrier in any recommendations.

### *Culture*

Perceptions of safety differ across cultures<sup>15,22,23</sup>. As a result, car seat use may be dependent on the perception that the car seat is needed at all<sup>15</sup>. Child Safety Link has done considerable work in Nova Scotia to ensure all populations are aware of the need for car seats through tailored programming and resource distribution. With half of all taxi drivers in Canada being immigrants, and with car seat use varying across cultures, it is necessary to understand any barriers to use and develop strategies to overcome these specific barriers<sup>22</sup>. To date, and to the best of our knowledge, no research has been conducted on culture and its relation to car seat use in taxis in Canada.

### *Health Services*

Canada provides a universal health care system to ensure everyone can access the services they need<sup>18</sup>. If a family chooses to hire a taxi, there should be adequate supports in place (e.g. car seats) to ensure the safest trip possible to get around in Nova Scotia (e.g. to a medical appointment). Recommendations made to increase car seat use should consider the transportation habits of caregivers, including how they are getting to and from health centres.

### **Gaps in Research**

It is already known that families and caregivers experience challenges installing car seats<sup>11,24,21</sup>. This is why Child Safety Link provides technician training across the Maritimes. Specific challenges regarding the use of car seats in taxis is not well understood. Globally, there has been very little research conducted on the topic of car seats in taxis. When research has been conducted, only a few studies have been conducted in the Canadian context. The demographics and needs of families in Nova Scotia who use taxis for transport are not known at this time. Similarly, any barriers experienced by taxi companies and their drivers are not known. Without this basic understanding of the needs of families who use taxis and taxi drivers themselves, it is not likely a “one size fits all” program or policy would work. Further, working directly with families and taxi drivers may redirect the focus of the solution away from legislation change altogether. Perhaps there is a barrier to car seat use in taxis that is currently unknown; it is only through working directly with families and taxi drivers that any next steps will be clear.

### **Emerging issue: Rideshare**

A ride-sharing company, more formally known as a Transportation Network Company (TNC), is a company that provides transportation in privately owned vehicles for a fee that is paid to the driver and the ride-sharing company<sup>8</sup>. Ride-sharing companies use an online platform (e.g. a mobile app) to connect passengers to drivers<sup>8</sup>. Ride-sharing companies are not yet available in

the Halifax Regional Municipality, however a recent survey found that 88% of Halifax residents are in favour of ride-sharing in the Halifax market<sup>10</sup>.

Ridesharing companies in larger cities in the U.S. have accommodated the need for car seats in vehicles for hire. In New York City, Uber has partnered with Safe Kids Worldwide to provide training to Uber drivers on how to correctly install and use the provided car seats<sup>25</sup>. Uber drivers meet one-on-one with a CPS technician who has been certified through Safe Kids Worldwide and demonstrated they could install the car seat properly<sup>25</sup>. Lyft also has the option of adding car seats and is only available in New York City<sup>26</sup>. Even with these added safety feature, Uber and Lyft drivers are still exempt from being liable for an improperly installed car seat or improperly secured child<sup>25,26</sup>.

## **Opportunities**

Child Safety Link has developed a strong CPS strategy in Nova Scotia including the development of key partnerships and educational resources for both professionals and caregivers, while also advocating for stronger policies. In addition, CSL has become a leader in CPS in the country. Due to the work already being done in the Maritimes and specifically across Nova Scotia, many opportunities exist and current momentum can be built upon.

### **Health Centre Initiatives**

Through already-existing partnerships, health centres have a unique opportunity to promote child passenger safety. Partnerships between external companies and within departments should be expanded.

### ***Taxi companies***

Many health centres and organizations across Nova Scotia have established partnerships with taxi companies. These partnerships allow for employees, clients, patients, and others to access taxi transportation in specific situations. A service not yet provided in Canada may be a possible consideration for the IWK Health Centre. A Safe Taxi Service is similar to a standard taxi service, with the option of adding car seats and/or booster seats by request to the vehicle for hire<sup>11</sup>. This service increases the number of families who use a car seat when leaving with children<sup>11</sup>.

### ***Emergency departments***

Programs like Child Safety Link have existing relationships with the IWK emergency department. These relationships are necessary to share data and educational resources to each other's benefit. Research has shown that emergency departments are an effective setting to provide car seat education to patients, even if their visit is unrelated to car seat education<sup>17,27</sup>.

## Vehicle for hire licensing program review

Halifax has indicated it is considering changes to the taxi industry with the recent release of the Vehicle for Hire Licensing Program Review<sup>10</sup>. Included in the review were suggestions for adult passenger safety in taxis. The review also stated that rideshare companies will eventually arrive in the Halifax market. This review demonstrates the readiness for change in taxi regulations and standards, as well as considering implications for rideshare.

## Vision zero

Vision Zero is a systems-level road-safety initiative that aims to eliminate all road and traffic-related fatalities and severe injuries<sup>28</sup>. Vision Zero suggests rethinking roads safety strategies so that, regardless of the mistakes human make, there will always be zero fatalities<sup>28</sup>. Child passenger safety is one component of Vision Zero, aiming to eliminate preventable deaths for children by ensuring children are always properly restrained in a motor vehicle<sup>28</sup>.

## Child friendly cities

An initiative led by UNICEF, the Child Friendly Cities Initiative (CFCI) supports the rights of children at the municipal level<sup>29</sup>. It uses a network of stakeholders from local governments, media, academia, the private sector, and children themselves to make cities and communities more child-friendly<sup>29</sup>. Child passenger safety fits within the framework of a child friendly city, where transportation services such as taxis can be tailored to ensure the safety of children<sup>30</sup>.

## Guiding Principles and Recommendations

The recommendations that follow have been suggested with multidisciplinary action in mind and have been organized according to Child Safety Link's Pillars and the 3 Es of Injury prevention. Child Safety Link has developed four pillars to guide their work in reducing the severity and incidence of unintentional injury to children and youth in the Maritimes<sup>3</sup>. Further, interventions aimed at preventing injuries are more successful if they include the three E's: education, enforcement, and engineering<sup>31</sup>. Using the Three Es to inform interventions shifts the causes of injury from being focused on the individual to more systemic, higher-level solutions<sup>31</sup>. The Three Es are as follows. A summary of all recommendations by E are found in Appendix B.

**Education** involves providing the public with education and skills training to prevent injuries; **Enforcement** includes policies, laws, and regulations which aim to reduce injuries; and **Engineering** involves developing or modifying products and environments to prevent injuries<sup>31</sup>.

## **Recommendations for Action**

A gradual change in awareness and the social environment are required before transitioning to legislation change. A change in legislation will remain a long-term goal that would be most successful if other components of a multidisciplinary solution are attended to first. These other components can be acted on through opportunities already outlined above.

### ***Partnership & Capacity Building***

Collaboration across sectors and with community members ensures relationships can be maintained and the needs of diverse populations met<sup>3</sup>. Working toward the shared goal of road safety requires cooperation between all stakeholders. The following are recommendations for partnerships and capacity building.

- Train all taxi drivers on child passenger safety through training services already provided by Child Safety Link<sup>2,13</sup>.
- Establish a Safe Taxi Service for families and caregivers in health centres across Nova Scotia<sup>11</sup>.

### ***Communication & Public Relations***

Communicating evidence and information to diverse audiences allows for continued engagement and education<sup>3</sup>. Increasing awareness of road safety and accompanying strategies may lead to safer road user behavior, which is the goal of the recommendations to follow<sup>6</sup>.

- Develop and distribute educational materials for health providers regarding differences in perceptions of safety across cultures (after conducting preliminary research)<sup>23</sup>.
- Frame educational materials in a way to address differing perceptions of safety across cultures<sup>23</sup>.
- Provide educational materials to emergency departments regarding child passenger safety, specifically car seat use in taxis<sup>17</sup>.

### ***Advocacy & Healthy Public Policy***

Reducing inequities and enhancing the health of populations requires social action and support for health goal<sup>3</sup>. Higher level, systemic changes have a lasting impact on population health and injury prevention strategies<sup>3</sup>. The following recommendations have been made with this in mind.

- Adopt a Vision Zero approach with child passenger safety as one component in Nova Scotia and its municipalities<sup>28</sup>.
- Advocate for more affordable, easy-to-use car seats for use in taxis or other motor vehicles<sup>17,18</sup>.

- Advocate for change in legislation (i.e. remove exemptions) once appropriate consultation, education, and support has been committed/provided.

### **Research & Evaluation**

In order to properly inform policies, programs and strategies, research and evaluation should be conducted and tailored to understand the needs of populations<sup>3</sup>. The research suggested below can be conducted through the use of surveys, observation, focus groups, or individual interviews.

- Investigate the Child Friendly Cities approach and its applicability in Nova Scotia including the safe transportation of children in taxis<sup>29</sup>.
- Conduct research with families and caregivers in Nova Scotia to understand their needs/barriers regarding car seat use in taxis<sup>23</sup>.
- Conduct research with taxi companies and their drivers to understand their needs/barriers regarding car seat use in taxis<sup>22,23</sup>.
- Conduct research with stakeholders affected by legislation change to understand other needs/barriers<sup>23</sup>.
- Determine next steps regarding the introduction of rideshare into the Halifax market and how child passenger safety could be addressed<sup>10</sup>.

### **Conclusion**

Car seats reduce the risk of injury or death by 71% when used correctly<sup>4</sup>. The exemption of taxi drivers from requiring children in car seats is unsafe and concerning. Removing any remaining exemptions for child restraints is necessary to ensure all children are transported safely and fatalities and injuries relating to improper restraint are eliminated<sup>2</sup>. To effectively address this exemption, a gradual approach is first recommended using already-existing opportunities in municipalities in Nova Scotia. Opportunities for change can happen through partnerships & capacity building, communication & public relations, advocacy and healthy public policy, and research & evaluation. Later, when the groundwork has been set, the legislation should be changed and the exemption removed.

**About Child Safety Link:**

Child Safety Link (CSL) is an injury prevention program at the IWK Health Centre dedicated to reducing the incidence and severity of unintentional injury to children and youth in the Maritimes. CSL is committed to working with community organizations, governments and other partners to ensure children are as safe as necessary at home, on the road and at play.

**Website:** [www.childsafetylink.ca](http://www.childsafetylink.ca)

**Twitter:** @childsafetylink

**Facebook:** [www.facebook.com/ChildSafetyLinkIWK](http://www.facebook.com/ChildSafetyLinkIWK)

**YouTube:** [www.youtube.com](http://www.youtube.com) (Search Child Safety Link)

**Email:** [childsafetylink@iwk.nshealth.ca](mailto:childsafetylink@iwk.nshealth.ca)

**Appendix A**  
**Jurisdictional Scan**

Province/Territory	Are car seats required by law in motor vehicles?	Are there exemptions for car seat requirements in taxis?
Alberta	Yes	Yes
British Columbia	Yes	Yes
Manitoba	Yes	Yes
New Brunswick	Yes	Yes
Newfoundland & Labrador	Yes	<b>No</b>
Northwest Territories	Yes	Yes
Nova Scotia	Yes	Yes
Nunavut	Yes	*
Ontario	Yes	Yes
Prince Edward Island	Yes	<b>No</b>
Quebec	Yes	Yes
Saskatchewan	Yes	Yes
Yukon	Yes	Yes

\*unable to retrieve legislative information.

## Appendix B Recommendations for Action Summary

Recommendations by Pillars of Child Safety Link		3 Es of Injury Prevention		
		Education	Enforcement	Engineering
<b>Partnership &amp; Capacity Building</b> Collaborate with communities, partners and across sectors to facilitate mobilization and capacity building to enhance the impact and sustainability of shared health priorities.	Train all taxi drivers on child passenger safety through training services already provided by Child Safety Link.	✓	✓	
	Establish a Safe Taxi Service for families and caregivers in health centres across Nova Scotia	✓		
<b>Communications &amp; Public Relations</b> Communicate evidence-based information and engage with diverse audience using effective approaches, mediums and technologies.	Develop and distribute educational materials for health providers regarding differences in perceptions of safety across cultures (after conducting preliminary research)	✓		
	Frame educational materials in a way to address differing perceptions of safety across cultures	✓		
	Provide educational materials to emergency rooms regarding child passenger safety and car seat use, specifically for use in taxis.	✓		
<b>Advocacy &amp; Healthy Public Policy</b> Create social action to influence healthy public policy within various sectors by gaining support for a particular health goal or initiative to reduce inequities and enhance the health of the population.	Adopt a Vision Zero approach with child passenger safety as one component in Nova Scotia and its municipalities.		✓	
	Advocate for more affordable, easy-to-use car seats for use in taxis or other motor vehicles.			✓
	Advocate for change in legislation once appropriate consultation, education, and support has been committed/provided.		✓	
<b>Research &amp; Evaluation</b> Draw upon multidisciplinary base of core concepts, principles, theory and research to understand health issues and inform health promotion action. Achieve measureable health promotion goals and objectives through monitoring and evaluating health promotion actions and initiatives.	Investigate the Child Friendly Cities approach and its applicability in Nova Scotia including the safe transportation of children in taxis.		✓	
	Conduct research with families and caregivers in Nova Scotia to understand their needs regarding car seat use in taxis.	✓		
	Conduct research with taxi companies and their drivers to understand their needs regarding car seat use in taxis.	✓	✓	
	Conduct research with stakeholders affected by legislation change to understand their needs.		✓	
	Determine next steps regarding the introduction of rideshare into the Halifax market and how child passenger safety will be addressed.		✓	

## References

- 
- <sup>1</sup> Warda, L., Ford-Jones, A., Philpott, J., Hawkins, A., Scott, J., Stanwick, R., & Van Schaik, C. (2008). Transportation of infants and children in motor vehicles. *Paediatrics and Child Health*, 13(4), 313-318+321-327.
- <sup>2</sup> World Health Organization (2004). *World report on road traffic injury prevention*. Geneva, Switzerland: World Health Organization. Retrieved from: [https://www.who.int/violence\\_injury\\_prevention/publications/road\\_traffic/world\\_report/intro.pdf?ua=1](https://www.who.int/violence_injury_prevention/publications/road_traffic/world_report/intro.pdf?ua=1)
- <sup>3</sup> Child Safety Link (n.d.). *Child Safety Link Descriptor*.
- <sup>4</sup> Children's Safety Network (2014 updated). *Injury Prevention: What Works? A summary of cost-outcome analysis for injury prevention programs*. Calverton, MD: Pacific Institute for Research and Evaluation.
- <sup>5</sup> Canadian Council of Motor Transport Administrators (2010). *CCMTA Road Safety Report Series: National Occupant Restraint Program 2010*. Ottawa, Ontario. Retrieved from: [http://ccmta.ca/images/publications/pdf/norp\\_report09.pdf](http://ccmta.ca/images/publications/pdf/norp_report09.pdf)
- <sup>6</sup> Canadian Council of Motor Transport Administrators (2016). *Canada's Road Safety Strategy 2025*. Retrieved from: <http://roadsafetystrategy.ca/en/>
- <sup>7</sup> *Motor Vehicle Act*, RSNS 1989, c 293. Retrieved from: <https://nslegislature.ca/sites/default/files/legc/statutes/motor%20vehicle.pdf>
- <sup>8</sup> Insurance Bureau of Canada. (2017). *FAQs: Transportation Network Companies*. Retrieved from: <http://www.IBC.ca/bc/auto/risk-management/faqs-transportation-network-companies>
- <sup>9</sup> NS Department of Transportation and Infrastructure Renewal (2019). From personal communication.
- <sup>10</sup> Halifax Regional Municipality (2019). *Vehicle for Hire Licensing Review*. Retrieved from: <https://www.halifax.ca/sites/default/files/documents/city-hall/regional-council/190212rc1433.pdf>
- <sup>11</sup> Eventov-Friedman, S., Bar-Oz, B., Zisk-Rony, R. Y. (2013). Using a safe taxi service to transport newborn babies home from hospital. *Acta Paediatrica*, 103(1), 57-61. doi: 10.1111/apa.12431
- <sup>12</sup> Child Safety Link (2014). *About CSL*. Retrieved from: <https://childsafetylink.ca/about-csl/>
- <sup>13</sup> Child Safety Link (2016). *Child Passenger Safety Primer*.

- 
- <sup>14</sup> IWK Health Centre. (2019). Having a Baby: Postpartum (after birth) Unit - Family Newborn Care Unit. Retrieved from: <http://www.iwk.nshealth.ca/women-and-newborns-health/services/having-a-baby#/women-and-newborns-health/postpartum-after-birth-unit-family-newborn-care-unit>
- <sup>15</sup> Wilson, M. K. R., Chambers, J. L., Hamill, J. K. (2013). Barriers to the safe transport of children to and from hospital. *The New Zealand Medical Journal*, 126(1375), 27-36. Retrieved from: <http://journal.nzma.org.nz/journal/126-1375/5671/>.
- <sup>16</sup> Bruce, B., Cramm, C., Mundle, K., Williams, D. P., Conrad, A. (2015). Roadside observation of child passenger restraint use. *Advances in Pediatric Research*, 2(24), 1-6. doi: 10.12715/apr.2015.2.24
- <sup>17</sup> Gittelman, M. A., Pomerantz, W. J., Laurence, S. (2006). An emergency department intervention to increase booster seat use for lower socioeconomic families. *Academic Emergency Medicine*, 13(4), 396-400. doi: 10.1197/j.aem.2005.11.002
- <sup>18</sup> Mikkonen, J., Raphael, D. (2010). *Social Determinants of Health: The Canadian Facts*. Toronto, Ontario: York University School of Health Policy and Management. Retrieved from: [http://thecanadianfacts.org/the\\_canadian\\_facts.pdf](http://thecanadianfacts.org/the_canadian_facts.pdf)
- <sup>19</sup> World Health Organization (2010). *A Conceptual Framework for Action on the Social Determinants of Health*. Geneva, Switzerland: WHO Press.
- <sup>20</sup> Canadian Institute for Health Information. (2010). Injury Hospitalizations and socioeconomic status. Ottawa: Canadian Institute for Health Information.
- <sup>21</sup> Zaza, S., Sleet, D. A., Thompson, R. S., Sosin, D. M., Bolen, J. C., Task Force on Community Preventative Services (2001). Reviews of evidence regarding interventions to increase use of child safety seats. *American Journal of Preventative Medicine*, 21(4), 31-47. doi: 10.1016/S0749-3797(01)00377-4
- <sup>22</sup> Xu, Li (2012). Who Drives a Taxi in Canada? *Government of Canada: Citizenship and Immigration Canada*. Retrieved from: <https://www.canada.ca/content/dam/ircc/migration/ircc/english/pdf/research-stats/taxi.pdf>
- <sup>23</sup> National Social Marketing Centre (n.d.). *What role can social marketing play in tackling the social determinants of health inequalities?* London: United Kingdom.
- <sup>24</sup> Bruce, B., Snowden, A., Cunningham, C., Cramm, C., Whittle, K., Correale, H., Harold, J. (2011). Predicting parents' use of booster seats. *Injury Prevention*, 17(5), 313-318. doi: 10.1136/ip.2010.029181
- <sup>25</sup> Uber (2014). Uber Car Seat NYC FAQs. Retrieved from: <https://www.uber.com/blog/new-york-city/uberfamily-faqs/>

<sup>26</sup> Lyft, Inc. (2018). Car Seat Mode. Retrieved from: <https://help.lyft.com/hc/en-ca/articles/360000722107-Car-seat-mode>

<sup>27</sup> Keshavarz, R., Patel, R., Bachar, R., Laddis, D. (2006). Children in Taxis: An Opportunity for Pediatricians and Emergency Physicians to Save Lives? *Pediatric Emergency Care*, 22(1), 704-709. doi: 10.1097/01.pec.0000238742.96606.20

<sup>28</sup> Vision Zero Network (2018). *What is Vision Zero?* Retrieved from: <https://visionzeronetwork.org/about/what-is-vision-zero/>

<sup>29</sup> UNICEF (2019). *Child Friendly Cities Initiatives: What is a child-friendly city?* Retrieved from: <https://childfriendlycities.org/what-is-a-child-friendly-city/>

<sup>30</sup> City of Edmonton (2017). *Child Friendly Working Plan*. Retrieved from: [https://www.edmonton.ca/programs\\_services/for\\_children\\_kids\\_youth/child-friendly-edmonton.aspx](https://www.edmonton.ca/programs_services/for_children_kids_youth/child-friendly-edmonton.aspx)

<sup>31</sup> Groff, P. (2015). The injury prevention spectrum and the 3 E's. In I. Pike, S. Richmond, L. Rothman, & A. MacPherson (Eds.), *Canadian Injury Prevention Resource: An Evidence-Informed Guide to Injury Prevention in Canada*. (pp. 399-408). Toronto, Ontario: Parachute.