

# *Road Safety in First Nations communities : in need of local interventions*

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# The canadian research...

- **A problematic situation:** Vehicle collisions are the leading cause of death among Aboriginals under 25 years old
- **Other research:** Alberta, British-Colombia, etc.
- **Our main objective:** overcome the lack of information and develop innovative and promising practices that can be shared and replicated in other Indigenous communities.

Drew a local portrait of the behavioral habits concerning motor vehicles conduct and designed a local intervention to reduce injuries caused by motor vehicles collisions

Selection of multiples communities all over Canada (Quebec, Ontario, British Colombia, Nova Scotia and New Brunswick)

## *A study case*

# Lac-Simon: an anishnabe community



- Anishnabe (Algonquin) nation  
(9 communities in Quebec)
- 1586 membres on reserve (377 of-reserve)
- 76% of the population is under 25 years  
old (2011)
- Median age: 18,6 years old (2011)

# The research process:

## Methodology and approach

- Our team: research assistants (social service students), supervisor (Professor, social worker) and Anishnabek collaborators
- Participatory action-research (PAR)
- 3 phases: quantitative and qualitative
  - Quantitative: quantitative survey; multiple-choice questions
  - Qualitative / action : a co-constitue prevention of injuries program

# Phase 1 : pre-intervention evaluation

- **Methodology:** survey  
Questions focused on seven major categories:
  - i. Awareness of risks and injuries when traveling by motor vehicle
  - ii. Knowledge and perceptions of the use of car seats and seat belts
  - iii. Factors influencing the decision to use car seats for children and seat belts
  - iv. Sources of information concerning health issues used by indigenous families; in particular the utilization of child car seats and seat belts
  - v. Use of child car seats and seat belts in vehicles (self-evaluation)
  - vi. Perceptions of risk of injuries caused by collisions inside and outside of the community
  - vii. Confidence toward different groups of people, such as the health system
- **Sample:** June 2013; 125 participants 49 males and 76 females ranging from 19 to 62 years old.
- **Results**

# Phase 2: Intervention program

- **Methodology**

Co-construction, implementation and evaluation of a program on road safety prevention

- **Objectives**

Develop awareness of the risks of injury when safety standards are not followed while driving a motor vehicle

**A.** Clarify the role of social capital and citizen involvement in reducing the risk of injury and death resulting from vehicle collisions

**B.** Maximize the investment and effectiveness of a partnership community/university in the prevention of injury caused by traffic collisions

**C.** Develop promising community practices that can effectively address problems related to the safe use of motorized vehicles and the proper use of child restraints

## Phase 2: Intervention program



Distribution  
of helmets



Collaboration  
with the  
community  
police

## Program description

*A week of prevention*

*(march 2014)*

Activities with children: they  
were a central component  
of the program

Community activities: walk,  
quiz, etc.

Distribution of helmets and  
booster seats



# Phase 3:

## Post-intervention evaluation

- **Methodology**

The same survey was administered a second time to assess the impact of prevention activities on behaviors and knowledge in matters of road safety standards.

New questions were add

- **Sample**

March 2013; 95 Anishnabek, 46 men and 49 women between 18 and 68 years old.



# Habits, conceptions and knowledge: results and testimony

## Injuries risk and road safety

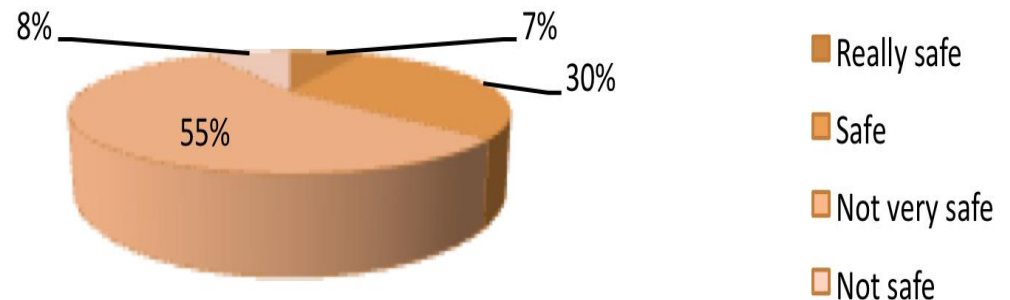
*Are community members aware of the risk of injuries when they travel by motor vehicle ?*

Half of the respondents reported that they found the community unsafe.

The concern with road safety in the community did not vary by gender, marital or occupational status of the respondents

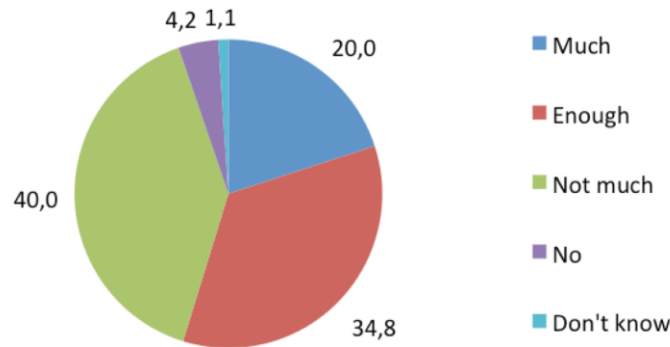
The degree of perception of road safety in the community did vary by age.

*Distribution of  
respondents  
according to their  
judgment of road  
safety in the  
community*



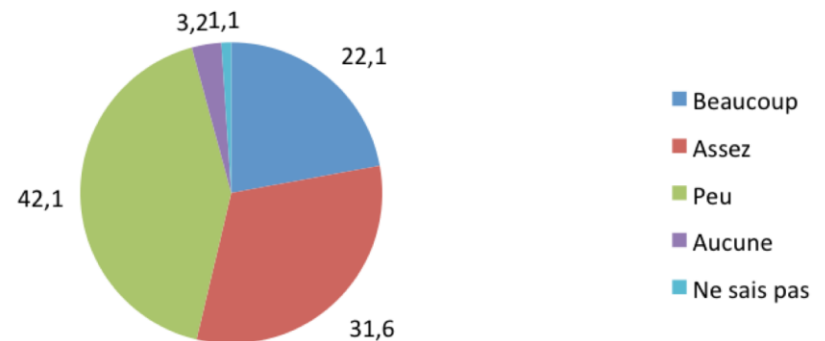
# Habits, conceptions and knowledge: results and testimony

## Car seats and seat belts



*Distribution of respondents according to their perception of the improvement of the community safety through the use of seat belts*

*Distribution of respondents according to their perception of the improvement of the community safety through the use of child car seats*



# Habits, conceptions and knowledge: results and testimony

## Car seats and seat belts

- Non-interference in the life of others a respected principle: impacts on results and behaviours

Personal gesture as a way to reduce injuries: 90% of the respondents think helmets may have an impact

Importance of individual autonomy

Importance of taking into account the cultural context

# Habits, conceptions and knowledge: results and testimony

## Factors influencing the decision to use car seats for children and seat belts

The choice of whether or not to use child car seats or wear seat belts drive by...

- Availability
- Seat that no longer meet safety standards
- Precarious living conditions

Car seat VS. Booster seat



# Habits, conceptions and knowledge: results and testimony

## Use of child car seats and seat belts in a motor vehicle

- We asked participants where they usually had their children sit in a vehicle:

Decrease in the number of people who directly (without a car seat) sat their children on the back seat of the vehicle

(30% decrease over phase 1; it past from 89% of the respondents to 59%).

- We did not observe a significant increase in the use of child car seats in our results for the second phase (less than 2%)

# Discussion

## Limitations

- Modification of questions
- Little time had elapsed the information transfer and the measurement of impact
- Did not note a radical change in behavior, but we did notice an increase in knowledge of appropriate prevention for collisions and injuries
- Behavioral change is a process that takes place over a long period of time. Thus, the development of long-term strategies should be considered and/or results should be evaluated over a longer period of time

## Highlights

- First phase of a larger project: the results have given us a better understanding of the local context and promising community practices that can both mobilize and impact children and youth.
- With PAR: our aim was to contribute to the empowerment of the community and encourage members to develop their own intervention initiatives as a community
- Importance of a collaborative approach that values aboriginal knowledge and experiences to develop locally adapted prevention activities.
- It contributes to the development of respectful collaborations between the university and the community to facilitate the exchange of knowledge