Eastern Ontario Active Transportation Summit

Safety and Active Transport

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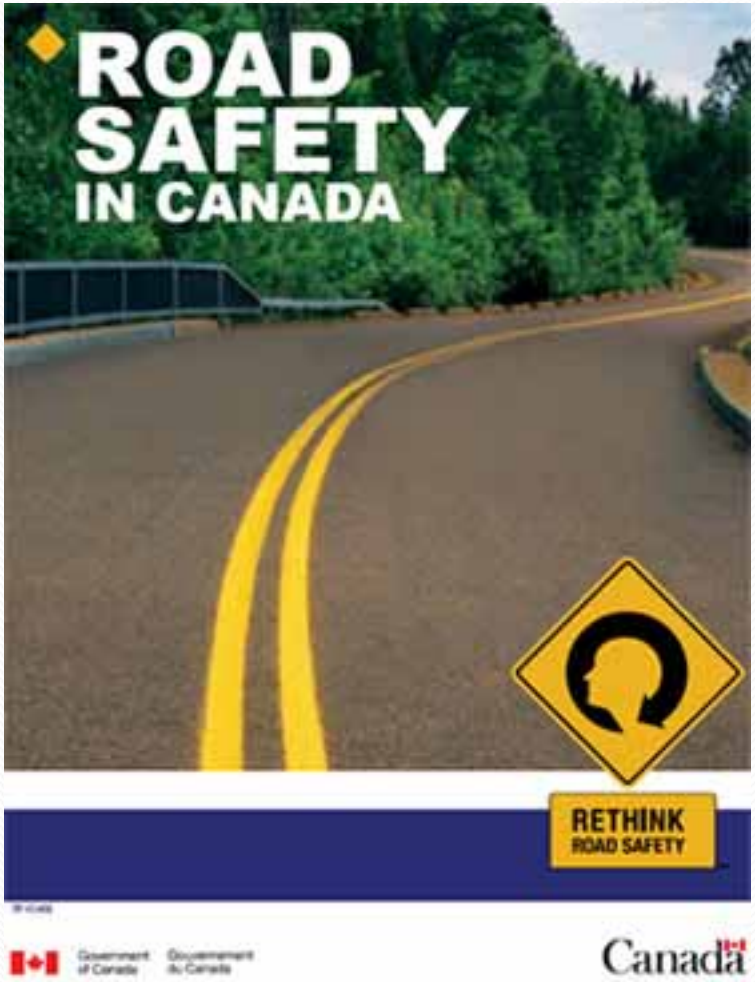
Active Transport Vision

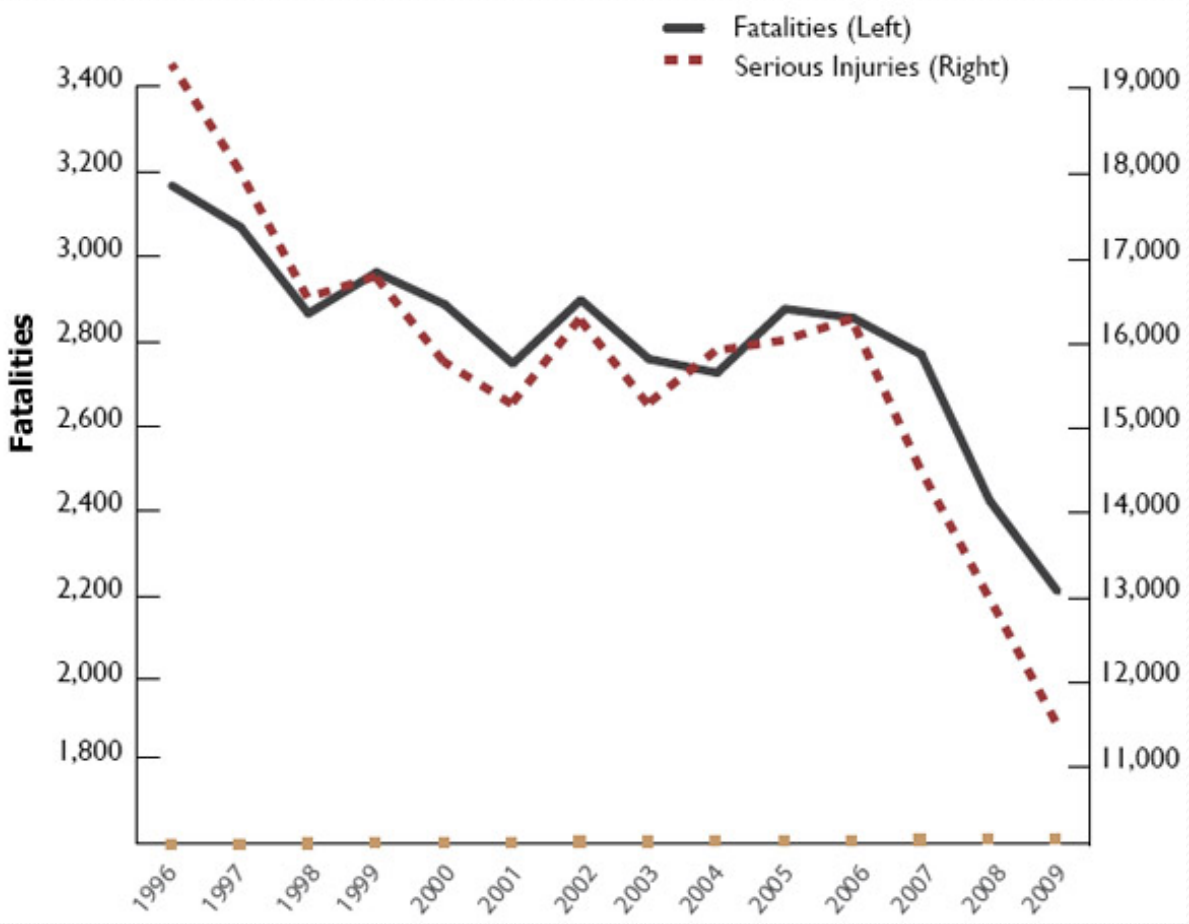
- Increase levels of walking and cycling
- Reduce vehicle use and road congestion
- Reduce pollution, green house gas emission and resource consumption
- Livability and public health - strong motivators

Road Safety in Canada

- Improvements in Road safety in Canada
- 60% decline in fatalities since 1970's
- Due to reduce speeds, seatbelts, alcohol policies, improved highways, training programs



Motor Vehicle Fatalities and Serious Injuries Canada 1996-2009



Transport Canada, Road Safety in Canada Report, 2011

Burden of Motor Vehicle Collisions

- Yet…one person dies every fours hours from a motor vehicle collision or admitted to hospital every 90 minutes from a traffic collision

- 2004 - Direct and Social costs in Canada $63 Billion

- U.S Study -for every dollar spent on safety programs, $53 saved to society

Burden of Motor Vehicle Collisions

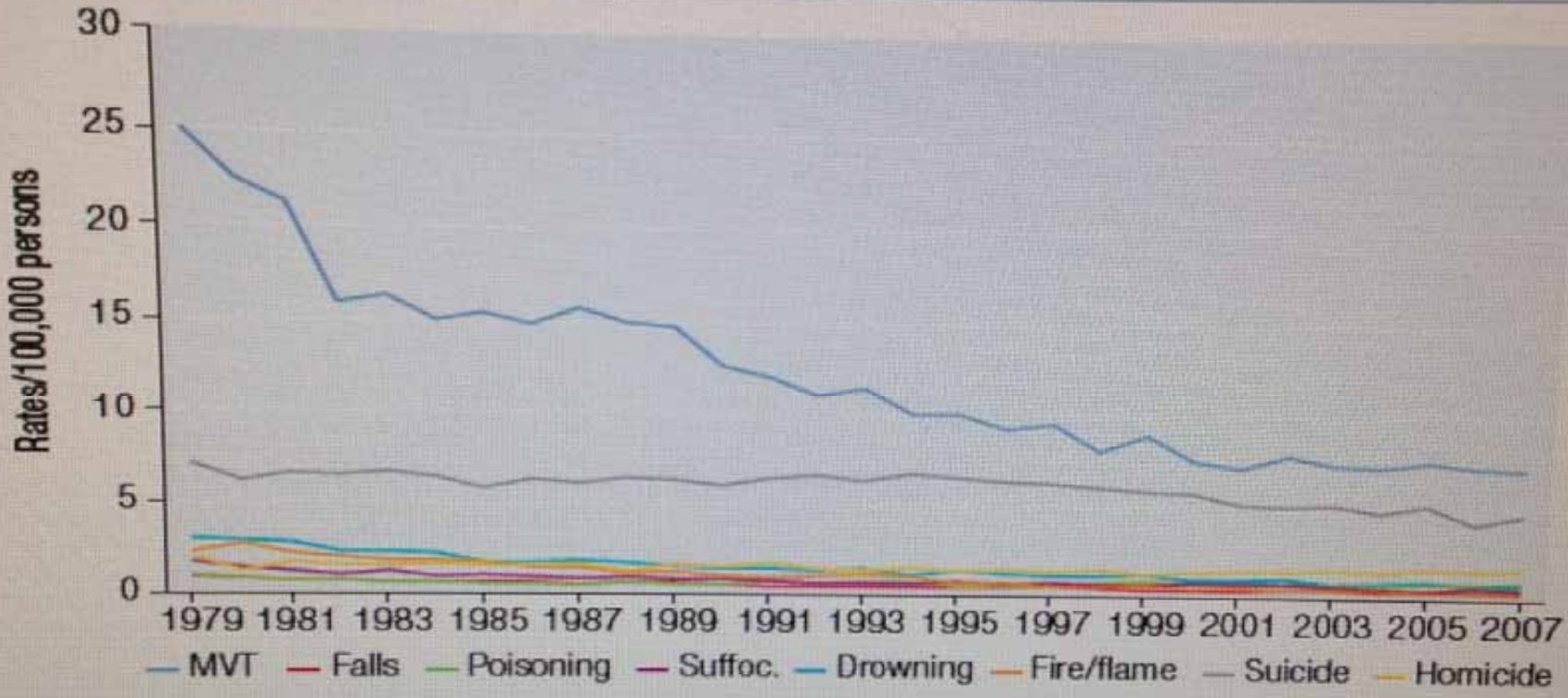
- Each week 80 child pedestrians involved in motor vehicle collisions (1 will die and 10 have serious injuries)*
- Motor vehicle Traffic Collisions leading cause death (age 25 and under) in Canada

These deaths and injuries are predictable and preventable

* Safe Kids Canada. Making it happen. Pedestrian Safety. A guide for communities. 2004

FIGURE 2.2

Leading causes of injury-related mortality in Canada, 1979-2007, both sexes combined, ages 0-24 years, standardized rates/100,000 persons



Source: Public Health Agency of Canada analysis of Statistics Canada mortality data.
Notes: (1) Rates are standardized to the 1991 Canadian population. (2) Injury causes 'Suicide' and 'Homicide' are intentional-related deaths, while all other causes are unintentional-related deaths.

From : Injury in Review. Spotlight on Road and Transport Safety. 2012. Public Health Agency of Canada, Report, p 17

TABLE 2.2

Leading causes of injury-related mortality in Canada, 2007, both sexes combined, ages 0-24 years, rates/100,000 persons

Cause	0-24 years	
	Deaths/100,000 persons (both sexes)	% Males
All injuries (excluding adverse effects of medical care)	19.4	73.6
All unintentional injuries (excluding adverse effects of medical care)	11.9	72.0
Motor Vehicle Traffic (MVT – All)	7.6	70.6
MVT – Occupant	3.4	70.1
MVT – Pedestrian	0.7	61.4
MVT – Motorcyclist	0.5	94.0
MVT – Pedal cyclist	0.2	73.3
Poisoning	1.0	69.7
Drowning	0.8	82.3
Suffocation	0.5	68.8
Falls	0.3	75.8
Fire/flame	0.3	61.5
All intentional injuries	6.8	75.8
Suicide	5.0	74.2
Homicide	1.8	80.4

Vulnerable Road Users

Roadway users unprotected by a vehicle structure and in a crash are susceptible to injury and death due to minimal protection

- Non-powered – pedestrians, cyclists, back-overs
- Powered – motorcycles, mopeds, scooters
- 25% of traffic deaths in Canada

Safety in Numbers

- Research - Cyclists and pedestrians less likely to get hit by motorists in communities with more active transport behaviours
- Being part of a large group, more known and predictable – can reduce risk of incident

Child Pedestrian Risk Factors

- Driver behavior
- Road environment
- Intersection characteristics
- Sidewalks
- Child behavior
- Adult supervision
- Time of day
- Proximity to traffic
- Enforcement of driving rules
- Gender (males)
- Lower Socio-economic status

Vulnerable Road Users - Cyclists

- Cyclists (2% of traffic deaths in Canada)

- 94% age 16 or older
- 34% struck in darkness
- 19% hit by heavy truck

Transport Canada, Motor Vehicle Safety, Road Safety in Canada, 2011

Making it Happen. Pedestrian Safety. A Guide for Communities. Safe Kids Canada 2004

Vulnerable Road Users - Pedestrians

Pedestrians – 13% of traffic deaths

- 60% killed trying to cross the road with speed < 60 km/h
- 75% on urban roads but for children under 15, 1/3 occur in rural area
- 70% - no cross walk, stop sign or traffic signal
- 33% were at fault for the crash
- 60% killed at night or dim lighting conditions
- 40% had been drinking

What hospital data show 1990-2009

- Canadian Hospitals Injury Reporting and Prevention Program (CHIRPP)
- Foot pedestrians account for 71% VRU injuries and pedal cyclists account for 27%
- Rate in foot pedestrians decreased over time (20%) but no change in rate for cyclists
- Median age for injuries for cyclists and pedestrians is 12 years
- Males over-represented (75% for cycling injuries and 56% for pedestrians)
- 37% of cyclists wore a helmet

Active Transport and Safety

Combination of three factors – to improve safety

- Education and awareness programs
- Enforcement
- Environmental change - Pedestrian and cycling environment designed, built and maintained to be safe

Prevention of transport injuries

Complete streets approach:

- Traffic calming measures
- Public education around pedestrian and bike safety (rules of the road, visible clothing)
- Educate drivers to share the road
- Additions to roadways – raised medians and curbs
- Promote helmet use for cyclists
- Better cycling and pedestrian infrastructure in communities

Framework for Road Safety

	Host (child)	Agent (driver/car)	Physical Environment	Social Environment
Education	Activities - Improve child knowledge, behavior	Educate drivers	Improve road conditions	Build awareness and support for pedestrian safety
Enforcement	Activities- enforce safe crossing behavior	Activities to enforce and influence safe driving behavior	Ensure traffic control installations used as intended	Influence laws and policies for pedestrian safety
Environment	Increase adult supervision Change road crossing conditions (lights)	Vehicle modification	How to: -Slow traffic -Separate traffic and pedestrians -Improve safe crossings	Advocate for pedestrian safety

* Safe Kids Canada. Making it happen. Pedestrian Safety. A guide for communities. 2004

Conclusion

- Transport related deaths and injuries declining in Canada
- Remain a significant cause of death and injury in Canada and are preventable
- Communities in developing active transport strategies have an opportunity to promote and incorporate road safety interventions
- Consider Education, Enforcement and Environmental interventions

Thank-you