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Distracted Driving: Enforcement & Practice in Canada

Robyn Robertson, M.C.A. President and CEO Traffic Injury Research Foundation Abu Dhabi, UAE, November 3rd, 2016

Overview

- > Context of enforcement and risk
- > Distraction in fatal crashes in Canada
- > Enforcement of distracted driving laws in Canada:
 - » strategies
 - » barriers
 - » outcomes
- > Canadian Coalition on Distracted Driving



Enforcement context

- > Distractions have different levels of physical, auditory, visual, cognitive processes.
- > Declines in situational awareness reduces margin of error to respond to an unexpected event.
- > Distraction factors related to crash risk:
 - » timing (coincide with unexpected);
 - » intensity (radio vs. text);
 - » resumability;
 - » frequency and duration;
 - » hang-over effect.



Enforcement context

- > Drivers aim to drive with acceptable range of task demand that is comfortable – leaves margin of error driver is prepared to accept.
- > Drivers compensate by reducing demands in other areas when distracted:
 - » reduce speed;
 - » increase headway;
 - » reduce lane changes.
- > But they over-estimate their ability to multi-task.



Enforcement context

- > Shifts resources in brain away from driving.
- > Attentional shifting ability degrades with age.
- > Younger male drivers are more likely (and more willing) to use cell phone while driving and rated themselves as more skillful.
- Younger drivers at high risk; they lack mature visual search, over-confident, poor calibration of unexpected vs. actual risk, low hazard detection.



Distracted driving in Canada

- > 4.3% of drivers admitted to crash from external distraction; 2.7% from internal distraction (2010).
- > 23% admitted to having to brake or steer to avoid crash in last 30 days due to external distractions and 6% due to internal distractions (2011).
- > 30% think talking on a phone is only dangerous if it is hand-held (2010).





Distracted driving in Canada

Number and percent of deaths involving a distracted driver: Canada, 2000-2013





Distracted driving in Canada

Percent of fatally injured distracted drivers by age group, 2000-2013



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Distracted driving in Canada

- Nationally, distraction-related fatalities were 16.8% of road deaths in 2000; and 25% in 2013 (TIRF 2016). I just downloaded a new p
- Distraction-related fatalities have exceeded impaired driving fatalities in several jurisdictions in Canada.
- > Ontario police data show one person is injured in a distracted-driving collision every half hour.



- > All Canadian jurisdictions have distracted driving laws which are provincial offences.
- > The use of fines and licence demerit points has increased dramatically in past 3 years:
 - » fines range from \$127 to \$1200;
 - » demerit points range from 0 to 5.
- > Enforcement calendar used/months vary.
- > Enforcement at high-crash locations.
- > Focus on intersections in urban areas.
 - Tactics similar to speed enforcement.

Strategies

- > Distracted driving enforcement is a top priority among police agencies across Canada.
- > Enforcement is often combined with education.





> Use of voluntary apps is encouraged.

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> Use of overt/covert enforcement tactics:

» APD officer stops driver with phones in both hands and driving with his knees.

» Driver: 'I know it looks bad...

» Drivers perceive ticket as the `cost of doing business'.



» In Ottawa, police have issued more than \$1 million in fines in the first ten months of 2016.

> Officers emphasize distraction issue generally in media, as opposed to individual incidents.

- > Innovative approaches to enforcement to target persistent distracted drivers.
- > Police in Toronto, Victoria, Sudbury, London and Montreal are using public transit busses to spot distracted drivers.
- Provincial insurer has measured risk of distraction offences; equal to impaired driving and now reflected in premium.



- > Federal Transport and Justice Ministers recently discussed criminalizing distracted driving.
- Some municipalities are considering distracted walking legislation to forbid use of hand-held phones by people on roadways.
- > Poll showed that 66% of Canadians would support municipal legislation.



Barriers to enforcement

- > Distraction is intermittent which makes it more difficult to detect (unlike impairment).
- > Deterrence limited by level of enforcement:
 - » competing priorities;
 - » inadequate enforcement tools.
- > Officers are also distracted in vehicle which may make them reluctant to impose stiff fines.
- > Escalating cost of fines and use of demerit points on driver's license may also discourage enforcement.
- > Concern about effects on unlicensed driver pop.

Outcomes

- > National surveys (by CCMTA) before and after implementation of hand-held bans.
- > Nationally, talking on *handheld* devices decreased 58% overall.
- > 9 jurisdictions reported reductions in urban areas;
 4 showed reductions in rural areas.
- > While officers report some drivers are more compliant with laws, others have just changed behaviour to avoid detection.
- > Some social shaming is observed.

Solutions

- > TIRF partnered with DIAD and The Co-operators to form the CCDD.
- > Aim to develop National Action Plan.
- > 25 organizations represented.
- > Government, enforcement, health, industry, and communities.
- > 9 provinces represented (BC, AB, SK, MB, ON, QC, NS, NB, PEI).



Canadian Coalition on
DISTRACTED DRIVING

Coalition canadienne contre

Solutions

> National Action Plan includes:

- » identify priority data and indicators;
- » develop an inventory of educational campaign materials and a resource centre;
- » create tools to quantify the effect of distraction on business and encourage company policies;
- » gauge optimal enforcement techniques;
- » explore potential of new technologies and their role in minimizing distractions in vehicle;
- » find practical strategies to help heavy truck drivers /law enforcement manage distractions in-vehicle.

J Orthop Sports Phys Ther, 2016

[EDITORIAL]

Preventable Injuries/Fatalities Due to Distracted Driving: A Call for a Coordinated Action

KAREN BOWMAN Drop It And Drive, Nanaimo, British Columbia, Canada.

ROBYN D. ROBERTSON Traffic Injury Research Foundation, Ottawa, Ontario, Canada. J Ortogo Sports Phys Ther 2016;45(30):818421. doi:10.2519/jougr.2016.01B

n the past decade, distracted driving has emerged as one of the most prominent global road-safety concerns. It is estimated that distraction is a factor in 20% to 30% of motor vehicle collisions (MVCs) in North America, and, since 2006, distraction-related fatalities in Canada have increased 26%, while major injuries (resulting

in persons being admitted to a hospital overnight for treatment or observation) scan in Canada: (1) provincial/territorial government strategies, (2) enforcement, distracted driving, provincial efforts have begun tackling this priority is sue through legislation, improved data collection and sharing, and awareness/education initiatives. While these initiatives are intended to create safer roads, they have often occurred independent of each other across sectors and jurisdictions, making it difficult to effect meaningful change in driv-

Conclusions

- Distracted driving is more challenging than other road safety issues.
- Drivers are reluctant to change behaviour due to misperceptions and overestimation of skills.



Emergence of automated vehicles may not help to overcome negative consequences of distraction according to a new TIRF survey on automated vehicles.

TRAFFIC INJURY RESEARCH FOUNDATION



DISTRACTED DRIVING IN CANADA: MAKING PROGRESS, TAKING ACTION



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THE ROLE OF DRIVER AGE IN FATALLY INJURED DRIVERS IN CANADA, 2000-2013

Traffic Injury Research Foundation, September 2016

Introduction

The role of driver age has been investigated in relation to many road safety issues. Studies show that, notably, younger drivers have been subject to considerable scrutiny due to their inexperience managing unexpected events on the road and risk-taking behaviour. Drivers aged 16-19 are overrepresented in fatal crashes in terms of fatalities per population and number of licensed drivers (TIRF, 2013). Similarly, drivers aged 65 and older are over-represented in crashes, particularly drivers aged 80 and older, partly because they are more fragile (susceptible to injury) than younger drivers and less likely to survive a serious collision (Li et al. 2003). Drivers aged 65 and older are also more susceptible to age-related declines in reaction time and mobility, and can be affected by factors such as heart disease, visual impairment, stroke, dementia, and impairment due to prescription medication use (Vanlaar et al. 2008).

This fact sheet contains a review of the magnitude and trends of drivers in four age groups involved in fatal crashes in Canada using different indicators. These age groups include ages 16-19, 20-34, 35-64, and 65 and older.

This fact sheet, sponsored by State Farm, summarizes the characteristics of fatally injured drivers according to age who were involved in

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collisions in Canada from 2000 to 2013. Data for this fact sheet are derived from TIRFS National Fatality Database which is jointly funded by the Public Health Agency of Canada and State Farm. Fatality data from British Columbia from 2011 to 2013 were not available at the time that this fact sheet was prepared. As a result, Canadian data presented have been re-calculated to exclude this jurisdiction and make equitable comparisons.

Trends In fatal crashes by driver age groups

The number of fatally injured drivers by age group in Canada from 2000 to 2013 is shown in Figure 1. Fatally injured drivers aged 16-19 represented the smallest population group and this age group had the fewest fatally injured drivers throughout the 14-year period. In 2000, 134 drivers in this age group were fatally injured, rising to 140 in 2001 before deceasing to a low of 74 in 2013. Among drivers aged 20-34, there were 447 that were killed in 2000, peaking at 467 in 2006, before decreasing to a low of 321 in 2013. The age group that has consistently accounted for the most fatally injured drivers is the 35-64 year old group. There were 609 of these drivers in 2000, peaking at 656 in 2005, before decreasing to 457 in 2013. The second smallest age group in terms of both population and fatally injured drivers was the oldest age group, 65 and older. In 2000, there were 221 fatally injured

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