ROAD SAFETY MONITOR 2019: DISTRACTED DRIVING ATTITUDES AND PRACTICES, 2004-2019

Traffic Injury Research Foundation, May 2020

By: Craig Lyon, Ward G.M. Vanlaar, and Robyn D. Robertson

Introduction

This fact sheet summarizes trends in attitudes about, and practices related to, distracted driving, based upon data from the Road Safety Monitor (RSM). The RSM is an annual public opinion survey conducted by the Traffic Injury Research Foundation (TIRF) under sponsorship from Beer Canada and Desjardins. The survey takes the pulse of the nation on key road safety issues by means of an online[1] survey of a random, representative sample of Canadian drivers.

The objective of the publication is to examine trends over time and the current status of beliefs and practices of drivers related to distracted driving. The increased use of cell phones has led to a growing interest in driver distraction, primarily involving the use of cell phones for texting and talking. It is important to acknowledge, however, that distracted driving is not limited to cell phone use but includes any activity taking the attention of drivers away from the driving task.

Distracted driving has become one of the most significant road safety concerns worldwide, with mobile devices and other in-vehicle technology being at the forefront of discussion. In North America, distraction is estimated to be a factor in approximately 20% to 30% of motor vehicle collisions (Bowman & Robertson, 2016).

A previous comparison of Canadian drivers' self-reported habits with drivers in the United States and Europe (Woods-Fry et al., 2018) showed Canadians were less likely to report they had talked on a handheld mobile device while driving (25% for Canada, 49.7% for the United States, and 37.8% for Europe). In the same study, a significantly larger proportion of American drivers indicated they had sent a text message or email while driving compared with Canadian and European drivers (35.3% for the United States, versus 24% for Canada, and 27.2% for Europe). The proportions of those who reported they had read a text message or email while driving were also significantly different (29.4% for Canada, 41.6% for the United States, and 36.4% for Europe), with Canadians reporting the lowest incidence of this behaviour.

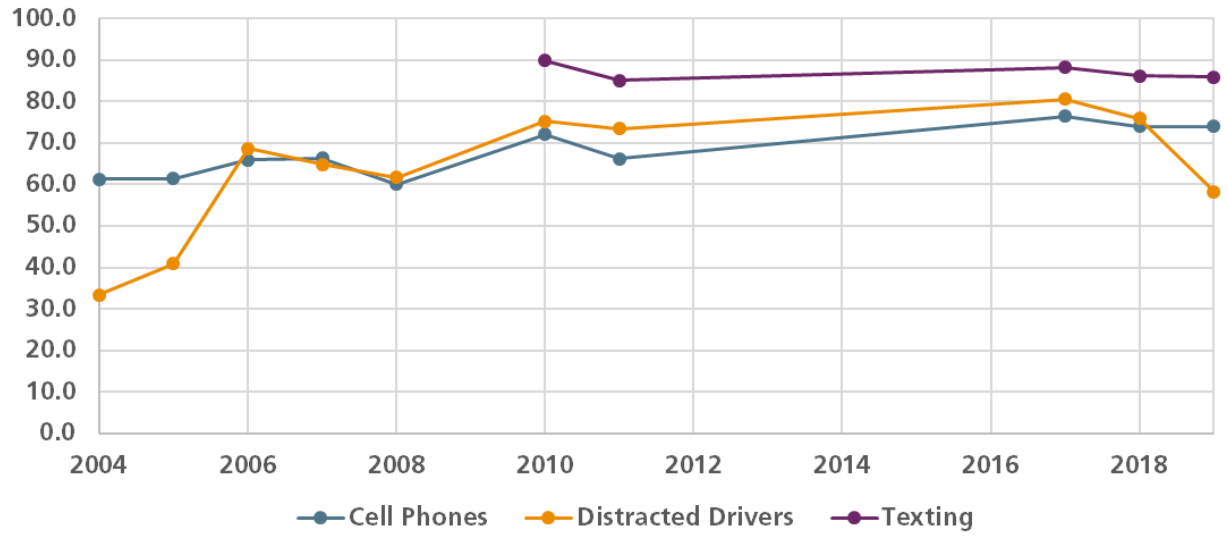
While Canadians' behaviour compares favourably to that of American and European drivers according to these results, TIRF's 2018 RSM revealed some concerning trends in Canada with respect to distracted driving (see Lyon et al., 2019). This fact sheet provides an update of these results based on 2019 RSM data.

Concern about distracted driving

In 2019, Canadians were asked how concerned they were with drivers using cell phones (either

handheld or hands-free), drivers texting messages on their phones while driving, and drivers distracted by such things as entertainment systems, vehicle apps, passengers or eating or drinking. Similar questions were also asked in previous years. Respondents were asked to rate their concern ranging from 1 (not a problem at all) to 6 (an extremely serious problem); for scoring purposes, respondents were coded as being concerned about an issue if they chose five or six.

Figure 1: Percentage of respondents concerned about distracted driving



In 2019, results revealed 74% of respondents were concerned with drivers using cell phones, 85.9% reported concern for drivers texting while driving and 58.3% reported concern for drivers distracted by entertainment systems, vehicle apps, passengers or eating or drinking.

The percentage of respondents expressing concern with each issue from 2004 to 2019 is presented in Figure 1. Since not every question was asked each year there are some gaps in the data.[2]

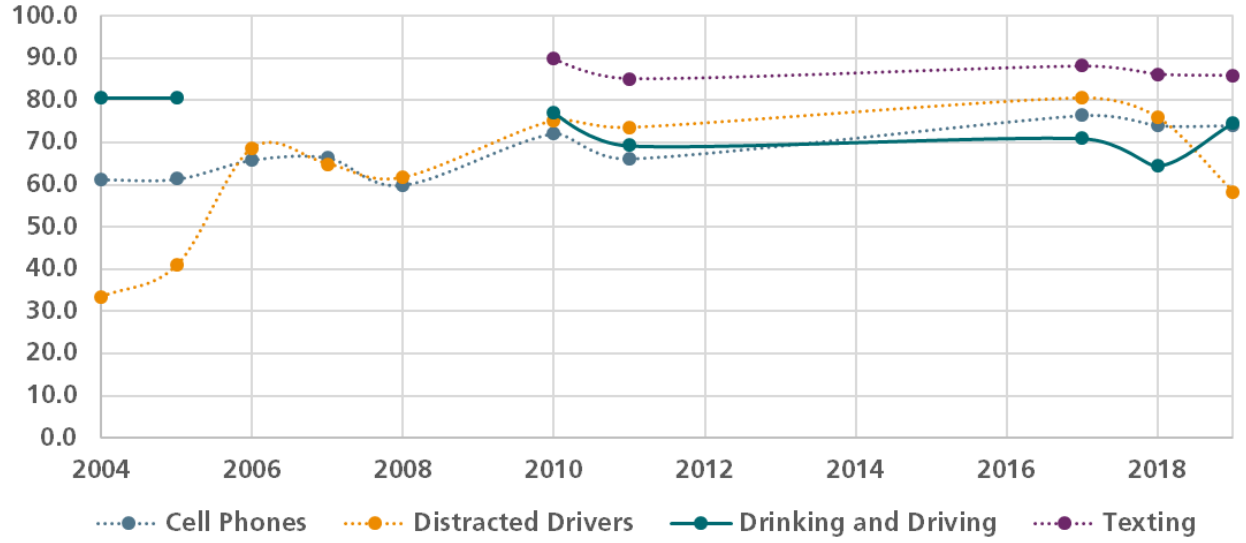
Comparing trends from 2004 to 2019, concern related to distracted driving rose dramatically from a low of 33.4% in 2004 to 75.9% in 2018, with a peak of 80.5% in 2017. Concern then decreased substantially in 2019 to 58.3%. It is important to note the wording of this question changed from 2005 to 2006 and again from 2018 to 2019.[3] These changes may be reflected in respondents' answers with the jump from 40.9% in 2005 to 68.7% in 2006 and the decrease from 75.9% in 2018 to 58.3% in 2019.

Concern related to cell phone use while driving indicated a smaller but significant rise from a low of 61.3% in 2004 to 74% in both 2018 and 2019 with a high of 76.4% in 2017. The results from 2017 to 2019 are statistically different from those in previous years, with the exception of 2010.

Concern about texting has decreased slightly from a high of 89.9% in 2010 to 85.9% in 2019 with a low of 85.1% in 2011.

To put distracted driving in context with other road safety issues, concern with distracted driving was compared to the RSM self-reported concern with drinking and driving. Figure 2 shows the percentage of respondents expressing concern with drinking and driving for the same years that data were available for distracted driving. Concern for drinking and driving decreased from a high of 80.6% in 2004 to 74.7% in 2019 with a low of 64.5% in 2018. In 2019, the issue of driving using cell phones was of equal concern with drinking and driving but less of a concern with texting and driving. Concern with drivers being distracted by means other than the use of mobile phones was lower than for drinking and driving.

Figure 2: Percentage of respondents concerned about distracted driving compared to concern about drinking and driving



Perceived danger of distracted driving

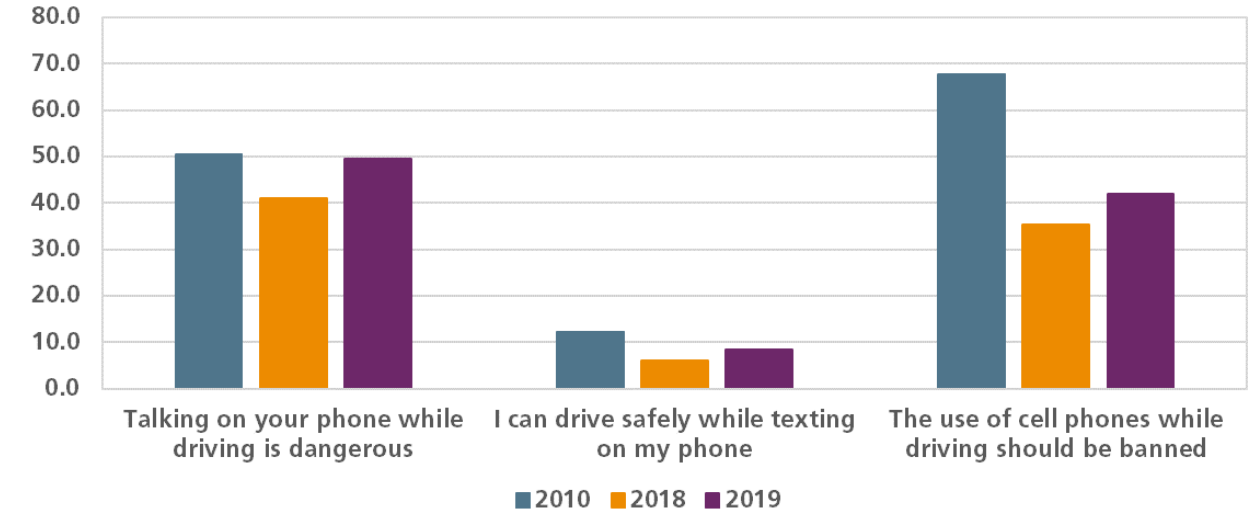
To gauge Canadians' attitudes towards the risks associated with distracted driving, respondents were asked about the extent to which they agreed or disagreed with various statements regarding distracted driving due to the use of cell phones while driving. Specifically, they were asked whether they agreed with the following statements:

1. Talking on your phone while driving is dangerous regardless of whether you use a handheld or a hands-free device;
2. I can drive safely while texting on my phone; and,
3. The use of both handheld and hands-free cell phones while driving should be banned.

Figure 3 shows the percentage of respondents who said they agreed with these statements, rated on a scale from 1 (strongly disagree) to 6 (strongly agree); for scoring purposes, respondents were coded as agreeing with an issue if they chose a five or six.

Slightly less than half of respondents, 49.6%, agreed talking on a handheld or a hands-free device was dangerous and 42% agreed the use of cell phones while driving should be banned. The percentage of drivers supporting a ban decreased markedly since

Figure 3: Percentage of respondents who agreed with statements regarding distracted driving



2010 when 67.7% agreed they should be banned while only 42% agreed so in 2019. The percentage who agreed with a ban in 2019 is a statistically significant increase over 2018 when 35.3% agreed. The percentage of respondents who agreed talking on your phone while driving is dangerous was consistent in 2010 and 2019 while in 2018 it was lower, a statistically significant difference. The percentage of respondents who agreed they can drive safely while texting has shown a statistically significant decrease from 12.2% in 2010 to 8.4% in 2019. However, comparing 2019 to 2018 an increase can be observed from 6% to 8.4%.

Since 2010 support for a cell phone ban while driving has decreased.

These self-report data suggest drivers' attitudes to driving while talking on a phone have remained relatively stable, but support for banning the use of cell phones while driving has decreased. Despite an overall reduction in those who think they can drive safely while texting, there is an increase in this indicator in 2019 compared to 2018.

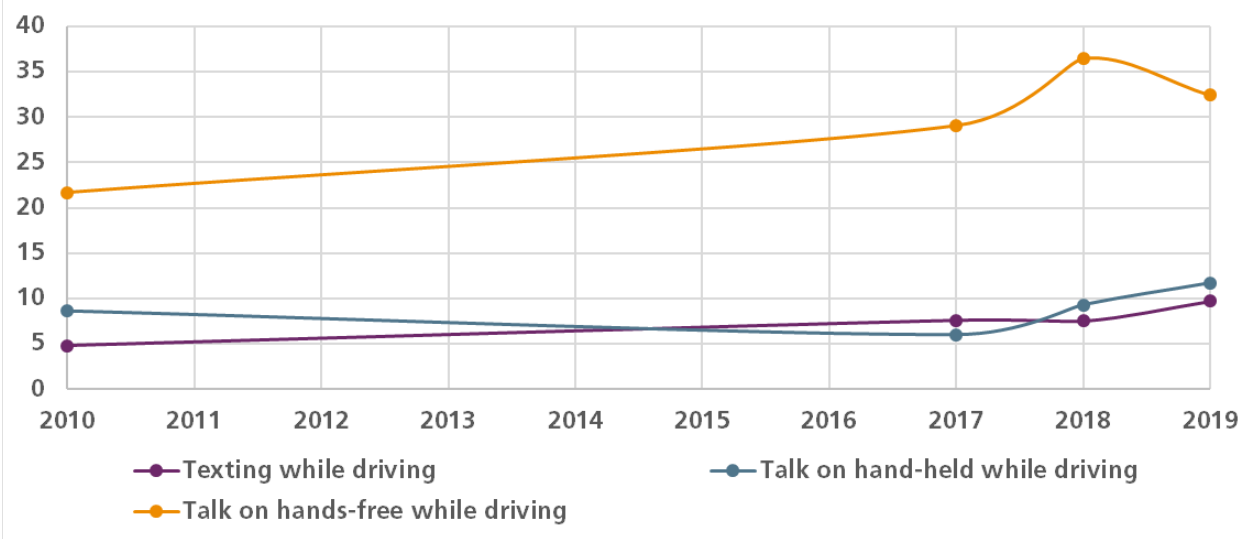
Logistic regression modelling was undertaken to assess the impacts of sex and age on the likelihood of respondents agreeing that talking on a handheld or hands-free cell phone while driving is dangerous, they can drive safely while texting and whether the use of cell phones while driving should be banned.

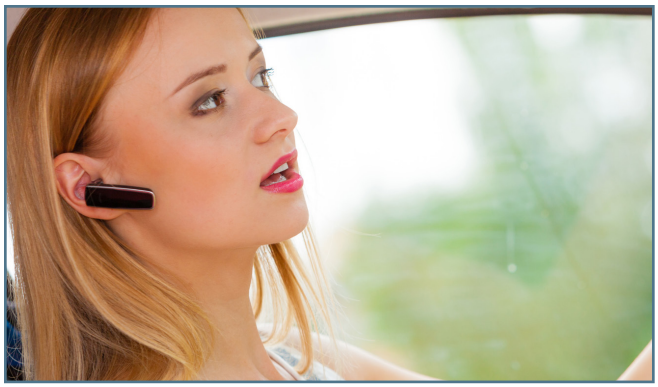
The results for agreement that talking on a cell phone while driving is dangerous showed no statistically significant differences between males and females and a 32% increase in the likelihood of agreement for every 10-year increase in age. The results for sex are in contrast to 2018, when females were found to be 31% more likely to agree (Lyon et al., 2018). The results for agreement they can drive safely while texting showed males were 65% more likely to agree while there was a 15% decrease in the likelihood of agreement for every 10-year increase in age. The results for agreement the use of cell phones should be banned showed no statistically significant differences between males and females and a 40% increase in the likelihood of agreement for every 10-year increase in age.

Frequency of distracted driving

In 2019, Canadians were asked how often they used their cell phones while driving. More specifically, respondents were asked how often they talked on their hands-free phone while driving, how often they talked on their handheld phone while driving, and how often they texted while driving. This question was also asked in 2010, 2017 and 2018. Figure 4 plots the responses over time. The questions were asked on a scale from 1 (never) to 6 (very often); for scoring purposes, respondents were coded as often engaging in distracted driving activities while driving if they chose a four, five or six.

Figure 4: Percentage of respondents who engaged in different types of distracted driving





Results from 2019 revealed 32.4% of respondents reported that they often talked on their hands-free phone while driving, 11.7% indicated they often talked on their handheld phone while driving, and 9.7% reported they often texted on their phone while driving. For comparison, in 2010, 21.7% reported that they often talked on their hands-free phone while driving (Robertson et al. 2011), a statistically significant difference. Fewer Canadians (8.6%) indicated they often talked on their handheld phone while driving in 2010 compared to 2019 (11.7%). A significant 102% increase in the percentage of respondents who reported they often texted on their phone while driving occurred between 2010 (4.8%) and 2019 (9.7%). When comparing 2019 results to 2018, two behaviours (texting while driving and talking on hand-held while driving) increased (from 7.5% to 9.7% and from 9.3% to 11.7% respectively) while one (talking on hands-free) has decreased (from 36.5% to 32.4%).

Respondents were also asked in 2019 how often they took their eyes off the road for more than two seconds while driving; 26.4% admitted to doing this often.

Logistic regression modelling was undertaken to assess the impacts of sex and age on the likelihood of respondents engaging in these distracted driving behaviours. In all cases, increasing age was associated with a lower likelihood of driving while distracted. For every 10-year increase in age drivers were:

- 44% less likely to text (significant);
- 38% less likely to use a handheld phone (significant); and,
- 28% less likely to use a hands-free phone (significant).

Males were also more likely to do so although results are not always statistically significant. To illustrate, males were:

- 55% more likely to text (not significant);
- 62% more likely to use a handheld phone (significant);
- 50% more likely to use a hands-free phone (significant); and,
- 34% more likely to take their eyes off the road for more than two seconds while driving (not significant).

Table 1: Estimated Number of Distracted Drivers by Age and Sex

Sex	Age	Texting while driving	Talk on handheld while driving	Talk on hands-free while driving	Take Eyes Off Road For More Than 2 Seconds while Driving
Male	19-24	212,527	219,066	609,789	565,649
	25-44	1,152,417	1,250,396	2,370,154	2,038,892
	45+	227,627	469,939	1,982,554	1,402,473
Female	19-24	156,480	178,835	555,878	359,160
	25-44	720,737	846,866	1,900,944	1,432,465
	45+	172,309	220,556	1,275,087	1,330,226
All	19-24	369,008	397,901	1,165,668	924,809
	25-44	1,873,154	2,097,262	4,271,098	3,471,357
	45+	399,936	690,494	3,257,641	2,732,700

While age and sex (to a lesser extent) were stable predictors of distracted driving, when considering estimates of the number of drivers engaging in this behaviour on Canadian roads, it was clear the behaviour was common regardless of demographic breakdowns (see Table 1).[4]

To summarize, significantly more Canadians reported talking on their hands-free phone while driving in 2019 compared to 2010. There was a smaller but statistically significant increase in the percentage of Canadians that reported talking on their handheld phone while driving. Alarmingly, there was a significant increase of 102% in the percentage reporting texting while driving in 2019 compared to 2010. Roughly one-fourth of drivers reported taking their eyes off the road for more than two seconds while driving.

Conclusion

This fact sheet summarizes trends in attitudes about, and practices related to, distracted driving, based upon data from TIRF's RSM. The increased use of cell phones has led to a growing interest in driver distraction, primarily involving the use of cell phones for texting and talking. It is important to acknowledge, however, distracted driving is not limited to cell phone use but includes any activity distracting drivers from the driving task.

The percentage of drivers concerned about cell phone use while driving has risen from 61.3% in 2004 to 74% in 2019 whereas concern about texting while driving has decreased slightly from 89.9% in 2010 to 85.9% in 2019. General concern about distracted driving rose dramatically from 33.4% in 2004 to 75.9% in 2018 and then decreased to 58.3% in 2019. It is important to note the wording of the question changed from 2005 to 2006 and again from 2018 to 2019. These changes may be reflected in the drop in concern in 2019.

The percentage of drivers who supported a ban has decreased markedly since 2010 when 67.7% agreed they should be banned while only 42% agreed so in 2019. However, the percentage who agreed with a ban in 2019 was a statistically significant increase over 2018 when 35.3% agreed. The percentage of respondents who agreed talking on your phone while driving is dangerous was consistent in 2010 and 2019, approximately 50%, while in 2018 it was lower, a statistically significant difference. The percentage of respondents who agreed they can drive safely while texting has shown a statistically significant decrease from 12.2% in 2010 to 8.4% in 2019. However, comparing 2019 to 2018, an increase can be observed from 6% to 8.4%.

These self-report data suggest drivers' comfort level with using cell phones for talking while driving is stable, but they have become less comfortable with texting while driving over time. The increase seen in 2019 over 2018 suggests continued messaging and enforcement are needed to reinforce how dangerous this behaviour is and to avoid complacency among the public. Males were found to be 65% more likely to agree they can drive safely while texting but no significant differences were found between males and females for attitudes towards talking on a cell phone while driving or the banning of cell phones while driving. For every 10-year increase in age, there was a 32% increase in the likelihood of agreement that driving while talking on a cell phone was dangerous, a 15% decrease in the likelihood of agreeing they can drive safely while texting and a 40% increase in the likelihood of support for a ban on cell phones while driving.

Significantly more Canadians reported talking on their hands-free phone while driving in 2019 (32.4%) compared to 2010 (21.7%). There was a smaller increase in the percentage of Canadians that reported talking on their handheld phone while driving (11.7% in 2019 versus 8.6% in 2010). Perhaps most concerning, was a 102% increase in the percentage reporting texting while driving in 2019 (9.7%) compared to 2010 (4.8%)

– for a behaviour that can be considered equally impairing as driving under the influence of alcohol with a blood alcohol concentration (BAC) of .08 this level of self-reported driving is alarmingly high. When comparing 2019 results to 2018, two behaviours (texting while driving and talking on a handheld while driving) increased (from 7.5% to 9.7% and from 9.3% to 11.7% respectively) while one (talking on hands-free) has decreased (from 36.5% to 32%). Finally, one-fourth of drivers reported taking their eyes off the road for more than two seconds while driving.

In 2019 9.7% of Canadians reported texting while driving, a 102% increase compared to 2010.

Age was a significant factor in the likelihood of driving while distracted. For every 10-year increase in age, drivers were 44% less likely to text, 38% less likely to use a handheld phone and 28% less likely to use a hands-free phone. Males were 62% more likely to use a handheld phone and 50% more likely to use a hands-free phone. While age and sex (to a lesser extent) may be stable predictors of distracted driving, when considering the estimated numbers of Canadian drivers engaging in the behaviour, it was clear distracted driving is common regardless of age and sex. For example, the demographic least likely to engage in distracted driving, females aged 45 and older who texted while driving still accounted for 172,309 drivers on our roads.

In conclusion, even though most Canadians appeared to understand one of the high-risk forms of distracted driving (i.e., texting while driving) was indeed dangerous, there was a minority who were unaware of, or resistant to, this fact. Most concerning, this minority has doubled in the past decade; the size of this group has now surpassed the size of the group of drivers who admitted to driving while over the legal limit for alcohol. Equally concerning, more Canadians self-reported talking on their hands-free phone while driving in 2019 compared to 2010. While this form of distracted driving may be less impairing than texting, it can still place significant cognitive demands on the driver and thereby take away attention from the primary driving task. Given the road environment can change in a matter of seconds, all forms of distraction should be avoided so drivers can focus their complete attention on the driving task at all times.

About the poll

These results are based on the RSM, an annual public opinion poll developed and conducted by TIRF. A total of 1,200 Canadians completed the poll in 2019. Results can be considered accurate within plus or minus 2.8%, 19 times out of 20. The majority of the questions were answered using a scale from one to six where six indicated high agreement, concern, or support and one indicated low agreement, concern or support.

[1] Prior to 2009 data were collected by means of telephone calls. From 2009 to 2014 data were collected using a combination of telephone calls and online surveys. Since 2014, data have been collected through online surveying only.

[2] None of these questions were asked in 2009 or from 2012 to 2016. The question pertaining to texting while driving was first asked in 2010.

[3] In 2004 and 2005 the question read, "drivers distracted by such things as tape decks, CD's or radios." In 2006, this changed to simply, "distracted drivers." In 2019, the question read "drivers distracted by such things as entertainment systems (i.e. radio), vehicle apps, passengers, eating or drinking etc."

[4] The estimates are based on the number of licensed drivers in Canada in each cell of Table 1 (source: Transport Canada; https://www.tc.gc.ca/eng/motorvehiclesafety/canadian-motor-vehicle-traffic-collision-statistics-2018.html).

References

Bowman, K., Robertson, R. (2016). Preventable Injuries/ fatalities Due to Distracted Driving: A Call for a Coordinated Action. Journal of Orthopaedic & Sports Physical Therapy, Vol. 46, No. 10, pp. 818–821

Lyon, C., Vanlaar, W., Robertson, R. (2019). The Road Safety Monitor 2018: Distracted Driving Attitudes and Practices, 2004-2018. Traffic Injury Research Foundation. Ottawa, Canada.

Robertson, R., Marcoux, K. Vanlaar, W., Pontone, A. (2011). The Road Safety Monitor 2010: Distracted Driving. Traffic Injury Research Foundation. Ottawa, Canada.

Woods-Fry, H., Vanlaar, W., Robertson, R., Torfs, K., Woon, K., Van den Berghe, W., Meesman, U. Comparison of Self-Declared Mobile Use While Driving in Canada, the United States, and Europe: Results from the European Survey of Road Users' Safety Attitudes. Transportation Research Record, Vol. 2672, Issue 37, pp. 74-83.

Traffic Injury Research Foundation

The mission of the Traffic Injury Research Foundation (TIRF) is to reduce traffic-related deaths and injuries. TIRF is a national, independent, charitable road safety research institute. Since its inception in 1964, TIRF has become internationally recognized for its accomplishments in a wide range of subject areas related to identifying the causes of road crashes and developing programs and policies to address them effectively.

Traffic Injury Research Foundation (TIRF)
171 Nepean Street, Suite 200
Ottawa, Ontario K2P 0B4
Phone: (877) 238-5235
Fax: (613) 238-5292
Email: tirf@tirf.ca
Website: **tirf.ca**

ISBN: 978-1-989766-07-1

Financial support provided by:

BEER CANADA

Desjardins

Sign-up today at www.tirf.ca to receive announcements, updates and releases.