



The Road Safety Monitor **2006**

Distracted Driving ●



**TRAFFIC
INJURY
RESEARCH
FOUNDATION**

A DRIVING FORCE FOR SAFETY

The 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 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.

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The Road Safety Monitor 2006

Driver Distraction

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Executive Summary —●

- The Road Safety Monitor (RSM) is an annual public opinion survey by the Traffic Injury Research Foundation (TIRF) that takes the pulse of the nation on key road safety issues by means of a telephone survey of a random, representative sample of Canadian drivers.
- The results of the RSM are released in a series of reports – the present one focuses on driver distraction.
- Results show that a growing number of Canadians are concerned about distracted driving – in a previous survey in 2001, about 40% of Canadians thought distracted driving was a serious problem; the current survey found that nearly 70% thought it was a serious problem.
- 95.5% of drivers think there is more distracted driving today than there was 5 years ago.
- Distractions from outside the vehicle were reported more often as a problem than distractions from within the vehicle – for example, 9.5% of the drivers surveyed said they had to brake or steer to avoid a collision caused by a distraction inside the vehicle, whereas over twice that number (20.2%) said they had to brake or steer to avoid a collision caused by a distraction outside the vehicle.
 - o Age of driver was unrelated to problems associated with distractions arising from outside the vehicle but was closely related to problems with internal distractions – e.g., 19.5% of young drivers reported they had to brake or steer to avoid a collision as a result of a distraction arising inside the vehicle, compared to only 6% of 55-64 year olds.
- The use of a cell phone while driving appears to be increasing – in 2001, 20.5% of drivers reported using a cell phone while driving in the past seven days; in the current survey that number had risen to 37%.
 - o However, there also appears to be a trend toward lower usage time – e.g., there has been an increase in the percentage of drivers who use their cell phone for less than 10 minutes a week (from 57.6% in 2001 to 69.4% in 2006) and a decrease in those who use it between 10 and 20 minutes (from 23.4% to 14.7%).
 - o Further monitoring is necessary before drawing definitive conclusions about these changes.
- Male drivers and young drivers aged 16-34 are more likely to report using their cell phone while driving.
- Canadians overwhelmingly support more educational and awareness efforts on the broader issue of distracted driving.
- More specifically, on the potential dangers associated with the use of electronic devices, there is little agreement regarding the most effective prevention measures; however, there is considerable support for a restriction on the use of cell phones by new drivers.



Introduction —●

The Road Safety Monitor (RSM) is an annual public opinion survey developed and conducted by the Traffic Injury Research Foundation (TIRF) to take the pulse of the nation on key road safety issues. The survey examines:

- what Canadians see as priority road safety issues and how concerned they are about them;
- their views about how to deal with these problems;
- what they know and don't know about safe driving practices; and
- how they behave on the highways.

The RSM includes a core set of questions that are asked each year to provide information on trends in attitudes, opinions and behaviours. This is supplemented each year by a set of questions that probe more deeply into special, topical, and emerging issues.

This report describes the findings from the 2006 RSM regarding the issue of driver distraction. Context is provided to discuss these results and compare them with the results of previous years.



Method —●

The sixth edition of the RSM contained 75 items designed to probe the knowledge, attitudes, and concerns of Canadians with respect to a range of road safety issues, and to obtain information on their driving practices. The survey required an average of 15 minutes to complete. It was administered by telephone to a random sample of Canadian drivers who have driven in the past 30 days. The sample was stratified by province and weighted to avoid bias. Opinion Search Inc. fielded this survey in September, 2006.

A total of 1,201 drivers completed the interview. The data were analyzed taking account of the stratified and weighted sampling design (see StataCorp. 2005 for information about the modeling procedures), using both univariate and multivariate approaches. Based on a sample of this size, on average, the results can be considered accurate within 2.9%, 19 times out of 20.



Background —●

What Is Distracted Driving?

Delegates at the International Conference on Distracted Driving, organized by TIRF and the Canadian Automobile Association (CAA), described distracted driving as “...a diversion of attention from driving, because the driver is temporarily focusing on an object, person, task, or event not related to driving...”. (Hedlund et al. 2006, p. v)

Distraction occurs when the driver’s attention is taken away from the primary driving task and can result both from distractions inside the vehicle (e.g., moving object, adjusting the radio/CD, talking to passengers, talking on a cell phone, eating or drinking) as well as outside the vehicle (e.g., admiring the landscape, billboards alongside the road, events). This fact was underscored by a major study that used accident data from 1995-1999 (Stutts et al. 2001). It was found that the most frequently reported source of distraction leading to crashes was persons, events or objects outside of the vehicle (29%), adjusting the radio/tape/CD player (11%), and other occupants of the vehicle (11%). Using/dialling a cell phone only accounted for 1.5% of reported distractions.

Indeed, a major emphasis at the International Conference on Distracted Driving was placed on the need to increase awareness about the wide range of factors that are distracting and potentially dangerous. This was particularly important in view of the fact that distracted driving had inappropriately become synonymous with cell phone usage.

How Common Is Distracted Driving and How Risky Is It?

As implied above, the issue of distracted driving has only recently come to the forefront, mainly as a result of the proliferation of cell phones and an increase in their use while driving. As a consequence, research into the causes of distraction and their consequences is relatively limited – “...the quality and quantity of the existing evidence is insufficient to state with confidence how risky distracted driving is, and among the



many distractions, which pose the greatest risk, and under what circumstances.”
(Hedlund et al. 2006, p. v)

Nevertheless, the limited evidence does suggest that driver distraction is anything but an insignificant traffic safety issue (Hedlund et al. 2006). For example, in the United States, the National Highway Traffic Safety Administration (NHTSA) estimates that about 25% of injury and property damage crashes are the result of driver distraction (Wang et al. 1996).

Given the relevance of driver distraction as a traffic safety issue, the purpose of this report was to investigate levels of concern among Canadians about it; to estimate how often they engage in distracting behaviour while driving; and, to gauge their support for actions to control the problem.



Public Concern about Driver Distraction —●

Are Canadians Concerned about Driver Distraction?

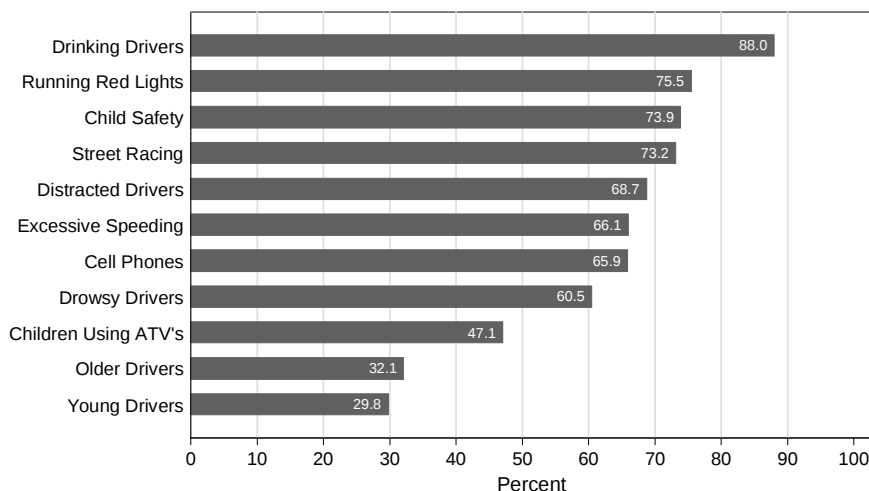
Survey respondents were asked to indicate their level of concern about a variety of road safety issues, including driver distraction. They rated the seriousness of each problem on a six-point scale from one (not a problem at all) to six (extremely serious problem). Figure 1 shows the percentage of respondents who thought the issue was very serious or extremely serious (a rating of five or six).

About 69% of Canadians think distracted drivers are a very or an extremely serious problem; 65.9% have the same opinion about cell phone use while driving¹. Significantly more Canadians are concerned about other issues such as street racing (73.2%), running red lights (75.5%) and drinking drivers (88.0%).

69% of Canadians think distracted drivers are a very or extremely serious problem; 66% have the same opinion about cell phone use while driving.

On the other hand, Canadians are significantly more concerned about distracted driving than they are about issues such as drowsy drivers (60.5%) or older drivers (32.1%).

Figure 1: Level of concern about road safety issues



¹ "Cell phones" refers to both hand-held or hands-free use of cell phones while driving.



Of considerable interest, five years ago, the 2001 RSM revealed that cell phones were seen as a distinct issue and a greater concern to Canadians than distracted driving in general. At that time, 40% of Canadians thought distracted drivers were a very or extremely serious problem; today, 69% think distracted drivers are a very or extremely serious problem. In 2001, 66% expressed such concern about the use of cell phones while driving (Beirness et al. 2002); today, the proportion of Canadians expressing their concern about cell phone use while driving is about the same as it was in 2001.

Compared to 2001, today, more Canadians are concerned about distracted driving, while the proportion of Canadians expressing concern about cell phone use remained the same.

This finding is of interest because delegates at the International Conference on Distracted Driving were concerned about the low level of public awareness and concern regarding the more general issue of distracted driving. The present survey results suggest this level has increased; in part this might be attributable to recent media campaigns that have stressed the variety of causes of distracted driving and their safety importance.

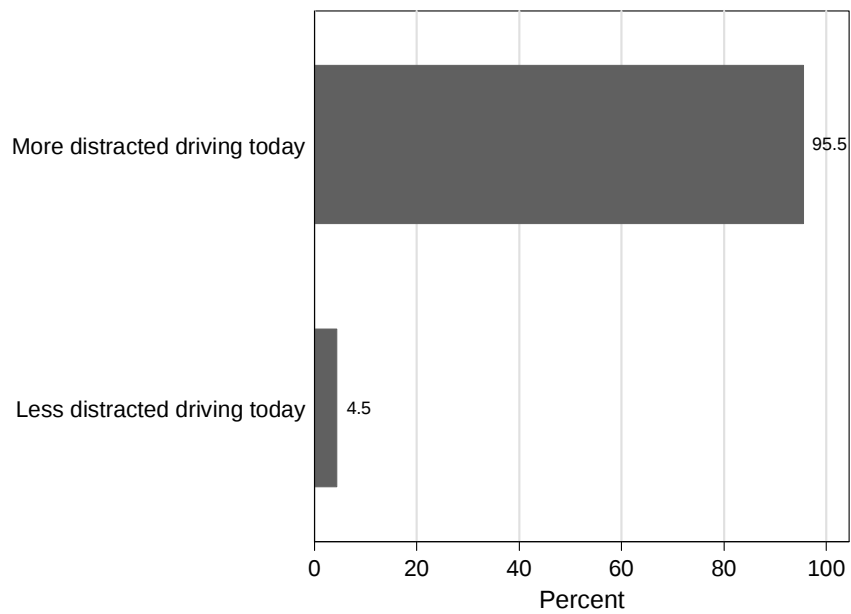
Do Canadians Believe There Is More or Less Distracted Driving Today?

As noted in the previous section, today more Canadians think distracted drivers pose a very or an extremely serious problem on our roads. Such an increase may have resulted from a growing awareness of the broader issue of distracted driving and/or from a belief among the public that the problem is more prevalent today.

In this regard, respondents were asked if they thought there is more or less distracted driving today, compared to five years ago. As can be seen in Figure 2, 95.5% of Canadians believe there is more distracted driving today than five years ago.



Figure 2: Percent agreeing/disagreeing there is more distracted driving today compared to five years ago



Magnitude of the Problem of Driver Distraction —●

Levels of concern among the public can partly be explained by their perception of the magnitude of the problem. Knowing the magnitude of the problem is also important because it sheds light on its importance as a traffic safety issue.

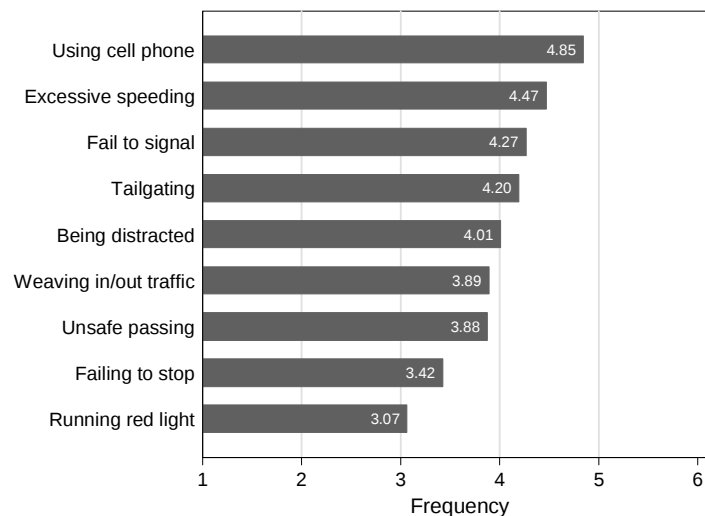
How Often Do Canadians See Distracted Drivers or Drivers Using Their Cell Phones?

Respondents were asked to indicate, for a variety of behaviours, how often they see them happening on the road, by giving a number between one (never) and six (very often).

Figure 3 displays the average perceived frequency of nine driving behaviours. As can be seen, drivers using cell phones tops the list with an average reported frequency of 4.85; drivers being distracted has an average reported frequency of 4.01.

Out of nine possibly unsafe driving behaviours, using cell phones was seen most frequently by Canadians.

Figure 3: Average perceived frequency of nine driving behaviours



Of some interest, the average perceived frequency of the driving behaviours shown in the figure are very similar to the results obtained in the 2001 survey. In particular, the perceived frequency of cell phone use was 4.8 in 2001 (Beirness et al. 2002), which is very comparable to the current value (4.85). This consistency in the perceived frequency of cell phone use and driving may be part of the explanation why concern among Canadians about the use of cell phones while driving has not changed over the last five years (see previous section).

It is also interesting to compare the reported frequency with which respondents say they see other drivers using their cell phone with their own self-reported usage of cell phones while driving. Although just one third of respondents (37%) said they used their cell phone while driving in the last seven days, some 85% said they observed others doing so. This can be explained by the fact that the 37% who used their phone in the past seven days did so more than once.

How Often Do Drivers Use Cell Phones?

The use of cell phones while driving appears to be growing. In the 2001 survey, about one in five drivers (20.5%) reported that they had used a cell phone while driving in the past seven days. In the current survey, the comparable proportion was 37% -- a significant increase. When applied to the entire population of drivers in Canada, this indicates that approximately 8.2 million drivers use a cell phone while driving each week².

Incidentally, age and gender both influence cell phone use. Out of all males, 43% reported they had used a cell phone while driving in the past seven days, while only 32% of females reported this. Young drivers aged 16-34 are more likely to report having used their cell phone: 55% of them admit to it, while only 29% of drivers aged 35 and over do so.

Male drivers and young drivers aged 16-34 are more likely to report using their cell phone while driving.

Respondents were also asked how many minutes they spend on a cell phone while driving during the past seven days. Among those who reported that they had used a cell

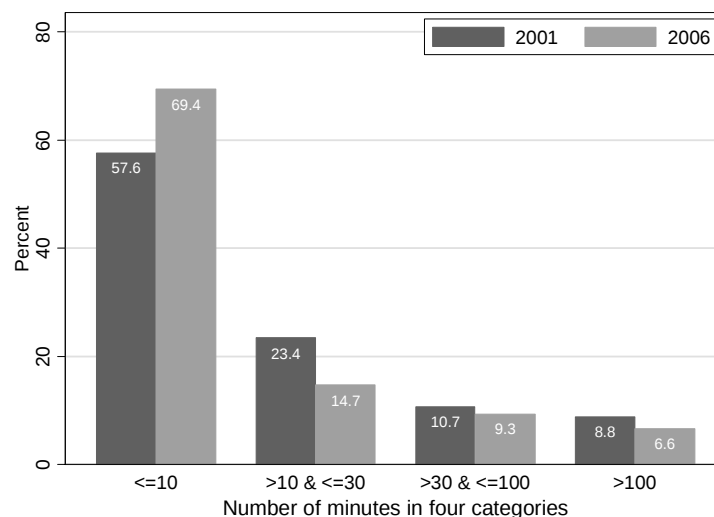
² Based on an estimated 22.25 million licensed drivers.



phone in the past seven days, the average length of time it was used while driving was 35 minutes; the maximum was 800 minutes. Further details are shown in Figure 4 together with the comparable results from the 2001 survey.

The most notable changes have occurred among the less frequent users. There has been an increase in the percent of drivers who use their phone for up to 10 minutes a week (from 57.6% to 69.4%) and a decrease in the percent who use their phone for more than 10 minutes up to 30 minutes during the week – from 23.4% in 2001 to 14.7% in 2006.³

Figure 4: Minutes of cell phone use while driving in past seven days



The extent to which this change represents a positive safety effect is of course not known, nor are the reasons for this change itself. At the same time, it is evident that among the more frequent users, there has been little change at all over the past several years. Further monitoring is necessary before drawing definitive conclusions about these changes.

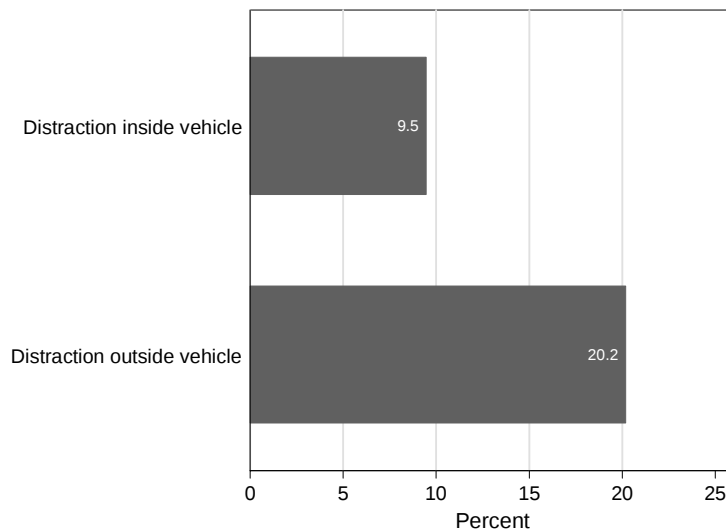
³ One could argue that the apparent decrease in drivers making long calls should have a positive effect on the public's level of concern. It should be noted, however, that it is easier for people to see whether drivers are making a call or not and that it is more difficult for them to see how long drivers are on the phone when they are making a call. As such, it is less likely that a change in length of phone calls at the wheel will have an effect on the public's level of concern, while it is likely that a change in the perceived frequency of cell phone use would affect concern, as argued previously.



How Often Do Canadians Have to Brake or Steer to Avoid a Crash Because They Were Distracted?

Respondents were asked to report if they ever had to brake or steer to avoid being in a collision in the last month because of a distraction inside or outside the vehicle. They could answer yes or no. Figure 5 contains the results.

Figure 5: Percent who had to brake or steer to avoid a crash because of a distraction inside or outside the vehicle



Almost one tenth of Canadians (9.5%) admit they had to brake or steer to avoid a crash because of a distraction *inside* the vehicle and about one fifth (20.2%) because of a distraction *outside* the vehicle. Distractions outside the vehicle are twice as likely to be reported as distractions inside the vehicle; this difference is significant and consistent with research findings that suggest external distractions are more important than internal ones (e.g., Stutts et al. 2001).

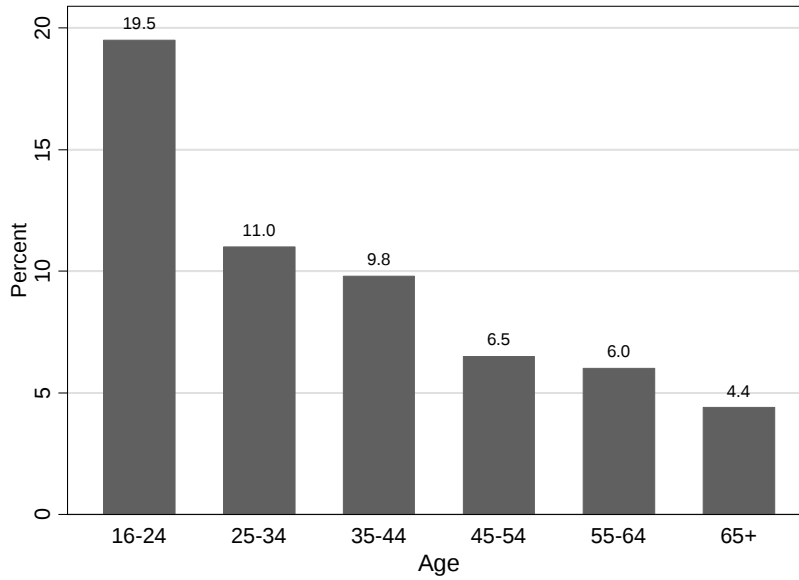
Interestingly, a significant relationship was found between age and admitting to braking or steering to avoid a collision because of a distraction *inside* the vehicle. Such a relationship was not found between age and distractions *outside* the vehicle.

Figure 6 illustrates this age effect. With increases in age, there is a decrease in the reported frequency with which drivers had to brake or steer to avoid being in a collision because of a distraction inside the vehicle. No other variables (e.g., gender) were found



to have a significant influence on the percent of drivers who had to brake or steer for this reason.

Figure 6: Percent who had to brake or steer because of a distraction inside the vehicle by age



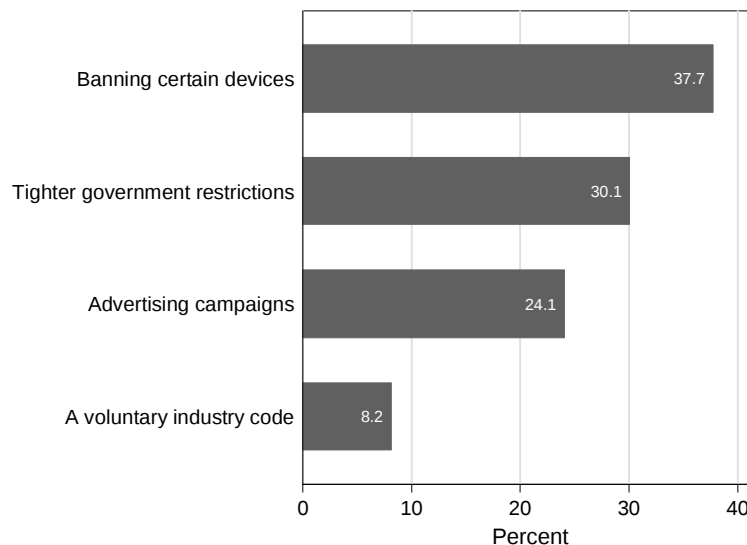
Public Support for Actions to Control Driver Distraction —●

Level of Support for Various Measures

A series of questions were asked to gauge the level of support for various measures that can be used to address the issue of distracted driving. First, respondents were asked if greater awareness and education efforts are needed to alert drivers to the problem of distracted driving. Eighty percent of Canadian drivers agree with this need.

Second, respondents were asked about measures to control distractions arising from electronic, telemetric, and other such devices inside the vehicle. They were asked which of four approaches they regarded as the most effective. As can be seen in Figure 7, there is not a high level of concurrence regarding the most effective approach – about 38% of respondents believe that banning certain devices altogether would be most effective, 30% see tighter government restrictions – without necessarily banning devices – as the best method, 24% support advertising campaigns and only 8% agree with a voluntary industry code.

Figure 7: Percent who believe approach is most effective



Finally, and specifically with respect to cell phones, respondents were asked if new drivers should be restricted from using them while driving – 80% agreed.

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