



The Road Safety Monitor 2006

Drinking and Driving ●



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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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Drinking and Driving _____●

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Executive Summary —●

- Canadians see drinking and driving as a major social and traffic safety problem.
- Although there has been a general decreasing trend in the number of persons killed in a traffic crash involving a drinking-driver on public roads, much of the decrease occurred during the 1990s. Progress since then has been limited. Furthermore, the number of alcohol-involved fatalities remains high (815 in 2004).
- There were an estimated 10.2 million trips in the past year when Canadians said they drove while they thought they were over the legal limit.
- However, the vast majority of these trips (92.4%) were accounted for by a small minority (4.4%) of drivers.
- Canadians remain more concerned about the problem of drinking and driving than any other contemporary social issue; they also continue to perceive drinking and driving as the number one road safety issue.
- Canadians are concerned with drinking and driving for three primary reasons. First, they believe drinking and driving is riskier than any other traffic safety issue; second, they are convinced that drinking and driving is more common than any other behaviour, with the exception of cell phone use while driving; and third, they think that offenders do not perceive drinking and driving as risky.
- An additional explanation for their concern may be their lower level of confidence in the criminal justice system for dealing with the problem of drinking and driving.
- The perception that the criminal justice system does not work effectively and efficiently enough may also explain in part the behaviour of those Canadians who engage in drinking and driving, even when they think they are above the legal limit.
- Canadians are supportive of more efforts to deal with the problem – police spot checks, immediate impoundment of the vehicles of drivers who fail a breath test, mandatory use of ignition interlock devices for persons convicted of an impaired driving offence and testing the physical coordination when the driver is suspected of being impaired by drugs or alcohol are all strongly endorsed. There is considerably less support among Canadians for lowering the legal Blood Alcohol Concentration (BAC) limit.
- In general, a higher level of concern about the problem of drinking and driving is associated with a higher level of support for most of the listed actions.
- Of interest, ignition interlock devices are more strongly supported by those who reported they drove within two hours after drinking any amount of alcohol compared to those who do not report driving after drinking. This suggests that drinking-drivers view these devices as a less negative consequence than alternatives like revocation of their driver's licence or jail.



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 drinking and driving. Context is provided to discuss these results and to 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 that was stratified by province and weighted to avoid biased results. 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), and using both a univariate and a multivariate approach. Based on a sample of this size, on average, the results can be considered accurate within 2.9%, 19 times out of 20.

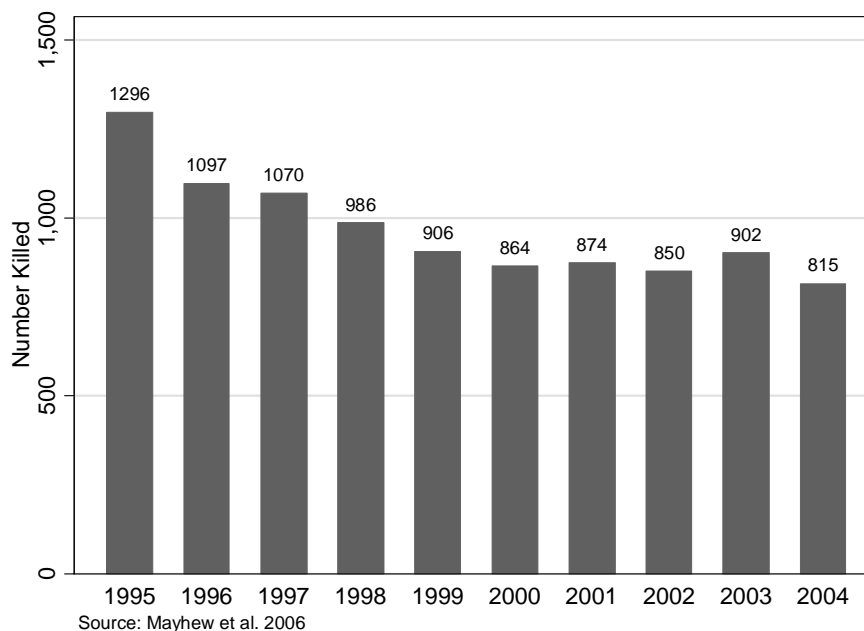


Drinking and Driving in Canada —●

How many Canadians die in traffic crashes involving a drinking-driver?

Figure 1 shows the number of persons killed in a traffic crash in Canada involving a drinking-driver, from 1995 through 2004. A general decreasing trend is evident: overall, there has been a decrease in the number of persons killed, from 1,296 in 1995 to 815 in 2004 (Mayhew et al. 2006).

Figure 1. Number¹ of Persons Killed in Crashes Involving a Drinking-Driver²



Despite a decreasing trend in alcohol-involved fatalities, the number of persons killed remains high – 815 in 2004.

This decreasing trend is somewhat more pronounced when the number of persons killed is standardized with available population data. Figures 2 and 3 show the number of

¹ Numbers are estimates based on the percent of fatalities for which information was available to determine alcohol use.

² These data are about collisions on public roadways involving principal vehicle types (i.e., automobiles, trucks/vans, motorcycles/mopeds, and tractor trailers).



persons killed in a traffic crash in Canada involving a drinking-driver per 100,000 population and per 100,000 licensed drivers, respectively.

Figure 2. Number of Persons Killed in Crashes Involving a Drinking-Driver Per 100,000 Population

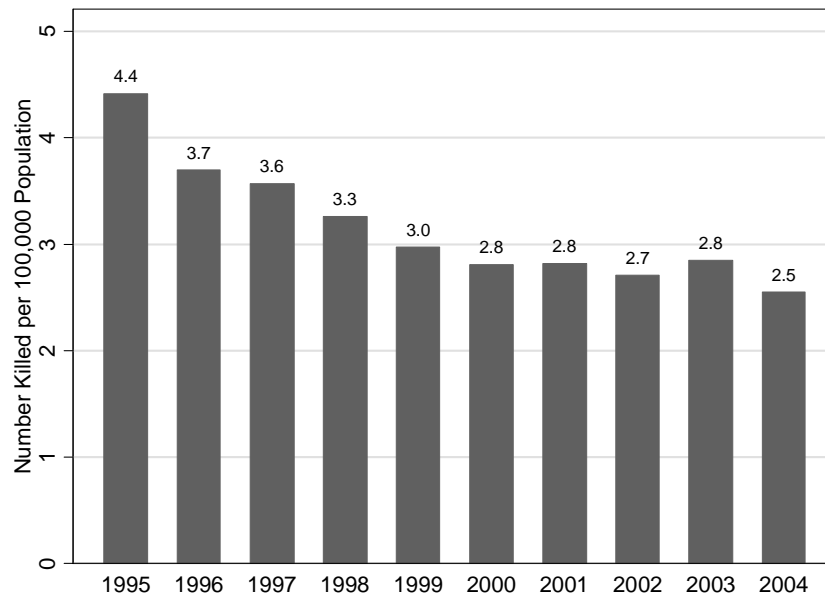
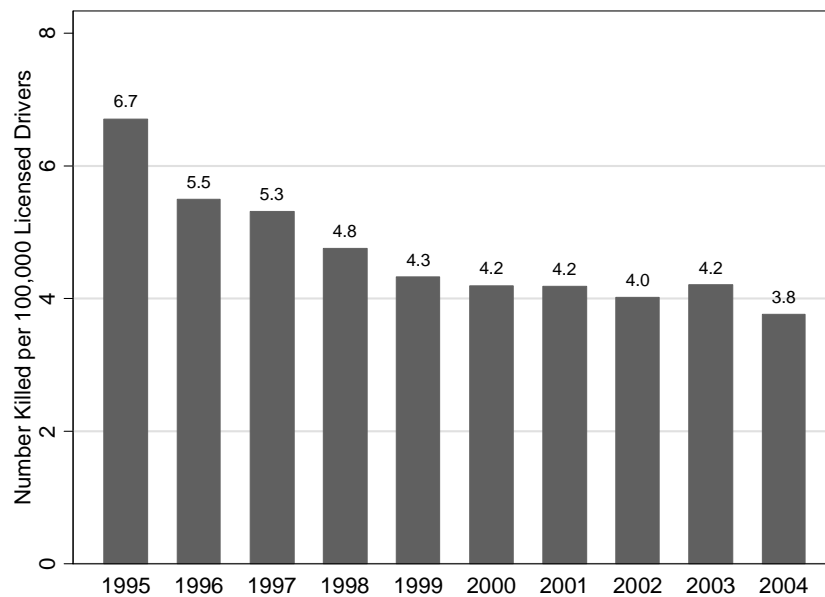


Figure 3. Number of Persons Killed in Crashes Involving a Drinking-Driver Per 100,000 Licensed Drivers



Much of this decrease, both in absolute and relative terms, occurred during the 1990s. Despite a continued, albeit less pronounced decrease in recent years, the number of persons killed in a collision involving a drinking-driver remains high and is a reason for concern. About 30% of all fatalities on Canadian roads involve people killed in a drinking-driving crash (Mayhew et al. 2006).

How many Canadians drink and drive?

Some 17.5% of Canadians report they have driven at least once in the past thirty days within two hours of drinking any amount of alcohol. This percentage might seem high, but should be interpreted with caution, since 'any amount' does not only pertain to amounts above the legal limit but also to amounts below the legal limit, including amounts arising from having had just one drink – the latter would typically correspond to a Blood Alcohol Concentration (BAC) of about .02%. Nevertheless it represents the proportion who admit that they have actually driven within two hours of drinking.

How many Canadians drive when they think they are over the legal limit?

Respondents were also asked on how many occasions in the past 12 months they had been driving when they thought they were probably over the legal limit – 7.7% of them answered they did so on at least one occasion. When extended to the general population of licensed drivers, this represents 1.7 million Canadians who reported driving when they thought they were over the legal limit at some time during the past year³.

7.7% of licensed Canadians (an estimated 1.7 million Canadians) report they have driven in the past 12 months when they thought they were over the legal limit.

If the reported number of times they did this is compared to the corresponding proportion of the total number of licensed drivers, it can be estimated that there were about 10.2 million trips last year during which the driver thought he/she was over the legal limit. However, the vast majority of these trips (92.4%) were accounted for by only 4.4% of the drivers.

There were about 10.2 million trips last year during which the driver thought he/she was over the legal limit.

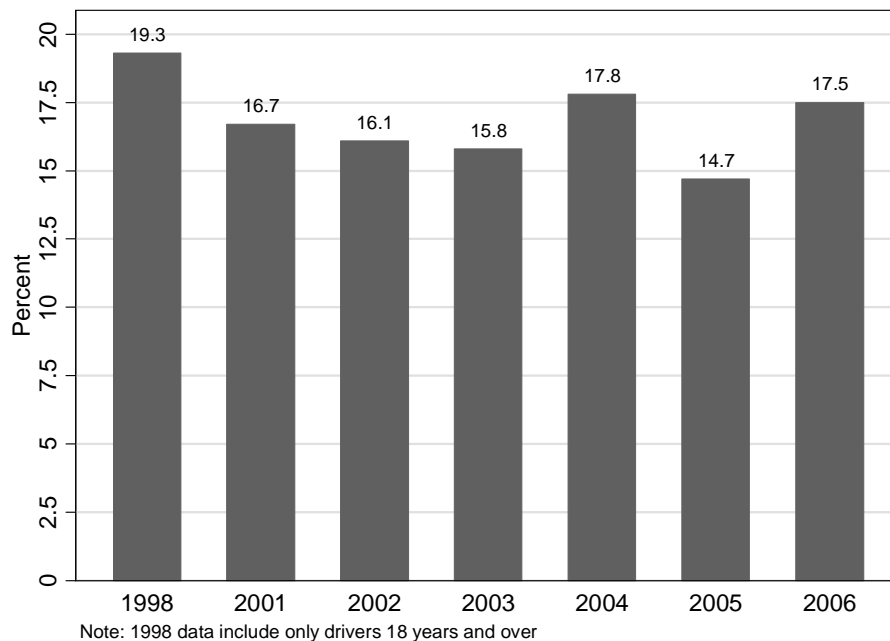
³ Based on an estimated 22.25 million licensed drivers.



Is the number of drinking-drivers increasing or decreasing?

The RSM has for six years obtained data on the percentage of Canadians who report they had driven after consuming any amount of alcohol in the past 30 days. Figure 4 presents the findings and includes the findings from a 1998 survey, which served as a precursor of the RSM. As can be seen, there was a consistent decline in the percentage who reported driving after drinking from 1998 to 2003, inclusive. The percentage increased in 2004, declined again in 2005 but increased once more in 2006.⁴ It is premature to conclude whether the declining trend from 1998 through 2003 will continue or not. If the decline does continue in future years the 2004 and 2006 results could be considered distortions due to random fluctuations.

Figure 4. Percentage Who Report Driving Within Two Hours of Drinking Any Amount of Alcohol in Past 30 Days



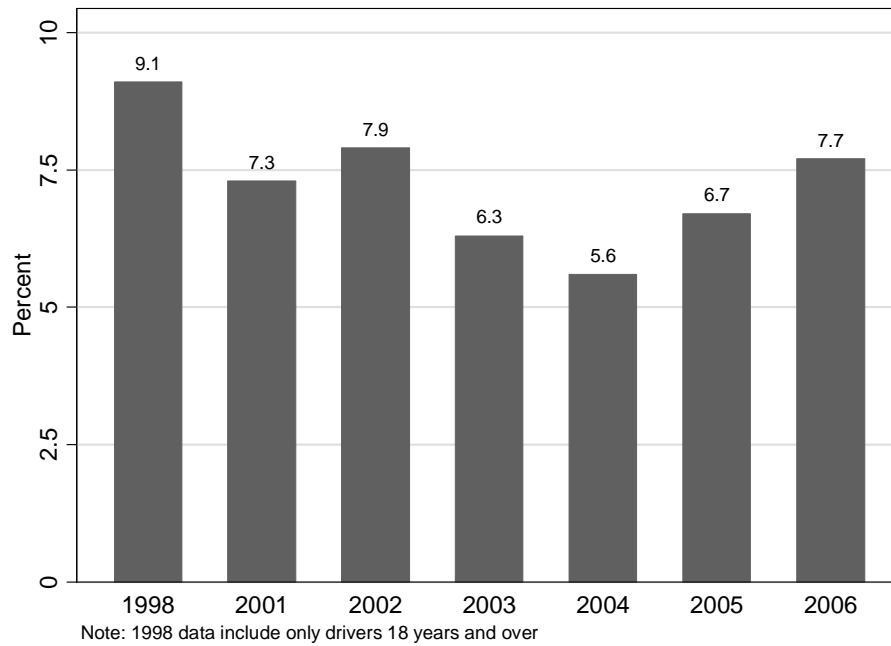
A somewhat different pattern emerges when considering the percentage of drivers who admitted to driving while over the legal limit in the past 12 months (see Figure 5). A reasonably consistent and encouraging decline was noted through 2004 but there was

⁴ 1998 data are taken from Simpson et al. 1999; 2001-2005 data are taken from Beirness et al. 2005.



an increase in 2005 and a further increase in 2006, which may be indicative of a real increasing trend. This recent upward trend needs to be monitored closely in future surveys.

Figure 5. Percentage Who Report Driving When They Thought They Were Over the Limit in Past 12 Months



Concern About the Problem of Drinking and Driving —●

Where does the issue of drinking and driving sit on the public agenda?

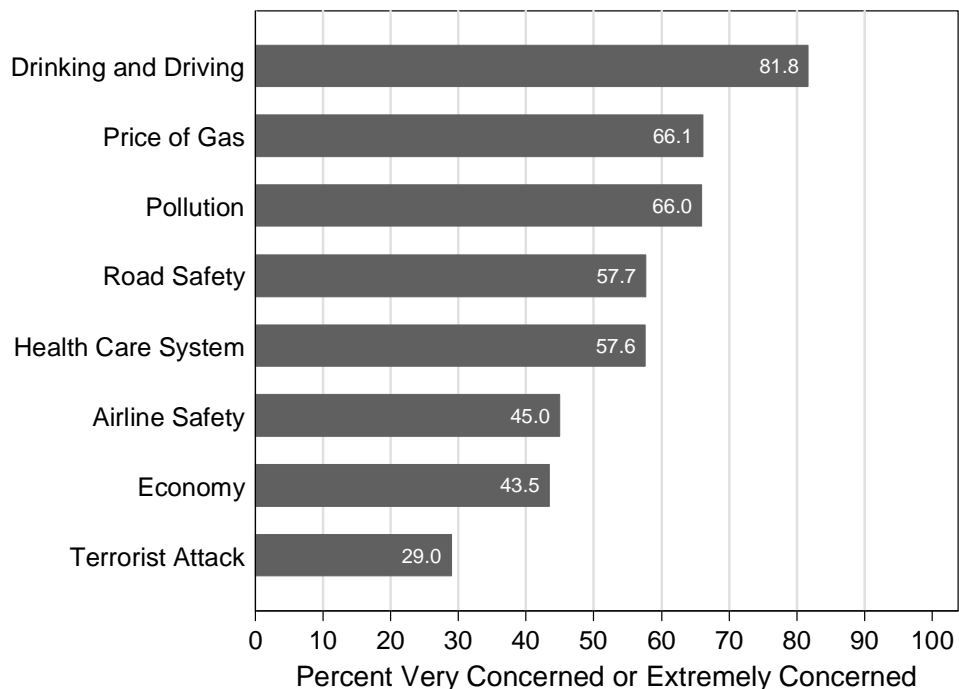
Canadians are more concerned about the problem of drinking and driving than many other contemporary issues such as the health care system, pollution, airline safety, terrorist attacks, road safety in general, the price of gas, or the state of economy.

Figure 6 shows the percentage of respondents who are “very concerned” or “extremely concerned” about a variety of social issues, rated on a scale from 1 (not at all concerned) to 6 (extremely concerned). Clearly, more Canadians are concerned with drinking and driving than with any of the other issues presented:

Canadians are more concerned about drinking and driving than any other contemporary social issue.

81.8% indicate they are very or extremely concerned about drinking and driving.

Figure 6. Level of Concern About Social Issues – Percentage



None of the other issues come close to this in terms of the level of concern. The second ranked issue, the price of gas, for example, is significantly lower at 66.1%. Compared to last year's results, the picture is somewhat different with respect to the price of gas, which, at that time, ranked as a close second to drinking and driving (Beirness et al. 2005). Given that last year's survey was conducted at a time when the price of gas rose to over a dollar per litre across Canada, this result was not surprising. After the price of gas decreased again, Canadians habituated to the new price and, as a result, are now less concerned about it.

By contrast, the percentage of Canadians who are very concerned or extremely concerned about drinking and driving has not changed since 2001. At least 80% of Canadians have rated this as an issue they are very or extremely concerned about, and each year they have rated it as something of greater concern than a variety of other social issues (see Beirness et al. 2005, 2004, 2003, 2002).

Since 2001, at least 80% of Canadians have been very or extremely concerned about drinking and driving.

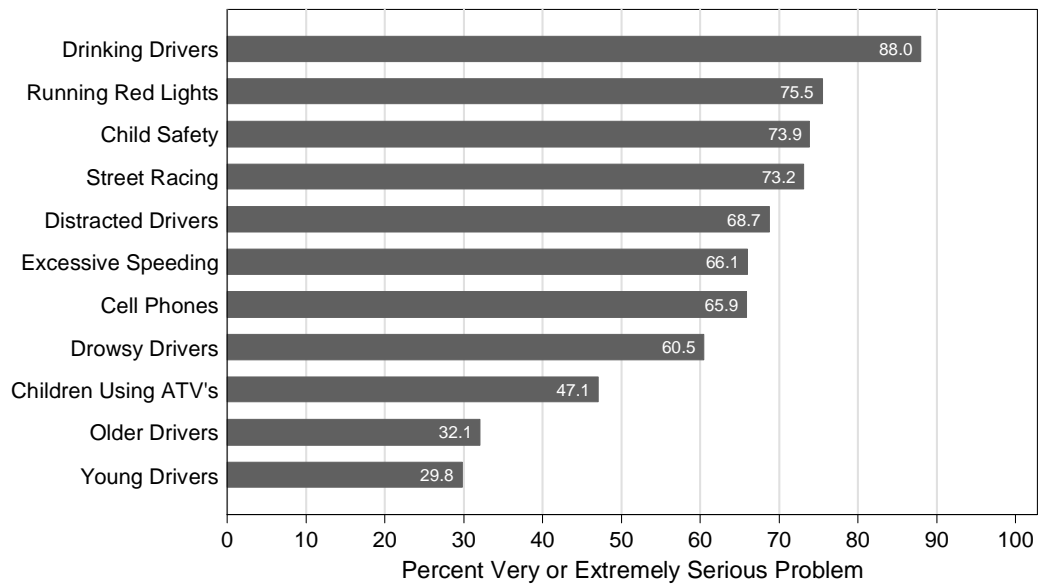
Is drinking and driving still a major road safety issue for Canadians?

Respondents were also asked to indicate their level of concern about a variety of road safety issues, including drinking and driving. They rated the seriousness of each problem on a six-point scale from 1 (not a problem at all) to 6 (extremely serious problem). Figure 7 shows the percentage of respondents who thought the issue was very serious or extremely serious. Figure 8 contains the average rating on the same six-point scale for each item.

Not only do Canadians regard drinking and driving as a serious societal issue, they also see it as the most serious road safety issue facing them today. Out of the 11 road safety issues tapped in the survey, drinking and driving was seen as a very serious or extremely serious problem by 88% of Canadians, which is also reflected by the highest average rating (5.5) in Figure 8. This is significantly higher than running red lights (75.5%; 5.1), which was the issue rated as the second most serious problem.



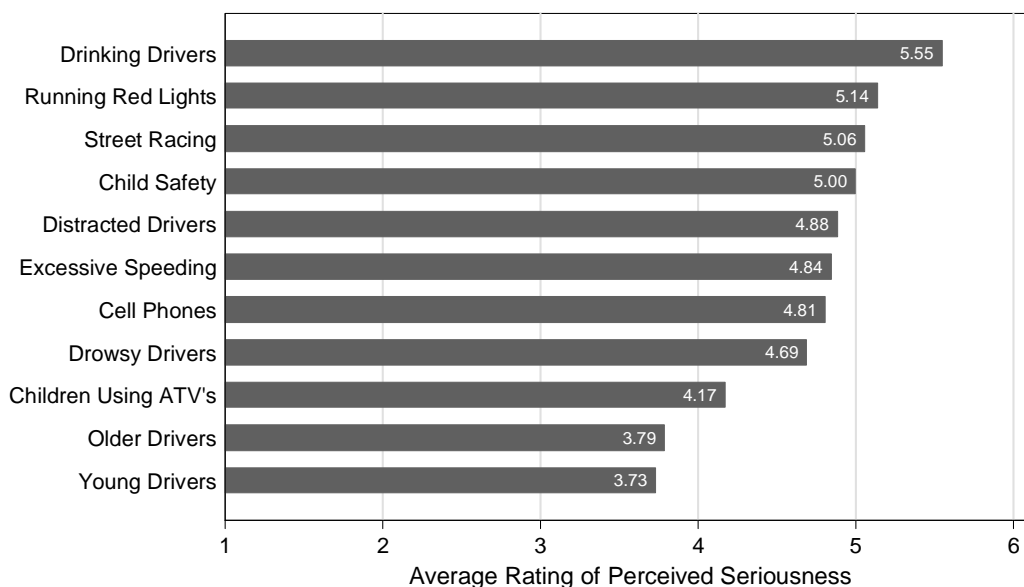
Figure 7. Level of Concern About Road Safety Issues – Percentage



Compared to previous years, Canadians continue to view drinking and driving as the number one road safety issue. Ever since 2001, drinking and driving has topped the list of road safety issues (see Beirness et al. 2005, 2004, 2003, 2002).

Canadians continue to perceive drinking and driving as the number one road safety issue.

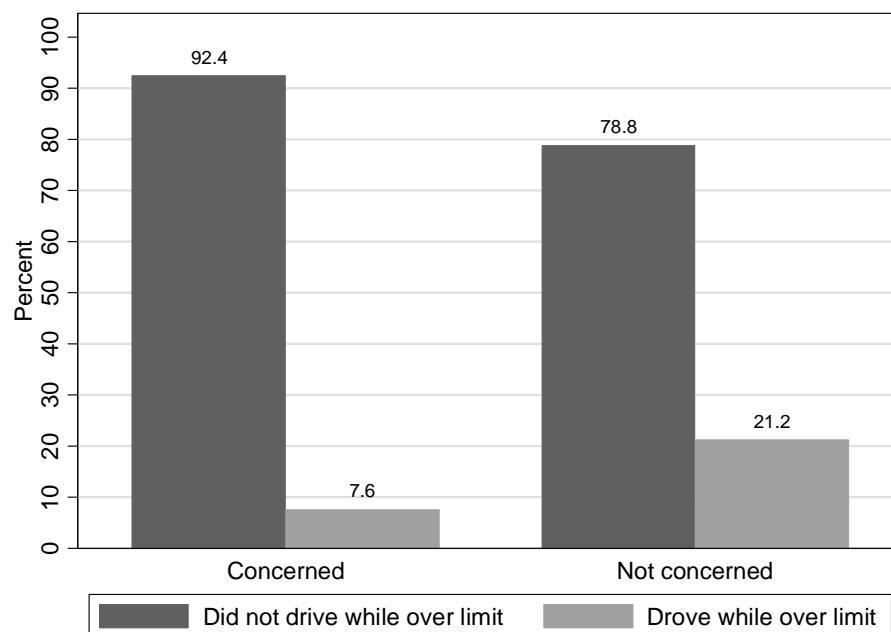
Figure 8. Level of Concern About Road Safety Issues – Average Rating



Is there a relationship between concern about drinking and driving and self-reported drinking-driving behaviour?

There is a significant relationship between concern about drinking-driving and driving with a BAC that is believed to be over the legal limit. As can be seen in Figure 9, Canadians who are not concerned about the issue of drinking and driving are far more likely to report driving while they thought they were over the legal limit than Canadians who are concerned about the issue (21.2% compared to 7.6%). This suggests that attributing an appropriate level of concern to the problem of drinking and driving may facilitate or encourage refraining from drinking and driving. The challenge is how to instill such concern.

Figure 9. Percentage Who Report Driving When Over the Limit in Past 12 Months by Concern About the Problem of Drinking and Driving



Reasons Why Canadians Are So Concerned with Drinking and Driving —●

As discussed in the previous section, Canadians continue to be very concerned about drinking and driving – they regard it a major social issue and the number one road safety problem. Given the high annual toll on the roads due to drinking and driving, the high number of drinking-drivers, and the relatively nominal change in the extent of the problem in recent years, this concern seems justified.

Paradoxically, however, it has been shown that Canadians are in fact not really aware of the facts related to the consequences of traffic crashes (see Singhal et al. 2006) – for example, Canadians have very little idea how many are killed each year; and many Canadians incorrectly believe the number of road deaths is increasing each year. This raises the question as to what factors influence the public's level of concern. Such an understanding can shed light on how the public forms their opinion about dangers associated with certain road safety issues. This section attempts to provide insights into why Canadians are so concerned with drinking and driving.

Concern as a function of risk and prevalence perception

It has been argued (e.g., Vanlaar 2004; Vanlaar and Yannis 2006) that when people gauge the seriousness of issues such as drinking and driving, they implicitly distinguish between the prevalence of the behaviour (how often they think people drink and drive) and the risk that such drinking-drivers pose to public safety (how likely they think it is that a drinking-driver will cause a road crash).

Thus, someone who believes that many people drink and drive and that drinking-drivers are at high risk of causing a crash will be very concerned with the issue. A person who thinks that the prevalence of drinking and driving is low and that drinking and driving is not a particularly risky behaviour will most likely not be that concerned about it.

To explore concern among Canadians as a function of prevalence and risk perception, a technique called multidimensional scaling or perceptual mapping (see Coxon 1982; StataCorp 2005) was applied to the data from the RSM. It revealed that Canadians do think drinking and driving is both prevalent and risky – they believe it is more common than any other road safety problem (with the exception of drivers using cell phones) and also more risky than any other road safety issue.

There is also another dimension that may contribute to the level of concern – whether the person believes that others also care; in other words, whether or not they believe that other members of the public share their view regarding the prevalence and risk of drinking and driving. Simply put, if you think others do not consider the behaviour to be a problem, it makes you even more concerned. Concern for drinking and driving then becomes a function of three dimensions: the individual's *perceived* prevalence of drinking and driving; the individual's *perceived* risk of drinking and driving; and the individual's *perception* of how concerned others are.

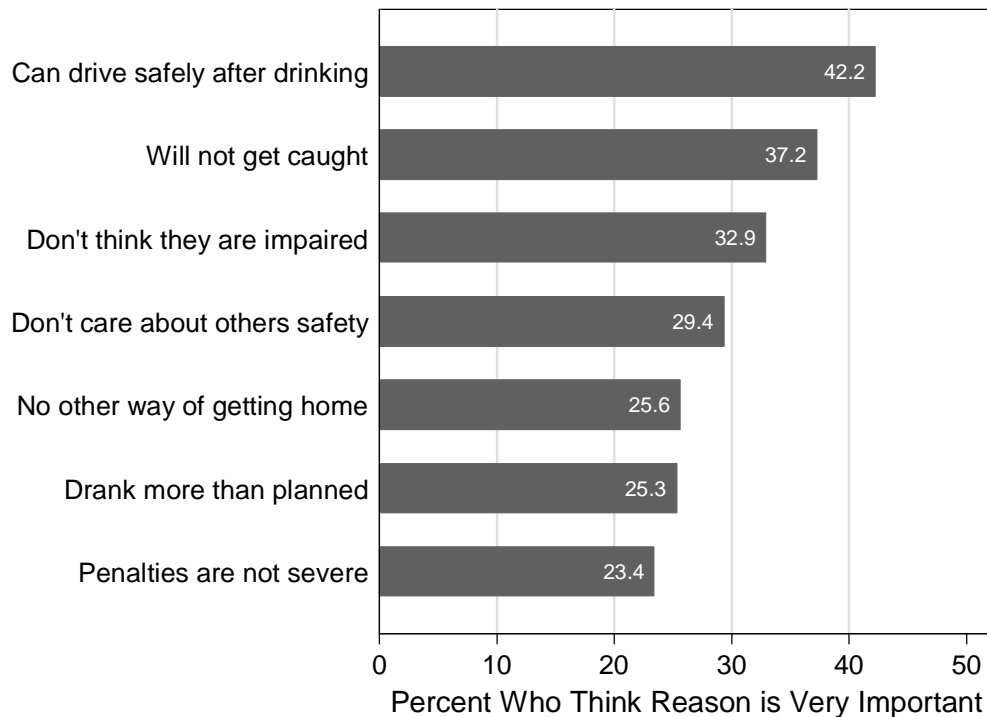
Information bearing on this latter point was obtained in the survey by asking respondents why they think people drink and drive. They were asked to state how important the reasons, listed in Figure 10, were in peoples' decision to drink and drive. As can be seen, four out of ten Canadians (42.2%) believe that the most important reason for someone to drink and drive is that person's belief that drinking and driving is not risky, which can be considered an indication of the drinking-driver's level of concern.

Collectively, the findings presented above suggest that Canadians are concerned with drinking and driving for the following three reasons:

- Canadians think drinking and driving is very common;
- They believe drinking and driving comes with the highest possible risk for causing a crash; and,
- Their concern for drinking and driving is further compounded by their belief that drinking-drivers are unconcerned about the risk they pose – i.e., they believe that drinking-drivers think they do not pose a risk.



Figure 10. Public Perceptions of Why Some Canadians Drink and Drive – Percentage



Another important reason why Canadians are so concerned about drinking and driving may be related to their perception of the law and law enforcement. In this regard, as shown in Figure 10, 37.2% of Canadians think that “not getting caught” is a very important reason for drinking-drivers to justify their behaviour. This will be further explored in the next section on perceptions of the law and law enforcement.

Perceptions of the Effectiveness of the Law and Law Enforcement —●

It is well known that, among other things, one of the factors associated with compliance with the law is the perceived likelihood of getting caught (Homel 1988, Ross 1992, Zaal 1994). If the perception is that law enforcement is not particularly effective, it might impact the level of concern that Canadians have for the problem of drinking and driving as well as their own behaviour. It was discussed previously that 'not getting caught' is the second most important reason according to Canadians for someone to decide to drink and drive. More precisely, 37.2% of Canadians think that "not getting caught" is a very important reason for drinking-drivers to persist in their behaviour.

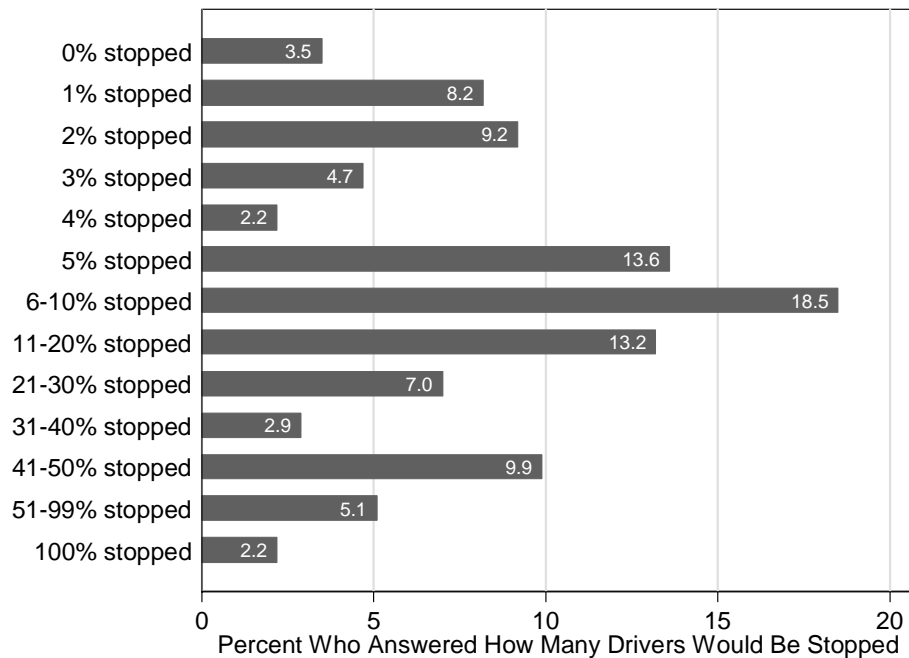
To investigate more thoroughly what Canadians think about the effectiveness of the law and law enforcement, respondents were given a scenario in which 100 people were legally impaired. They were then asked to estimate how many of those impaired drivers would be stopped; if stopped, how many would be arrested; if arrested, how many would be convicted; and, if convicted, how many would repeat the offence.

Do Canadians think impaired drivers will be stopped by the police and breath tested?

Figure 11 shows the percentage of respondents who believe a certain proportion of the impaired drivers in the scenario outlined above would be stopped by the police and breath tested.

Of some interest, only 3.5% of respondents stated that the police would stop and breath test none of the 100 legally impaired drivers. In 1998, this number was 7% (see Simpson et al. 1999). Put another way, the current results show that 96.5% of Canadians believe that if there are 100 impaired drivers on the road, at least some of them will be stopped and breath tested by the police.

Figure 11. Perceived Effectiveness of Police Enforcement – Percentage



About 8.2% of Canadians think one driver out of the 100 legally impaired drivers would be stopped and 9.2% think two drivers would be stopped. The actual chance of getting caught for drinking and driving was about 1 in 200 or even less in 1999 (Simpson et al. 1999) and may not have changed a lot since then.

The vast majority of Canadians (88.3% -- if the actual chance is believed to be about 1 in 100) overestimate the actual chance of getting caught. For example, 5.1% think that 51 to 99 drivers out of the hundred legally impaired drivers would be stopped; 2.2% think all of them would be stopped. The public appears to have considerable confidence in the enforcement of impaired driving laws.

Do Canadians think immediate action will be taken against impaired drivers who are caught?

The issue of enforcement is, however, more complex than stopping and breath testing potentially impaired drivers. For the legal system to be efficient and effective, immediate action has to be taken against impaired drivers who are caught as well.



At this level, the public has less confidence in the system. Respondents were asked to assume that all 100 of the impaired drivers were stopped and breath tested; they were then asked to estimate how many drivers would be arrested and charged, how many would get a short-term license suspension and how many would be sent home with a warning.

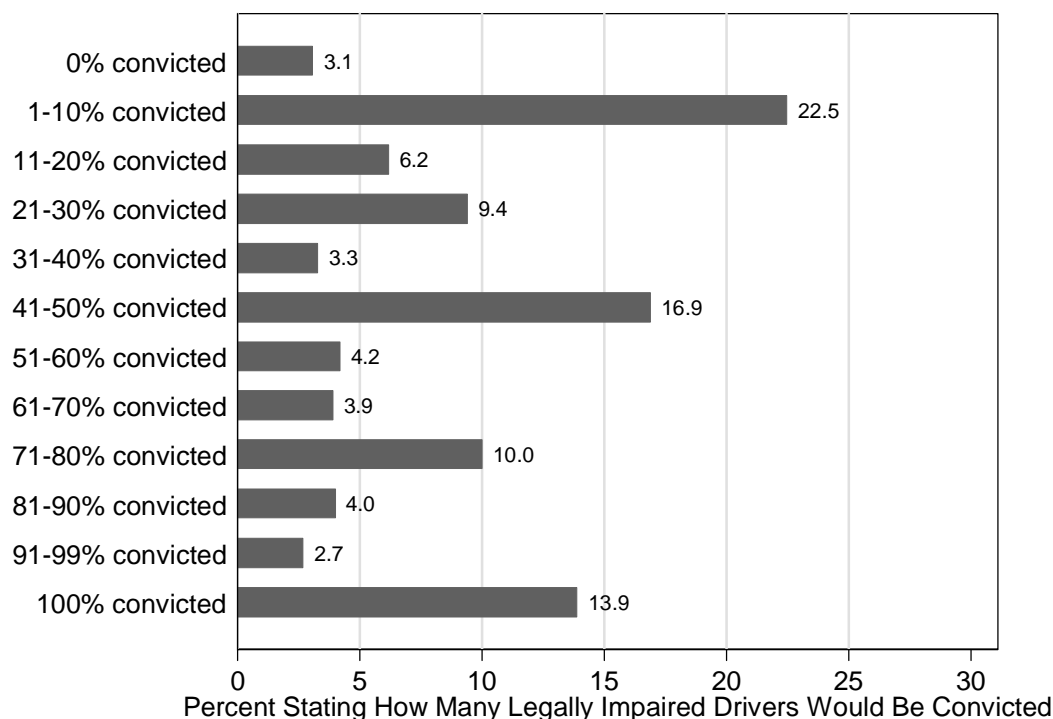
Some 76.5% of Canadians believe that at least some of the impaired drivers who are caught would be sent home with no consequences other than a warning. Furthermore, out of those 76.5% of Canadians, about 19% believe *exactly half* of the impaired drivers would receive just a warning, and another 16.0% think *at least half* of the impaired drivers would not be arrested but would just be warned by the police officer.

Only 17.5% of Canadians think all the impaired drivers who are caught would get a short-term license suspension and have their vehicle towed and only 16.4% believe each impaired driver that is caught, would be arrested. Conversely, 31.8% of Canadians believe that only 10% or less would have their license suspended and 39.4% think that 10% or less of the caught drinking-drivers would be arrested.

Do Canadians think drinking-drivers who are charged with impaired driving will be convicted by the courts?

Assuming that all hundred legally impaired drivers were actually *charged* with impaired driving, respondents were asked how many of them would end up being *convicted* by the courts. Figure 12 presents the findings. Overall, some 60% of Canadians believe that half or less of those charged with impaired driving will actually be convicted. Only 13.9% of Canadians believe all hundred would be convicted, and a small percentage (3.1%) even believes that none of those charged with impaired driving would be convicted. *It is evident that the public's confidence in the system is not extensive.*

Figure 12. Perceived Conviction Rate for Legally Impaired Drivers Who Are Caught – Percentage



How do Canadians think convicted impaired drivers will be sanctioned?

Respondents to the survey were also asked what would happen to those who were, in fact, convicted. Almost two thirds of Canadians (63%) think that more than half of the convicted legally impaired drivers would receive a fine and more than one third (37%) believes a maximum of 50% of convicted impaired drivers would receive a fine.

Interestingly enough, the majority of Canadians (44%) who believe the former, are convinced that all convicted impaired drivers would receive a fine, while the remainder (63%-44%=19%) believes between 51% and 99% would be fined. Nevertheless, since a fine is automatic, all convicted impaired drivers would, in fact, receive a fine, so there seems to be a discrepancy between perception and reality in that the majority of the public underestimates the number of convicted impaired drivers who would get a fine. Such a discrepancy may contribute to the overall level of perceived effectiveness of the justice system among the public.



About the same proportion of Canadians (62%) believes 10% or less of the convicted impaired drivers would serve time in jail. Out of those 62% of Canadians, 19% believe none of the convicted drinking-drivers would go to jail, while 43% think 1% to 10% of the convicted drinking-drivers would serve jail time.

While fewer Canadians believe more than 10% would serve time in jail, still 9.5% of Canadians expect to see 11% to 20% of convicted impaired drivers go to jail; 9.1% think 21% to 30% would go to jail; 8.8% believe 41% to 50% would go to jail and 4.1% think all convicted drinking-drivers will serve time in jail.

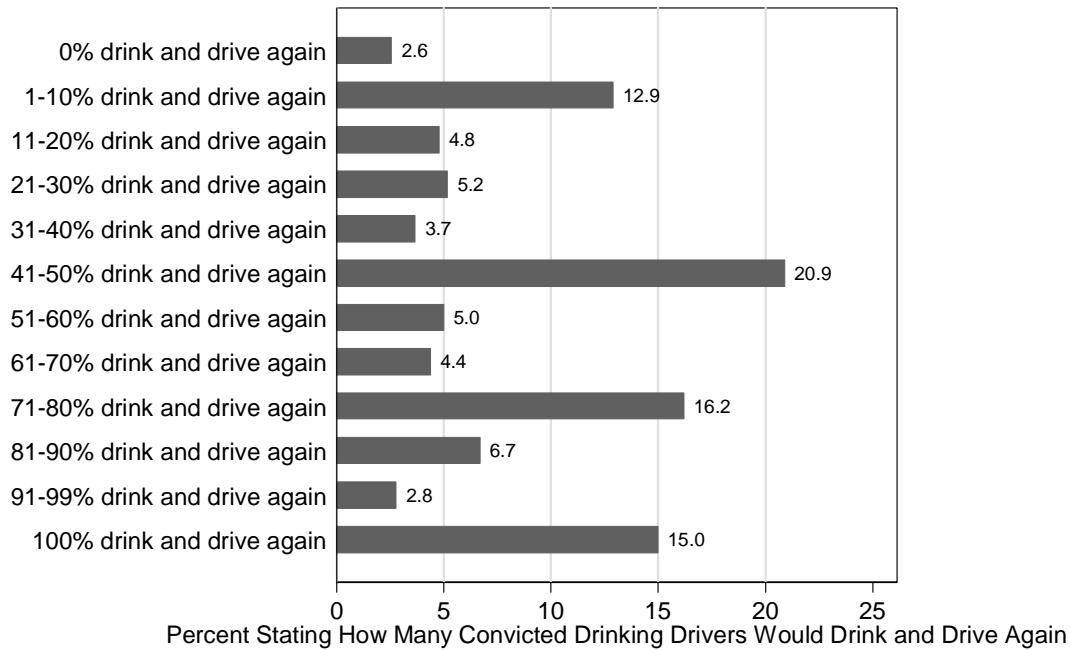
Finally, about 39% of Canadians are convinced that all convicted impaired drivers will get a criminal record and about 36% believe 10% or less would get a criminal record. In fact, all convicted impaired drivers would get a criminal record, meaning that only about 4 out of 10 Canadians (39%) are right about this. This is an additional discrepancy that may bias the public's perception of the law and the criminal justice system.

Do Canadians think the drinking-driving legislation effectively prevents recidivism?

Survey respondents were asked to assume that all 100 of the impaired drivers were actually convicted, and asked to estimate how many would commit the offence again; In other words, they were asked to estimate the recidivism rate. As can be seen in Figure 13, the majority of Canadians believe that most will repeat the offence. As many as 71% of Canadians think 50% or more of those convicted of impaired driving will drink and drive again.⁵ While the available data did not allow investigating why Canadians think there would be such a high level of recidivism, *this seems to suggest that the majority of Canadians have less confidence in the effectiveness of the system in changing behaviour.*

⁵ Note that the category "41-50% drink and drive again" really only contains respondents who answered that 50% will drink and drive again. In this category, there were no respondents answering any other possible percentage between 41% and 50%. For consistency reasons, however, the same categories were used to recode the variable and represent the results. As such, adding all the categories from 41-50% onwards to 100% yields 71% of Canadians.

Figure 13. Perceived Recidivism Rate Among Convicted Impaired Drivers – Percentage



Summary

In this section, the perception of the effectiveness of the law and law enforcement were investigated because of its relevance to explaining why Canadians are so concerned about the problem of drinking and driving.

Although Canadians believe the problem of drinking and driving is widespread and risky – which heightens their level of concern – this is somewhat mitigated by the fact that they also believe that drinking-drivers are very likely to get caught. Indeed, they tend to overestimate the chance of getting caught by the police when drinking and driving.

Canadians overestimate the chance of getting caught by the police for drinking and driving.

However, Canadians also believe that many impaired drivers who are caught will not be arrested or have their license suspended; and, if charged and arrested,

Canadians also think caught drinking-drivers are not arrested or do not have their license suspended. If arrested, they believe many of them are not convicted by the courts; and, if convicted, they believe the sanctions do little to prevent recidivism.



that they will not be convicted by the courts. Canadians also believe that if impaired drivers are convicted, the sanctions they receive will be nominal and do little to change the likelihood of drinking and driving again. This lack of confidence in the criminal justice system would appear to be a major factor in determining the level of public concern about the problem of drinking and driving.

To conclude, while Canadians may perceive the police to be very effective agents to catch legally impaired drivers and to have them breath tested, their high level of concern about the problem of drinking and driving may – partly – be explained by their perceived lack of effectiveness and efficiency of the remaining steps of the criminal justice system, once drinking-drivers are caught. This may also explain the behaviour of drinking-drivers, and the high prevalence of drinking-driving.



Public Support for Actions to Control Drinking and Driving —●

As discussed in the previous section, Canadians do not seem to be particularly confident in the criminal justice system, with the exception of their confidence in police forces. It may be interesting to see what the public believes is needed to better control drinking and driving. The RSM provided an opportunity to gauge the level of public support for a variety of actions to deal with the problem of drinking and driving. It was also possible to determine whether there exist different levels of support in different subgroup of drivers – in particular, if differences exist in the level of support between those who are very concerned about the problem, compared to those who are not; and between those who report driving after drinking, compared to those who do not.

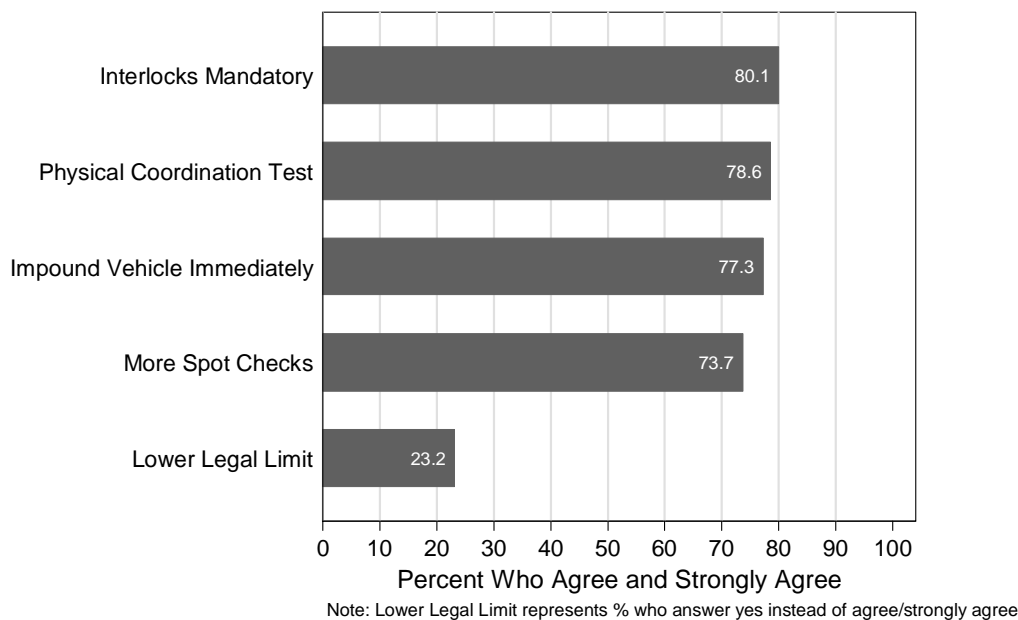
Level of support for various measures

Figure 14 shows the level of support for a variety of actions against drinking and driving. These actions include:

- mandatory use of ignition interlock devices for persons convicted of an impaired driving offence;
- a test of physical coordination in case the driver is suspected of being impaired by drugs or alcohol;
- immediate impoundment of the vehicles of drivers who fail a breath test;
- more police spot checks; and,
- lowering the legal limit.⁶

⁶ Note that respondents who mildly agree (i.e., those who answered 4 on a scale from 1 to 6, where 1 represents strongly disagree and 6 means strongly agree) have been excluded in the bar chart in Figure 14; and, that the result for lowering the legal limit is based on those who answered they thought the limit should be lowered when given the options 'lowering the limit' or 'increasing the limit'.

Figure 14. Percentage Who Agree and Strongly Agree With Actions Against Drinking and Driving



While the majority of Canadians endorse the first four possible actions, lowering the legal limit garnered the lowest level of support (23.2% versus 73.7% to 80.1%).

Especially interesting was the finding that reporting driving within two hours after drinking any amount of alcohol is significantly related to the level of support for mandatory use of ignition interlock devices for persons convicted of an impaired driving offence. More precisely, those who reported they drove within two hours after drinking any amount of alcohol were more likely to agree or strongly agree with mandatory interlocks. This finding is congruent with other research suggesting that drinking-drivers seem to think mandatory interlocks are a fair and productive sanction (see Robertson et al. 2006). This can likely be explained in light of the negative consequences of the alternative to an ignition interlock sanction such as a revocation of the driver's licence or even jail.

While the majority of Canadians endorse a variety of possible actions against drinking and driving, lowering the legal limit garnered the lowest level of support.

Furthermore, each of these actions, except for lowering the alcohol limit, seem to garner more support among those who are more concerned with the issue of drinking and driving. This means that being more concerned with this issue does not necessarily

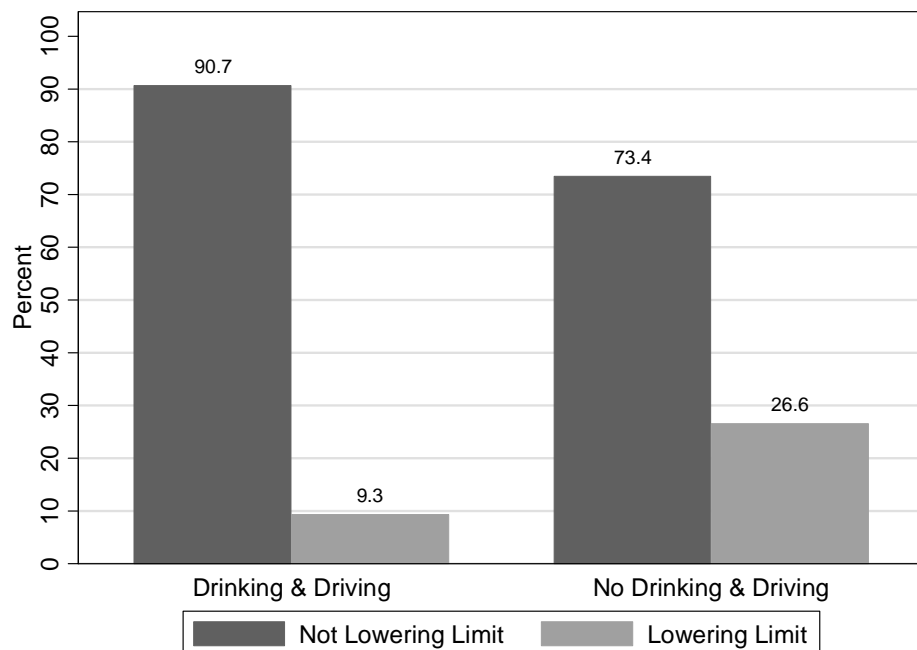


imply you will endorse lowering the alcohol limit as an action against drinking and driving, while it is more likely that you will endorse all the other actions when you are more concerned.

Finally, there is a significant relationship between driving after drinking and support for a change in the legal limit when controlling for other variables such as gender and age (see Figure 15). Other variables were found not to be significant.

Perhaps not surprisingly, those who report they have driven within two hours of drinking any amount of alcohol are less likely to support lowering the alcohol limit than those who report they have not driven after drinking. Notwithstanding this significant relationship, as many as 73.4% of Canadians who report not to drive within two hours of drinking any amount of alcohol do not support lowering the alcohol limit as an action against drinking and driving.

Figure 15. Driving Within Two Hours of Drinking Any Amount of Alcohol by Level of Support for Lowering Legal Limit – Percentage



Conclusion —●

Canada has a drinking and driving problem. While a general decreasing trend in the number of persons killed in a traffic crash involving a drinking-driver is evident between 1995 and 2004, much of the decrease occurred during the 1990s. Furthermore, despite a continued, albeit less pronounced decrease in recent years, the number of persons killed in crashes involving drinking-drivers on public roads remains high (815 fatalities in 2004) and is a reason for concern.

Not so surprisingly, a large number of drinking-drivers (an estimated total of 1.7 million) drive on Canadian roads while they think they are over the legal limit (an estimated total of 10.2 million trips). Despite an increase in the percentage who report driving when they thought they were over the legal limit in 2005 and a further increase in 2006, it is too premature, however, to draw definitive conclusions about the nature of this trend. The recent increases need to be monitored closely over more years to determine if this reflects the beginning of an upward trend.

Given these findings about the number of alcohol-involved fatalities and the number of drinking-drivers, Canadians have good reasons to be concerned about the problem of drinking and driving. And they are. Canadians are more concerned about drinking and driving than any other contemporary issue; since 2001, they also continue to perceive drinking and driving as the number one road safety issue. A significant relationship between concern for drinking and driving and engaging in drinking and driving was found as well. Those who are less concerned about the problem are more likely to drive after drinking, suggesting that drinking-drivers may lack the necessary appreciation of the risks associated with drinking and driving to feel a reasonable level of concern to this issue.

Several reasons that might explain the level of concern of Canadians with regard to drinking and driving were explored. The analyses suggest that concern is a function of several dimensions leading to the conclusion that the majority of Canadians are so concerned with drinking and driving, mainly for three reasons. First, because they believe drinking and driving is riskier than any other traffic safety issue; second, because



they are convinced that drinking and driving is more common than any other issue, with the exception of cell phone use while driving; and third, because they think that drinking-drivers do not perceive drinking and driving as risky.

An additional explanation for the level of concern among Canadians may be their perception of the effectiveness and efficiency of the law and law enforcement. While their concern about the effectiveness and efficiency of the law and law enforcement is somewhat mitigated by the fact that Canadians believe that drinking-drivers are very likely to get caught by the police, they also believe that many drinking-drivers who are caught will not be arrested or have their license suspended; and, if charged and arrested, that they will not be convicted by the courts. Furthermore, Canadians believe that the sanctions convicted drinking-drivers receive are nominal and do little to change the likelihood of recidivism (i.e., drinking and driving again). Their perception of the effectiveness and efficiency may not only explain the high level of concern among the majority of Canadians, but also the behaviour of those Canadians engaging in drinking and driving, even when they think they are above the legal limit.

In light of the public's concern about the criminal justice system, the level of public support for a variety of actions to deal with the problem of drinking and driving was investigated. In this regard, Canadians are supportive of more police spot checks, immediate impoundment of the vehicles of drivers who fail a breath test, mandatory use of ignition interlock devices for persons convicted of an impaired driving offence, and testing the physical coordination when the driver is suspected of being impaired by drugs or alcohol. The level of support among Canadians for lowering the legal limit, however, is considerably lower.

Interestingly enough, ignition interlocks are more strongly supported by those who reported they drove within two hours after drinking any amount of alcohol compared to those who do not report driving after drinking. No evidence was found suggesting that a higher level of concern leads to a higher level of support for lowering the legal limit, while there was such a relationship between concern and the other counter-measures. Finally, those who report they have driven within two hours of drinking any amount of alcohol are less likely to support lowering the alcohol limit than those who report they have not driven after drinking. Still, as many as 73% of Canadians who report not to drive within



two hours of drinking any amount of alcohol do not support lowering the alcohol limit as an action against drinking and driving.



Bibliography —●

- Beirness, D.J., Simpson, H.M., Desmond, K. (2002) *The Road Safety Monitor 2002: Drinking and Driving*. Ottawa, Ontario: Traffic Injury Research Foundation.
- Beirness, D.J., Simpson, H.M., Desmond, K. (2003) *The Road Safety Monitor 2003: Drinking and Driving*. Ottawa, Ontario: Traffic Injury Research Foundation.
- Beirness, D.J., Simpson, H.M., Desmond, K., and Mayhew, D.R. (2004) *The Road Safety Monitor 2004: Drinking and Driving*. Ottawa, Ontario: Traffic Injury Research Foundation.
- Beirness, D.J., Simpson, H.M., Mayhew, D.R., and Desmond, K. (2005) *The Road Safety Monitor 2005: Drinking and Driving*. Ottawa, Ontario: Traffic Injury Research Foundation.
- Coxon, A.P.M. (1982) *The User's Guide to Multidimensional Scaling with special reference to the MDS (X) library of computer programs*. London: Heinemann Educational Books Ltd.
- Homel, R. (1988) *Policing and Punishing the Drinking Driver. A Study of General and Specific Deterrence*. New York: Springer Verlag.
- Mayhew, D.R., Brown, S.W., Simpson, H.M. (2006) *The Alcohol-Crash Problem in Canada: 2004*. Ottawa, Ontario: Canadian Council of Motor Transport Administrators.
- Robertson, R.D., Vanlaar, W.G.M., Simpson, H.M. (2006) *Ignition Interlocks. From Research to Practice. A Primer for Judges*. Ottawa, Ontario: Traffic Injury Research Foundation.
- Ross, H.L. (1992) *Confronting Drunk Driving: Social policy for saving lives*. New Haven, Connecticut: Yale University.
- Simpson, H.M., Beirness, D.J., Mayhew, D.R. (1999) *National opinion poll on drinking and driving*. Ottawa, Ontario: Traffic Injury Research Foundation.
- Singhal, D., Simpson, H., Vanlaar, W., Mayhew, D. (2006) *The Road Safety Monitor: Public Awareness and Concern About Road Safety*. Ottawa, Ontario: Traffic Injury Research Foundation.
- StataCorp. (2005). *Stata Statistical Software. Release 9*. College Station, Texas: StataCorp LP.
- Vanlaar, W. (2004) Perception of road accident causes. In: J-P. Cauzard (ed.) *European drivers and road risk. Part 2: report on in-depths analyses*. Arcueil, Paris: INRETS, pp. 125-137.
- Vanlaar, W., Yannis, G. (2006) Perception of road accident causes. *Accident Analysis and Prevention* 38: 155-161.
- Zaal, D. (1994) *Traffic Law Enforcement: a Review of the Literature*. Australia, Federal Office of Road Safety. Victoria, Australia: Monash University (General Report No. 53).

