MONASH UNIVERSITY

ACCIDENT RESEARCH CENTRE

INVOLVEMENT OF 21-26 YEAR OLDS IN DRINK-DRIVING BEHAVIOUR

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Involvement of 21-26 year olds in drink-driving behaviour

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Abstract:
This project examined the involvement of 21-26 year-old Victorian drivers in drink-driving behaviour following concerns of their over-representation in alcohol-related, fatal and serious casualty crashes. It is during this age range that Victorian probationary drivers, subject to a zero BAC, generally progress to a full licence, with a corresponding increase in BAC limit to 0.05. Therefore, this transition was of particular interest. The study examined the involvement of fully-licensed, 21-26 year-old drivers (termed "novices") in drink-driving behaviour relative to younger probationary drivers (18-20 year olds) and older experienced drivers (31-40 year olds), including by gender and metropolitan/rural splits. Two complementary approaches were applied. First, fatal and serious casualty crash data from 1993-2000 were examined. Analyses confirmed that novices were, in more recent years, over-represented in alcohol-related fatal crashes in comparison to the other age/experience groups. Analyses by gender and region showed that males in both the novice and probationary groups were over-represented in serious casualty crashes regardless of region. In contrast, for experienced drivers, males in rural regions were consistently over-represented in serious casualty crashes except in 1996 when males in both regions were equally represented. Second, a telephone survey explored related issues: driving, drinking and drink-driving exposure, drink-driving-related awareness, knowledge, planning behaviour, strategy use and reasoning, including specific questions regarding the transition from a zero to 0.05 BAC. Findings suggest that exposure partly explains the over-representation of male novices, but not that of females. Awareness and knowledge was high for all groups. Getting someone else to drive was a strategy commonly reported by novices and while one of their most successful strategies, it was also one of the most unsuccessful. Female novices' use was less successful than males', although generally their strategy use was more effective. It was found that limiting, counting or spacing drinks, a strategy more common among male novices, was less likely to be effective compared to avoiding the combination of alcohol and driving altogether (i.e. not drinking when driving or not driving when drinking). A perceived need/desire to get home was the most commonly reported reason for drink-driving, while fears (of crashes, injuries, licence loss, detection and arrest) were common reasons for not drink-driving. The findings suggest the transition from a zero to 0.05 BAC is difficult for some novices and requires education or interventions. Recommendations regarding these initiatives are provided.

Key Words:
drink-driving; transitional licence period; young drivers

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Preface

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EXECUTIVE SUMMARY

In 1996, it was found that Victorian drivers aged 21-26 years were clearly over-represented in alcohol-related fatal crashes compared to other age groups. Within Victoria's graduated driver licensing system, this age range reflects the period that drivers generally graduate from a probationary licence, which carries a zero Blood Alcohol Content (BAC) limit, to a full licence, for which the limit is 0.05 BAC. Therefore, there was concern that this transition may contribute to the over-involvement of 21-26 year olds in alcohol-related crashes.

This project aimed to examine the involvement of fully-licensed, 21-26 year-old drivers (termed "novices") in drink-driving behaviour relative to younger probationary drivers (18-20 year olds) and older experienced drivers (31-40 year olds) in Victoria. Two complementary approaches were applied to explore differences between the three age/experience groups, including by gender and metropolitan/rural splits.

First, crash data from 1993 through 2000 was examined in order to investigate trends of levels of involvement in alcohol-related fatal crashes and serious casualty crashes for each of the three age/experience groups. The data was analysed both in terms of recorded BAC levels of drivers and the surrogate measure of crashes during "alcohol times of the week" or High Alcohol Hours (HAH). HAH were derived from the proportion of drivers killed or seriously injured in crashes with known illegal BAC readings during 1990-1997.

Second, a telephone survey was conducted in order to explore issues that may be associated with the alcohol-related crash rates, namely, driving, drinking and drink-drinking exposure, drink-driving-related awareness, knowledge, planning behaviour, strategy use and reasoning. Included was an exploration of the transitional issue relating to the change from probationary to full licence and the corresponding change in legal BAC limit.

ESTABLISHING THE INVOLVEMENT OF 21-26 YEAR-OLD DRIVERS IN ALCOHOL-RELATED CRASHES

The crash analysis results obtained using drivers' BAC readings as an indicator of alcohol involvement in fatal crashes were consistent with those using the surrogate measure, HAH. Both methods showed that drivers aged 21-26 years, who were no longer probationary licence holders, were, in more recent years, over-represented in alcohol-related fatal crashes and in HAH fatal crashes in comparison to probationary drivers aged 18-20 years and fully-licensed drivers aged 31-40 years.

The two methods also displayed similar trends in fatal alcohol-related crashes during 1993-2000 for the 21-26 year-old age group. Specifically, both methods showed an increasing trend since 1998, following a consistent decrease during 1993-1997. Fatal crashes occurring during HAH were more likely to involve drivers aged 21-26 years than fatal crashes that occurred during low alcohol hours of the week (LAH).

HAH analyses by gender and region showed that males in every age/experience group were over-represented in serious casualty crashes regardless of region for both novice and probationary drivers. Males experienced drivers in rural regions, however, were consistently over-represented in serious casualty crashes from 1993-2000, the only

exception being 1996 where males in both metropolitan and rural regions were equally represented.

Serious injury crashes were not analysed using BAC as an indicator of alcohol involvement as using this criterion did not reflect the true proportion of alcohol-involvement in fatal crashes, as not all surviving drivers involved in a serious casualty crash were tested. On average, only 40% of drivers involved in serious injury crashes were BAC-tested. These findings show that analysis of BAC levels is unlikely to give an accurate indication of the rate of alcohol involvement in serious injury crashes.

EXPLORATORY SURVEY OF DRINK-DRIVING-RELATED ISSUES

A ten-minute telephone survey was developed based on previous road safety literature and new items specific to the focus on the transitional period from probationary to full licence. The survey explored several exposure variables (driving, drinking and drink-driving), awareness variables (anti-drink-driving messages, drink-driving enforcement and public breath-testing machines), knowledge variables (crash factors, effects of a 0.05 BAC and penalties for drink-driving offences), planning and strategy use to avoid drink-driving (successful and unsuccessful use, recent use and use during the transitional period), as well as reasons for and against drink-driving.

A market research company conducted the survey using random-digit dialling and population sampling methods to contact a quota of 250 drivers per age group. Respondents were current drivers who had ever consumed alcohol. A total of 762 surveys were completed, which was reduced to 696 to meet both age and licence type criteria.

Driving, drink and drink-driving exposure

Driving: Participant estimates of how many hours they would spend driving in an average week differed significantly by age group. Overall, newly fully-licensed 21-26 year olds ("novice drivers") reported fewer hours than the other groups, with probationary-licensed 18-20 year olds ("probationary drivers") reporting the highest average. This finding was influenced by the significantly fewer hours reported by female novices. In fact, male novices reported the highest average. For fully-licensed 31-40 year olds ("experienced drivers"), males also reported more hours than females, while there was no difference between 18-20 year-old males and females.

Drinking: The age/experience groups differed in their responses to the question "How often do you consume alcohol?" Notably, less than 1% of respondents replied they no longer drank alcohol. Novices more commonly nominated "a few times a week", particularly novice males, or "once a week". Novice females more commonly reported drinking once or less than once a month. In comparison, probationary drivers more commonly nominated "once a week" or "a few times a month". Of experienced drivers, over one-third reported drinking "a few times a week" (more common for females) and one-fifth "a few times a month". In addition, a small but significantly higher percentage were more likely to drink "daily" than the younger groups; therefore, reporting the most frequent drinking.

Drink-driving: We asked participants whether they had driven when they thought they "were over the limit or might be over the limit" in the past year (equivalent to over a zero BAC limit for probationary drivers and over a 0.05 BAC limit for novice and experienced drivers). Novices more commonly responded affirmatively, followed by probationary

drivers and experienced drivers. For all age/experience groups, over two-thirds of the cases reporting affirmatively were male.

Drink-driving-related awareness

Anti-drink-driving messages: We asked, "When was the last time you can remember seeing, hearing or reading an anti-drink-driving message?" Overall, the majority of respondents in each age group (over 70%) reported that they had done so "during the past week". An additional 12-17% had done so during the "past month". This indicated a high level of awareness of the drink-driving issue among all age groups. The results also suggested that the two younger groups had more recently ("past week") experienced an anti-drink-driving message compared to the older age group ("past month" or earlier). Within each age/experience group, males reported more recent experience than females.

Random Breath Testing (RBT): Participants were also asked whether they had seen Police conducting RBT and whether they had been personally tested, in the last six months. Novice drivers were most likely to respond affirmatively to both items. Awareness was generally higher among males than females. We also asked how likely respondents thought it was that they would be tested in the next six months. Novices were most likely to respond "very likely", including by gender.

Public breath-testing machines (PBTMs): A reasonably high awareness of PBTMs was reported when we asked participants if they had ever seen one in a hotel, club or restaurant, and if so, how long ago. More novices than probationary or experienced drivers reported awareness, while both novices and probationary drivers reported more recent sightings than experienced drivers. When asked had they ever used a PBTM, more novices and experienced drivers had done so than probationary drivers, while novices had done so more recently (previous week to year) and experienced drivers less recently (more than a year ago). These results suggest 21-26 year olds have the greatest awareness and use of PBTMs.

Drink-driving-related knowledge

Crash factors: We asked, "What factor do you think most often leads to road crashes?" For all age/experience groups, speed was most commonly nominated (~30%) followed by drink-driving (~25%). When asked to identify other factors so that up to three factors could be nominated, this order was reversed, with the largest proportion of respondents including drink-driving (~75%), followed by speed (~50%). These results show a reasonably high level of recognition that alcohol is a major contributor to crashes.

Effects of 0.05 BAC: We also tested knowledge regarding the effects of a 0.05 BAC by several True/False questions. The best known effects were in relation to reaction time, alertness and concentration. While correct responses were relatively high, an alternative interpretation of the results is that approximately 20% of drivers in each age group did not disagree with the notion that being at 0.05 has little effect on driving ability. Generally, novices' knowledge was at the same level or higher than the younger and older drivers. Exceptions were regarding ability to do more than one task and confidence (clearly the least known effect). In addition, for all responses fewer male novices answered correctly than statistically expected (except regarding vision and hearing), while more female novices answered correctly compared to other groups.

Penalties for drink-driving offences: Experienced drivers most often reported not knowing the penalty for being caught with a BAC of 0.05 for the first time compared to novice and probationary drivers. This was also true for a first offence at 0.10 BAC.

Planning and strategies to avoid drink-driving

Successful and unsuccessful strategies: We first asked respondents "Think of a time when you planned to avoid drink-driving but *did* drink drive. How had you planned to avoid drink-driving?" (unsuccessful). We then asked them to think of such an occasion when they "did avoid drink-driving" (successful). Limiting drinks was the most common strategy unsuccessfully applied by 21-26 year olds, as well as 31-40 year olds, but not probationary drivers. Use by 21-26 year olds was somewhat equal for males and females. Notably, a moderate proportion had also used the strategy successfully, although this was more likely true of 31-40 year olds, and rarely reported by 18-20 year olds. More male novices had used the strategy successfully than females. In contrast, not drinking any alcohol was one of the most commonly reported successful strategies used by 21-26 year olds, and was only moderately unsuccessful; although, in both circumstances, it was more likely to be reported by probationary drivers (those subject to a zero BAC limit). Successful use was more likely for females than males. Similar usage patterns were reported for unsuccessful use.

Recent use: To focus on recent strategy use, respondents were asked to indicate whether they had used any of a list of strategies to avoid drink-driving in the past month. The most common recent strategy used by 21-26 year olds was getting someone else to drive. Not consuming any alcohol and limiting drinks were also common for this group. Counting or spacing drinks was far more likely to be reported by 21-26 year olds than the other groups. Drinking low-alcohol beer was also a moderately applied strategy. In addition, novices made the most use, although low, of courtesy buses. There was similarly low reported use of PBTMs.

Transitional issues: To further highlight transitional issues, we asked the two older groups "As a probationary driver, if you wanted to drink alcohol when you went out, did you do any of the following to avoid drink-driving?" We then repeated the question, beginning "In your first year as a fully-licensed driver". While these retrospective questions potentially draw over a long period of time for experienced drivers and, therefore, should be interpreted with caution, they were included to specifically target the transitional period. The greatest contrast for both groups was increased tendency to drink low-alcohol beer. From the previous section, it can be seen that more experienced drivers appear to have since adopted this strategy, whereas usage by novices has substantially fallen.

Reasons do or do not drink drive

For those that did report reasons for drink-driving, the most common reasons were the perceived need or desire to go home or to another destination and the convenience of driving compared to other options; although these were less commonly cited by experienced drivers and by females. Few cited monetary or safety (of self or vehicle) reasons, or unsuccessful use of designated drivers. None mentioned social pressures. Novices' responses differed from the other groups in that a small but larger percentage cited lack of access to alternative transport, especially males, as well as geographical reasons (e.g. short distance, back streets).

Metropolitan and rural contrasts

Some differences emerged in the self-reports obtained from metropolitan and rural respondents. Rural probationary and experienced drivers were more likely than their metropolitan counterparts to report having seen Police conducting RBT in the previous six months; however, novice drivers in rural areas were less likely to report this than their metropolitan counterparts. Rural probationary and novice drivers (both male and female), and female experienced drivers less often reported having seen a PBTM in the last week, and less often reported having ever used one, than metropolitan drivers in these experience categories. Rural probationary drivers were less likely than their metropolitan counterparts to report the belief that speed, drink-driving, or other drugs were likely to be causes of road crashes. When asked about attitudes to drink-driving, slightly higher proportions of the rural drivers in each age/experience category reported not drinking at all, compared to the metropolitan drivers in these categories.

Limiting the amount of alcohol they drank was the most commonly cited unsuccessful strategy applied by metropolitan novices to avoid drink-driving, but was not reported by any rural novices. In contrast, rural probationary drivers were more likely to limit their alcohol consumption than metropolitan probationary drivers. For rural novices, getting someone to drive was the most commonly cited unsuccessful strategy and more likely than any other group. Moreover, rural novices were also more likely to cite walking as a strategy while this was not reported by any metropolitan novices.

During the transitional period, rural drivers (both novices and experienced drivers) were not more likely to increase the amount of water/non-alcoholic drinks they consumed once fully-licensed, and rural novices did not report an increase in their use of the strategy to get someone else to drive compared to metropolitan groups.

For those that did report drink-driving, the most common reason reported was the perceived need or desire to go home or to another destination, although metropolitan experienced drivers also reported confidence in their ability to drive. Metropolitan novices also commonly reported this reason, as well as driving being more convenient, geographical reasons and lack of access to public transport.

Reasons for not drink-driving followed a similar pattern by regional breakdown to the overall age/experience group findings, although lack of confidence in ability to drive was somewhat more likely to be reported by metropolitan novices than rural novices.

DISCUSSION AND CONCLUSIONS

The survey findings suggest that exposure variables may at least partly explain the over-representation of male 21-26 year-old drivers in alcohol-related crashes. They reported more driving than others (particularly metropolitan males), and typically drank heavily a few times a week. They also reported a high level of driving when potentially over the BAC limit, despite generally high knowledge and awareness of drink-driving issues. They were also much more likely than females or any other age/experience group to be a passenger of a drinking driver.

For female 21-26 year olds, the pattern was less clear. They actually drove the least of all groups, drank on fewer occasions and typically drank fewer drinks, and reported generally high knowledge and awareness of drink-driving issues. Notwithstanding these findings, moderate proportions reported having driven when potentially over the BAC limit and having been a passenger of a driver over the limit during the past year.

The strategy findings add further understanding. Getting someone else to drive was the most common strategy reported by novices. While this strategy was the most successful one used by novices to avoid drink-driving, it was also one of the most unsuccessful. However, given that this was also one of the most common successful strategies of probationary drivers, these results suggest that this strategy is currently problematic but can be one of the most effective if used correctly (i.e. with a responsible, sober driver). Notably, female novices used the strategy of getting someone else to drive less successfully than males, although generally their strategy use was more effective.

It was also found that limiting, counting or spacing drinks - a strategy previously promoted in education campaigns - was less likely to be an effective strategy than avoiding the combination of alcohol and driving altogether (i.e. not drinking when driving or not driving when drinking). In addition, novices, particularly male novices, were found to be more likely to limit their alcohol intake before driving rather than avoiding any alcohol consumption.

A further understanding of strategy use was obtained by asking respondents to consider their use as a probationary driver and as a newly-fully-licensed driver. It was found that after this transition, which involved an increase from a zero to 0.05 BAC limit, novices more commonly drank low-alcohol beer and water/non-alcoholic drinks. Moreover, strategies to restrict, count or space drinks, that is, those more likely to be unsuccessful, increased. Overall, despite their potential success as a strategy to avoid drink-driving, the use of courtesy buses and PBTMs was low.

Finally, we asked respondents about the reasons why they may drink-drive or why they avoid it. While the majority reported never having driven when (potentially) over the limit, of those that did respond, the most common reasons were the perceived need or desire to go home or to another destination and, to some extent for male novices, the convenience of driving compared to other options. There was also some indication that some novices perceived a lack of alternative transport. Fear was found to be an important motivator not to drink-drive, particularly, fear of crashes and/or injuries, of licence loss, and of detection or arrest.

LIMITATIONS OF THE RESEARCH

Several limitations of the present research are recognised. The survey was based on self-report data that at times required recall of behaviour over a number of years. This may have resulted in inaccurate recall of past behaviours. Self-report data is also subject to social desirability bias, although the anonymous nature of the telephone survey and the considerable reporting of drink-driving involvement suggest that this was likely not a strong influence in the present instance. The quota sampling method and unequal sample sizes was addressed by appropriately weighting the data; however, the low response rate (22.4%) is of concern. Generally, an acceptable response rate for this method is 30-40%. The market research company indicated that the need to recruit young people, particularly 18-20 year olds, contributed to the lower rate, suggesting that responses of probationary drivers may be less representative than those of other groups. Alternative methods of surveying young drivers are now being explored for future research.

RECOMMENDATIONS

The following recommendations have been suggested for increasing the safety of road users based on the findings of this research:

1. The transition from probationary to full licence currently involves no drink-driving education or intervention process. An educational process targeted to drivers as they make the transition from probationary to full licence should be developed, to reinforce the importance of this issue. This education might profitably focus on:

    a. The association between blood alcohol content and crash risk;

    b. The poor success rates of strategies to stay under the legal BAC limit, rather than not combining drinking and driving;

    c. Methods of improving such strategies (e.g. use of designated drivers, public breath-testing machines).

2. The graduated licensing system may need review; it may be advisable to extend the zero BAC restriction over a longer period, or to develop a more tapered BAC restriction for drivers aged 21-26.

Further research examining the drink-driving behaviour of newly fully-licensed ("novice") drivers is warranted, including examination of larger, more representative samples.

1 BACKGROUND

Drink-driving has been a strong focus of enforcement and advertising campaigns for many years now. Both the Victoria Police and the Transport Accident Commission have been expending substantial effort aimed at reducing injuries and fatalities caused by drink-driving behaviour. While these programs have certainly been successful, there continues to be a much higher level of involvement in alcohol-related fatal crashes among young adults than among older drivers or probationary[1] drivers. In fact, in 1996 drivers aged between 21-26 years comprised over a third (36%) of such fatalities, while younger (probationary) drivers accounted for 21% and older drivers for only 18%. It is unclear why drivers in this middle age group should be so prone to involvement in alcohol-related fatal crashes.

Victoria, Australia has a three-phase, graduated driver licensing system (GDLS) comprising learner, intermediate and full licence phases. The learner permit is first available at 16 years of age and must be held for at least six months. During this phase, the learner driver is subject to a zero Blood Alcohol Concentration (BAC) limit and must be accompanied by a supervisory driver who has been fully-licensed for at least two years. This is followed by the probationary licence, which can be obtained from a minimum age of 18 years (the legal age for consumption of alcoholic beverages). A zero BAC still applies and, at the time of the research, more severe penalties for driving offences, including licence suspensions and cancellation[2]. The probationary licence extends for three years, at which time full licence status is achieved and the legal BAC limit increases to 0.05g/100ml. Under this system, the minimum age for full licensure is, therefore, 21 years - generally much older than the equivalent age in other GDLS (e.g. 18 years in most North American and several European jurisdictions) [Senserrick & Whelan, in press]. All licence applicants must follow these three graduated licensing phases. That is, there are no exemptions from the process for drivers entering the licensing system at older ages (although those aged 25 years or older need only hold the learner permit for three months).

A zero BAC restriction has been associated with the saving of many lives and serious injuries among young drivers in both Australian and American jurisdictions (Zwerling & Jones, 1999). It is considered to be the most effective GDLS restriction in Victoria where, unlike New Zealand and many North American jurisdictions, no night-time or passenger restrictions apply (see Christie, 1997; Senserrick & Whelan, in press). The age range of 21-26 years represents the period when Victorian drivers typically graduate from probationary to full licence and, therefore, from a zero BAC to a 0.05 BAC. Therefore, there is concern that the over-representation of 21-26 year olds in alcohol-related crashes is, at least in part, related to this transition.

[1] In Victoria, the interim licence issued following the learner permit and prior to full licensure is called a probationary licence. In other Australian and international jurisdictions, such a licence is also referred to as a provisional, restricted or intermediate licence.

[2] This licensing initiative has since been replaced. A reduced demerit point threshold now applies.

A lack of understanding about the circumstances and patterns of drink-driving in this age group relative to others led to the development of this project. It is critical for Police and other road safety organisations to have a clear picture of what this difference in involvement levels means. A number of questions must be addressed in order to devise optimal countermeasures to this problem. How much does the age difference in involvement reflect a disregard of drink-driving advertising? How much of the difference is the result of difficulties in adjusting to the move from probationary to full licence (and, therefore, from a legal BAC of zero to one of 0.05)? How much is caused by knowledge, attitudes and behaviour specific to this age group? Finding answers to these questions will aid Police, TAC and policy makers in optimising program resource expenditure, and will help them achieve best practice in reducing road trauma in Victoria.

1.1 PROJECT GOALS

This project aims to examine the involvement of 21-26 year-old Victorian drivers in drink-driving behaviour. It will achieve this via a comparison with data from older and younger drivers in terms of their involvement in alcohol-related crashes, and self-reported knowledge, attitudes and behaviour with regard to drink-driving. The study aims to provide information on the optimal combination of countermeasures that would be most useful in reducing the level of alcohol-related road trauma for this age group.

1.2 PROJECT STRUCTURE

Generally, the 21-26 year-old age range represents the period when probationary drivers in Victoria convert to a full licence (termed the novice driver period in the present report). To compare the drink-driving involvement of this age/experience group to other road users, two further age/experience groups were included in analyses. These were 18-20 year olds, the probationary driver group, and 31-40 year olds, an experienced driver group. A two-stage approach in addressing the issues of concern was recommended by MUARC.

The first stage examined Victorian crash data from 1993 through 2000 in order to investigate trends of levels of involvement in alcohol-related fatal crashes and serious casualty crashes for each of three age/experience groups. The data were analysed both in terms of recorded BAC levels of drivers and crashes during high alcohol hours.

The second stage explored issues that may have been associated with the crash involvement rates, namely, self-reported drink-driving-related knowledge, awareness, attitudes, motivations, and behaviours. This included an exploration of transitional issues relating to the change from probationary to full licence and the corresponding change in legal BAC levels. A telephone survey of drivers in the three age/experience levels was conducted in both metropolitan Melbourne and rural Victoria. Differences were explored by age group, gender and the metropolitan/rural split.

The report first presents the results of the crash analyses, followed by an introduction to the literature concerning drink-driving-related issues. A description of the telephone survey method and response is then presented preceding an examination of the survey results. Findings from the two stages are brought together in a summary and conclusions chapter, followed by recommendations for future research and practice.

2 ESTABLISHING THE INVOLVEMENT OF 21-26 YEAR-OLD DRIVERS IN ALCOHOL-RELATED CRASHES

2.1 INTRODUCTION

Victorian crash data for the years 1993-1996 show a much higher level of involvement in alcohol-related fatal crashes among young adults aged 21-26 years than among older, experienced drivers or younger, probationary drivers. These findings suggest that this age group is associated with a higher vulnerability to alcohol-related fatal crashes. This is of particular significance, as this age marks the transitionary period from zero blood alcohol content (BAC) restrictions to one in which a BAC of up to 0.05 g/100ml is permitted. With an additional four years of crash data now available, i.e. 1997-2000, alcohol-related fatal crashes have been re-examined to establish the extent to which 21-26 year-old drivers are now involved. The analysis has been broadened to include an examination of serious injury crashes to ascertain whether a similar problem exists in those crash types. This chapter details the results of these analyses and aims to document the trends in the level of involvement of 21-26 year-old drivers in alcohol-related fatal and serious injury crashes for the period 1993-2000.

2.2 MEASURES OF ALCOHOL INVOLVEMENT

Alcohol involvement in serious casualty crashes[3] was identified via two approaches. The first and most direct method entailed a driver-based analysis selecting fatally-injured drivers based on their BAC readings. Although this method was adequate for selecting fatally-injured drivers with illegal BACs, it was not suitable for selecting seriously-injured drivers with an illegal BAC. Unlike fatally-injured drivers, BAC readings are not routinely obtained from all seriously-injured drivers, hindering assessment of the true extent of the problem. As a result, a second method involving the use of a surrogate measure, termed alcohol hours, was employed. Alcohol hours are an indication of the times of the week when alcohol is more likely to be a factor in crashes. The alcohol hours used in the analysis of metropolitan and rural crashes in Victoria are based on the update described in Shtifelman (1998). Both methods are discussed in the following sections.

The crash analyses were confined to drivers of passenger cars or passenger car derivatives including station wagons, taxis, panel vans, utilities and mini-buses. Although, only three age groups are discussed, calculations are based on the entire driver pool. Analyses in this chapter are descriptive in nature and results are presented primarily through graphs.

2.3 IDENTIFICATION OF ALCOHOL-RELATED CRASHES

This section discusses the two methods employed in identifying alcohol-related crashes and outlines the problems associated with each in trying to measure the extent of drink-driving in fatal and serious casualty crashes.

[3] Serious casualty crashes are defined as those crashes which involve at least one person being killed or seriously injured.

2.3.1 BAC testing

2.3.1.1 BAC testing at person injury level

BAC testing is conducted as a matter of routine during the autopsy of fatally-injured drivers. As a result, the rate of reporting is very high. Non-recording of BAC levels of fatally-injured persons is usually ascribed to technical and administrative difficulties (ATSB, 2001). Injured drivers, however, are less likely to be tested via a blood test as shown in Table 2.1, demonstrating that BACs are not routinely conducted on every driver involved in a crash. Table 2.1 shows that on average only 40% of seriously-injured drivers have been tested, despite a Code of Practice adopted by some Victorian hospitals in 1991 to increase the rate at which seriously-injured drivers were BAC-tested (South, 1994). Prior to 1991, blood samples were taken from seriously-injured drivers only if suspected of drinking.

The extent to which this Code has been adhered to during the period 1993-2000, is shown below in Table 2.1, for seriously-injured, and non-seriously-injured drivers of cars or car derivatives in Victoria. It is clear from Table 2.1 that the rate of testing of seriously-injured drivers has been gradually declining since 1993. BAC testing of all drivers involved in injury crashes, however, is essential to determining the extent of alcohol involvement in crashes. Table 2.1 is depicted graphically in Figure 2.1, below.

Table 2.1 Percentage of fatally-injured, seriously-injured, and non-seriously-injured car drivers tested for BAC, 1993-2000

Year	Fatal Injury	Serious Injury	Other Injury
1993	98.3%	50.9%	16.7%
1994	94.8%	45.5%	15.3%
1995	97.1%	47.6%	15.6%
1996	93.7%	40.9%	13.2%
1997	95.9%	40.0%	13.0%
1998	100.0%	39.3%	13.9%
1999	91.2%	32.4%	11.5%
2000	94.5%	23.6%	7.4%
Average	**95.7%**	**40.0%**	**13.3%**

Figure 2.1 illustrates the consistently high level of BAC testing of fatally-injured drivers, averaging 96% of all fatally-injured drivers over the 1993-2000 period. In comparison, hospital BAC testing of seriously-injured drivers, of which there is a much lower rate, has declined steadily in the same period reaching its lowest level in 2000 of just 24%. The testing rate of non-seriously-injured drivers is considerably less.

2.3.2 Alcohol times of the week

Due to the low proportion of *known* BAC readings of seriously-injured drivers, it difficult to ascertain the true extent of alcohol involvement in crashes using this measure. Consequently, alcohol times of the week were devised as a surrogate measure for identifying the involvement of alcohol in crashes. This method uses a driver-based approach to find the times during the week when alcohol is likely to be a factor in serious casualty crashes. The times of the week where the proportion of drivers and riders killed or seriously injured with a known illegal BAC was more than 15% were defined as High

Alcohol Hours (HAH). The remaining hours were labelled Low Alcohol Hours (LAH). The definition of high alcohol hours of the week was based on the method employed by Harrison (1990), which considered drivers killed or seriously injured in crashes during 1988-1989. This concept was updated by analysing the BAC readings of killed and seriously-injured drivers during 1990-1997 for Melbourne and rural Victoria separately. A detailed description of the method can be found in Shtifelman (1998).

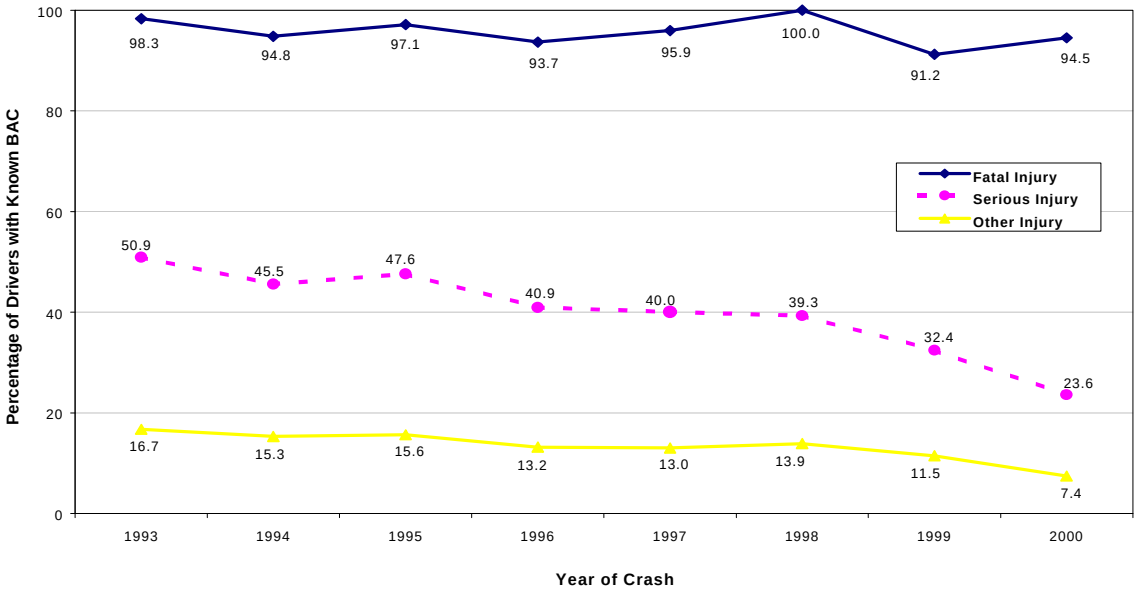

Figure 2.1 Percentage of drivers involved in casualty crashes at each injury level in Victoria with a recorded BAC, 1993-2000

Table 2.2 shows the high and low alcohol times of the week for Melbourne. The high alcohol hours are indicated by the shaded areas. High and low alcohol hours of the week for rural Victoria are shown in Table 2.3. In total, 96 hours (57%) of the week were defined as HAHs in Melbourne, whilst 92 hours (55%) of the week were defined as HAH in rural Victoria.

These definitions of HAH of the week were used in the analysis of the 1993-2000 crashes.

Table 2.2 High Alcohol Hours of the week for Melbourne

Day of Week	Time of Day											
	0-2	2-4	4-6	6-8	8-10	10-12	12-14	14-16	16-18	18-20	20-22	22-24
Sun												
Mon												
Tues												
Wed												
Thur												
Fri												
Sat												

Table 2.3 High Alcohol Hours of the week for rural Victoria

Day of Week	Time of Day											
	0-2	2-4	4-6	6-8	8-10	10-12	12-14	14-16	16-18	18-20	20-22	22-24
Sun												
Mon												
Tues												
Wed												
Thur												
Fri												
Sat												

2.4 DATA

Crash-based and driver-based analyses were conducted using Police-reported serious casualty crashes from 1993-2000. The crash data was obtained from the VicRoads mass crash database supplied by VicRoads. Serious casualty crashes were defined as crashes in which at least one person involved in the crash was either killed or seriously injured. The variable used to code these crashes was derived by VicRoads from the values of injury codes on the Police 510 accident form (VicRoads, 1991).

2.5 METHOD

This section describes the method and criteria used to select cases for the crash-based and driver-based analyses.

2.5.1 Selection Criteria

All drivers of passenger cars or car derivatives were extracted and coded into the following age groups:

i. 18-20 years;
ii. 21-26 years;
iii. 27-30 years;
iv. 31-40 years; or
v. at least 41 years.

However, only drivers in the 18-20, the 21-26 and the 31-40 year age groups were considered for the crash analysis.

Car derivatives considered in the analysis included station wagons, taxis, panel vans, utilities and mini-buses (9-13 seats).

Alcohol times of the week were assigned to each case based on the definitions given in section 2.3.2.

To ensure that only fully-licensed drivers aged 21-26 years were compared with probationary drivers aged 18-20 years and with fully-licensed drivers aged 31-40 years, the age and licence variables were cross checked to eliminate drivers who did not hold a compatible licence with respect to the study criteria. This meant that drivers aged 18-20 years who held full licences or learner permits were excluded from the data used in the crash analysis. Similarly, drivers aged 21-26 years or 31-40 years who did not have a

standard full licence were also removed. The percentage distribution of drivers of cars by licence type is given in Table A1 (Appendix 1).

2.5.2 Analyses

The resulting data set was used as the basis for conducting the analyses described below:

i. Calculation of the annual percentage distribution of three BAC levels of drivers fatally injured in crashes to document trends in drink-driving over time. A separate analysis has been conducted for each age group;

ii. Calculation of the annual percentage distribution of fatally-injured drivers by age group using BAC readings as an indicator of alcohol involvement. Percentages are calculated using the entire cohort of drivers;

iii. Calculation of the number of fatal and serious injury crashes occurring during HAH and LAH alcohol times of the week by driver age group and region. This is a crash-based analysis where a crash may have been included more than once if more than one age group was involved; and

iv. Driver-based calculations estimating the annual proportion of drivers who had been in a serious casualty crash during HAH times of the week relative to the number of drivers involved in casualty crashes during all times of the week. An example is shown below, which calculates the annual percentage of male drivers aged 18-20 years involved in a serious casualty crash in Melbourne during HAH.

$$\% \;=\; \frac{\textit{no. of } 18-20 \textit{ y.o. male Melbourne drivers involved in serious casualty crashes during HAH}}{\textit{no. of } 18-20 \textit{ y.o. male Melbourne drivers involved in casualty crashes}} * 100$$

The following section presents the results of the crash analyses for the three comparison age-groups, i.e. probationary drivers aged 18-20 years; fully-licensed drivers aged 21-26 years and older fully-licensed drivers aged 31-40 years.

2.6 RESULTS

2.6.1 Trends in BAC levels of fatally-injured drivers in crashes — Analysis i

The trends in BAC levels of drivers that were involved in fatal crashes in Victoria for each age group were examined for the period 1993-2000. The drivers' BAC readings were categorised into the following levels:

- 0.000 g/100ml;
- 0.001-0.05 g/100ml; and
- over 0.05 g/100ml.

The calculation involved expressing the annual number of fatally-injured drivers in crashes at each BAC level for each age group as a percentage of fatally-injured drivers in each age group with known BAC readings. The results are depicted graphically in Figures 2.2, 2.3 and 2.4.

Figure 2.2 shows these annual percentages for probationary drivers aged 18-20 years for the period 1993-2000. It can be seen that with the exception of 1997, most fatally-injured

drivers in this age group had a legal BAC (i.e. BAC = 0.000 g/100ml). The graph also shows that for most of the period 1993-2000, at least one in five fatally-injured drivers aged 18-20 years had an illegal BAC (i.e. more than 0.000 g/100ml). This percentage increased to 52% in 1997 indicating that just over half of 18-20 year-old drivers killed in a crash had an illegal BAC. The proportion of fatalities with an illegal BAC declined to 40% in 1998 and continued a downward trend through to 2000 when the smallest proportion of fatally-injured, 18-20 year olds was recorded for the period under study.

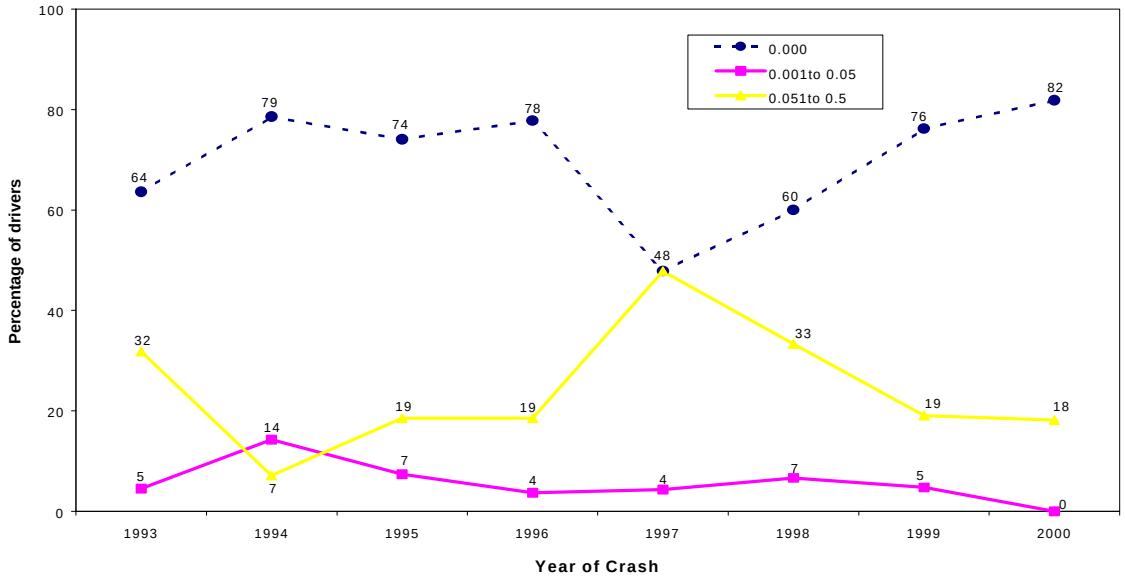

Figure 2.2 BAC levels of fatally-injured, probationary drivers aged 18-20 years, expressed as a proportion of all fatally-injured, probationary drivers aged 18-20 years, 1993-2000

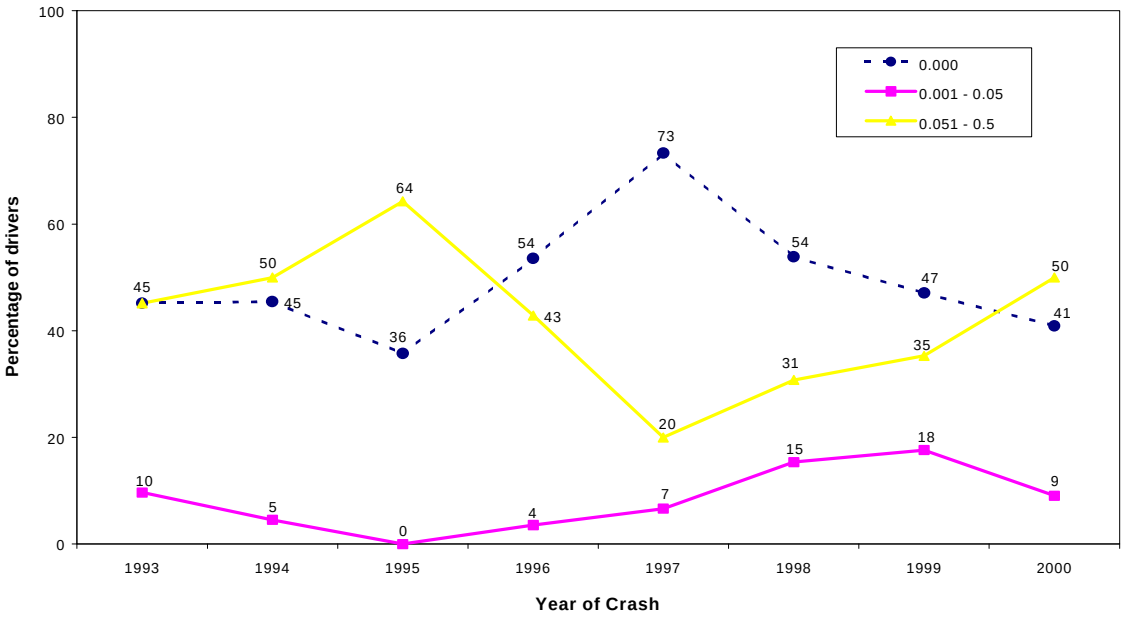

Figure 2.3 BAC levels of fatally-injured, fully-licensed drivers aged 21-26 years, expressed as a proportion of all fatally-injured, fully-licensed drivers aged 21-26 years, 1993-2000

Figure 2.3 depicts the percentage of fatally-injured, fully-licensed drivers aged 21-26 years by to the three BAC levels. The most notable aspect in Figure 2.3 is the steadily increasing percentage of fatally-injured drivers with an illegal BAC. Fully-licensed 21-26 year-old drivers with an illegal BAC represented 50% of all driver fatalities in this age group in 2000.

Annual percentage distributions of fatally-injured, fully-licensed drivers aged 31-40 years based on BAC level are depicted in Figure 2.4. It is clear from the graph that in any one year, most fatally-injured drivers aged 31-40 years had a zero blood alcohol level. Figure 2.4 also shows that a sizeable proportion of drivers in this age group (one third on average) had an illegal BAC, with the largest percentage occurring in 1999. This percentage decreased to 22% in 2000, the lowest level since 1995.

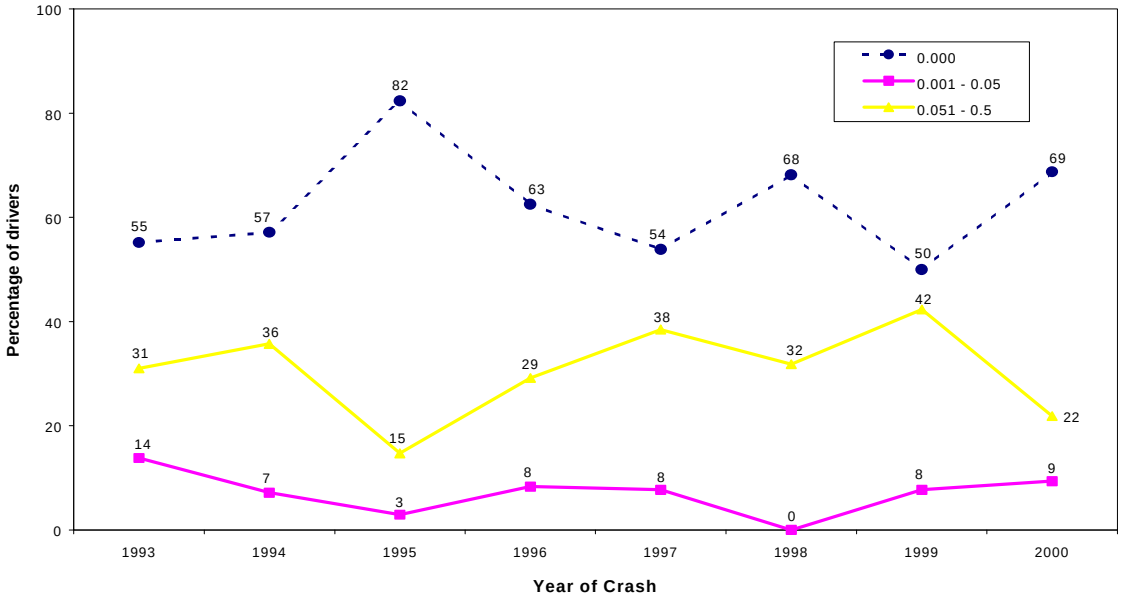

Figure 2.4 Annual percentage distributions of fatally-injured, fully-licensed drivers aged 31-40 years based on BAC level, 1993-2000

2.6.2 Crash results using both BAC levels and high alcohol hours as indicators of alcohol involvement

The following graphs (in sections 2.6.2.1 and 2.6.2.2) compare trends in the level of alcohol-related crashes for the three groups considered in the study, namely probationary drivers aged 18-20 years, fully-licensed drivers aged 21-26 years and fully-licensed drivers aged 31-40 years. The percentages have been calculated using the entire cohort of drivers of all ages. Hence, the percentages shown in the graphs do not sum to 100% for each year when totalling the percentages across age groups. The graphs presented in section 2.6.2.1 depict percentages from a population of drivers with known BAC levels whilst the charts

shown in sections 2.6.2.2 and 2.6.2.3 depict percentages derived from alcohol times (a proxy for alcohol involvement).

2.6.2.1 BAC as an indicator of alcohol involvement — Analysis ii

Figure 2.5 depicts the trends in the proportion of fatal crashes involving drivers from the three age groups with a BAC greater than 0.05 for the period 1993-2000. Figure 2.5 shows that between 1993-1996 fully-licensed drivers aged 21-26 years had the highest level of involvement in alcohol-related fatal crashes (i.e. between 33%-36%) compared to the younger and older driver groups. This proportion decreased considerably in 1997 and 1998 to the extent where fatally-injured, 21-26 year olds were the lowest represented group in alcohol-related fatal crashes. Since 1998, however, the downward trend associated with this age group has reversed and in 2000, fatally-injured, 21-26 year-old drivers were again the highest involved age group.

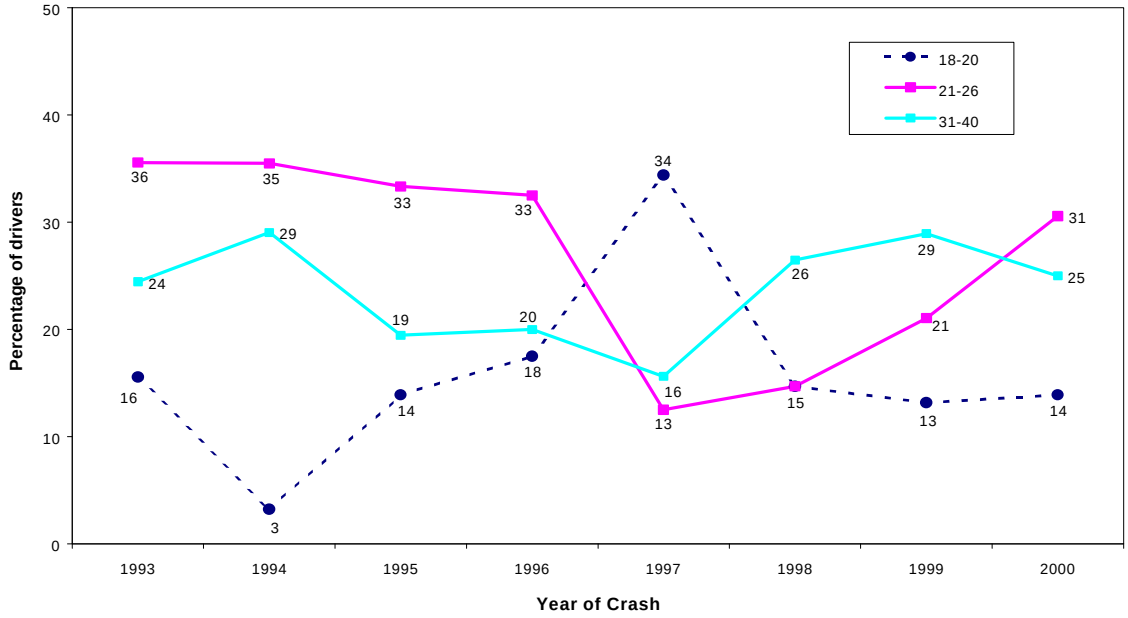

Figure 2.5 Fatally-injured drivers with BAC levels exceeding 0.05 for each age group, expressed as a percentage of all drivers with known BAC, 1993-2000

2.6.3 Results using HAH as an indicator of alcohol involvement — Analysis iii

This section examines the level of involvement of fully-licensed drivers aged 21-26 years in fatal and serious injury crashes in Melbourne and rural Victoria using high alcohol hours, HAH, in comparison to other age groups.

2.6.3.1 Fatal crashes in Melbourne

Figure 2.6 depicts the proportion of LAH fatal crashes that occurred in Melbourne for each of the three groups of drivers (the LAH group provides a surrogate for *no* alcohol-involvement in crashes). With the exception of 1994, drivers aged 31-40 years had the highest level of involvement in LAH fatal crashes. The pattern of LAH fatal crashes exhibited by drivers aged 21-26 years displayed a downward trend during the same period, with the level of involvement decreasing by 2000 (12%) to almost half that for 1993

(21%). Thus, there has been a decline in the proportion of fatal crashes occurring during low alcohol times of the week for drivers aged 21-26 years in Melbourne.

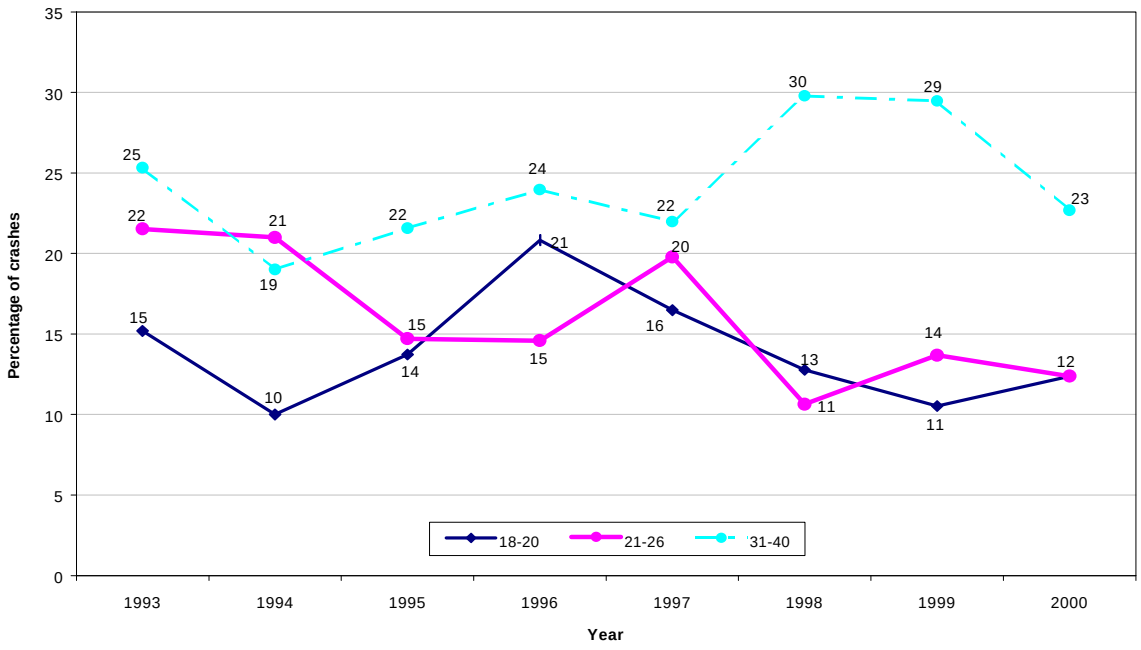

Figure 2.6 Percentage of LAH fatal crashes in Melbourne involving each driver age-group, 1993-2000

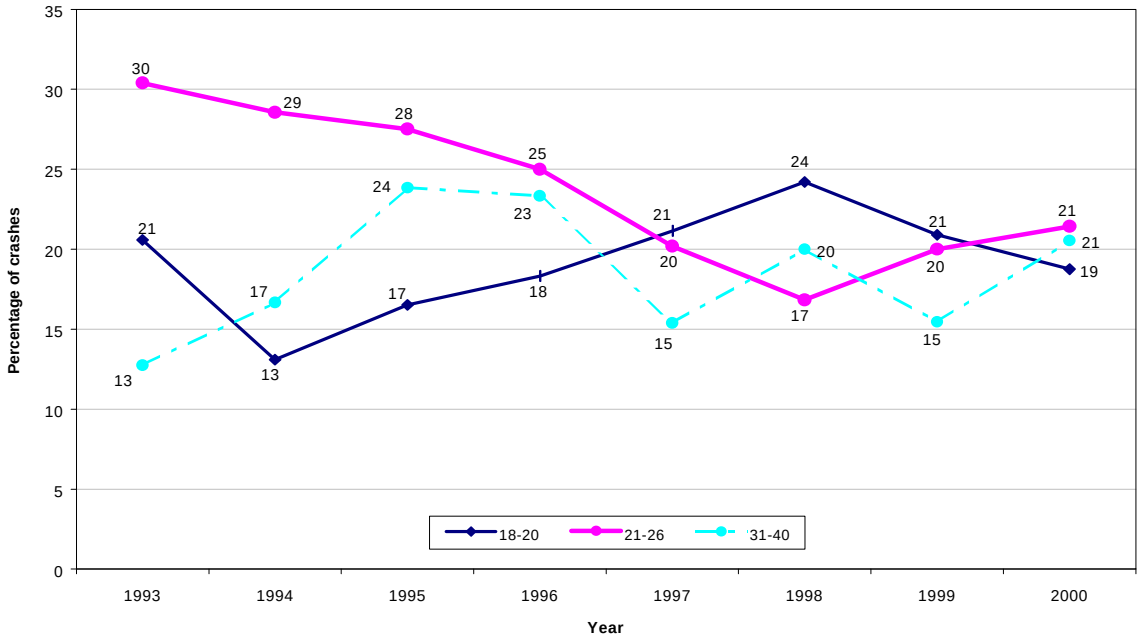

Figure 2.7 Percentage of HAH fatal crashes in Melbourne involving each driver age-group, 1993-2000

Figure 2.7 shows the proportion of fatal crashes that occurred during high alcohol times of the week in Melbourne for each driver group during 1993-2000. The graph clearly shows that fully-licensed drivers aged 21-26 years had the highest level of involvement in HAH

fatal crashes until 1997. Nevertheless, the proportion of HAH fatal crashes involving drivers aged 21-26 years declined steadily from 1993-1998, decreasing by almost half during this period (i.e. from 30% to 17%). It appears, however, that the downward trend is reversing for this age group of drivers, as indicated by the successive percentage increases in 1999 and 2000. These results concur with those described earlier for fatal crashes involving drivers with BACs over 0.05 (Figure 2.5).

It should also be noted that during 1994-1998 there has been a steady increase in the proportion of HAH fatal crashes involving probationary drivers aged 18-20 years, increasing from 13% to 24%. In fact, the proportion for the probationary group of drivers was greater than found for fully-licensed drivers aged 21-26 years during 1997-1999.

2.6.3.2 Fatal crashes in rural Victoria

Figure 2.8 displays the proportion of fatal crashes that occurred during low alcohol times of the week in rural Victoria for each group of drivers.

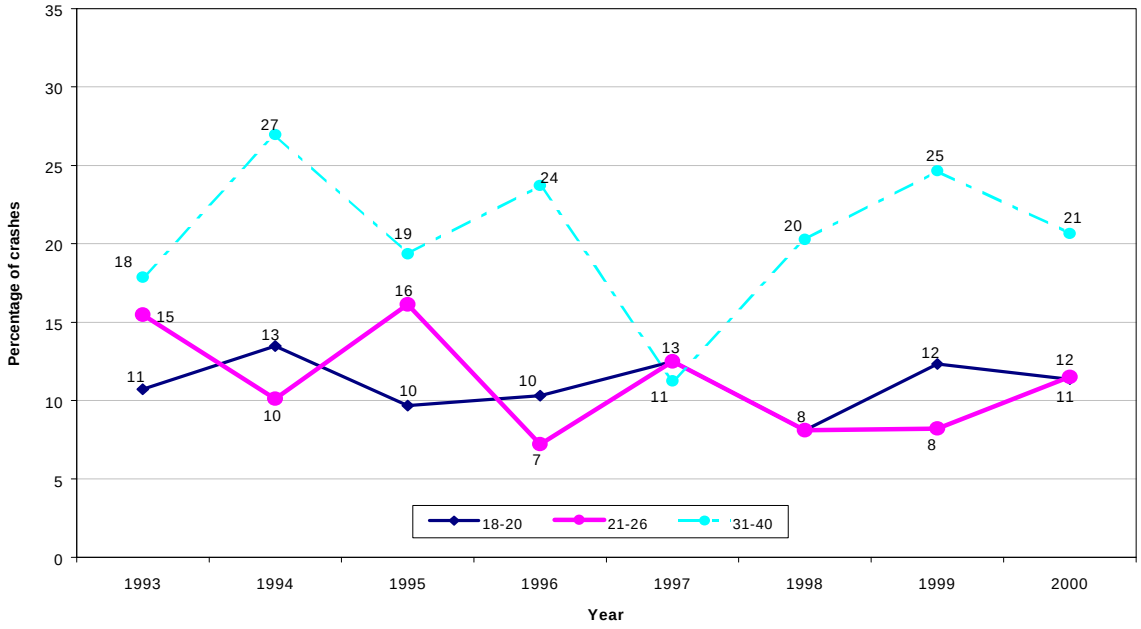

Figure 2.8 Percentage of LAH fatal crashes in rural Victoria involving each driver age-group, 1993-2000

With the exception of 1997 when all three driver groups had similar levels of involvement in LAH fatal crashes in rural Victoria, the older group of drivers (those aged 31-40 years) had the greatest representation in fatal crashes that occurred during LAHs in rural Victoria (Figure 2.8). Of note is the substantial increase that occurred during 1997-1999 in which the proportion of fatal LAH crashes for this group of drivers doubled. The level of involvement of drivers aged 21-26 years in LAH fatal crashes has been fairly constant during 1993-2000, fluctuating between 7% and 16%, a trend similar to that observed for probationary drivers aged 18-20 years.

Figure 2.9 depicts the level of involvement of the three driver groups in fatal crashes during HAHs in rural Victoria from 1993-2000. Although drivers aged 21-26 years did not have the highest level of involvement in fatal HAH crashes in rural Victoria during the entire evaluation period, this group did display a similar level of involvement as the older

group of drivers - those aged 31-40 years. The only exception occurred during 1999 in which the proportion of fatal HAH crashes involving drivers aged 21-26 years dropped markedly from 23% to 12%. This proportion was lower than the corresponding proportions estimated for the younger and older groups of drivers. The proportion of HAH fatal crashes in 2000 for drivers aged 21-26 years, however, more than doubled compared to the previous year.

It should also be noted that there was a gradual increase in the proportion of HAH fatal crashes in rural Victoria for probationary drivers aged 18-20 years during 1997-2000 (increasing from 12% to 19%).

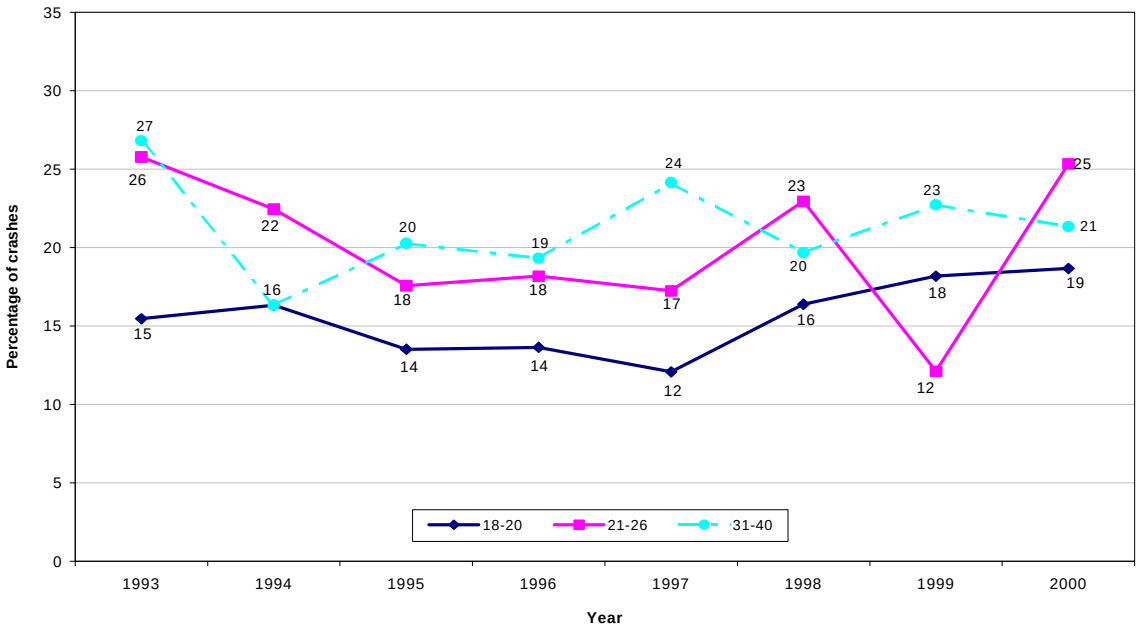

Figure 2.9 Percentage of HAH fatal crashes in rural Victoria involving each driver age-group, 1993-2000

2.6.3.3 Serious injury crashes in Melbourne

Similar to the trends found for LAH fatal crashes in Melbourne (Figure 2.6), drivers aged 31-40 years also had the highest level of involvement in serious injury crashes that occurred during LAHs in Melbourne, as shown in Figure 2.10. Unlike the LAH fatal crash trends in which there was increasing trend for this age-group (Figure 2.6), the level of involvement in LAH serious injury crashes has remained constant at about 22% during 1993-2000. The level of involvement for drivers aged 21-26 years in LAH serious casualty crashes in Melbourne has gradually declined over the years. Probationary drivers aged 18-20 years had the least involvement in LAH serious casualty crashes among all the age groups.

Figure 2.11 depicts trends in the proportion of HAH serious injury crashes involving drivers in each of the three age-groups for Melbourne during 1993-2000. Whilst drivers aged 21-26 years had the highest level of involvement in HAH serious injury crashes in Melbourne, the level of involvement gradually decreased during 1993-2000 from around 26% to 23%. Generally during most of the evaluation period, the older and younger groups of drivers had similar levels of involvement in HAH serious injury crashes.

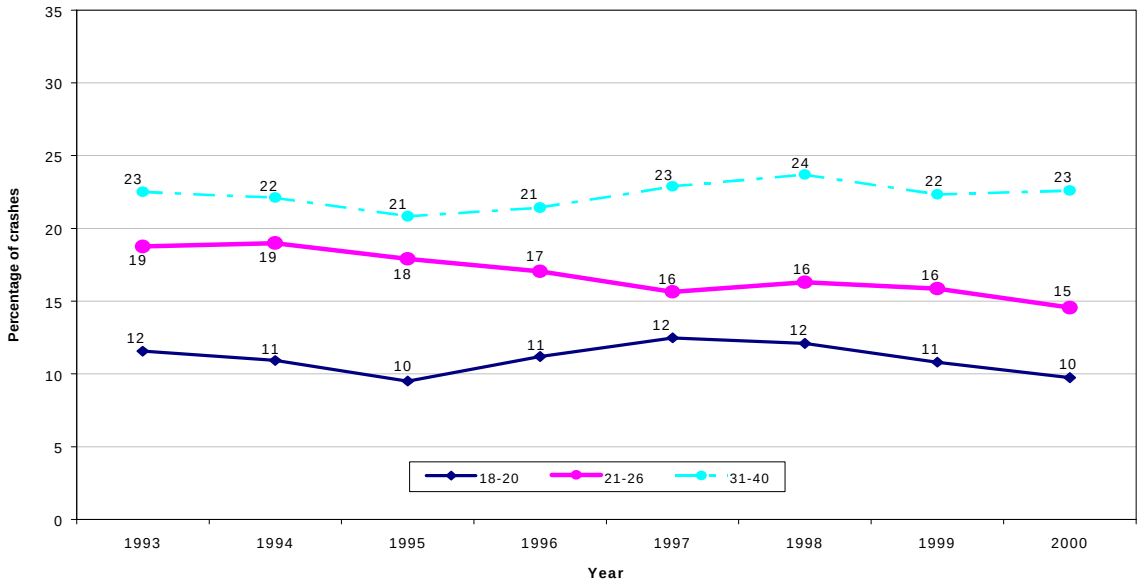

Figure 2.10 Percentage of LAH serious injury crashes in Melbourne involving each driver age-group, 1993-2000

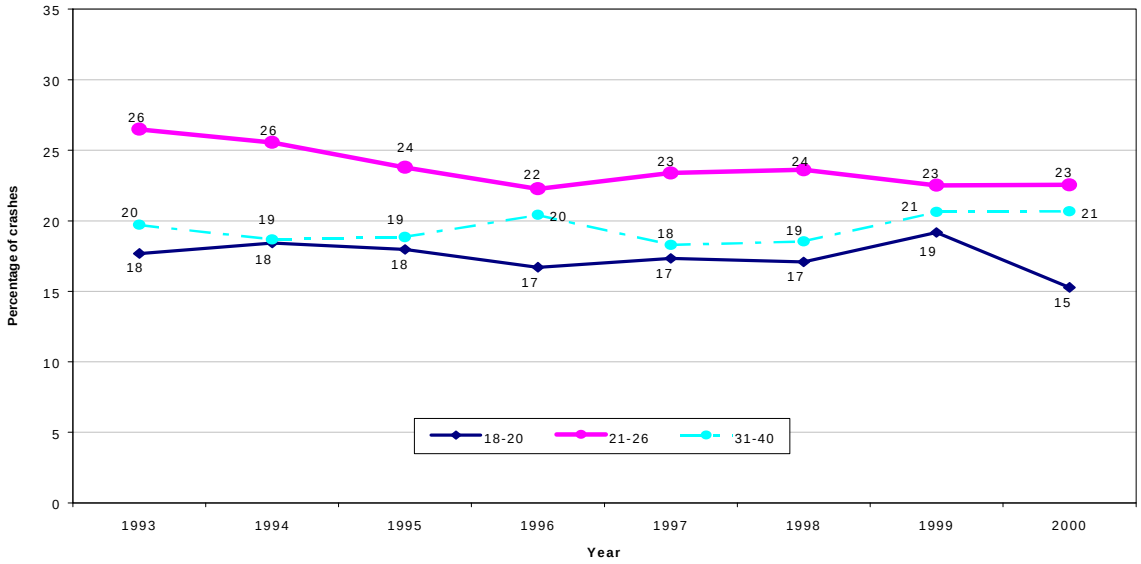

Figure 2.11 Percentage of HAH serious injury crashes in Melbourne involving each driver age-group, 1993-2000

2.6.3.4 Serious injury crashes in rural Victoria

Figure 2.12 and Figure 2.13 display trends in the proportion of serious injury crashes involving each of the three driver groups that occurred during LAHs and HAHs, respectively, in rural Victoria during 1993-2000.

Drivers aged 31-40 years were involved in a greater proportion of LAH serious injury crashes in rural Victoria than the two younger driver groups (Figure 2.12). Similar trends in the proportion (and in the numbers) of LAH serious injury crashes that involved drivers aged 21-26 years and those aged 18-20 years were found during 1993-1994.

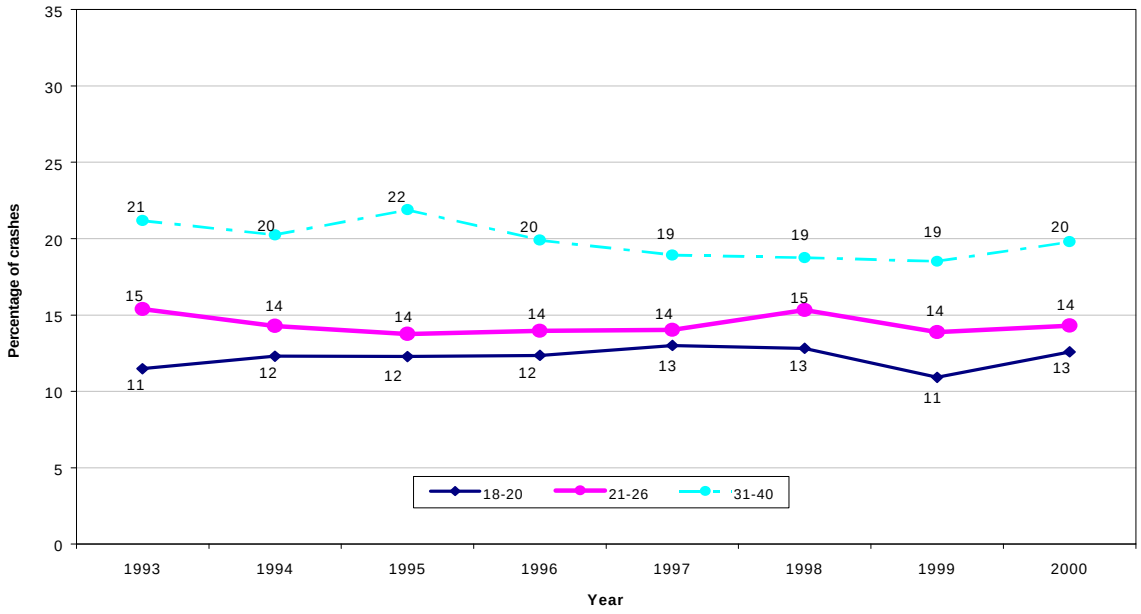

Figure 2.12 Percentage of LAH serious injury crashes in rural Victoria involving each driver age-group, 1993-2000

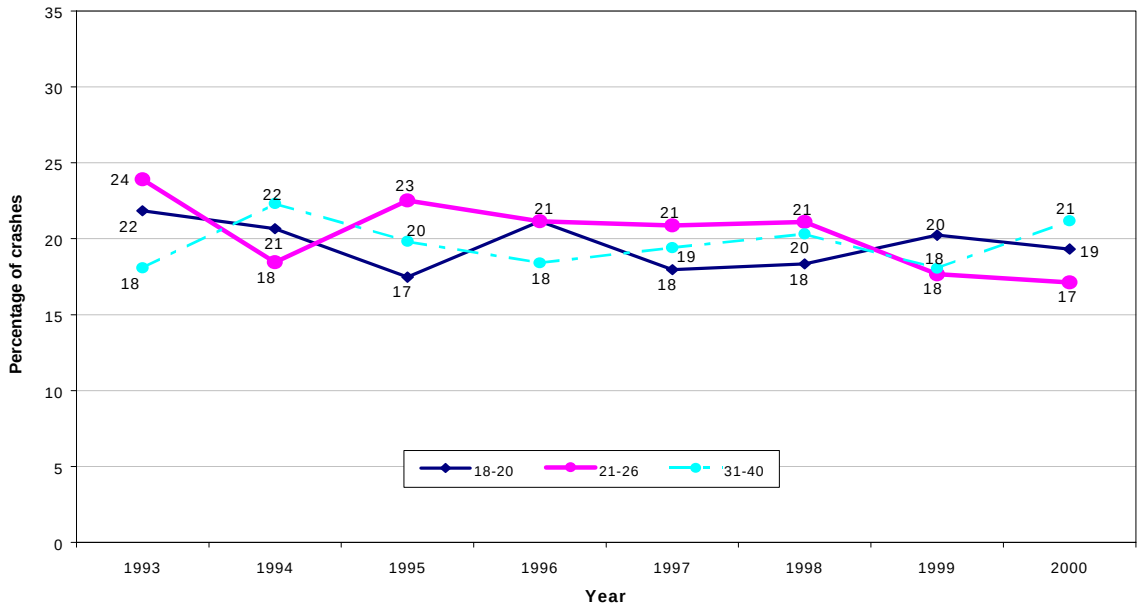

Figure 2.13 Percentage of HAH serious injury crashes in rural Victoria involving each driver age-group, 1993-2000

Although the proportion of HAH serious injury crashes that occurred in rural Victoria did not differ substantially between the three age groups, HAH serious injury crashes involving drivers aged 21-26 years decreased from 21% in 1998 to 17% in 2000 (Figure 2.13). Overall, however, no major trends were evident for any of the driver age-groups.

2.6.4 Driver-based results using high alcohol times as an indicator of alcohol involvement – analysis iv

For various demographic groups, this section investigates the trends in serious casualty crashes that occurred during high alcohol times of the week for the period 1993-2000, expressed as a proportion of the total number of casualty crashes. The demographic groups considered were classified by age, gender and region. Specifically, the demographics considered within each driver age group were:

- male drivers in Melbourne during HAHs;
- female drivers in Melbourne during HAHs;
- male drivers in rural Victoria during HAHs; and
- female drivers in rural Victoria during HAHs.

The formula described in section 2.5.2 was used in the calculation of the above proportions. For example:

$$\% = \frac{no.\ of\ 18-20\ y.o.\ male\ Melbourne\ drivers\ involved\ in\ serious\ casualty\ crashes\ during\ HAH}{no.\ of\ 18-20 y.o.\ male\ Melbourne\ drivers\ involved\ in\ casualty\ crashes} * 100$$

The HAH serious casualty crashes have been expressed as a proportion of casualty crashes that occurred during all times of the week (i.e. HAHs and LAHs) involving the particular demographic group in question. This adjustment was made to take into account changes that may have occurred in all crashes involving that demographic group not just changes that occurred in HAH serious casualty crashes.

2.6.4.1 Probationary drivers aged 18-20 years

Figure 2.14 shows the proportion of HAH serious casualty crashes that involved probationary drivers aged 18-20 years during 1993-2000 for each of the above four demographic groups.

Figure 2.14 shows a distinct upward trend in HAH serious casualty crashes in rural areas of Victoria for both male and female drivers aged 18-20 years during 1997-2000 while, the proportion of HAH serious casualty crashes in the metropolitan areas have decreased during this period. The proportion of HAH serious casualty crashes in rural Victoria involving male drivers 18-20 year-old drivers decreased from 19% in 1993 to 12% in 1997, however this proportion had increased back to 20% by 2000. For female drivers in rural Victoria, a similar trend was found with the proportion decreasing from 15% in 1993 to 8% in 1997 before increasing again to 13% by 2000. In the 18-20 old age group, male drivers had the highest level of involvement in HAH serious casualty crashes regardless of region.

As with drivers aged 18-20 years, male drivers aged 21-26 years also displayed the highest involvement in HAH serious casualty crash statistics regardless of region (Figure 2.15). There was a decline in the proportion for male drivers in both rural and urban regions during 1993-1997, with the rural proportions being generally larger. The proportions increased again by 2000.

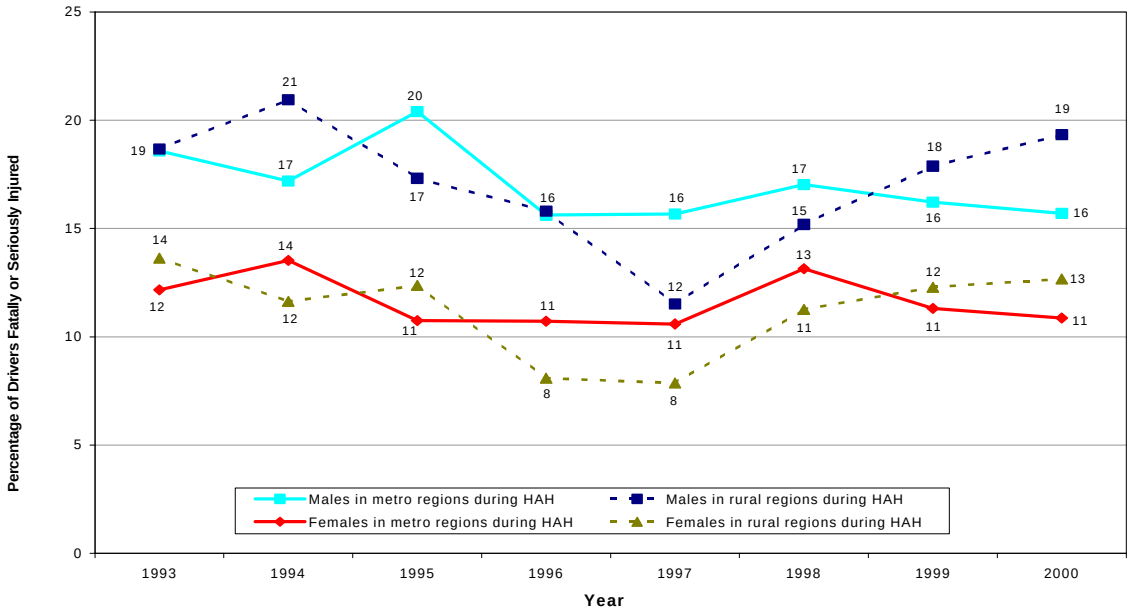

Figure 2.14 HAH serious casualty crashes involving probationary drivers aged 18-20 years, expressed as a proportion of those involved in casualty crashes by gender and region, 1993-2000

2.6.4.2 Fully-licensed drivers aged 21-26 years

Figure 2.15 shows the proportion of drivers aged 21-26 years who were involved in serious casualty crashes during high alcohol hours of the week from 1993-2000.

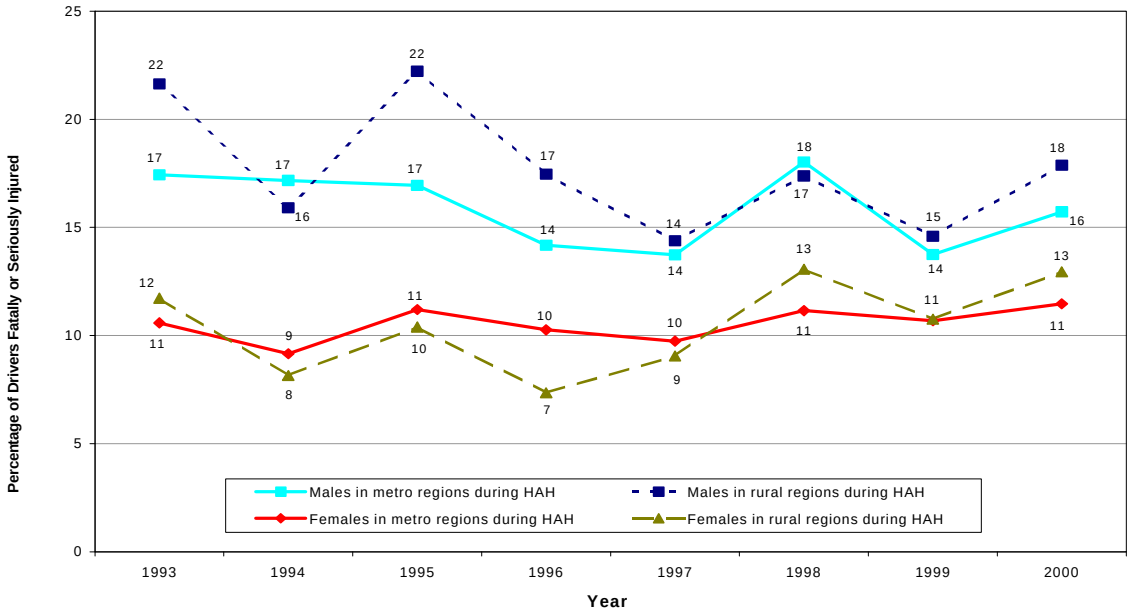

Figure 2.15 HAH serious casualty crashes involving fully-licensed drivers aged 21-26 years, expressed as a proportion of those involved in casualty crashes by gender and region, 1993-2000

The proportion of 21-26 year-old female drivers involved in HAH serious casualty crashes in Melbourne has remained fairly constant throughout the evaluation period (between 9% and 12%). However, the proportion of 21-26 year-old female drivers involved in HAH serious casualty crashes in rural Victoria has been increasing since 1996, from 7% to 13% by 2000.

2.6.4.3 Fully-licensed drivers aged 31-40 years

Figure 2.16, shows the proportion of 31-40 year-old drivers resulting in serious or fatal injury in Victoria during HAH from 1993-2000. As with other driver age-groups, male drivers aged 31-40 years had the highest representation in HAH serious casualty crashes for both regions. However, the proportion of 31-40 year-old male drivers involved in HAH serious casualty crashes in rural Victoria during HAH was greater that the corresponding proportion found for Melbourne during the evaluation period. There was a decrease in the rural proportions from 17% in 1993 to 12% in 1996 before increasing again to 19% by 2000 – the trends in the Melbourne proportions remained relatively stable.

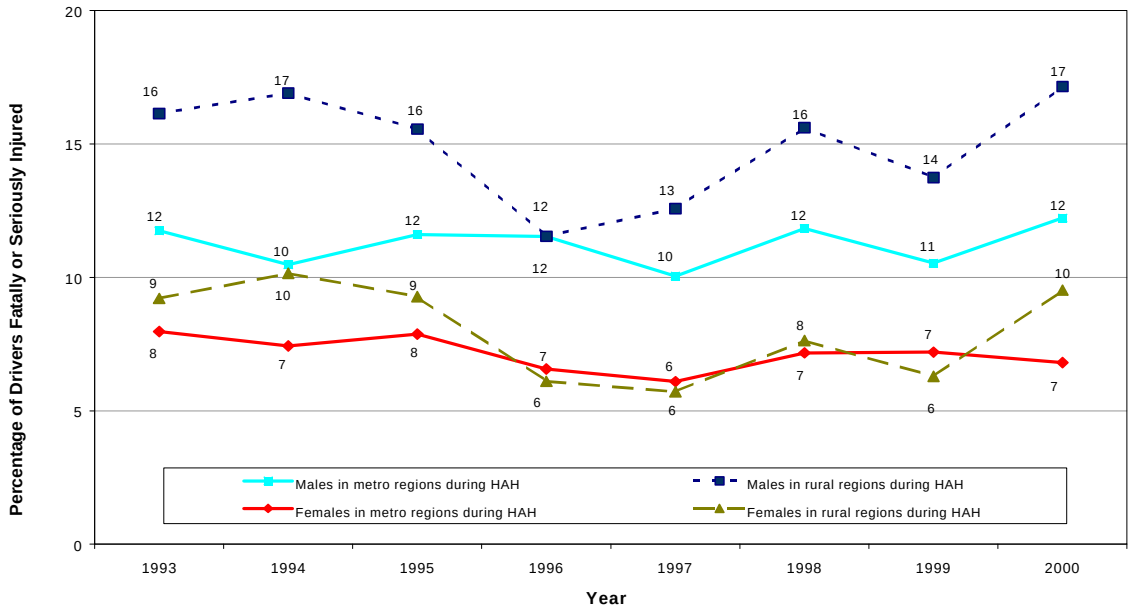

Figure 2.16 HAH serious casualty crashes involving fully-licensed drivers aged 31-40 years, expressed as a proportion of those involved in casualty crashes by gender and region, 1993-2000

There was little change in the proportion of female drivers aged 31-40 years involved in HAH serious casualty crashes in Melbourne during 1993-2000, whilst the corresponding rural Victoria proportion decreased from 10% in 1993 to 6% in 1997 before increasing to 10% again by 2000.

3 DRINKING AND DRIVING LITERATURE

3.1 DRIVING, DRINKING AND DRINK-DRIVING BY YOUNG DRIVERS

There is a large volume of research reporting that young drivers (16-25 years of age) are over-represented in drink-driving fatal crashes, compared to older drivers. According to Hampson (1989), young drivers in Australia have twice the crash risk of drivers aged 32-59 years on a per population basis, and three times the risk per distance travelled. Furthermore, in Victoria, Harrison and Pronk (1998) reported higher levels of driving exposure for males than females, thus inflating their crash risk due to greater distances travelled. They also reported that males and younger respondents drove more during night-time hours than females and older drivers.

Young male drivers in Australia have been reported to engage in higher rates of drinking and driving activities than females. Young male drivers tend to have a greater proportion of high BACs than females (Harrison & Pronk, 1998). Rosman, Ferrante and Marom (2001) reported higher rates of young males involved in serious alcohol-related crashes. In America (USA) and Canada, young males outnumber females for serious and fatal alcohol-related crashes (NHTSA, 2001; Mayhew & Simpson, 2000).

Ferrante, Rosman and Marom (2001) examined the relationship between drink-driving incidents and crash involvement among drivers in Western Australia. They found that if a driver's first drink-driving offence resulted from a road crash, particularly at a younger age, the driver was more likely to drink, drive and crash again. Specifically, male drivers less than 25 years of age were most likely to be re-arrested for drink-driving offences. These finding support the conclusion that drink-driving violations may be one of the early predictors of high-risk drinking drivers.

Balmforth (1998; cited in Mayhew & Simpson, 2000) reported that drivers aged 21-29 in America were more likely to report driving within two hours of drinking in the past month (18% compared to 7% of 16-20 year olds and 15% of 30-45 year olds). Foss, Holladay, Bartley, and Marchetti (2000) BAC tested 1,846 university students as they returned to their college dorm rooms in the evening. Among drivers less than 21 years of age, 7% had an illegal, non-zero BAC. Males were more likely than females to have a non-zero BAC. Among designated drivers (including drivers over 21 years of age), 34% had a non-zero BAC.

In summary, research shows that among young drivers, males are more likely to be involved in drink-driving-related behaviours, including higher BACs in the context of greater driving exposure, and more arrests for drink-driving offences.

As drivers get older, a decrease in risky behaviours occurs. Begg and Langley (2001) reported a significant decrease in risky driving behaviours among males between the age of 21 and 26 years in New Zealand. Among both males and females there was an increase in the prevalence of driving within two hours of drinking, but a decrease in driving after drinking too much to drive safely (self-assessed). Begg and Langley suggested that males grow out of the need to engage in risky driving behaviours.

While young men seem to traditionally be most prone to taking up risky driving behaviours such as drink-driving, relatively recent research suggests that young women are narrowing the gap (Harre, Brandt & Dawe, 2000). Popkin (1991; cited in Harre et al, 2000) found a 26% increase in the rate of drink-driving arrests for young females aged 21-24 years. Young females also make up an increasing proportion of the fatally-injured drink-drivers.

Research has also found differences in patterns of BAC levels for drivers in metropolitan and rural areas. In Victoria, Harrison (1996b) reported that rural drivers of all ages tend to have higher BACs than metropolitan drivers. Furthermore, while there was a significantly higher proportion of high BACs for males than females in a metropolitan setting, in a rural setting, BAC levels were high across both genders. Hampson (1989) reported that the crash risk of both younger and older drivers is more than twice as high in rural areas than urban areas nationally, a finding duplicated by Rosman, Ferrante and Marom (2001). Similarly, in America, NHTSA (2001) reported that nearly 70% of youth motor vehicle fatalities occurred in rural areas.

Types of alcohol consumed by young drivers have been found to vary between males and females. Mitchell-Taverner has conducted yearly national surveys in Australia. Results from the most recent surveys, conducted in 2001 and 2002, indicate that a majority of males aged 15-24 years preferred to drink beer (61% and 57% in respective years), while a majority of females aged 15-24 years preferred mixed drinks, including spirits and liqueurs (65% and 66% in respective years) (Mitchell-Taverner, 2002a, 2002b).

Together these findings highlight the importance of exploring differences in driving, drinking, drink-driving and crash involvement patterns among young, novice drivers and as well as comparisons to more experienced drivers. Research suggests differences arise between males and females and those who reside in a metropolitan compared to rural setting. Such differences are also evident in patterns of awareness and knowledge on drink-driving-related issues and related attitudes and behaviours.

3.2 AWARENESS

In their investigation of awareness of drink-driving enforcement and risk, Harrison and Pronk (1998) reported that Australian males were more likely to report observation of recent drink-driving enforcement activity, whereas females were more likely to perceive a risk of detection. There were no gender differences in the level of recall of publicity. Younger respondents (18-29 years) tended to report more enforcement, occurring more recently, than older respondents (30-59 years). The differences in perceived enforcement were consistent with differences in the level of exposure to enforcement. Younger people drove more at night-time and hence had a higher level of exposure to enforcement.

According to Mayhew and Simpson (2000), there is evidence that mass communication is effective in increasing awareness, improving knowledge and changing attitudes, but no evidence that they are effective in changing actual behaviour. Hedlund, Ulmer and Preusser (2001) suggested an increase in the number and variety of campaigns and activities aimed at youth drinking and driving probably played a part in the trend reduction of youth drink-driving. However, Hedlund et al also point out that the extent of the effect has not been properly evaluated.

Grosvenor, Toomey and Wagenaar (1999) surveyed just under 9000 12^{th} grade American students (median age 17 years). They found that perceived certainty of legal consequences

was significantly related to lower drinking and driving rates among those binge drinking. Wagenaar, O'Malley and LaFond (2001) also found significant declines in drink-driving after a change in legislation (lowering BAC for those younger than 21 years). There was also a decline in the likelihood of riding in a car with a heavily drinking driver. However, evidence also indicated that knowledge of the changed BAC levels was extremely low, and a public information campaign was recommended. Blomberg (1992; cited in Wagenaar et al, 2001) reported an experimental study of a public information campaign specifically designed to enhance the effects of Maryland's (America) youth BAC law. Results showed that the addition of a public information campaign more than doubled the effect of the law on its own. Furthermore, Cameron, Haworth, Oxley, Newstead, and Le (1993) reported that monthly levels of anti-drink-driving publicity in Victoria were associated with reductions in casualty crashes during high alcohol hours. The recency of exposure to anti drink-driving messages is explored in the present survey. The relationship between awareness and behaviour change will be further examined, looking at differences between age groups in their perception of enforcement activity and risk.

Harrison (1996a) reported that recency of exposure to enforcement was an important factor in maximising the effectiveness of drink-drive enforcement. Harrison also reported that many drinkers would attempt to avoid drink-drive enforcement. Almost half the sample of rural Australian drinkers surveyed indicated that they would drive home by an alternate route if they knew about the location of a random breath-testing (RBT) operation, a finding that was duplicated by Cameron, Diamantopoulou, Mullan, Dyte, and Gantzer (1997). In further evidence of the utilisation of this strategy, Cameron et al (1997) reported a significant increase in serious casualty crashes during high alcohol hours on minor roads during times of intense enforcement and publicity awareness in rural Victoria.

Christie (1997) also found a significantly greater perception of risk of detection for drink-driving between rural and metropolitan respondents. Given that RBT activity is actually higher in metropolitan areas, Christie suggested it was possibly due to changing rates of RBT use in rural areas, which resulted in a false perception of greater RBT activity. Similarly, Mitchell-Taverner (2000) found that respondents in rural areas (43%) were more likely to believe RBT activity had increased than respondents in metropolitan areas (35%). Thus, research has shown that differing perceptions of RBT activity in rural compared to metropolitan settings are not necessarily consistent with actual RBT activity.

Use of public breath-testing machines (PBTMs) has been also shown to result in a change in behaviour. Haworth and Bowland (1995) reported that 16% of metropolitan Australian drivers surveyed had intended driving home, but changed their minds after finding out their BAC was greater than 0.05 after using a PBTM. A further 63% decided to modify their subsequent drinking behaviour after finding out they were over 0.05. Two-thirds of people that self-tested reported doing so for fun or curiosity rather than for safety reasons. Non-testers expressed doubts about the accuracy of such machines. Most people using PBTMs were under the age of 30 years, and 60% were male. Males and females were equally likely to use the breath-testing machine. However, Mitchell-Taverner (2000) more recently reported that males were more likely (17%) than females (10%) to use PBTMs and that the machines were most frequently utilised by people under the age of 24 years. The use of PBTMs is also explored in the current survey.

3.3 KNOWLEDGE

A number of studies have looked at knowledge of alcohol and driving-related laws. Christie (1997) reported a high degree of knowledge of the relevant Victoria laws and practices among both probationary and full licence holders. Antill (1995) found little evidence that knowledge of the rules, penalties for drink-driving and how to stay under the legal limit, have implications for how a young person drives a car. In the most recent survey, Mitchell-Taverner (2000) investigated knowledge and attitudes to drinking and driving in Australia. He found that females were less likely than males to be aware of the correct guidelines for alcohol consumption for their gender, particularly for the first hour. Guidelines for alcohol consumption were actually best known by drink-drivers, which was consistent with previous research.

Overall, 83% of Harre, Brandt and Dawe's (2000) New Zealand sample of young drivers reported a belief that you should not drink and drive, or that you should only have one or two drinks. However, 46% had been the passenger of a drinking driver in the last three months. Whereas in America, Foss, Holladay, Bartley and Marchetti (2000) suggested that there has been an increase in the knowledge about and use of designated drivers. However, rather than the designated driver being pre-chosen and then not drinking, groups tend to choose the person who has had the least to drink to be the designated driver.

Another issue in understanding the BAC infringements is the judgement of drunkenness and subsequent likely impairment of driving ability. This is relevant to deciding both whether one is able to drive home safely and legally, and whether one's friends are able to drive, particularly if they are a designated driver. Research suggests that adolescents tend to make inaccurate judgements of drunkenness using the cues about number of drinks and consumption time – both for themselves and for others (Turrusi, Jaccard, Kelly & O'Malley, 1993). Trained personnel, such as medical staff and Police are able to make more accurate judgements. In the present survey, these issues are explored in relation to crashes, BAC levels and penalties for illegal BAC levels.

3.4 PLANNING AND STRATEGIES TO AVOID DRINK-DRIVING

The downward trend in youth drink-driving suggests a change in behaviour – at least in terms of drink-driving – a decoupling of the activities of drinking (particularly social drinking in the case of young people) and driving. For example, in an Australian survey of young probationary drivers and fully-licensed drivers, Christie (1997) asked respondents to rank up to five things they did to avoid drink-driving from a list of 18 options. The strategy most often employed by the probationary drivers was "Not drinking at all if I know I'm driving", whereas for fully-licensed drivers the most popular response was "Carefully limit what I drink if I know I'm driving". More probationary drivers (83%) planned to avoid any combination of drinking and driving, compared to fully-licensed drivers (52%). Further, the top five strategies employed by the probationary drivers did not involve any combination of drinking and driving, a finding also confirmed by Mitchell-Taverner (2000). Furthermore, Mitchell-Taverner (2000) reported that females were more likely than males to indicate that they wouldn't drink and drive (44% females, 36% males). Males were more likely to say they "restrict" what they drink when driving (50% versus 33% of females).

Harre, Field, and Kirkwood (1996) suggested that reported differences in unsafe driving practices might partly reflect the different amounts of driving exposure. They also found

differences in attitudes towards driving, which suggested that males have greater confidence in their driving than females. Females were also more likely than males to be the passenger of a drinking driver, even though the majority of participants had attitudes consistent with not drinking and driving.

Teaching drivers to be more aware of their true level of intoxication or that of others could be an effective countermeasure against young people driving after drinking. Surveying a group of university students in America, Kulick and Rosenberg (2000) found that participants were more likely to have driven after drinking if they had considered themselves less intoxicated than they actually were, the least intoxicated of the group, or other potential drivers were intoxicated.

Planning and strategies are explored in the current study, with particular focus on the changes in planning related to transitional issues. This is examined in terms of current strategies for probationary and younger drivers, and both current and retrospective strategies used by older drivers.

3.5 REASONS DRIVERS DO OR DO NOT DRINK-DRIVE

Young people have consistently been found to have erroneous normative beliefs regarding the consumption of alcohol by their peers; that is, they believe that alcohol use among their peers is more common than actual practice (Klitzner et al, 1988, Vegega & Klitzner, 1989; both cited in National Institute on Alcohol Abuse and Alcoholism, 1997). Finken, Jacobs and Laguna (1998) reported that older adolescents (mean age 21.5 years) had greater previous experiences drink-driving or being in a car with a drunk driver than younger respondents (mean age 19 years). This experience was significantly associated with greater rates of risky decision making in regard to drink-driving. Older adolescents also reported that drinking and driving was more acceptable among their peers than the younger respondents.

Kulick and Rosenberg (1999) surveyed American University students about self-reported motivations for and against drink-driving during four recent episodes of drinking. Distances between drinking locations and destinations tended to be longer for episodes where participants drank and drove. The most commonly cited reason for drink-driving was the perceived need or desire to go to a certain destination (e.g. home, friend's home, grocery, or restaurant). Further reasons supporting drink-driving were perception of minimal intoxication, or that, by comparison, others were too intoxicated to drive. On the other hand, the most commonly cited reason for not driving after drinking was that the participant found alternative transport. Further reasons included being too intoxicated, poor parking at the intended destination, and conditions favourable to walking, including company, short distances and favourable weather. Alternatives to driving were investigated with the most common alternative being walking, calling someone else for a ride, riding with another driver from the same location, or calling a taxi. Participants reported barriers to these alternatives consistent with reasons for drink-driving. These types of rationalisations are also explored in the present survey.

3.6 TRANSITIONAL ISSUE

In the current study, the issue of transition is of particular interest. More specifically, the ways awareness, knowledge and planning strategies may differ between probationary drivers, newly fully-licensed drivers and more experienced drivers. Exploration of these

differences will improve understanding of the differing behaviours and crash-involvement rates among these groups.

Zero BAC laws have applied to Victorian probationary licence holders (the first three years of licensed driving) since 1984 (Christie, 1997). According to Christie (1996), a zero BAC for Victorian novice drivers is advantageous for the first two or three years of limitations, in terms of reduced alcohol-related crashes. Three years may not confer an additional advantage over two years, but one year seems to be insufficient.

Victoria has a highly-visible RBT regime with substantial supporting publicity. Christie (1997) found that a majority of survey respondents perceived the risk of detection, apprehension, or charge for drink-driving to be a better than even chance. Probationary licence holders perceived a risk of detection equal to other drivers. Christie suggests that under zero tolerance laws, the certainty of being caught and the severity of penalty might be at an increased level for adolescent drinking drivers. This should be particularly so for Victoria's probationary licence holders, who must by law display *P*-plates and so may be perceived as more of a target for Police. In this regard, the transition to a full licence may relax such perceptions among 21-26 year-old drivers at a time when they may not be fully aware of their personal tolerance for alcohol and how many or how few drinks they can consume without being over the 0.05 BAC limit.

To further examine this transitional issue, it is worthwhile briefly turning attention to research on BAC levels in probationary drivers and licensing restrictions in general. In Australia and many overseas jurisdictions (particularly New Zealand and the United States), drivers are licensed under a Graduated Driver Licensing System (GDLS). The implementing of GDLS has been very effective in reducing crash rates among young drivers (Senserrick & Whelan, in press). An integral component of most GDLS jurisdictions is a prohibition against drinking and driving, reflected by a zero or low BAC limit for both learner and intermediate-licensed drivers. Chamberlain and Solomon (2001; in press) argue that zero BAC restrictions send a clear message not to drink and drive, whereas, higher BAC limits give the impression that some drinking before driving is acceptable. Chamberlain and Solomon found that an American jurisdiction that reduced its BAC limit from .02 to zero (Maine), and one that extended its zero BAC laws to apply to drivers up to age 21 years rather than only to age 18 years (Oregon) had respectively 36% and 40% reductions in night-time single-vehicle crashes among affected drivers. From this they concluded that a zero BAC restriction for all drivers up to age 21 years provided a road safety benefit. This study indicates the effectiveness of mandating a zero BAC level and also increasing the period that the zero BAC is mandated.

Preusser and Stewart (2001) indicated that education and awareness dramatically increase the effectiveness of drink-driving laws and that detecting and punishing violators is not as important as deterring young people from drinking in the first place. In this regard, they argue that deterrence is best when people perceive that the risk of detection is high and that punishment will be swift and severe. The research reported here indicates that at minimum, more education is needed, particularly for this exit stage to full licensure. Research on drivers' knowledge and awareness is discussed in the following sections.

4 EXPLORATORY SURVEY METHODOLOGY

4.1 METHOD

4.1.1 Measure

A ten-minute telephone survey was drafted based on comparative published research. The survey draws on questionnaire items from the following surveys:

- Federal Office of Road Safety *Community attitudes to road safety survey* (Mitchell-Taverner, 2000)
- *Drinking and Driving Survey Questionnaire* (Christie, 1997)
- *Drinking-Driving Episode Survey* (Kulick & Rosenberg, 2000)
- *Self-reported Drunk Driving Tendency* (Turrisi & Jaccard, 1991)

A copy of the questionnaire is included in Appendix 2.

The survey comprised 36 items. All items allowed for "Don't know" responses, where applicable, and when multiple response lists were used these were presented in random order.

The first items, age group, gender, whether ever consumed alcohol, type of driver's licence held (whether for a car and/or other vehicle and whether full or probationary) were used for screening.

Several items focused on other demographics and exposure variables. Respondents were asked to state their highest level of education, current occupation and the country in which they were born. Responses were categorised by the market research company as they appear in the following Sections 4.1.4.1, 4.1.4.2 and 4.1.4.3. Driving exposure was surveyed by asking respondents how many hours they spent driving in an average week. Crash exposure was also surveyed, using two open-ended survey items adapted from the Mitchell-Taverner (2000) survey: "How many crashes they have been involved in as a driver during the past three years?" and "How many of these crashes resulted in someone going to hospital?"

Drinking exposure and attitude towards drinking was surveyed using items from the Mitchell-Taverner (2000) survey. Respondents were asked both "How often do you consume alcohol? Daily, a few times a week, once a week, a few times a month, once a month or less than once a month?" and "On a typical drinking occasion, how many alcoholic drinks would you have?" (with actual responses entered or coded for more than six drinks as "6-9" or "10+" drinks). Respondents were also asked which of three statements best described their attitude to drinking and driving (Mitchell-Taverner, 2000): "If I am driving, I don't drink", "If I am driving, I restrict what I drink" or "If I am driving, I do not restrict what I drink". Turrisi and Jaccard (1991) used a single item to assess self-reported drink-driving tendency and this was adapted for the current survey by asking respondents to indicate whether they had driven when thought they were over the legal alcohol limit in the past year. In addition, they were asked whether they had ever been a passenger of a driver who was most likely over the legal alcohol limit.

Ten items pertained to knowledge and awareness of mass media campaigns, RBT enforcement and penalties for drink-driving. For example, mass media campaign knowledge was assessed by asking respondents when the last time they remember seeing, hearing, or reading and anti-drink-driving message with 5 response options; "during the past week", "past month", "last 2 to 3 months" and "more than 3 months ago". Respondents were also asked whether they had seen Police conducting RBT in the last six months, whether they had been tested in the last six months, and if they had seen a public breath-testing machine in a hotel, club or restaurant.

Knowledge of road safety issues item originated from the Mitchell-Taverner (2000) survey. Respondents were asked to name the factor that they believed most often lead to road crashes. There were 19 response categories including "speed/excessive speed/inappropriate speed", "drink-driving", and "drugs (other than alcohol)". There was also an item that assessed respondents' knowledge of the effect of alcohol on driving, whereby 10 statements were read out and respondents had to answer either "true" or "false". Examples included statements that being at 0.05 has little effect on driving ability, increases confidence while driving, affects hearing and vision, and doubles the risk of having a crash (adapted from Queensland Transport, 2001).

Knowledge of penalties for driving in excess of the legal BAC limit was assessed by asking respondents "What is the penalty if you are caught for the first time with a blood alcohol concentration of 0.05?" This question was then asked regarding a BAC of 0.10. Both items allowed for more than one response including a warning, loss of demerit points (including number of points), fine (including amount of fine) and suspension/cancellation of licence (including the length of the disqualification).

Seven items related to planning attitudes and behaviour, that is, both successful and unsuccessful strategy use, based on both Christie (1997) and Kulick and Rosenberg (2000). These items included the strategies employed to avoid drink-driving and reasons given as to why they had driven or not driven when they thought they were over the legal alcohol limit. For example, respondents were asked how often they planned ahead to avoid drink-driving and how often they planned to avoid drink-driving but ended up drink-driving anyway with the response options "all of the time", "most of the time", "about 50/50", "occasionally" or "never" (Christie, 1997). They were also asked to recall a specific episode when they planned to avoid drink-driving but did drink drive and a specific episode when they did avoid drink-driving. For each episode, they were asked to identify their planning strategies, which were categorised into 17 response options, including "not drinking any alcohol", "count or space my drinks", "walk", "take a taxi" and "sleep in my car".

To assess the reason drivers report both for drink-driving and for not drink-driving, we asked two questions: "What are the main reasons you have driven when you thought you were over the limit or might have been over the limit?" and "What are the main reasons you *don't* drive when you are over the limit or might be over the limit?" Responses were categorised into several options based on responses given in Kulick and Rosenberg's (1999) research; e.g. for the former question "confident in ability to drive", "perceived need/desire to go home/other location", "driving more convenient" and for the latter "not confident in ability to drive", or several fears, including a fear of being caught/arrested, of losing their licence, getting a fine or being involved in a crash.

4.1.2 Procedure

The telephone survey was conducted by a leading market research company, Roy Morgan Research using Computer Assisted Telephone Interviewing (CATI). The sample was randomly drawn from the most recent version of the electronic telephone directory in proportion to population distributions across metropolitan and rural areas of Victoria. An approximate 50-50 split for males/females was maintained within each age group. Target respondents were contacted by phone at their homes, mostly during weekday evenings (5:00pm-9:00pm). After proper screening, the main structured questionnaire was administered. Only one person was interviewed within a household.

4.1.3 Telephone survey response

The survey aimed to include 250 drivers in each of three age groups, resulting with a minimum total of 750 interviews. Table 4.1 presents a summary of the response to the telephone survey (provided by the market research company).

Table 4.1 Telephone survey response summary

Description	Frequency
Completed interviews	762
Terminations	66
Refusals	2,580
Subtotal	**3,408**
Language/hearing difficulties	450
Did not meet selection criteria	10,561
Enough respondents in age/gender criteria	95
No reply to call/number engaged	995
Tried more than 3+ calls	3,160
Telstra message (incorrect number)	1,525
Fax/business/mobile number/appointment	688
TOTAL	**20,882**

Of those that terminated the interview 66 did not wish to continue, 363 suffered language problems, 87 suffered from hearing difficulties or were very elderly, 10,484 had nobody in the household that fitted the introduction criteria, 304 were on a business number, and 4 were on a mobile number.

Of those that declined to participate, 33 cited their reason for doing so as being interviewed too often, 35 were other refusals, and 2,512 were general refusals.

Overall, 762 surveys were completed from a total of 3,408 eligible calls. This represents a 22.4% response rate.

4.1.4 Sample characteristics

The sample was drawn from the general community based on the following criteria:

- current drivers (including those with recent temporary suspensions/cancellations);
- aged between 18 and 26 or between 31 and 40 years;
- had ever consumed alcohol; and
- from Victoria, in proportion with demographic profiles for rural and metropolitan areas.

The definition of Metropolitan and Rural areas was based upon the ABS Statistical Division 2001 Census Map. There are 12 Statistical Divisions in Victoria. The Melbourne Statistical Division is the only Metropolitan area. Rural areas comprise the remaining 11 Statistical Divisions[4].

While a total of 762 individuals completed the telephone survey, not all could be included in the analyses. The survey respondents were sampled at a minimum of 250 persons per age group. However, in the present research, the age groups also represent general equivalent experience levels for Victorian drivers (probationary, newly fully-licensed, and experienced drivers). Therefore, the data were screened so that the final divisions by age group were also representative of equivalent experience groups.

In this respect, the follow selection decisions were made:

- Drivers with missing data regarding the length of time they had held a full licence were excluded.
- Drivers with missing data regarding the length of time they had held a probationary licence were excluded.
- Drivers who had held a full licence for less than 4 months were excluded.
- Eight 18-20 year olds who had held a full licence for more than 4 months were included in 21-26 year-old group.
- Thirty-four 21-22 year olds who held a probationary licence were included in 18-20 year-old group.
- Twelve 23-26 year olds and three 31-40 year olds who held a probationary licence were excluded.

As a result, the final sample comprised 696 drivers. The distribution by age and gender is summarised in Table 4.2.

Table 4.2 Summary of participants by age group and gender

Age group (years)	Male	Female	Total
18-20	136	135	271
21-26	101	97	198
31-40	111	116	227
TOTAL	**348**	**348**	**696**

[4] Therefore, Geelong is included in the Rural areas.

As shown, exactly half of the sample was male and half female. The inclusion of 21-26 year-old drivers who held a probationary licence in the younger age group resulted in a relatively higher number of 18-20 year olds and lower number of 21-26 year olds.

The distribution of participants across metropolitan and rural areas is shown in Table 4.3. As expected with population sampling, Table 4.3 shows that a greater proportion of the respondents resided in metropolitan Melbourne (71.8%) and fewer in rural areas (28.2%). Exactly half of both the metropolitan participants and rural participants were male and half were female.

Table 4.3 Summary of participants by age group and area

Age group (years)	Metropolitan			Rural		
	Male	Female	Total	Male	Female	Total
18-20	99	98	197	37	37	74
21-26	72	69	141	29	28	57
31-40	79	83	162	32	33	65
TOTAL	**250**	**250**	**500**	**98**	**98**	**196**

4.1.4.1 Education level

A summary of the highest level of education completed by participants is presented in Table 4.4 by age/experience group.

Table 4.4 Education level by age group (%)

Education level	Total	Age group (years)		
		18-20	21-26	31-40
Some secondary	21.3	14.8	13.1	36.5
Year 12	30.9	45.6	25.8	17.6
Some TAFE	4.5	6.3	4.5	2.3
Trade certificate/Diploma	8.7	5.6	14.1	7.7
Some University	11.7	24.1	5.6	2.3
University degree or higher	22.8	3.7	36.4	33.8

Overall, in approximate proportions, about one-fifth of the sample had some secondary schooling, one-third had completed Year 12, one-quarter had some higher education or had completed a trade certificate or diploma, and a further one-fifth had completed a university degree or higher degree.

Comparisons across the age groups revealed that 21-26 year olds were more likely than average to have completed a University degree/higher degree or a trade certificate/diploma that the other age groups. In contrast, 18-20 year olds were far more likely to have completed Year 12 or to have some TAFE or University education. This suggests that many of the 18-20 year olds were currently undertaking some form of study[5]. The 31-40

[5] Also suggested by the finding in the following section 4.1.4.2 that a higher number of 18-20 year olds listed no occupation.

year-old group had both a higher than average proportion of respondents with some secondary education and a higher than average proportion of respondents with a University degree/higher degree.

4.1.4.2 Occupation

Respondents were asked to indicate their "usual occupation". The market research company recorded occupations according to the categories listed in Table 4.5. While a similar pattern of responses was found for novice and experienced drivers, probationary drivers were less likely to work in professional, semi-professional or skilled occupations and more likely to have no occupation or, for a small percentage, to be a farm owner.

Table 4.5 Occupation by age group (%)

Occupation	Total	Age group (years)		
		18-20	21-26	31-40
Professional	12.4	2.4	13.5	14.7
Owner or Executive	2.0	0.0	1.1	2.9
Owner of Small Business	1.7	1.6	1.0	2.0
Sales	11.8	14.3	12.4	10.9
Semi-Professional	15.2	4.2	16.3	17.8
Other White Collar	9.7	8.5	11.1	9.4
Skilled	14.4	7.5	18.4	14.4
Semi-Skilled	5.8	9.2	7.6	4.0
Unskilled	3.4	4.5	2.2	3.7
Farm Owner	1.0	3.8	0.6	0.4
Farm Worker	0.1	0.5	0.0	0.0
No Occupation	22.4	43.6	15.3	19.8
Can't say/Refused	0.1	0.0	0.5	0.0

4.1.4.3 Country of birth

Table 4.6 presents the distribution of respondents by country of birth, as coded by the market research company. As shown, the majority of the sample was Australian-born for all age/experience groups, although probationary drivers were more likely to include Asian-born drivers than the other groups.

4.2 ANALYSES

To account for the spread in numbers, all survey analyses were weighted by equivalent numbers of licensed drivers in Victoria by age, gender, and probationary/full licence type. The population and sample sizes, according to age and gender groups within the driver categories, are shown in Table 4.7, along with the respective weighting coefficients for these groups.

Table 4.6 Country of birth by age group (%)

Country of birth	Total	Age group (years)		
		18-20	21-26	31-40
Australia	87.3	81.5	89.4	88.0
Asia	4.4	9.5	3.6	3.3
India	0.3	0.4	0.0	0.4
Pakistan	1.8	2.4	1.1	1.9
United Kingdom	0.4	0.0	0.0	0.8
Ireland	0.2	0.0	0.0	0.4
Greece	0.2	0.0	0.0	0.4
Italy	3.2	3.3	2.8	3.4
Other Europe	0.5	0.4	1.6	0.0
New Zealand	0.4	0.0	0.0	0.6
Pacific Islands	0.3	0.3	0.0	0.5
Canada	0.3	0.0	1.0	0.0
United States of America	0.2	1.4	0.0	0.0
Mexico	0.1	0.4	0.0	0.0
Central America	0.4	0.3	0.5	0.4
South America	-	-	-	-
Africa	-	-	-	-
Middle East	-	-	-	-
Other	-	-	-	-

Table 4.7 Summary of the licensed driver population in Victoria, survey samples and weighting coefficients, by age/experience group and gender

Age group (years)	Victorian Population			Survey Sample			Weighting Coefficient		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
18-20[1]	81560	77797	159357	136	135	271	599.71	576.27	588.03
21-26[2]	133724	128801	262525	101	97	198	1324.00	1327.85	1325.88
31-40[2]	252744	317893	570637	111	116	227	2276.97	2740.46	2513.82
Total	468028	524491	992519	348	348	696	1344.91	1507.16	1426.03

Note: [1] Probationary-licensed; [2] Fully-licensed

5 EXPLORATORY SURVEY RESULTS

5.1 DRIVING, DRINKING AND DRINK-DRIVING EXPOSURE

Several items were included in the telephone survey to establish a profile of each age group in terms of their driving and drinking characteristics. These included how often respondents drove and how often and to what extent they consumed alcoholic drinks, in addition to their crash history and previous drink-driving offences. This section discusses patterns of response obtained from the different groups of drivers.

5.1.1 Driving exposure

Exposure to driving was measured by asking respondents to estimate the number of hours they would spend driving in an average week. Responses ranged from less than one hour to more than 60 hours, with a median of 10 hours. Examination of standardised scores identified six outliers with scores in excess of four standard deviations above the mean. These cases were excluded from all further analyses.[6]

Estimated hours varied between the three age groups and between males and females across the age groups. The mean numbers of hours reported are displayed in Table 5.1 together with standard deviations, which indicate the spread in responses.

Table 5.1 Driving exposure by age group and gender (hours per week)

	Age group (years)		
Mean (*SD*)	**18-20**	**21-26**	**31-40**
Male	11.79 (8.97)	12.30 (8.85)	12.05 (8.01)
Female	11.67 (8.87)	9.62 (8.05)	10.29 (7.78)
Total	11.73 (8.92)	10.99 (8.57)	11.07 (7.93)

Overall, the average driving hours reported by 21-26 year olds were fewer than those reported by both the younger and older groups, with 18-20 year olds reporting the highest average. Examination of gender differences revealed that this finding was due to the fewer driving hours reported by 21-26 year-old females (significantly fewer than for any other group). In fact, male 21-26 year olds reported the highest number of driving hours (statistically higher than for any other group). For 31-40 year olds, males also reported a higher average than females, while there was no difference between the 18-20 year-old males and females.

[6] All six respondents were male: one 18-20 year old and four 31-40 year olds from metropolitan areas, and one 31-40 year-old rural resident. All reported that they drove for more than 50 hours in an average week. As greater driving exposure was expected to impact on other responses in the survey (such as crash history and driving offences), these cases were not included in further analyses. The 18-20 year old had been involved in 4 crashes as a driver (with one resulting in a hospital visit), and two crashes as a passenger or pedestrian. He was born in Australia, had some secondary schooling and worked in a skilled profession. Among the 31-40 year olds, three had been involved in crashes as drivers (one each in 1, 2 and 5 crashes). One had been caught drink-driving on two occasions and one on three occasions. Three were born in Australia, one in Asia and one in Europe. They had either some secondary or Year 12 schooling and their occupations ranged from semi-skilled to professional.

5.1.2 Crash history

Crash history was measured by asking respondents to recall the number of crashes they had been involved in as a driver and as a passenger in the previous three years. Responses ranged from none to seven crashes in the previous three years.

In terms of crash history as a driver, the two younger driver groups were more likely to have been involved in a crash during the past three years than the experienced group (Figure 5.1). This finding may be expected due to the greater driving exposure reported by these groups (as reported in the previous section 5.1.1). The two younger driver groups were also more likely to have been in two or more crashes during the past three years. In terms of crash history as a passenger, similar patterns of responses were obtained. The two younger driver groups were again more likely to have been involved in a crash, and in multiple crashes, during the past three years than the experienced group (Figure 5.2).

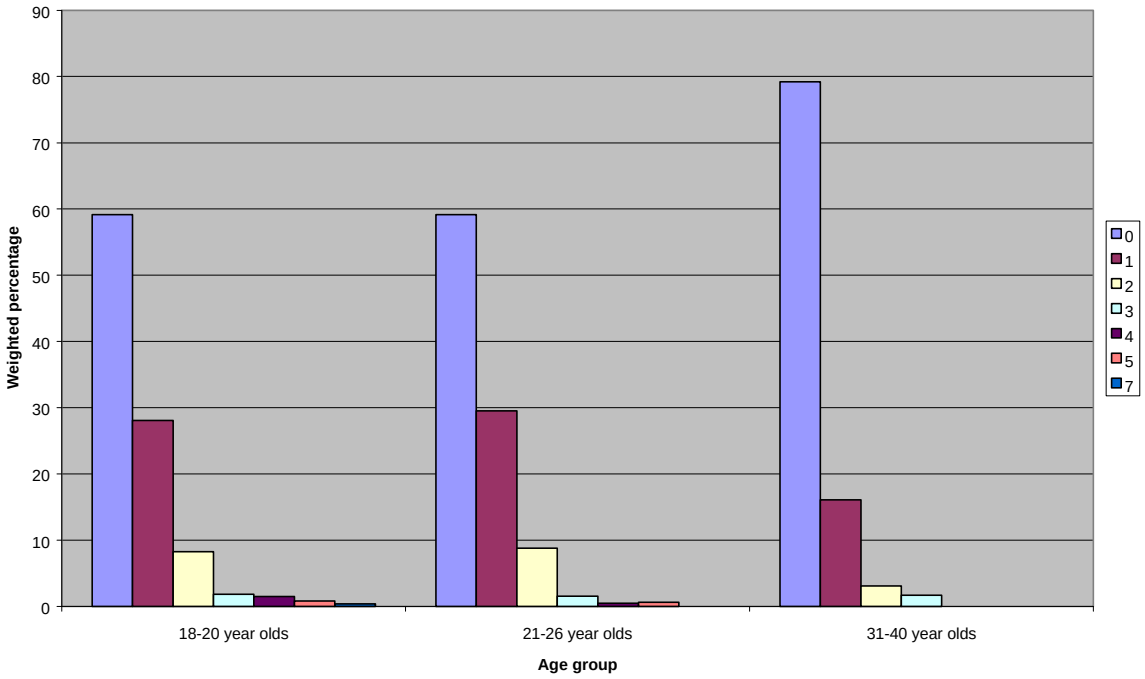

Figure 5.1 Number of crashes as a driver during past three years by age group

5.1.3 Drinking patterns

Patterns of responses to the question "How often do you consume alcohol?" are shown, according to age/experience groups, and gender, in Table 5.2. Notably, less than 1% of respondents replied they no longer drank alcohol. Novices more commonly nominated "a few times a week", particularly novice males, or "once a week" compared to other response options. Novice females more commonly reported drinking once or less than once a month. In comparison, probationary drivers more commonly nominated "once a week" or "a few times a month". Of experienced drivers, over one-third reported drinking "a few times a week" (more common for females) and one-fifth "a few times a month". In addition, a small but significantly higher percentage were more likely to drink "daily" than the younger groups; therefore, reporting the most frequent drinking.

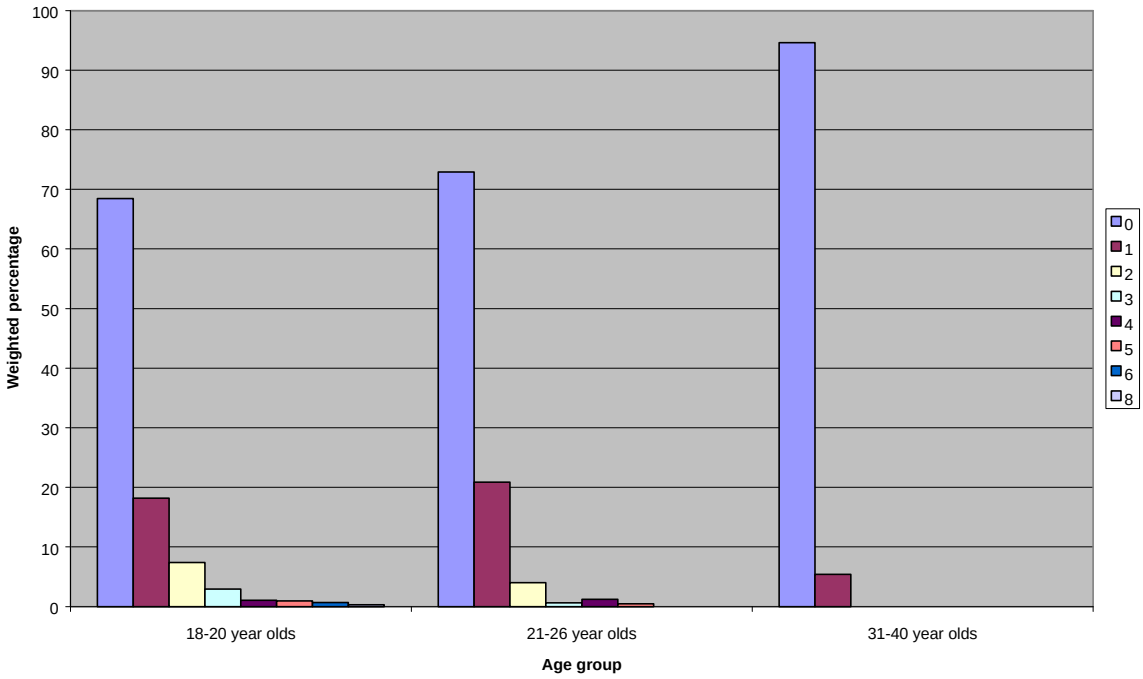

Figure 5.2 Number of crashes as a passenger or pedestrian during past three years by age group

We also asked "On a typical drinking occasion, how many alcoholic drinks would you have?" Probationary drivers by far reported the heaviest drinking: 27% 6-9 drinks, 22% 10+ drinks. Experienced drivers were most likely to report 1, 2 or 3 drinks (14%, 26%, 24% respectively); however, by gender, significantly more males reported 6-9 drinks, with more females reporting 1-3 drinks. Novices fell somewhat between the two with 22% citing 6-9 drinks (mostly males) and 19% only 2 drinks (mostly females).

5.1.4 Drink-driving history

We asked respondents whether they had driven when they thought they "were over the limit or might be over the limit" in the past year (equivalent to over a zero BAC limit for probationary drivers and a 0.05 BAC limit for novice and experienced drivers). The majority of respondents in each age/experience category reported that they had not done so (Table 5.3). There was a small age-related variation for those who did report such instances, with novice and probationary drivers more likely to have driven when they thought they were, or might be, over the limit compared to experienced drivers. Within each age/experience group, twice or more than twice as many males reported (potential) drink-driving than females.

When asked whether they had been a passenger of a driver who was most likely over the legal limit, there was again a pattern for more respondents in the younger groups to report that they had done so compared to experienced drivers (Table 5.4). For 21-26 year olds, such occurrences were more commonly reported by males than females.

Table 5.2 Reported frequency of alcohol consumption by age group and gender (%)

	Total	Age group (years)			18-20		21-26		31-40	
		18-20	21-26	31-40	Male	Female	Male	Female	Male	Female
Never	0.5	0.7	0.6	0.5	0.0	0.0	1.0	1.3	1.2	0.0
Daily	3.0	1.7	1.5	4.1	2.6	3.0	3.8	0.7	0.0	4.3
A few times per week	31.4	20.2	30.6	34.9	25.7	44.8	39.7	14.5	15.8	31.0
Once a week	19.4	23.9	26.1	15.0	27.2	28.8	18.1	20.4	23.3	12.6
A few times per month	19.0	23.1	15.3	19.6	23.0	14.4	15.5	23.2	16.2	22.8
Once a month	8.6	13.2	7.9	7.6	8.9	1.0	6.7	17.8	15.1	8.2
Less than once per month	17.1	16.3	18.1	16.9	12.2	8.2	13.1	20.7	28.3	19.9
Don’t know/Varies	1.0	0.9	0.0	1.5	0.5	0.0	2.1	1.3	0.0	1.1

Table 5.3 Reported experience of driving when over the limit or potentially over the limit by age group and gender (%)

	Total	Age group (years)			18-20		21-26		31-40	
		18-20	21-26	31-40	Male	Female	Male	Female	Male	Female
Yes	18.9	20.9	23.1	16.4	30.2	11.1	32.3	13.7	22.9	11.2
No	81.1	78.9	76.9	83.6	69.4	88.9	67.7	86.3	77.1	88.8
Don’t recall	0.0	0.2	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0

Table 5.4 Reported experience as a passenger of a driver who was most likely over the legal alcohol limit by age group and gender (%)

	Total	Age group (years)			18-20		21-26		31-40	
		18-20	21-26	31-40	Male	Female	Male	Female	Male	Female
Yes	40.4	45.0	41.1	38.8	49.9	39.9	52.4	29.4	36.7	40.4
No	58.3	53.7	57.8	59.8	49.7	58.0	45.5	70.6	62.5	57.8
Don’t recall	1.3	1.3	1.1	1.4	0.5	2.1	2.1	0.0	0.9	1.8

Table 5.5 Reported number of times caught drink-driving by age group and gender (%)

	Total	Age group (years)			18-20		21-26		31-40	
		18-20	21-26	31-40	Male	Female	Male	Female	Male	Female
None	95.5	98.2	98.5	93.3	96.4	100.0	97.1	100.0	88.6	97.0
Once	3.2	1.8	0.5	4.9	3.6	0.0	1.0	0.0	7.3	3.0
Twice or more	1.3	0.0	1.0	1.8	0.0	0.0	1.9	0.0	4.1	0.0

We also asked how many times respondents had been caught drink-driving (Table 5.5). Experienced drivers more often reported having been caught drink-driving and, while only for a small percent of respondents, they also more often reported having been caught drink-driving twice or more compared to novice and probationary drivers. However, this question was not restricted to recent experience, so the higher incidence of being caught drink-driving by experienced drivers would be at least partially due to their greater exposure than the less experienced driver groups. More notable is the finding that some novice and probationary drivers reported having already been caught drink-driving, for some novices on more than one occasion, and in each case such occurrences were only reported by males.

5.2 AWARENESS

5.2.1 Anti-drink-driving messages

We asked participants when they had last heard, seen or read an anti-drink-driving message (Table 5.6). Overall, the majority of respondents in each age group (over 70%) reported that they had seen, heard or read an anti-drink-driving message sometime during the past week. An additional 12-17% had done so during the past month. This indicated a high level of awareness of the drink-driving issue among all age groups. The results suggested that the two younger groups had more recently (in the past week) experienced an anti-drink-driving message compared to the older age group (in the past month or earlier).

Table 5.6 Reported recency of seeing, hearing or reading an anti-drink-driving message by age group (%)

		Age group (years)		
During the…	**Total**	**18-20**	**21-26**	**31-40**
Past week	74.1	79.7	76.4	71.5
Past month	15.5	12.1	15.1	16.7
Last 2-3 months	5.8	5.2	5.9	5.9
More than 3 months	2.0	0.6	0.6	3.0
Don't know	2.5	2.4	2.0	2.8

Figure 5.3 indicates that there were also gender differences among the age/experience groups for this item. Figure 5.3 shows that males reported more recent experience of an anti-drink-driving message than females in each age group. This was particularly discrepant for both the youngest and oldest groups.

5.2.2 Drink-driving enforcement

Respondents were also asked whether they had seen Police conducting RBT in the last six months (Table 5.7) and whether they had been personally tested in the last six months (Table 5.8). Awareness was generally high among all groups (over 80%), with somewhat higher proportions of younger males reporting sightings than their female counterparts. Overall, somewhat less than 50% of respondents in all age/experience groups had personally experienced RBT, with experience most common among 21-26 year olds. By gender, this rose to over 50% of male 21-26 year-olds. There was a general pattern of more males reporting RBT experience than females.

We also asked respondents how likely they believed it was that they would be breath tested in the next six months (Table 5.9). The majority indicated they believed it was either

somewhat likely or very likely that they would be tested, again suggest high awareness levels. Overall, more 21-26 year olds suggested it was very likely compared to the other age groups. There was also a general pattern of more males perceiving the likelihood to be very likely, while more females perceived it to be somewhat likely.

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Figure 5.3 Reported recency of seeing, hearing or reading an anti-drink-driving message by age group and gender

5.2.3 Public breath-testing machines

We asked participants if they had ever seen a public breath-testing machine (PBTM) in a hotel, club or restaurant (Table 5.10). Novice drivers were more likely to report having seen a PBTM compared to probationary and experienced drivers and, within each age/experience group, males were more likely to report sightings than females.

Among those who reported having seen a PBTM, novice and probationary drivers were more likely to report having seen one in the previous week than were experienced drivers, while experienced drivers were more likely to report last having seen a PBTM more than a year ago compared to the two younger groups (Table 5.11). For novice drivers, males were more likely than females to have seen a PBTM in the last week; females were more likely to report last seeing a PBTM a few months and more than a year ago.

We also asked respondents if they had ever used a PBTM (Table 5.12). Probationary drivers were less likely to report having used a PBTM compared to novice and experienced drivers and, within each age/experience group, males were more likely to report use than females.

Table 5.7 Reported sighting of Police conducting RBT in the last six months by age group and gender (%)

	Total	Age group			18-20		21-26		31-40	
		18-20	21-26	31-40	Male	Female	Male	Female	Male	Female
Yes	85.8	84.0	86.4	86.0	86.1	81.7	87.5	85.4	85.6	86.3
No	13.6	15.2	12.5	13.6	13.0	17.6	10.4	14.6	14.4	13.0
Don't recall	0.6	0.8	1.1	0.4	0.9	0.7	2.1	0.0	0.0	0.7

Table 5.8 Reports of having personally been breath tested in the last six months by age group and gender (%)

	Total	Age group			18-20		21-26		31-40	
		18-20	21-26	31-40	Male	Female	Male	Female	Male	Female
Yes	44.2	41.3	47.1	43.7	48.9	33.4	50.9	43.1	45.8	42.0
No	55.2	58.3	51.8	55.8	51.1	65.9	46.9	56.9	53.2	58.0
Don't recall	0.6	0.4	1.1	0.5	0.0	0.7	2.1	0.0	1.0	0.0

Table 5.9 Perceived likelihood of being breath tested in the next six months by age group and gender (%)

	Total	Age group			18-20		21-26		31-40	
		18-20	21-26	31-40	Male	Female	Male	Female	Male	Female
Very likely	40.7	37.7	48.8	37.8	41.5	33.8	52.7	44.8	40.0	36.1
Somewhat likely	36.5	35.5	32.0	38.9	34.0	37.1	29.3	34.7	41.3	37.0
Somewhat unlikely	11.0	13.0	8.8	11.4	8.5	17.7	11.9	5.7	12.2	10.7
Very unlikely	10.8	12.6	9.9	10.8	13.8	11.4	6.1	13.9	4.8	15.5
Don't know	1.0	1.1	0.5	1.2	2.2	0.0	0.0	0.9	1.7	0.7

Table 5.10 Reported sighting of a public breath-testing machine (ever) by age group and gender (%)

	Total	Age group			18-20		21-26		31-40	
		18-20	21-26	31-40	Male	Female	Male	Female	Male	Female
Yes	64.4	64.4	73.9	60.0	68.4	60.2	80.2	67.3	67.4	54.1
No	35.4	35.6	26.1	39.5	31.6	39.8	19.8	32.7	31.5	45.9
Don’t recall	0.3	0.0	0.0	0.5	0.0	0.0	0.0	0.0	1.0	0.0

Table 5.11 Reported time since last seeing a public breath-testing machine by age group and gender (%)

	Total	Age group			18-20		21-26		31-40	
		18-20	21-26	31-40	Male	Female	Male	Female	Male	Female
Last week	11.8	23.9	16.7	5.3	26.0	21.3	23.7	8.1	3.0	7.6
A few weeks ago	14.0	19.5	12.8	13.0	24.0	14.1	11.9	14.1	13.3	12.7
A few months ago	20.0	27.6	23.1	16.0	30.0	24.7	18.5	28.9	13.5	18.5
About a year ago	16.0	11.6	16.4	17.2	8.2	15.6	16.0	16.8	18.4	16.0
More than a year ago	37.4	17.1	30.9	47.1	11.1	24.3	30.0	32.2	49.0	45.2
Don’t know	0.8	0.4	0.0	1.4	0.7	0.0	0.0	0.0	2.8	0.0

Table 5.12 Reported use of a public breath-testing machine by age group and gender (%)

	Total	Age group			18-20		21-26		31-40	
		18-20	21-26	31-40	Male	Female	Male	Female	Male	Female
Yes	39.9	29.6	42.3	41.6	33.4	25.1	47.3	36.2	51.2	32.1
No	60.1	70.4	57.7	58.4	66.6	74.9	52.7	63.8	48.8	67.9
Don’t recall	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 5.13 Reported recency of use of public breath-testing machines by age group and gender (%)

	Total	Age group			18-20		21-26		31-40	
		18-20	21-26	31-40	Male	Female	Male	Female	Male	Female
Last week	1.3	6.5	1.6	0.0	7.5	5.0	2.5	0.0	0.0	0.0
A few weeks ago	3.1	10.3	5.7	0.0	13.7	5.0	3.1	10.0	0.0	0.0
A few months ago	10.8	29.7	19.5	1.8	39.0	14.9	18.5	21.2	3.0	0.0
About a year ago	12.6	22.7	13.9	9.8	11.3	40.8	19.4	5.0	8.4	11.9
More than a year ago	72.2	30.8	59.3	88.4	28.5	34.4	56.4	63.8	88.6	88.1
Don’t know	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Among those who had used a PBTM, probationary drivers were more likely to report recent use than other groups, whereas the two older groups were more likely to report use more than a year ago, particularly experienced drivers (Table 5.13). For the two younger groups, use was generally more recent among males than females, while there was little difference for experienced drivers.

5.3 KNOWLEDGE

5.3.1 Crash factors

We asked what main factor respondents believed most often lead to crashes (Figure 5.4). Drink-driving, speeding and fatigue (in that order) were the three most commonly identified contributors to crashes for all age/experience groups. Carelessness/negligent driving and inattention/lack of concentration were also commonly reported. Novice drivers were also somewhat more likely to nominate a lack of driver training as the main contributor to crashes.

By gender (Table 5.14), drink-driving and speed were the two most commonly identified factors for all groups and fatigue was the third most commonly cited factor, although male probationary drivers also nominated carelessness/negligent driving to a similar level as fatigue.

Table 5.14 Factor perceived as most often leading to road crashes by age group and gender (%)

Factor	Age group (years)					
	18-20		21-26		31-40	
	Male	Female	Male	Female	Male	Female
Speed	46.9	49.3	56.9	58.9	57.7	54.8
Drink driving	77.9	82.2	75.7	80.0	81.4	76.0
Drugs (other than alcohol)	6.9	11.2	6.9	10.1	9.1	12.8
Driver attitudes/behaviour/ impatience	7.8	5.8	6.2	7.3	6.7	5.0
Inattention/lack of concentration	16.5	21.2	14.5	14.1	17.2	23.3
Carelessness/negligent driving	23.1	22.0	19.5	14.0	16.6	19.2
Lack of driver training	11.0	13.4	23.1	16.9	14.8	13.0
Driver fatigue	21.8	32.4	27.7	33.4	29.6	27.2
Disregard of road rules	1.0	0.6	0.0	0.9	1.0	2.5
Ignorance of road rules	4.0	0.0	0.0	0.0	1.9	1.4
Poor road design/road signs	0.9	0.0	2.0	0.9	2.8	2.5
Road conditions/traffic congestion	0.9	1.4	3.1	2.4	1.7	1.8
Weather conditions	5.5	2.7	4.1	4.0	2.6	2.5
Vehicle design	0.0	0.0	1.0	0.0	0.0	0.7
Failing to maintain vehicle	2.6	0.0	1.0	0.9	1.7	0.0
Older drivers	1.7	1.4	3.4	0.0	1.9	0.7
Inexperience	5.3	0.0	3.0	0.9	0.9	3.7
Other	5.0	14.0	0.0	2.8	0.9	4.8

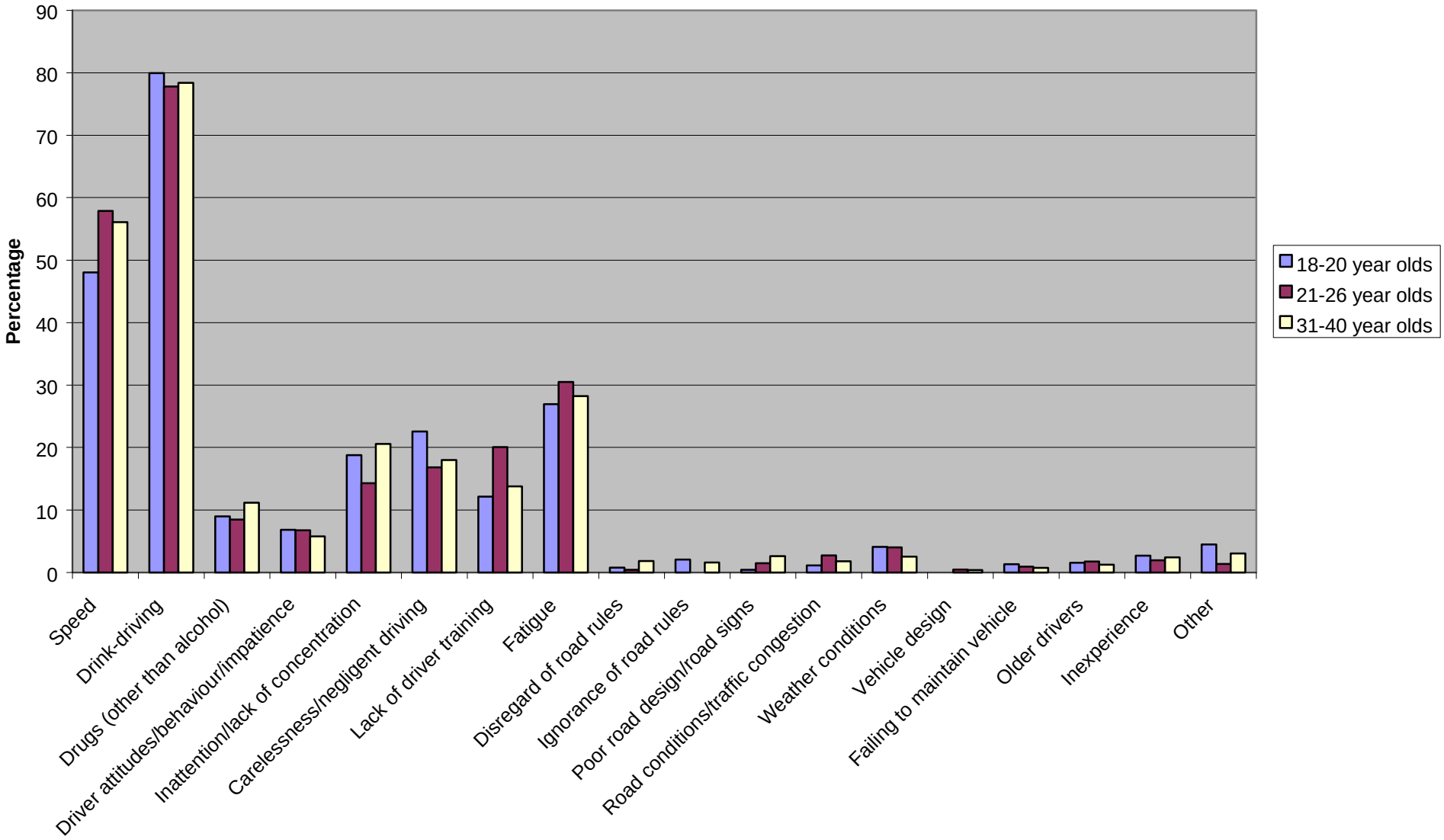

Figure 5.4 Factor perceived as most often leading to road crashes by age group

5.3.2 Effects of 0.05 BAC

We asked respondents whether a series of statements relating to possible effects of having a blood alcohol concentration of 0.05 were true (Table 5.15). The best known effects were in relation to reaction time, alertness and concentration. While correct responses were relatively high, an alternative view of the results is that approximately 20% of drivers in each age group did not disagree with the notion that being at 0.05 has little effect on driving ability. Generally, novice drivers' knowledge was similar to the younger and older driver groups. Exceptions were regarding ability to do more than one task and, in particular, confidence (clearly the least known effect). In addition, for all responses fewer male novices answered correctly than expected (except regarding vision and hearing), while more female novices answered correctly compared to other groups (Table 5.16).

Table 5.15 Reported beliefs regarding the effects of having a blood alcohol concentration of 0.05 by age group (%)

Statement		Age group (years)		
		18-20	21-26	31-40
Slows down your reaction time	(True)	97.9	95.7	93.7
Increases your alertness when driving	(False)	90.6	92.6	92.8
Makes it harder to concentrate on driving	(True)	91.8	91.6	88.9
Reduces your ability to do more than one thing at a time	(True)	91.9	87.1	90.8
Increasing your chances of falling asleep at the wheel	(True)	85.5	86.7	90.8
Makes simple tasks more difficult	(True)	85.6	85.6	80.3
Affects your vision and hearing	(True)	84.9	85.0	81.3
Has little effect on your driving ability	(False)	79.6	81.4	80.9
Doubles your risk of having a crash	(True)	88.6	81.0	80.2
Increases your confidence while driving	(True)	58.2	54.4	56.9

5.3.3 Penalties for drink-driving offences

We next asked respondents what the penalty was for being caught for the first time with a blood alcohol concentration of 0.05. At the time of the survey, the penalty notice for this level of BAC was a $300 fine, licence cancellation and disqualification from driving for six months. If this was contested in court the penalty could be reduced, or increased to a maximum fine of $1200 in addition to licence cancellation and disqualification from driving for six months[7].

[7] In certain circumstances the Court could deal with the matter without proceeding to conviction for these levels (first offence and a BAC reading of 0.10 or less). If there was no conviction recorded then the court is not required to cancel and disqualify the licence. This was changed in December 2001 with the introduction of demerit points.

Table 5.16 Reported beliefs regarding the effects of having a blood alcohol concentration of 0.05 by age group and gender (%)

Statement		Age group (years)					
		18-20		21-26		31-40	
		Male	Female	Male	Female	Male	Female
Slows down your reaction time	(True)	96.5	99.4	95.7	95.7	91.6	95.4
Increases your alertness when driving	(False)	92.4	88.7	91.6	93.6	87.8	96.8
Makes it harder to concentrate on driving	(True)	87.8	96.0	88.5	94.8	84.2	92.7
Reduces your ability to do more than one thing at a time	(True)	89.3	94.6	82.3	92.1	88.1	92.9
Increasing your chances of falling asleep at the wheel	(True)	82.5	88.8	81.0	92.7	87.8	93.2
Makes simple tasks more difficult	(True)	82.8	88.6	80.9	90.6	76.6	83.3
Affects your vision and hearing	(True)	80.1	89.9	83.7	86.3	77.1	84.7
Has little effect on your driving ability	(False)	75.5	83.9	76.9	86.0	73.0	87.2
Doubles your risk of having a crash	(True)	80.9	96.6	70.7	91.8	73.7	85.4
Increases your confidence while driving	(True)	53.9	62.7	56.2	52.5	55.6	58.0

Table 5.17 shows the distribution of responses regarding penalties for this level of offence. Interestingly, there was a small percentage of respondents in each age group who believed the penalty for this offence was a warning. Experienced drivers most often reported not knowing the penalty for this level of offence, while smaller proportions of novice and probationary drivers also reported not knowing the penalties involved.

Table 5.17 Reported beliefs about the penalty for being caught for the first time with a blood alcohol concentration of 0.05 by age group (%)

		Age group (years)		
	Total	**18-20**	**21-26**	**31-40**
Licence cancellation	60.4	72.1	64.3	55.3
Fine	33.7	27.4	40.2	32.4
Loss of demerit points	2.7	3.6	3.8	2.0
Warning	2.6	1.7	2.2	2.9
Don't know	23.2	16.8	19.0	27.0

We then asked respondents what the penalty was for being caught for the first time with a blood alcohol concentration of 0.10. At the time of the survey, the penalty notice for this level of BAC was a $420 fine, licence cancellation and disqualification from driving for ten months. If this was contested in court the penalty could be reduced, or increased to a maximum fine of $1200 in addition to licence cancellation and disqualification from driving for ten months.

Table 5.18 shows the distribution of responses regarding penalties for this level of offence. Experienced drivers were again the most likely to report not knowing the penalty for this level of offence, while somewhat smaller proportions of novice and probationary drivers also reported not knowing the penalties involved. When these responses are compared to the responses obtained in regard to being caught with a 0.05 BAC, respondents in each of the age/experience categories were less likely to report believing that the penalty for a 0.10 BAC offence was only a warning or a fine.

Table 5.18 Reported beliefs about the penalty for being caught for the first time with a blood alcohol concentration of 0.10 by age group (%)

		Age group (years)		
	Total	**18-20**	**21-26**	**31-40**
Licence cancellation	72.5	75.6	78.0	69.2
Fine	23.4	20.7	28.8	21.6
Loss of demerit points	1.2	1.6	1.5	1.0
Warning	0.8	0.4	0.6	1.0
Don't know	24.1	20.3	20.3	27.0

5.4 PLANNING AND STRATEGIES TO AVOID DRINK-DRIVING

5.4.1 General planning and success regarding drinking and driving

We asked respondents about their overall planning approach to drinking and driving (Table 5.19). Probationary drivers more often reported planning to not drink at all when driving compared to novice and experienced drivers. Novice and experienced drivers provided similar patterns of responses; both groups being slightly more likely to report restricting their drinking when driving, rather than completely abstaining from drinking when driving, and only a very small proportion in each group reporting not restricting their drinking when driving.

Table 5.19 Reported attitudes to drinking and driving by age group (%)

	Total	Age group (years)		
		18-20	21-26	31-40
If I am driving, I don't drink	55.2	94.1	46.6	48.3
If I am driving, I restrict what I drink	43.9	5.5	52.4	50.7
If I am driving, I do not restrict what I drink	0.7	0.0	0.5	0.9
Can't say	0.2	0.4	0.5	0.0

Further examination of the responses obtained to this question show a pattern in each of the age/experience categories for females to more often than males report planning to not drink at all when driving (Table 5.20). Reciprocally, in each age/experience group, males were more likely than females to report planning to restrict their drinking when driving. In the novice and experienced groups, males were more likely than females to report not restricting their drinking when driving, an intention that was not reported by probationary drivers (male or female).

Table 5.20 Reported attitudes to drinking and driving by age group and gender (%)

	Age group (years)					
	18-20		21-26		31-40	
	Male	Female	Male	Female	Male	Female
If I am driving, I don't drink	90.4	98.1	34.7	59.1	40.2	54.8
If I am driving, I restrict what I drink	8.8	1.9	63.3	40.9	57.8	45.2
If I am driving, I do not restrict what I drink	0.0	0.0	1.1	0.0	2.1	0.0
Can't say	0.9	0.0	1.0	0.0	0.0	0.0

We next asked how often respondents planned ahead to avoid drink-driving. As shown in Table 5.21, probationary drivers most often reported always planning ahead to avoid drink-driving, followed by experienced drivers; novice drivers were the least likely to report always planning ahead. In all three age/experience groups, female respondents were more likely than male respondents to report planning ahead to avoid drink-driving all the time.

Table 5.21 Reported frequency of planning ahead to avoid drink-driving by age group and gender (%)

	Total	Age group (years)			18-20		21-26		31-40	
		18-20	21-26	31-40	Male	Female	Male	Female	Male	Female
All the time	74.7	83.0	68.2	75.4	75.3	91.1	54.1	83.1	65.7	83.1
Most of the time	15.9	9.0	22.0	15.0	13.0	4.7	30.8	12.6	21.0	10.3
About 50/50	3.7	2.0	5.4	3.4	3.1	0.8	9.4	1.2	3.7	3.2
Occasionally	1.5	1.4	0.9	1.8	2.2	0.6	1.0	0.9	3.1	0.7
Never	4.1	4.6	3.0	4.4	6.3	2.8	3.8	2.1	6.5	2.7
Don’t know	0.1	0.0	0.5	0.0	0.0	0.0	1.0	0.0	0.0	0.0

Table 5.22 Reported frequency of unsuccessful planning ahead to avoid drink-driving by age group and gender (%)

	Total	Age group (years)			18-20		21-26		31-40	
		18-20	21-26	31-40	Male	Female	Male	Female	Male	Female
All the time	2.1	0.3	0.0	3.6	0.0	0.6	0.0	0.0	2.8	4.2
Most of the time	0.8	0.5	1.6	0.5	1.0	0.0	2.2	1.0	1.1	0.0
About 50/50	0.8	0.4	0.0	1.4	0.0	0.8	0.0	0.0	2.2	0.7
Occasionally	17.5	11.5	21.2	17.5	16.5	6.3	28.8	13.5	23.6	12.9
Never	78.7	87.3	77.2	77.0	82.5	92.3	69.0	85.5	70.3	82.2
Don’t know	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

We also asked respondents how often they made plans to avoid drink-driving, but ended up drink-driving anyway (Table 5.22). Few respondents indicated that this happened all the time; most of the participants who did say this happened all the time were experienced drivers. Probationary drivers were more likely to report never ending up drink-driving after planning to avoid it compared to novice and experienced drivers. In each age/experience category, female drivers were more likely than male drivers to report never unsuccessfully planning to avoid drink-driving.

5.4.2 Unsuccessful and successful strategies to avoid drink-driving

We first asked respondents "Think of a time when you planned to avoid drink-driving but did drink drive. How had you planned to avoid drink-driving?" (unsuccessful). Open responses were coded into several categories, the most common of which (>10%) are listed in Table 5.23. We then asked them to think of such an occasion when they "did avoid drink-driving" (successful). Common responses are also presented in Table 5.23.

As shown in Table 5.23 limiting drinks was the most often cited strategy unsuccessfully applied by 21-26 year olds, as well as by 31-40 year olds, but not by probationary drivers. Use by 21-26 year olds was similar among males and females. Notably, a moderate proportion had also used the strategy successfully, although this was more likely true of 31-40 year olds, and rarely reported by 18-20 year olds. More male novices had used the strategy successfully than females.

Table 5.23 Unsuccessful and successful strategies used to avoid drink-driving by age group (%)

Strategy	Age group (years)		
	18-20	21-26	31-40
Unsuccessful			
Limit alcohol consumed	11.3	27.5	27.3
Get someone else to drive	15.4	27.0	24.8
Not drink any alcohol	26.1	13.7	13.8
Take a taxi	10.3	13.3	10.9
Not take my car	14.0	10.7	3.8
Successful			
Limit alcohol consume	1.4	12.3	17.1
Get someone else to drive	38.2	35.4	38.9
Not drink any alcohol	38.5	29.7	27.9
Take a taxi	24.4	26.0	26.1
Not take my car	10.1	12.1	10.2

In contrast, not drinking any alcohol was one of the most commonly reported successful strategies used by 21-26 year olds, and was only moderately unsuccessful; although it was more likely to be reported by probationary drivers in both situations. This would be expected when the aim is a zero BAC. Successful use was more common among females than males. Similar usage patterns were reported for unsuccessful use.

5.4.3 Recent strategy use to avoid drink-driving

We also asked respondents whether they had used any of a list of strategies (in random order) to avoid drink-driving in the past month. The strategies and their reported use are presented in Table 5.24. The most commonly reported recent strategy used by 21-26 year olds was getting someone else to drive. Not consuming any alcohol and limiting drinks were among other common strategies used by this group. When comparing age/experience groups, counting or spacing drinks was more likely to be reported by 21-26 year olds, while drinking low-alcohol beer was more likely to be reported by experienced drivers. Probationary drivers were more likely to report use of courtesy buses, which was generally low, as was the use of public breath-testing machines by all groups.

Table 5.24 Recent strategies used to avoid drink-driving by age group (%)

Strategy	Age group (years)		
	18-20	21-26	31-40
Got someone else to drive	73.9	74.7	52.5
Not drank any alcohol while you were out	68.9	62.4	49.4
Limited the amount of alcohol you drank	24.6	61.3	52.5
Not taken your car	65.0	60.3	39.9
Drank at home or close to home	61.0	60.0	52.6
Taken a taxi	64.2	57.3	36.0
Drank more water or non-alcoholic drinks	48.1	54.2	42.6
Stayed overnight after drinking	58.6	46.0	22.7
Counted or spaced your drinks	16.0	41.1	27.5
Walked	46.0	38.5	26.5
Used Public Transport	45.4	32.0	25.2
Limited amount of money you took to spend on alcohol	23.6	20.9	7.8
Drank low-alcohol beer	5.4	18.0	22.7
Used breath-testing machine to check blood alcohol level	3.0	3.7	2.4
Used a special courtesy bus	10.5	3.4	3.9
Slept in your car	6.7	3.4	2.5

Several interesting gender patterns were also indicated (Table 5.25). Male novices and female experienced drivers were less likely to report the strategies of getting someone else to drive and not drinking alcohol while they were out compared to other groups. In addition, male novices were more likely than female novices to nominate strategies of limiting their alcohol consumption, counting or spacing their drinks and drinking low-alcohol beer, while female novices were more likely to nominate strategies of not taking their car, staying overnight after drinking, walking and using public transport.

5.4.4 Transitional issue in strategies to avoid drink-driving

To further highlight transitional issues, we asked the two older groups "As a *probationary* driver, if you wanted to drink alcohol when you went out, did you do any of the following to avoid drink-driving?" All strategies listed in Table 5.26 were presented in (random order). We then repeated the question, this time beginning "In your first year as a fully-licensed driver…". The most common and contrasting results also appear in Table 5.26.

Table 5.25 Recent strategies used to avoid drink-driving by age group and gender (%)

	Age group (years)					
	18-20		21-26		31-40	
	Male	Female	Male	Female	Male	Female
Got someone else to drive	74.5	76.7	55.1	72.3	72.7	50.5
Not drunk any alcohol while you were out	65.9	56.9	50.0	72.1	68.3	48.9
Limited the amount of alcohol you drank	24.1	65.1	63.8	25.0	57.2	43.6
Not taken your car	69.8	70.5	39.9	60.0	49.6	40.0
Drank at home or close to home	63.2	62.1	49.6	58.7	57.8	55.0
Taken a taxi	61.5	62.9	37.7	67.0	51.3	34.7
Drank more water or non-alcoholic drinks	43.7	55.7	40.2	52.8	52.7	44.5
Stayed overnight after drinking	59.0	55.0	23.4	58.1	36.5	22.1
Counted or spaced your drinks	17.0	45.3	36.5	14.9	36.7	20.3
Walked	48.5	47.4	28.5	43.4	29.2	24.9
Used public transport	48.6	33.6	19.8	42.1	30.3	11.6
Limited the amount of money you took to spend on alcohol	26.0	22.2	7.6	21.1	19.4	8.0
Drank low-alcohol beer	6.7	23.9	37.1	4.0	11.7	11.4
Used a breath testing machine to check your blood alcohol level	4.0	2.0	1.0	2.0	5.5	3.4
Used a special courtesy bus	14.0	5.4	4.1	6.8	1.2	3.7
Slept in your car	10.8	5.5	4.0	2.3	1.2	1.4

Table 5.26 Strategies used to avoid drink-driving as a probationary and newly-licensed driver by age group and gender (%)

Strategy	Age group		21-26		31-40	
	21-26	31-40	Male	Female	Male	Female
Probationary period						
Got someone else to drive	77.4	53.2	85.7	57.2	68.8	50.0
Drank more water or non-alcoholic drinks	50.8	37.2	52.6	32.9	48.9	40.6
Limited the amount of alcohol you drank	32.5	35.1	36.3	39.0	28.6	32.0
Counted or spaced your drinks	20.7	20.0	23.0	23.4	18.3	17.4
Used a special courtesy bus	15.3	6.7	17.9	7.7	12.5	5.9
Slept in your car	18.6	17.5	29.5	28.6	7.3	8.7
Drank low-alcohol beer	7.9	11.4	10.5	17.6	5.2	6.4
First year fully-licensed						
Got someone else to drive	81.7	63.8	86.8	64.5	76.3	63.2
Drank more water or non-alcoholic drinks	58.9	42.3	62.6	34.1	55.2	48.9
Limited the amount of alcohol you drank	56.0	52.2	57.5	57.5	54.3	47.9
Counted or spaced your drinks	42.2	35.2	45.6	40.1	38.6	31.3
Used a special courtesy bus	10.9	8.0	12.5	8.9	9.2	7.3
Slept in your car	11.8	14.7	18.1	22.2	5.2	8.7
Drank low-alcohol beer	17.6	17.1	24.0	26.5	10.9	9.6

These retrospective questions potentially demand recall over a very long period, particularly for experienced drivers, and should therefore be interpreted with caution. These items were included to try specifically to target the transitional period when the legal BAC limit increases from zero to 0.05.

Recall of this transition for both groups indicated greater use of strategies to get someone else to drive, to limit alcohol consumed, to consume more water/non-alcoholic drinks, and to count or space drinks in the first year as a fully-licensed driver, and a decreased tendency to use courtesy buses or sleep in their car. The greatest contrast for both groups was an increased tendency to drink low-alcohol beer. These trends also were evident in the breakdown by gender.

5.5 REASONS DRIVERS DO OR DO NOT DRINK-DRIVE

We asked, "What are the main reasons you have driven when you thought you were over the limit or might have been over the limit?" The most common responses (>3%) are presented in Table 5.27 together with common responses to the question "What are the main reasons you don't drive when you are over the limit or might be over the limit?"

The majority of respondents in each age/experience group reported never having driven when (potentially) over the legal BAC limit; however, this applied to a smaller percentage of novices compared to other groups. Moreover, this response was more common among females than males in each group, and least likely among male novices.

Table 5.27 Reported reasons for and against drink-driving by age group and gender (%)

Reason	Age group (years)			18-20		21-26		31-40	
	18-20	21-26	31-40	Male	Female	Male	Female	Male	Female
Reasons driven when over BAC limit									
Never driven when (thought) over the limit	74.3	66.4	73.3	62.6	86.5	54.3	79.0	67.1	78.3
Perceived need/desire to go home/elsewhere	9.0	10.3	5.4	14.0	3.8	14.1	6.4	8.3	3.2
Driving more convenient	3.4	4.7	1.5	4.1	2.6	7.4	1.9	0.9	2.1
Lack of access to alternative transport	2.7	4.2	2.1	4.2	1.2	6.5	1.9	2.9	1.4
Geographical reasons	1.4	4.2	2.8	2.7	0.0	4.2	4.2	4.7	1.4
Confidence in ability to drive/judge not dangerous	2.0	4.1	6.5	2.8	1.2	7.2	0.9	5.8	7.1
Thought close to 0.05/ OK after blood test	0	3.3	3.1	0.0	0.0	4.2	2.4	4.8	1.8
Alcohol still in system from previous night	3.5	0.6	0	6.2	0.7	1.2	0.0	0.0	0.0
Reasons don't drive when over BAC limit									
Fear of having a road crash/injuries (self/others)	67.5	63.9	64.7	58.6	76.9	58.1	69.9	61.6	67.1
Fear of losing licence	35.9	28.0	25.4	41.5	30.1	36.3	19.4	36.4	16.7
Fear of being caught/arrested for drink-driving	17.4	13.3	13.1	16.7	18.2	13.8	12.7	11.7	14.2
Not confident in ability to drive	8.8	8.8	8.4	8.0	9.6	6.4	11.3	5.5	10.7
Fear of getting fined	8.5	5.4	6.2	7.6	9.3	6.3	4.5	6.9	5.7
Would feel bad/guilty if something happened	3.2	3.6	4.2	3.1	3.4	4.1	3.0	3.8	4.6

For those that did report drink-driving, the most common reason reported was the perceived need or desire to go home or to another destination, with this trend also apparent by gender groups. Experienced drivers also reported confidence in their ability to drive, which was also commonly reported by male novices. There was some indication that novices were more likely to report lack of access to alternative transport than other groups, especially male novices. Male novices were also more likely to report that driving was more convenient.

When asked about reasons for not drink-driving, a small percentage of novices (0.5%) and probationary drivers (0.4%), all male, indicated that they would usually drive. The most common reasons cited for not drink-driving, in order, were fear of crashes and/or injuries, fear of licence loss, and fear of detection or arrest. Therefore, fear was a powerful motivator. Responses were similar across age/experience groups. By gender, fewer male novices reported fear of a crash and/or injury compared to other groups, while female novices and female experienced drivers were less likely to report fear of losing their licence and more likely to report a lack of confidence in their ability to drive.

5.6 METROPOLITAN AND RURAL RESPONDENTS

This section provides a series of comparisons of the responses obtained from respondents in metropolitan areas and from respondents in rural areas. This section provides highlights of the response patterns obtained from these groups. Not all survey questions are addressed in detail in this section; however, response distribution tables for all questions by age group, gender and region can be found in Appendix 3.

5.6.1 Driving, drinking and drink-driving exposure

5.6.1.1 Driving exposure

When asked about the amount of time respondents spent driving each week, metropolitan drivers reported more driving time than their rural peers (Table 5.28).

Table 5.28 Driving exposure by age group, gender and region (hours per week)

Mean (*SD*)	Age group (years)		
	18-20	21-26	31-40
Metropolitan			
Male	12.21 (9.05)	12.68 (9.49)	11.81 (7.63)
Female	11.92 (8.82)	10.00 (8.53)	11.42 (8.00)
Total	12.07 (8.94)	11.36 (9.12)	12.39 (10.36)
Rural			
Male	10.56 (8.66)	11.43 (7.08)	12.61 (8.83)
Female	10.98 (8.99)	8.73 (6.69)	7.98 (5.63)
Total	10.77 (8.83)	10.12 (7.02)	10.15 (7.66)

5.6.1.2 Crash history

Notwithstanding lower reported driving exposure, metropolitan drivers were less likely to report having been involved in a road crash as a driver or as a passenger, in the previous three years (Table 5.29).

Table 5.29 Driving exposure and crash history by age group and region (%)

	Metropolitan			Rural		
	18-20	**21-26**	**31-40**	**18-20**	**21-26**	**31-40**
How many crashes have you been involved in as a driver during the past three years?						
None	57.8	51.4	77.2	63.0	77.8	84.4
One	29.1	34.7	18.0	25.2	17.2	10.9
Two or more	13.0	14.0	4.8	11.8	5.0	4.7
How many crashes have you been involved in as a passenger or pedestrian during the past three years?						
None	64.4	71.0	93.2	79.6	77.3	98.4
One	21.2	23.5	6.8	10.0	14.5	1.6
Two or more	14.4	5.4	0.0	10.4	8.1	0.0

Table 5.30 Reported number of drinks consumed on a typical drinking occasion by age group and region (%)

	Metropolitan						Rural					
	18-20		**21-26**		**31-40**		**18-20**		**21-26**		**31-40**	
	Male	**Female**	**Male**	**Female**	**Male**	**Female**	**Male**	**Female**	**Male**	**Female**	**Male**	**Female**
One	7.6	7.6	4.1	11.2	12.8	20.1	0.0	4.7	3.2	15.2	3.0	10.5
Two	3.1	13.6	10.0	30.5	26.9	29.1	10.5	5.1	10.7	19.6	6.5	29.6
Three	8.3	18.9	12.8	16.1	24.9	26.3	1.8	23.8	13.9	11.0	15.4	20.0
Four	11.2	15.8	13.7	10.7	3.7	6.5	3.8	2.4	10.4	15.2	8.9	11.3
Five	12.0	14.7	21.3	11.7	7.7	5.3	10.4	7.0	0.0	11.9	15.9	9.6
Six to nine	30.7	20.4	28.0	11.6	13.3	6.5	17.9	41.4	36.5	15.2	32.9	16.5
Ten+	24.8	8.0	10.2	8.1	2.7	4.6	55.6	15.6	25.4	7.7	7.0	0.0
Don’t know	2.4	0.9	0.0	0.0	7.9	1.5	0.0	0.0	0.0	4.3	10.5	2.6

5.6.1.3 Drinking patterns

When asked how often they consumed alcohol, respondents aged 21-26 and 31-40 from rural areas more often reported drinking daily, compared to metropolitan respondents in the same age groups (Table 5.30). We asked how many drinks respondents consumed on a typical drinking occasion. This highest alcohol consumption response option, "10 or more drinks" was selected by similar proportions of rural and metropolitan experienced drivers (3.3% and 3.8%, respectively). However, the rural respondents in the other two age groups were far more likely to report this high consumption level than the metropolitan respondents in these age groups (metropolitan 18-20: 16.7%; rural 18-20: 35.9%; metropolitan 21-26: 9.2%; rural 21-26: 17.0%).

5.6.1.4 Drink-driving

When asked whether they had driven during the previous year when they thought they were, or might be, over the 0.05 BAC limit, respondents in the rural areas and metropolitan areas provided similar responses. Interestingly, respondents in the rural areas were less likely than metropolitan respondents to report having been a passenger of a driver who was likely to have been over the legal alcohol limit, in each of the age/experience groups. Furthermore, fewer rural novices and probationary drivers (if fact none) and more rural experienced drivers reported having been caught drink-driving compared to their metropolitan counterparts (Table 5.31).

Table 5.31 Reported number of times caught drink-driving by age group and region (%)

	Metropolitan			Rural		
	18-20	**21-26**	**31-40**	**18-20**	**21-26**	**31-40**
None	97.5	97.9	94.9	100.0	100.0	89.2
Once	2.5	0.7	4.5	0.0	0.0	5.8
Twice or more	0.0	1.4	0.6	0.0	0.0	4.9

5.6.2 Awareness

5.6.2.1 Anti-drink-driving messages

Compared to their metropolitan counterparts, novice and experienced drivers in rural areas (both male and female) were more likely to report seeing, hearing or reading an anti-drink-driving message in the previous week (Table 5.32).

5.6.2.2 Drink-driving enforcement

Rural probationary and experienced drivers were more likely than their metropolitan counterparts to report having seen Police conducting RBT in the previous six months (Table 5.33). However, novice drivers in rural areas were less likely to report this than their metropolitan counterparts. Compared to metropolitan drivers, rural drivers in each gender and age/experience category were more likely to report having been personally tested in the previous six months (Table 5.34).

Table 5.32 Reported recency of seeing, hearing or reading an anti-drink-driving message by age group, gender and region (%)

	Age group (years)					
	18-20		21-26		31-40	
	Male	Female	Male	Female	Male	Female
Metropolitan						
Past week	85.2	74.7	77.3	67.3	77.6	63.5
Past month	11.2	11.7	13.5	22.4	11.7	22.9
Last 2-3 months	0.6	8.3	7.8	4.3	2.4	6.8
More than 3 months	0.0	1.7	0.0	1.7	4.1	3.1
Don't know	2.9	3.6	1.4	4.3	4.1	3.7
Rural						
Past week	84.3	72.5	82.9	89.5	83.6	70.4
Past month	10.5	17.5	6.4	10.5	6.5	19.1
Last 2-3 months	5.2	10.0	10.8	0.0	6.5	10.5
More than 3 months	0.0	0.0	0.0	0.0	3.5	0.0
Don't know	0.0	0.0	0.0	0.0	0.0	0.0

Table 5.33 Reported sighting of Police conducting RBT in the last six months by age group, gender and region (%)

	Age group (years)					
	18-20		21-26		31-40	
	Male	Female	Male	Female	Male	Female
Metropolitan						
Yes	84.4	80.3	91.2	85.0	83.7	82.3
No	14.4	18.7	7.3	15.0	16.3	16.7
Don't recall	1.2	1.0	1.5	0.0	0.0	0.9
Rural						
Yes	91.1	85.4	78.8	86.3	90.0	97.4
No	8.9	14.6	17.6	13.7	10.0	2.6
Don't recall	0.0	0.0	3.6	0.0	0.0	0.0

Table 5.34 Reports of having personally been breath tested in the last six months by age group, gender and region (%)

	Age group (years)					
	18-20		21-26		31-40	
	Male	Female	Male	Female	Male	Female
Metropolitan						
Yes	44.2	30.4	47.1	40.3	44.8	39.6
No	55.8	68.6	51.5	59.7	53.7	60.4
Don't recall	0.0	1.0	1.4	0.0	1.5	0.0
Rural						
Yes	62.3	41.5	59.9	49.9	48.2	48.7
No	37.7	58.5	36.2	50.1	51.8	51.3
Don't recall	0.0	0.0	3.9	0.0	0.0	0.0

5.6.2.3 Public breath-testing machines

Rural probationary and novice drivers (both male and female), and female experienced drivers less often reported having seen a PBTM in the last week, and less often reported having ever used one, than metropolitan drivers in these experience categories. Interestingly, 56% of male novice drivers in rural areas reported having used one in the last week, a far higher proportion than the equivalent group of metropolitan drivers (0%). In fact in no other group had more than 6% used a PBTM in the previous week.

5.6.3 Knowledge

5.6.3.1 Crash factors

Rural probationary drivers were less likely than their metropolitan counterparts to report the belief that speed, drink-driving, or other drugs were the main contributing factor to road crashes. However rural novice and experienced drivers were more likely to cite these factors than their metropolitan counterparts. Rural drivers at each age/experience level were more likely to cite driver fatigue compared with their metropolitan peers. Novice drivers in rural areas were less likely than their metropolitan counterparts to cite inattention/lack of concentration or carelessness/negligent driving (Table 5.35).

5.6.3.2 Effects of 0.05 BAC

Responses to the questions asking about the effects of a 0.05 BAC were somewhat similar among the rural and the metropolitan respondents.

5.6.3.3 Penalties for drink-driving offences

Regarding penalties for a first offence of driving with a 0.05 BAC, rural experienced drivers were more likely than metropolitan experienced drivers to identify licence cancellation, while all rural groups were less likely to report a fine compare to their metropolitan counterparts (Table 5.36). For a first offence at 0.10 BAC, however, responses were similar across groups, although again rural groups were less likely to report a fine compare to their metropolitan counterparts, particularly probationary drivers (Table 5.37).

Table 5.36 Reported beliefs regarding the effects of having a blood alcohol concentration of 0.05 by age group and region (%)

	Metropolitan			Rural		
	18-20	**21-26**	**31-40**	**18-20**	**21-26**	**31-40**
Licence cancellation	72.0	64.9	50.2	72.2	62.8	68.5
Fine	29.8	42.9	33.9	20.5	33.8	28.4
Loss of demerit points	3.2	2.8	2.8	4.9	6.0	0.0
Warning	2.4	2.3	2.5	0.0	2.0	4.2
Don’t know	14.5	19.0	29.4	23.0	19.0	20.6

Table 5.35 Factors identified as most often leading to road crashes by age group and region (%)

	Age group (years)		
	18-20	**21-26**	**31-40**
Metropolitan			
Speed	51.47	54.12	54.82
Drink-driving	81.03	73.88	79.55
Drugs (other than alcohol)	10.69	7.72	11.64
Driver attitudes/Behaviour/Impatience	7.46	7.29	5.12
Inattention/Lack of concentration	19.91	18.01	23.41
Carelessness/Negligent driving	24.78	21.69	18.19
Lack of driver training/Insufficient training	11.93	18.41	16.34
Driver fatigue	20.59	28.81	24.45
Disregard of road rules	0.33	0.65	0.12
Ignorance of road rules	1.19	0.00	1.69
Road design/Poor design/Poor road signs	0.60	0.69	3.62
Road conditions/Traffic congestion	0.89	2.23	1.59
Weather conditions	4.57	5.06	2.12
Vehicle design	0.00	0.69	0.00
Failing to maintain vehicle	1.19	1.34	1.06
Older drivers	1.61	0.00	1.16
Inexperience	3.66	2.80	2.81
Other	5.12	1.94	2.28
Rural			
Speed	38.47	66.90	59.29
Drink-driving	76.99	87.13	75.41
Drugs (other than alcohol)	4.24	10.31	9.97
Driver attitudes/Behaviour/Impatience	5.08	5.37	7.46
Inattention/Lack of concentration	15.62	5.41	13.18
Carelessness/Negligent driving	16.39	5.17	17.60
Lack of driver training/Insufficient training	12.75	23.98	7.20
Driver fatigue	44.75	34.52	38.20
Disregard of road rules	2.03	0.00	3.68
Ignorance of road rules	4.50	0.00	1.39
Road design/Poor design/Poor road signs	0.00	3.39	0.00
Road conditions/Traffic congestion	1.67	4.00	2.30
Weather conditions	2.83	1.54	3.68
Vehicle design	0.00	0.00	1.39
Failing to maintain vehicle	1.67	0.00	0.00
Older drivers	1.39	5.90	1.39
Inexperience	0.00	0.00	1.39
Other	2.83	0.00	5.07

Table 5.37 Reported beliefs regarding the effects of having a blood alcohol concentration of 0.05 by age group and region (%)

	Metropolitan			Rural		
	18-20	**21-26**	**31-40**	**18-20**	**21-26**	**31-40**
Licence cancellation	74.2	77.4	68.9	79.3	79.5	69.9
Fine	25.0	30.8	22.0	8.7	24.2	20.5
Loss of demerit points	1.2	1.3	1.4	2.8	2.0	0.0
Warning	0.6	0.8	0.9	0.0	0.0	1.4
Don't know	21.1	21.0	28.5	18.2	18.6	22.9

5.6.4 Planning and strategies to avoid drink-driving

5.6.4.1 General Planning and success regarding drinking and driving

When asked about attitudes to drink-driving, slightly higher proportions of the rural drivers in each age/experience category reported not drinking at all, compared to the metropolitan drivers in these categories (Table 5.38).

Table 5.38 Reported attitudes to drinking and driving by age group and region (%)

	Age group (years)		
	18-20	**21-26**	**31-40**
Metropolitan			
If I am driving, I don't drink	93.6	44.2	46.6
If I am driving, I restrict what I drink	5.8	54.3	52.1
If I am driving, I do not restrict what I drink	0.0	0.8	1.3
Can't say	0.6	0.7	0.0
Rural			
If I am driving, I don't drink	95.4	52.3	52.9
If I am driving, I restrict what I drink	4.6	47.7	47.1
If I am driving, I do not restrict what I drink	0.0	0.0	0.0
Can't say	0.0	0.0	0.0

5.6.4.2 Successful and unsuccessful strategies to avoid drink-driving

When asked how often they planned ahead to avoid drink-driving, similar response patterns were elicited from the metropolitan and rural drivers. When asked about unsuccessful incidents when planning to avoid drink-driving, however, different response patterns emerged (Table 5.39).

Limiting the amount of alcohol they drank was the most commonly cited unsuccessful strategy among metropolitan novices but was not reported by any rural novices. In contrast, rural probationary drivers were more likely to limit their alcohol consumption than metropolitan probationary drivers. For rural novices, getting someone to drive was the most commonly cited unsuccessful strategy and more likely than any other group. Moreover, rural novices were also more likely to cite walking as a strategy while this was not reported by any metropolitan novices. Rural experienced drivers were the most likely to cite walking, which was only reported by a small percentage of metropolitan experienced drivers.

Table 5.39 Unsuccessful strategies used to avoid drink-driving by age group and region (%)

	Age group (years)		
	18-20	**21-26**	**31-40**
Metropolitan			
Not drink any alcohol	31.1	12.2	15.3
Limit the amount of alcohol I drank	7.6	36.5	26.6
Count or space my drinks	4.5	6.3	4.5
Drink low-alcohol beer	0.0	0.0	2.2
Drink more water or non-alcoholic drinks	0.0	2.8	0.0
Not take my car	10.1	14.2	0.0
Get someone else to drive	16.2	22.3	32.3
Take a taxi	8.8	11.4	7.5
Use public transport	3.2	0.0	2.7
Walk	0.0	0.0	2.7
Drink at home or close to home	0.0	0.0	0.0
Stay overnight after drinking	8.9	3.2	6.4
Sleep in my car	0.0	0.0	2.7
Leave car at someone's house	0.0	3.1	2.7
I have never driven after drinking	0.0	0.0	4.5
Other	8.9	2.8	4.5
Can't say	5.1	0.0	10.8
Rural			
Not drink any alcohol	8.6	18.6	8.7
Limit the amount of alcohol I drank	24.1	0.0	29.5
Count or space my drinks	0.0	0.0	0.0
Drink low-alcohol beer	0.0	0.0	0.0
Drink more water or non-alcoholic drinks	0.0	0.0	0.0
Not take my car	27.5	0.0	16.1
Get someone else to drive	12.9	41.3	0.0
Take a taxi	15.5	19.3	22.1
Use public transport	0.0	0.0	0.0
Walk	10.3	10.6	29.5
Drink at home or close to home	0.0	9.6	7.4
Stay overnight after drinking	15.5	0.0	0.0
Sleep in my car	0.0	0.0	0.0
Leave car at someone's house	0.0	0.0	0.0
I have never driven after drinking	12.9	0.0	0.0
Other	15.5	10.3	0.0
Can't say	0.0	9.6	8.7

In contrast, patterns of successful strategy use were somewhat more similar between the metropolitan age/experience groups and their rural counterparts (Table 5.40).

5.6.4.3 Recent strategy use to avoid drink-driving

Reported use of strategies to avoid drink-driving in the past month was also similar for comparisons within metropolitan and rural age/experience groups.

Table 5.40 Successful strategies used to avoid drink-driving by age group and region (%)

	Age group (years)		
	18-20	**21-26**	**31-40**
Metropolitan			
Not drink any alcohol	41.0	30.6	29.2
Limit the amount of alcohol I drank	1.2	14.6	17.3
Count or space my drinks	0.6	1.5	1.1
Drink low-alcohol beer	0.0	0.0	1.1
Drink more water or non-alcoholic drinks	7.0	3.1	1.7
Limit the amount of money I took to spend on alcohol	0.9	0.0	0.0
Not take my car	8.8	11.7	4.3
Get someone else to drive	40.1	37.7	39.2
Take a taxi	23.4	25.2	22.1
Use public transport	7.6	3.5	3.5
Use a special courtesy bus	0.4	0.0	0.7
Walk	1.5	3.8	0.6
Drink at home or close to home	0.6	1.5	2.3
Stay overnight after drinking	3.5	5.3	2.7
Sleep in my car	0.0	0.0	0.0
Use breath-testing machine to check my blood alcohol level	0.0	0.0	0.0
I have never avoided drink-driving	0.0	0.0	0.0
Other	2.9	2.2	2.3
Can’t say	0.8	0.0	1.8
Rural			
Not drink any alcohol	31.2	27.5	24.6
Limit the amount of alcohol I drank	2.1	7.0	16.7
Count or space my drinks	0.0	0.0	0.0
Drink low-alcohol beer	0.0	2.1	2.9
Drink more water or non-alcoholic drinks	0.0	2.0	2.9
Limit the amount of money I took to spend on alcohol	0.0	1.6	1.4
Not take my car	14.0	13.1	25.4
Get someone else to drive	32.6	30.1	38.2
Take a taxi	27.2	27.9	36.3
Use public transport	3.1	0.0	3.8
Use a special courtesy bus	0.0	0.0	0.0
Walk	6.6	3.6	12.9
Drink at home or close to home	3.9	0.0	2.4
Stay overnight after drinking	12.9	3.4	5.2
Sleep in my car	1.0	1.6	0.0
Use breath-testing machine to check my blood alcohol level	0.0	0.0	2.4
I have never avoided drink-driving	2.7	1.6	0.0
Other	0.0	4.1	1.7
Can’t say	1.8	2.1	1.7

5.6.4.3 Transitional issue in strategies to avoid drink-driving

To further highlight transitional issues, we asked the two older groups "As a *probationary* driver, if you wanted to drink alcohol when you went out, did you do any of the following to avoid drink-driving?" Responses, categorised by region, appear in Table 5.33. We then repeated the question, this time beginning "In your first year as a fully-licensed driver…", with responses also presented in Table 5.41.

Patterns of responses were similar within age/experience groups for metropolitan and rural drivers to the overall age/experience group findings. That is, use of strategies to drink more low-alcohol beer, get someone else to drive, to limit alcohol consumed, to consume more water/non-alcoholic drinks, and to count or space drinks generally increased early in the in the fully-licensed period compared to the probationary period. However, rural drivers (both the novices and experienced drivers) were not more likely to increase the amount of water/non-alcoholic drinks they consumed once fully-licensed, and rural novices did not report an increase in their use of the strategy to get someone else to drive.

5.6.5 Reasons drivers do or do not drink-drive

We asked respondents what the main reasons were that led them to drive when they thought they might be over the legal alcohol limit. Responses to this question, according to region, are shown in Table 5.42.

For those that did report drink-driving, the most common reason reported was the perceived need or desire to go home or to another destination, although metropolitan experienced drivers also reported confidence in their ability to drive. Metropolitan novices also commonly reported this reason, as well as driving being more convenient, geographical reasons and lack of access to public transport.

Reasons for not drink-driving followed a similar pattern by regional breakdown to the overall age/experience group findings in that the most common reasons cited for not drink-driving, in order, were fear of crashes and/or injuries, fear of licence loss (particularly for rural experienced drivers), and fear of detection or arrest. Fear of getting fined was also commonly reported by rural probationary and experienced drivers. Lack of confidence in ability to drive was somewhat more likely to be reported by metropolitan novices than rural novices.

Table 5.41 Strategies used to avoid drink-driving as probationary and newly-licensed driver by age group and region (%)

	Probationary period				First year fully-licensed			
	Metropolitan		Rural		Metropolitan		Rural	
	21-26	31-40	21-26	31-40	21-26	31-40	21-26	31-40
Limited the amount of alcohol you drank	28.8	35.6	41.3	33.6	55.0	54.2	58.4	46.9
Counted or spaced your drinks	19.9	20.1	22.5	20.0	45.1	36.0	35.2	33.0
Drank low-alcohol beer	6.7	9.8	10.7	15.3	15.2	14.6	23.2	23.7
Drank more water or non-alcoholic drinks	48.9	37.6	55.3	36.2	61.2	43.8	53.5	38.5
Limited the amount of money you took to spend on alcohol	15.7	8.2	22.2	13.0	18.3	8.9	24.3	17.3
Not taken your car	66.0	38.9	75.1	56.2	71.1	42.8	71.1	63.8
Got someone else to drive	75.9	54.7	81.0	49.2	82.6	63.4	79.3	65.0
Taken a taxi	69.0	49.7	77.1	59.2	71.8	52.2	77.1	62.4
Used public transport	45.3	31.6	35.0	22.5	50.7	37.3	31.2	29.7
Used a special courtesy bus	11.9	5.0	23.4	11.1	7.9	5.3	17.9	15.1
Walked	43.5	36.6	77.0	57.4	50.9	34.1	70.8	53.3
Drank at home or close to home	53.7	42.9	67.6	39.5	62.2	45.0	67.9	50.2
Stayed overnight after drinking	59.4	44.4	62.9	43.5	55.2	42.3	63.9	48.8
Slept in your car	16.9	15.7	22.8	22.2	12.3	13.6	10.5	17.5
Used breath-testing machine to check your blood alcohol level	8.5	0.5	9.2	5.3	8.0	4.8	6.5	6.1
None of these	2.9	8.2	1.5	8.1	0.6	9.3	4.0	8.4

Table 5.42 Reported reasons for and against drink-driving by age group and region (%)

Reason	Metropolitan			Rural		
	18-20	21-26	31-40	18-20	21-26	31-40
Reasons do drink-drive						
Never driven when (thought) over the limit	72.4	63.4	74.1	79.5	73.7	71.4
Perceived need/desire to go home/elsewhere	8.9	11.5	5.7	9.4	7.4	4.7
Driving more convenient	3.6	5.8	1.6	2.6	1.8	1.4
Driving cheaper option	0.0	1.3	0.0	0.0	2.0	0.0
Lack of access to alternative transport	2.5	4.4	2.8	3.3	3.9	0.0
Geographical reasons	1.8	4.6	1.7	0.0	3.4	5.8
Confidence in ability to drive/judge not dangerous	2.2	5.1	7.4	1.7	1.8	4.2
Thought close to 0.05/ OK after blood test	0.0	2.2	3.3	0.0	5.9	2.8
Alcohol still in system from previous night	3.2	0.0	0.0	4.4	2.0	0.0
Reasons do not drink-drive						
Fear of having a road crash/injuries (self/others)	66.3	61.8	70.4	70.9	68.9	49.6
Fear of losing licence	33.5	29.0	20.8	42.7	25.6	37.4
Fear of being caught/arrested for drink-driving	16.7	11.8	12.3	19.6	16.8	15.1
Not confident in ability to drive	9.2	10.2	8.6	7.7	5.6	7.9
Fear of getting fined	8.0	6.0	4.4	9.8	4.0	10.9
Would feel bad/guilty if something happened	2.6	4.3	4.8	5.1	1.8	2.8

6 SUMMARY AND CONCLUSIONS

6.1 CRASH DATA FINDINGS

The crash analysis has aimed to establish the level of involvement of 21-26 year-old drivers in alcohol-related serious casualty crashes using two measures of alcohol involvement in crashes.

Results obtained using the driver's BAC reading as an indicator for identifying alcohol involvement in fatal crashes were consistent with those using the surrogate measure "alcohol times of the week". The "alcohol times" were derived from the proportion of drivers killed or seriously injured in crashes with known illegal BAC readings during 1990-1997. Both methods showed that drivers aged 21-26 years, who were no longer probationary licence holders, were, in more recent years, over-represented in alcohol-related fatal crashes and in HAH fatal crashes in comparison to probationary drivers aged 18-20 years and fully-licensed, older drivers aged 31-40 years.

The two methods also displayed similar trends in fatal alcohol-related crashes during 1993-2000 for the 21-26 year-old age group. Specifically, both methods showed an increasing trend since 1998, following a consistent decrease during 1993-1997. This was also consistent with the trends shown in

Figure 2.3, for drivers aged 21-26 years, in which the proportion of drivers involved in fatal crashes with a BAC reading exceeding 0.05 decreased during 1995-1997 but increased from 1998 onwards. The trends shown in Figure 2.6 and Figure 2.7 also support the above findings. These charts show that fatal crashes occurring during high alcohol hours of the week (HAHs) are more likely to involve drivers aged 21-26 years than fatal crashes that occurred during low alcohol hours of the week (LAHs). The results obtained from analyses using the surrogate measure "alcohol times" indicate that drivers aged 21-26 years also had the highest level of involvement in serious injury crashes during 1993-2000, despite decreasing involvement during this time.

Analyses by gender and region showed that males in every age group were over-represented in serious casualty crashes regardless of region with regard to age groups 18-21 and 21-26 years. Males in rural regions in the 31-40 year-old age group, however, were consistently over-represented in serious casualty crashes from 1993-2000, the only exception being 1996 where males in both regions were equally represented.

Serious injury crashes were not analysed using BAC as an indicator of alcohol involvement as using this criterion does not reflect the true proportion of alcohol-involvement in fatal crashes, as not all surviving drivers involved in a serious casualty crash are tested. This was evident from Table 2.1, which shows that on average, only 40% of drivers involved in serious injury crashes are BAC-tested. These findings show that analysis of BAC levels is unlikely to give an accurate indication of the rate of alcohol involvement in serious injury crashes.

6.2 SURVEY DATA FINDINGS

The survey findings suggest that exposure variables may at least partly explain the over-representation of male 21-26 year-old drivers in alcohol-related crashes. They reported more driving than others (particularly metropolitan males), and typically drank heavily a few times a week. They also reported a high level of driving when potentially over the BAC limit, despite generally high knowledge and awareness of drink-driving issues. They were also much more likely than females or any other age/experience group to be a passenger of a drinking driver.

For female 21-26 year olds, the pattern was less clear. They actually drove the least of all groups, drank on fewer occasions and typically drank fewer drinks, and reported generally high knowledge and awareness of drink-driving issues. Notwithstanding these findings, moderate proportions reported having driven when potentially over the BAC limit and having been a passenger of a driver over the limit during the past year.

The results of the survey support those of Christie (1997) and Mitchell-Taverner (2000) — that more probationary and more female drivers avoid combining drinking with driving whereas older driver groups and males tend to restrict their alcohol intake. For 21-26 year-old males, this pattern of strategy use was more often unsuccessful in avoiding drink-driving, whereas for females, it was more often successful.

Notably, getting someone else to drive was both the most successful and one of the most unsuccessful strategies for novices, potentially indicating that Foss et al's (2000) American findings of imperfect use of designated drivers may apply to Victorian drivers. Given this was also one of the most common successful strategies of probationary drivers (who were least at risk in current crash statistics), these results suggest this strategy can be one of the most effective if used correctly (i.e. with a responsible, sober driver).

Limiting or monitoring drinks was more likely to be reported by 21-26 year olds than the other groups – a strategy previously promoted in education campaigns. Drinking low-alcohol beer was also a moderately applied strategy. In addition, novices made the most use, though nonetheless low use, of courtesy buses. There was similarly a low level of reported use of public breath-testing machines, though other research has found that such machines deter drink-driving (Haworth and Boland, 1995).

For those that did report reasons for drink-driving, the most common reasons were the perceived need or desire to go home or to another destination (similar findings were reported by Kulick & Rosenberg [1999]) and the convenience of driving compared to other options; although these were less commonly cited by experienced drivers and by females. Few cited monetary or safety (of self or vehicle) reasons, or unsuccessful use of designated drivers. None mentioned social pressures. Novices' responses differed from the other groups in that a small but larger percentage cited lack of access to alternative transport, especially males (metropolitan and rural), as well as geographical reasons (e.g. short distance, back streets).

In response to not drink-driving, a small percentage of novices (0.5%) and probationary drivers (0.4%), all male, indicated that they would usually drive. The most common reasons cited for not drink-driving were fear of crashes and/or injuries, of licence loss, and of detection or arrest. Probationary drivers most commonly cited these, as well as fear of being issued a fine. Therefore, fear was a powerful motivator. Few cited the convenience of other transport, walking, and cycling or short travel distances. This contrasts with

Kulick and Rosenberg's (1999) research, finding alternative transport was the main reason cited for not drink-driving. Notably, differences across groups were more marked for probationary versus experienced drivers than for novices. Fears were less commonly cited by female novices, with the exception of fear of crashes and/or injuries. Lack of confidence was more common among females.

Metropolitan and rural contrasts

Some differences emerged in the self-reports obtained from metropolitan and rural respondents. Rural probationary and experienced drivers were more likely than their metropolitan counterparts to report having seen Police conducting RBT in the previous six months; however, novice drivers in rural areas were less likely to report this than their metropolitan counterparts. Rural probationary and novice drivers (both male and female), and female experienced drivers less often reported having seen a PBTM in the last week, and less often reported having ever used one, than metropolitan drivers in these experience categories. Rural probationary drivers were less likely than their metropolitan counterparts to report the belief that speed, drink-driving, or other drugs were likely to be causes of road crashes. When asked about attitudes to drink-driving, slightly higher proportions of the rural drivers in each age/experience category reported not drinking at all, compared to the metropolitan drivers in these categories.

Limiting the amount of alcohol they drank was the most commonly cited unsuccessful strategy applied by metropolitan novices to avoid drink-driving, but was not reported by any rural novices. In contrast, rural probationary drivers were more likely to limit their alcohol consumption than metropolitan probationary drivers. For rural novices, getting someone to drive was the most commonly cited unsuccessful strategy and more likely than any other group. Moreover, rural novices were also more likely to cite walking as a strategy while this was not reported by any metropolitan novices.

During the transitional period, rural drivers (both novices and experienced drivers) were not more likely to increase the amount of water/non-alcoholic drinks they consumed once fully-licensed, and rural novices did not report an increase in their use of the strategy to get someone else to drive compared to metropolitan groups.

For those that did report drink-driving, the most common reason reported was the perceived need or desire to go home or to another destination, although metropolitan experienced drivers also reported confidence in their ability to drive. Metropolitan novices also commonly reported this reason, as well as driving being more convenient, geographical reasons and lack of access to public transport.

Reasons for not drink-driving followed a similar pattern by regional breakdown to the overall age/experience group findings, although lack of confidence in ability to drive was somewhat more likely to be reported by metropolitan novices than rural novices.

Limitations of the Research

Several limitations of the present research are recognised. The survey was based on self-report data that at times required recall of behaviour over a number of years. This may have resulted in inaccurate recall of past behaviours. Self-report data is also subject to social desirability bias, although the anonymous nature of the telephone survey and the considerable reporting of drink-driving involvement suggest that this was likely not a strong influence in the present instance. The quota sampling method and unequal sample

sizes was addressed by appropriately weighting the data; however, the low response rate is of concern. Generally, an acceptable response rate for this method is 30-40%. The market research company indicated that the need to recruit young people, particularly 18-20 year olds, contributed to the lower rate, suggesting that responses of probationary drivers may be less representative than those of other groups. Alternative methods of surveying young drivers are now being explored for future research.

7 RECOMMENDATIONS

The following recommendations have been suggested for increasing the safety of road users based on the findings of this research:

1. The transition from probationary to full licence currently involves no drink-driving education or intervention process. An educational process targeted to drivers as they make the transition from probationary to full licence should be developed, to reinforce the importance of this issue. This education might profitably focus on:

    a. The association between blood alcohol content and crash risk;

    b. The poor success rates of strategies to stay under the legal BAC limit, rather than not combining drinking and driving;

    c. Methods of improving such strategies (e.g. use of designated drivers, public breath-testing machines).

2. The graduated licensing system may need review; it may be advisable to extend the zero BAC restriction over a longer period, or to develop a more tapered BAC restriction for drivers aged 21-26.

3. Further research examining the drink-driving behaviour of newly fully-licensed ("novice") drivers is warranted, including examination of larger, more representative samples.

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APPENDIX 1: DISTRIBUTION OF LICENCE TYPES PER DRIVER AGE-GROUP

Table A-1, shows the percentage distribution of licence types for drivers of cars in the database of Police-reported crashes. The type of licence was classified into four categories, and the percentage of each type held by drivers in five age groups was estimated. The "other" category consists of drivers who at the time of the crash were either unlicensed, or who held an inappropriate licence, or whose licence type could not be determined. Almost 20% of drivers aged 21-26 years held a probationary licence at the time of the crash and approximately 1% held a learner's permit. These drivers were eliminated from the sample of drivers aged 21-26 years used in the analysis to ensure that probationary drivers would be compared only with fully-licensed drivers. Hence, only probationary drivers were included in the group of drivers aged 18-20 years, and only drivers with a standard licence were included in all other age groups.

Table A-1 Percentage distribution of licence types across driver age groups (%)

	Driver age group (years)					
Licence Type	**18-20**	**21-26**	**27-30**	**31-40**	**[3] 41**	**Total**
Learner	1.7	0.8	0.4	0.3	0.1	0.5
Probationary	90.3	18.2	5.4	3.2	1.1	17.2
Standard	5.9	78.4	91.3	94.4	97.7	80.4
Other	2.1	2.7	2.8	2.1	1.1	1.9
Total	100.0	100.0	100.0	100.0	100.0	100.0

APPENDIX 2: TELEPHONE QUESTIONNAIRE

MONASH
UNIVERSITY

A C C I D E N T R E S E A R C H C E N T R E

DRINKING AND DRIVING QUESTIONNAIRE

Hello my name is _____ and I'm calling from "XXXXXXXXXXXX" on behalf of the Monash University Accident Research Centre.

We are conducting a short, anonymous phone survey about alcohol and driving. It should take around 10 minutes to complete.

We only need to interview:

- drivers who have a full or probationary licence
  [RECENT TEMPORARY SUSPENSION / CANCELLATION OK]
- aged between 18 and 26 or between 31and 40
- who have EVER consumed alcohol

Does this apply to you?

If YES, proceed.

If NO: Is there someone else in your household that fits the criteria?

<u>WHEN MADE CONTACT WITH ELIGIBLE PARTICIPANT</u>

Are you willing to be interviewed?

If YES: Great, and thank you very much for your help.
[IF YES BUT NOT NOW, ARRANGE A CONVENIENT TIME TO CALL BACK]

RECORD (ask if necessary) Male/female _____
Age _____
Postcode _____]

If NO: Could we please just ask how old you are? _____
[RECORD Male/female: _____
Postcode _____]

Thanks very much for your time.

<u>WHEN MADE CONTACT WITH ELIGIBLE PARTICIPANT WHO IS WILLING AND ABLE TO PROCEED WITH THE INTERVIEW</u>

Q1a. What type of driver's licence do you hold? Is it for cars only? [RECORD ALL]

1. Car
2. Motorcycle
3. Heavy vehicle/Truck
4. Bus
5. Taxi/Hire car
6. Other

Q1b. Is that a full or probationary licence? (Is your car licence full or probationary?) [COMPLETE FOR CARS ONLY]

1. Full
2. Probationary

Q2a. What factor do you think most often leads to road crashes?

1. Speed/Excessive speed/Inappropriate speed
2. Drink-driving
3. Drugs (other than alcohol)
4. Driver attitudes/Behaviour/Impatience
5. Inattention/Lack of concentration
6. Carelessness/Negligent driving
7. Lack of driver training/Insufficient training
8. Driver fatigue
9. Disregard of road rules
10. Ignorance of road rules
11. Road design/Poor design/Poor road signs
12. Road conditions/Traffic congestion
13. Weather conditions
14. Vehicle design
15. Failing to maintain vehicle/Lack of vehicle maintenance
16. Too few police on road/Lack of police enforcement
17. Driving too close to other cars
18. Other _____ [RECORD]
19. (DON'T KNOW/NONE)

Q2b. What other factors (lead to road crashes)? (What else?)
[RECORD TWO: SAME OPTIONS AS ABOVE]

Q3. When was the last time you can remember seeing, hearing or reading an anti-drink-driving message? [READ OUT]

1. During the past week
2. Past month
3. Last 2 to 3 months
4. More than 3 months ago
5. (DON'T KNOW/CAN'T SAY)

Q4. Have you seen police conducting random breath testing in the LAST 6 MONTHS?

1. Yes
2. No
3. DON'T KNOW/CAN'T RECALL

Q5. Have you personally been breath tested in the LAST 6 MONTHS?

1. Yes
2. No
3. DON'T KNOW/CAN'T RECALL

Q6. How likely do you think it is that you will be breath tested in the NEXT 6 MONTHS? Is it… [READ OUT]

1. Very likely
2. Somewhat likely
3. Somewhat unlikely
4. Very unlikely
5. (DON'T KNOW)

Q7. The following statements refer to possible effects of having a blood concentration of .05. Do you think it is TRUE or FALSE that being at .05… [READ OUT]

1. Has little effect on your driving ability.
2. Increases your alertness when driving
3. Increases your confidence while driving
4. Makes simple tasks more difficult
5. Makes it harder to concentrate on driving
6. Slows down your reaction time
7. Reduces your ability to do more than one thing at a time
8. Affects your vision and hearing
9. Increasing your chances of falling asleep at the wheel
10. Doubles your risk of having a crash

Q8. What is the penalty if you are caught for the first time with a blood alcohol concentration of .05? [CAN RECORD MORE THAN ONE. RECORD AMOUNTS]

1. Warning
2. Loss of _____ demerit points
3. Fine of $_____
4. Suspension / Cancellation of licence for _____ months
5. DON'T KNOW

Q9. What is the penalty if you are caught for the first time with a blood alcohol concentration of .10? [CAN RECORD MORE THAN ONE. RECORD AMOUNTS]

1. Warning
2. Loss of _____ demerit points
3. Fine of $_____
4. Suspension / Cancellation of licence for _____ months
5. DON'T KNOW

Q10a. Have you ever seen a public breath-testing machine in a hotel, club or restaurant?

1. Yes
2. No
3. DON'T KNOW/CAN'T RECALL

IF YES:

Q10b. When was the last time you saw one? [MAY NEED TO READ OUT]

1. Last week
2. A few weeks ago
3. A few months ago
4. About a year ago
5. More than a year ago
6. (DON'T KNOW/CAN'T RECALL)

Q11a. Have you ever used a public breath-testing machine?

1. Yes
2. No
3. DON'T KNOW/CAN'T RECALL

IF YES:

Q11b. When was the last time you used one? [MAY NEED TO READ OUT]

1. Last week
2. A few weeks ago
3. A few months ago
4. About a year ago
5. More than a year ago
6. (DON'T KNOW/CAN'T RECALL)

Q12. How often do you consume alcohol? [READ OUT]

1. Daily
2. A few times per week
3. Once a week
4. A few times per month
5. Once a month
6. Less than once per month
7. (DON'T KNOW/VARIES)

Q13. What types of alcoholic beverage do you mainly drink? [CAN RECORD MORE THAN ONE: ASK BEER DRINKERS WHETHER FULL OR LIGHT]

1. Full Strength Beer
2. Light Beer
3. Wine/Champagne
4. Mixed drinks/Spirits/Liqueurs
5. Alcoholic cider
6. Other
7. DON'T KNOW/VARIES

Q14. On a typical drinking occasion, how many alcoholic drinks would you have? [RECORD LARGEST NUMBER: EG FOR "ONE OR TWO" RECORD TWO]

1. One
2. Two
3. Three
4. Four
5. Five
6. 6 to 9
7. 10+
8. DON'T KNOW

Q15. Which of the following statements best describes your attitude to drinking and driving? [READ OUT]

1. If I am driving, I don't drink
2. If I am driving, I restrict what I drink
3. If I am driving, I do not restrict what I drink
4. (CAN'T SAY)

Q16. How often do you plan ahead to avoid drink-driving? [READ OUT]

1. All the time
2. Most of the time
3. About 50/50
4. Occasionally
5. Never [GO TO Q20]
6. (DON'T KNOW) [GO TO Q18]

Q17. How often do you plan to avoid drink-driving but end up drink-driving anyway? [READ OUT]

1. All the time
2. Most of the time
3. About 50/50
4. Occasionally
5. Never [GO TO Q19]
6. (DON'T KNOW)

Q18. Think of a time when you planned to avoid drink-driving but DID DRINK-DRIVE. How had you planned to avoid drink-driving?

1. Not drink any alcohol
2. Limit the amount of alcohol I drank
3. Count or space my drinks
4. Drink low-alcohol beer
5. Drink more water or non-alcoholic drinks
6. Limit the amount of money I took to spend on alcohol
7. Not take my car
8. Get someone else to drive
9. Take a taxi
10. Use Public Transport
11. Use a special courtesy bus
12. Walk
13. Drink at home or close to home
14. Stay overnight after drinking
15. Sleep in my car
16. Use a breath-testing machine to check my blood alcohol level
17. Other _____ [RECORD]

Q19. Think of a time when you planned to avoid drink-driving and DID AVOID DRINK-DRIVING. How had you planned to avoid drink-driving?

1. Not drink any alcohol
2. Limit the amount of alcohol I drank
3. Count or space my drinks
4. Drink low-alcohol beer
5. Drink more water or non-alcoholic drinks
6. Limit the amount of money I took to spend on alcohol
7. Not take my car
8. Get someone else to drive
9. Take a taxi
10. Use Public Transport
11. Use a special courtesy bus
12. Walk
13. Drink at home or close to home
14. Stay overnight after drinking
15. Sleep in my car
16. Use a breath-testing machine to check my blood alcohol level
17. Other _____ [RECORD]

Q20. Have you done any of the following to avoid drink-driving in the PAST MONTH? YES or NO [READ OUT]

1. Not drank any alcohol while you were out
2. Limited the amount of alcohol you drank
3. Counted or spaced your drinks
4. Drank low-alcohol beer
5. Drank more water or non-alcoholic drinks
6. Limited the amount of money you took to spend on alcohol
7. Not taken you car

8. Got someone else to drive
9. Taken a taxi
10. Used Public Transport
11. Used a special courtesy bus
12. Walked
13. Drank at home or close to home
14. Stayed overnight after drinking
15. Slept in your car
16. Used a breath-testing machine to check your blood alcohol level

Q21. In the last year, have you driven when you thought you were over the limit or might be over the limit?

1. Yes
2. No
3. DON'T KNOW/CAN'T RECALL

Q22. Have you ever been a passenger of a driver who was most likely over the legal alcohol limit?

1. Yes
2. No
3. DON'T KNOW/CAN'T RECALL

Q23. What are the main reasons you have driven when you thought you were over the limit or might have been over the limit? [CAN RECORD MORE THAN ONE]

1. NEVER DRIVEN when (thought) over the limit
2. Confident in ability to drive / Judge driving as not dangerous
3. Think BAC is pretty close to .05 / would be OK after waiting for blood test
4. Perceived need / desire to go home / other location
5. Driving more convenient (e.g. long distance, long wait for public transport)
6. Driving cheaper option (taxi / public transport too expensive)
7. Lack of access to alternative transport (taxi, public transport, other driver)
8. Driving considered safer option
9. Weather conditions (cold, raining)
10. Geographical reasons (short distance, back streets, country roads, few cars on the road)
11. Social pressure / Influence to drive (e.g. if designated driver)
12. Designated driver fell through (e.g. drank too much)
13. Was the least drunk
14. Other _____ [RECORD]
15. DON'T KNOW/JUST DO

Q24. What are the main reasons you DON'T drive when you are over the limit or might be over the limit? [CAN RECORD MORE THAN ONE]

1. Usually drive
2. Not confident in ability to drive
3. Fear of being caught / arrested for drink-driving
4. Fear of losing licence

5. Fear of getting fined
6. Fear of having a road crash / Fear of injuries (to self and/or others)
7. Would feel bad / guilty if something happened
8. Convenient to walk/cycle / Live close by
9. Alternative transport available (taxi, public transport, other driver)
10. Weather is good (e.g. not raining)
11. Someone convinces me not to drive (partner, friends)
12. Other _____ [RECORD]
13. DON'T KNOW

Q25a. At what age did you first get a driver's licence? [FIRST PROBATIONARY OR FULL LICENCE EVER: RECORD AGE IN YEARS]

Q25b. Was this in Victoria?
1. Yes
2. No

IF NO: Which state was it?
IF NOT IN AUSTRALIA: What country?

<u>Q26 TO Q29 FOR FULLY-LICENSED DRIVERS ONLY (NOT PROBATIONARY)</u>

Q26. For how many years were you a probationary driver?
[INCLUDE PROBATIONARY PERIOD WITHOUT P-PLATES]

Q27. For how many years have you been fully licensed?
IF LESS THAN 1 YEAR: How many months?

Q28. As a PROBATIONARY DRIVER, if you wanted to drink alcohol when you went out, did you do any of the following to avoid drink-driving? YES OR NO [READ OUT]
1. Not drank any alcohol while you were out
2. Limited the amount of alcohol you drank
3. Counted or spaced your drinks
4. Drank low-alcohol beer
5. Drank more water or non-alcoholic drinks
6. Limited the amount of money you took to spend on drinks
7. Not taken your car
8. Got someone else to drive
9. Taken a taxi
10. Used Public Transport
11. Used a special courtesy bus
12. Walked
13. Drank at home or close to home
14. Stayed overnight after drinking
15. Slept in your car
16. Used a breath-testing machine to check your blood alcohol level

[IF FULLY-LICENSED FOR MORE THAN ONE MONTH]

Q29. In your first year as a FULLY-LICENSED DRIVER, if you wanted to drink alcohol when you went out, did you do any of the following to avoid drink-driving? YES or NO

1. Limited the amount of alcohol you drank
2. Counted or spaced your drinks
3. Drank low-alcohol beer
4. Drank more water or non-alcoholic drinks
5. Limited the amount of money you took to spend on drinks
6. Not taken your car
7. Got someone else to drive
8. Taken a taxi
9. Used Public Transport
10. Used a special courtesy bus
11. Walked
12. Drank at home or close to home
13. Stayed overnight after drinking
14. Slept in your car
15. Used a breath-testing machine to check your blood alcohol level

Q30. In an average week, how many hours would you spend driving? [CAN RECORD HALF HOURS eg 1½

Q31a. How many crashes have you been involved in AS A DRIVER during the PAST THREE YEARS? [INCLUDE MINOR INCIDENTS IF THEY ASK eg "just a bump in the car park"]

IF ONE OR MORE:

Q31b. How many of these crashes resulted in someone going to hospital?

Q32a. How many crashes have you been involved in AS A PASSENGER OR PEDESTRIAN during the PAST THREE YEARS?

IF ONE OR MORE:

Q32b. How many of these crashes resulted in someone going to hospital?

Q33. How many times have you been caught drink-driving?

Q34. What is the highest level of education that you have completed? [MAY NEED TO READ OUT]

1. Some secondary
2. Year 12
3. Trade certificate/diploma
4. Some University
5. University degree (or higher)
6. (DON'T KNOW)

Q35. What is your usual occupation?

Q36. What country were you born in?

That's the end of the survey. Thanks for your time.

If you have any complaints about this study you can phone 9905 2052 and ask to speak to the secretary of the Human Ethics Committee. The project number is 2001/437.

Thanks again.

APPENDIX 3: RESPONSE COMPARISONS — METROPOLITAN AND RURAL RESPONDENTS

What factor do you think most often leads to road crashes? (%)

	Metropolitan			Rural		
	18-20	21-26	31-40	18-20	21-26	31-40
Speed	51.47	54.12	54.82	38.47	66.90	59.29
Drink-driving	81.03	73.88	79.55	76.99	87.13	75.41
Drugs (other than alcohol)	10.69	7.72	11.64	4.24	10.31	9.97
Driver attitudes/Behaviour/Impatience	7.46	7.29	5.12	5.08	5.37	7.46
Inattention/Lack of concentration	19.91	18.01	23.41	15.62	5.41	13.18
Carelessness/Negligent driving	24.78	21.69	18.19	16.39	5.17	17.60
Lack of driver training/Insufficient training	11.93	18.41	16.34	12.75	23.98	7.20
Driver fatigue	20.59	28.81	24.45	44.75	34.52	38.20
Disregard of road rules	0.33	0.65	0.12	2.03	0.00	3.68
Ignorance of road rules	1.19	0.00	1.69	4.50	0.00	1.39
Road design/Poor design/Poor road signs	0.60	0.69	3.62	0.00	3.39	0.00
Road conditions/Traffic congestion	0.89	2.23	1.59	1.67	4.00	2.30
Weather conditions	4.57	5.06	2.12	2.83	1.54	3.68
Vehicle design	0.00	0.69	0.00	0.00	0.00	1.39
Failing to maintain vehicle	1.19	1.34	1.06	1.67	0.00	0.00
Older drivers	1.61	0.00	1.16	1.39	5.90	1.39
Inexperience	3.66	2.80	2.81	0.00	0.00	1.39
Other	5.12	1.94	2.28	2.83	0.00	5.07

What factor do you think most often leads to road crashes? (%)

	Metropolitan						Rural					
	18-20		21-26		31-40		18-20		21-26		31-40	
	M	F	M	F	M	F	M	F	M	F	M	F
Speed	50.41	52.60	55.46	52.75	58.09	52.32	36.73	40.21	60.38	73.85	56.58	61.69
Drink-driving	78.53	83.71	71.40	76.42	83.17	76.78	75.95	78.02	85.71	88.64	77.08	73.93
Drugs (other than alcohol)	8.08	13.48	8.50	6.92	10.25	12.70	3.33	5.14	3.19	17.89	6.47	13.07
Driver attitudes/Behaviour/Impatience	8.72	6.11	7.28	7.29	5.35	4.95	5.18	4.99	3.59	7.27	9.98	5.23
Inattention/Lack of concentration	17.43	22.55	17.50	18.54	20.41	25.69	13.69	17.55	7.51	3.18	9.43	16.51
Carelessness/Negligent driving	27.37	22.03	26.48	16.76	18.05	18.29	10.70	22.06	3.19	7.27	12.94	21.73
Lack of driver training/Insufficient training	9.30	14.74	20.65	16.12	17.05	15.79	15.87	9.64	28.92	18.72	9.43	5.23
Driver fatigue	15.24	26.30	24.01	33.74	21.18	26.94	40.72	48.77	36.43	32.48	49.89	27.85
Disregard of road rules	0.64	0.00	0.00	1.31	1.45	0.93	1.84	2.21	0.00	0.00	0.00	6.95
Ignorance of road rules	2.31	0.00	0.00	0.00	2.68	0.93	9.01	0.00	0.00	0.00	0.00	2.61
Road design/Poor design/Poor road signs	1.15	0.00	1.36	0.00	3.90	3.41	0.00	0.00	3.59	3.18	0.00	0.00
Road conditions/Traffic congestion	0.00	1.85	4.40	0.00	2.45	0.93	3.33	0.00	0.00	8.27	0.00	4.33
Weather conditions	5.37	3.72	5.78	4.33	3.67	0.93	5.67	0.00	0.00	3.18	0.00	6.95
Vehicle design	0.00	0.00	1.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.61
Failing to maintain vehicle	2.31	0.00	1.37	1.31	2.45	0.00	3.33	0.00	0.00	0.00	0.00	0.00
Older drivers	2.31	0.88	0.00	0.00	2.68	0.00	0.00	2.77	11.44	0.00	0.00	2.61
Inexperience	7.09	0.00	4.25	1.31	1.22	4.02	0.00	0.00	0.00	0.00	0.00	2.61
Other	4.79	5.47	0.00	3.93	1.22	3.09	5.67	0.00	0.00	0.00	0.00	9.56

True/False items on knowledge of effects of 0.05 BAC (% correct)

	Metropolitan			Rural		
	18-20	21-26	31-40	18-20	21-26	31-40
Has little effect on your driving ability (False)	79.5	82.5	80.9	80.1	78.8	80.9
Increases your alertness when driving (False)	90.7	91.7	92.9	90.3	94.6	92.5
Increases your confidence while driving (True)	57.2	57.2	53.4	61.1	47.6	66.3
Makes simple tasks more difficult (True)	83.6	82.2	80.2	91.2	93.9	80.7
Makes it harder to concentrate on driving (True)	90.8	89.7	90.3	94.8	96.1	85.3
Slows down your reaction time (True)	98.4	94.8	93.0	96.5	98.0	95.6
Reduces your ability to do more than one thing at a time (True)	91.1	85.4	90.5	94.1	91.1	91.4
Affects your vision and hearing (True)	80.6	84.8	80.5	96.7	85.4	83.6
Increasing your chances of falling asleep at the wheel (True)	84.4	86.8	90.0	89.5	86.6	92.8
Doubles your risk of having a crash (True)	87.4	78.2	77.7	91.8	87.9	86.7

True/False items on knowledge of effects of 0.05 BAC (% correct)

	Metropolitan						Rural					
	18-20		21-26		31-40		18-20		21-26		31-40	
	M	F	M	F	M	F	M	F	M	F	M	F
Has little effect on your driving ability (False)	75.7	83.4	80.4	84.6	73.7	86.4	74.8	85.3	68.6	89.5	71.2	89.5
Increases your alertness when driving (False)	91.6	89.8	89.5	94.0	86.8	97.5	94.8	85.8	96.4	92.7	90.0	94.8
Increases your confidence while driving (True)	50.6	64.2	58.6	55.7	52.3	54.2	63.6	58.7	50.3	44.7	63.6	68.7
Makes simple tasks more difficult (True)	80.4	87.1	77.8	86.7	79.0	81.1	89.6	92.8	88.2	100.0	70.6	89.5
Makes it harder to concentrate on driving (True)	87.2	94.6	86.7	92.7	85.6	93.8	89.6	100.0	92.5	100.0	80.6	89.5
Slows down your reaction time (True)	97.7	99.1	95.6	94.0	90.7	94.7	93.0	100.0	96.1	100.0	93.5	97.4
Reduces your ability to do more than one thing at a time (True)	85.7	92.6	80.8	90.1	87.1	93.2	88.1	100.0	85.5	96.8	90.6	92.2
Affects your vision and hearing (True)	75.5	86.2	85.9	83.7	75.1	84.5	93.3	100.0	78.6	92.7	81.7	85.2
Increasing your chances of falling asleep at the wheel (True)	81.1	87.3	82.3	91.4	86.6	92.6	86.3	92.7	77.9	95.8	90.6	94.8
Doubles your risk of having a crash (True)	79.9	96.4	65.6	91.0	70.8	83.0	86.3	97.2	82.5	93.6	80.6	92.2

What is the penalty if you are caught for the first time with a blood alcohol concentration of 0.05? (%)

	Metropolitan			Rural		
	18-20	21-26	31-40	18-20	21-26	31-40
Licence cancellation	72.0	64.9	50.2	72.2	62.8	68.5
Fine	29.8	42.9	33.9	20.5	33.8	28.4
Loss of demerit points	3.2	2.8	2.8	4.9	6.0	0.0
Warning	2.4	2.3	2.5	0.0	2.0	4.2
Don’t know	14.5	19.0	29.4	23.0	19.0	20.6

What is the penalty if you are caught for the first time with a blood alcohol concentration of 0.10? (%)

	Metropolitan			Rural		
	18-20	21-26	31-40	18-20	21-26	31-40
Licence cancellation	74.2	77.4	68.9	79.3	79.5	69.9
Fine	25.0	30.8	22.0	8.7	24.2	20.5
Loss of demerit points	1.2	1.3	1.4	2.8	2.0	0.0
Warning	0.6	0.8	0.9	0.0	0.0	1.4
Don’t know	21.1	21.0	28.5	18.2	18.6	22.9

What is the penalty if you are caught for the first time with a blood alcohol concentration of 0.05? (%)

	Metropolitan						Rural					
	18-20		21-26		31-40		18-20		21-26		31-40	
	M	F	M	F	M	F	M	F	M	F	M	F
Licence cancellation	73.7	70.3	67.9	61.8	61.3	41.8	81.0	63.4	77.7	46.9	74.1	63.5
Fine	32.4	27.0	44.8	41.0	33.8	34.1	19.2	21.8	21.3	47.0	27.0	29.6
Loss of demerit points	3.6	2.7	1.4	4.3	0.0	5.0	1.8	7.9	3.9	8.3	0.0	0.0
Warning	3.6	1.0	2.9	1.7	2.4	2.5	0.0	0.0	3.9	0.0	5.9	2.6
Don’t know	13.1	16.1	16.1	21.9	26.5	31.6	13.8	32.1	18.4	19.7	19.4	21.7

What is the penalty if you are caught for the first time with a blood alcohol concentration of 0.10? (%)

	Metropolitan						Rural					
	18-20		21-26		31-40		18-20		21-26		31-40	
	M	F	M	F	M	F	M	F	M	F	M	F
Licence cancellation	77.1	71.1	78.1	76.8	68.8	69.0	84.0	74.5	81.6	77.1	71.2	68.7
Fine	29.1	20.7	35.5	25.9	29.7	16.1	5.5	11.9	18.6	30.2	25.9	15.7
Loss of demerit points	2.3	0.0	0.0	2.6	0.0	2.5	0.0	5.5	0.0	4.1	0.0	0.0
Warning	1.2	0.0	0.0	1.7	0.0	1.5	0.0	0.0	0.0	0.0	0.0	2.6
Don’t know	16.3	26.1	20.4	21.6	27.3	29.4	16.0	20.3	18.4	18.8	25.3	20.8

When was the last time you remember seeing, hearing or reading an anti-drink-driving message? (%)

	Metropolitan			Rural		
During the…	18-20	21-26	31-40	18-20	21-26	31-40
Past week	80.1	72.4	69.6	78.4	86.1	76.6
Past month	11.4	17.9	18.1	14.0	8.4	13.2
Last 2-3 months	4.4	6.1	4.9	7.6	5.5	8.6
More than 3 months	0.8	0.8	3.5	0.0	0.0	1.6
Don't know	3.2	2.8	3.9	0.0	0.0	0.0

When was the last time you remember seeing, hearing or reading an anti-drink-driving message? (%)

	Metropolitan						Rural					
	18-20		21-26		31-40		18-20		21-26		31-40	
During the…	M	F	M	F	M	F	M	F	M	F	M	F
Past week	85.2	74.7	77.3	67.3	77.6	63.5	84.3	72.5	82.9	89.5	83.6	70.4
Past month	11.2	11.7	13.5	22.4	11.7	22.9	10.5	17.5	6.4	10.5	6.5	19.1
Last 2-3 months	0.6	8.3	7.8	4.3	2.4	6.8	5.2	10.0	10.8	0.0	6.5	10.5
More than 3 months	0.0	1.7	0.0	1.7	4.1	3.1	0.0	0.0	0.0	0.0	3.5	0.0
Don't know	2.9	3.6	1.4	4.3	4.1	3.7	0.0	0.0	0.0	0.0	0.0	0.0

Have you seen Police conducting random breath testing in the LAST 6 MONTHS? (%)

	Metropolitan			Rural		
	18-20	21-26	31-40	18-20	21-26	31-40
Yes	82.4	88.1	82.9	88.3	82.5	93.9
No	16.5	11.1	16.5	11.7	15.7	6.1
Don't recall	1.1	0.8	0.5	0.0	1.8	0.0

Have you seen Police conducting random breath testing in the LAST 6 MONTHS? (%)

	Metropolitan						Rural					
	18-20		21-26		31-40		18-20		21-26		31-40	
	M	F	M	F	M	F	M	F	M	F	M	F
Yes	84.4	80.3	91.2	85.0	83.7	82.3	91.1	85.4	78.8	86.3	90.0	97.4
No	14.4	18.7	7.3	15.0	16.3	16.7	8.9	14.6	17.6	13.7	10.0	2.6
Don’t recall	1.2	1.0	1.5	0.0	0.0	0.9	0.0	0.0	3.6	0.0	0.0	0.0

Have you personally been breath tested in the LAST 6 MONTHS? (%)

	Metropolitan			Rural		
	18-20	21-26	31-40	18-20	21-26	31-40
Yes	37.5	43.8	41.9	51.9	55.0	48.5
No	62.0	55.6	57.5	48.1	42.9	51.5
Don’t recall	0.5	0.7	0.6	0.0	2.0	0.0

Have you personally been breath tested in the LAST 6 MONTHS? (%)

	Metropolitan						Rural					
	18-20		21-26		31-40		18-20		21-26		31-40	
	M	F	M	F	M	F	M	F	M	F	M	F
Yes	44.2	30.4	47.1	40.3	44.8	39.6	62.3	41.5	59.9	49.9	48.2	48.7
No	55.8	68.6	51.5	59.7	53.7	60.4	37.7	58.5	36.2	50.1	51.8	51.3
Don’t recall	0.0	1.0	1.4	0.0	1.5	0.0	0.0	0.0	3.9	0.0	0.0	0.0

How likely do you think it is that you will be breath tested in the NEXT 6 MONTHS? (%)

	Metropolitan			Rural		
	18-20	21-26	31-40	18-20	21-26	31-40
Very likely	37.0	46.1	36.8	39.9	55.2	40.6
Somewhat likely	37.3	31.8	39.5	30.4	32.4	37.4
Somewhat unlikely	12.6	9.3	13.4	14.1	7.7	6.1
Very unlikely	11.6	12.8	9.3	15.6	3.1	14.6
Don't know	1.5	0.0	1.1	0.0	1.5	1.4

How likely do you think it is that you will be breath tested in the NEXT 6 MONTHS? (%)

	Metropolitan						Rural					
	18-20		21-26		31-40		18-20		21-26		31-40	
	M	F	M	F	M	F	M	F	M	F	M	F
Very likely	42.6	31.0	49.5	42.6	39.5	34.7	38.6	41.3	60.2	49.9	41.2	40.0
Somewhat likely	33.1	41.8	29.7	33.9	43.3	36.6	36.5	24.3	28.6	36.4	36.4	38.3
Somewhat unlikely	8.4	17.1	12.2	6.4	11.9	14.5	8.9	19.4	11.1	4.1	12.9	0.0
Very unlikely	13.0	10.1	8.7	17.0	2.9	14.2	16.0	15.1	0.1	6.4	9.4	19.1
Don't know	2.9	0.0	0.0)	0.0	2.4	0.0	0.0	0.0	0.01)	3.2	0.0	2.6

Have you ever seen a public breath-testing machine in a hotel, club or restaurant? (%)

	Metropolitan			Rural		
	18-20	21-26	31-40	18-20	21-26	31-40
Yes	65.9	77.7	59.8	60.2	64.8	60.4
No	34.1	22.3	39.5	39.8	35.2	39.6
Don't recall	0.0	0.0	0.6	0.0	0.0	0.0

Have you ever seen a public breath-testing machine in a hotel, club or restaurant? (%)

	Metropolitan						Rural					
	18-20		21-26		31-40		18-20		21-26		31-40	
	M	F	M	F	M	F	M	F	M	F	M	F
Yes	69.0	62.5	85.1	70.0	63.2	57.3	66.4	54.0	68.7	60.6	77.6	45.2
No	31.0	37.5	14.9	30.0	35.3	42.7	33.6	46.0	31.3	39.4	22.4	54.8
Don't recall	0.0	0.0	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0

IF YES: When was the last time you saw one? (%)

	Metropolitan			Rural		
	18-20	21-26	31-40	18-20	21-26	31-40
Last week	27.6	17.4	5.9	12.6	14.7	3.8
A few weeks ago	16.5	12.5	9.9	28.6	13.8	21.1
A few months ago	25.1	23.5	16.5	35.1	22.0	14.7
About a year ago	10.6	14.4	21.0	14.4	21.9	7.3
More than a year ago	19.7	32.1	45.8	9.3	27.6	50.3
Don't know	0.5	0.0	0.9	0.0	0.0	2.7

IF YES: When was the last time you saw one? (%)

	Metropolitan						Rural					
	18-20		21-26		31-40		18-20		21-26		31-40	
	M	F	M	F	M	F	M	F	M	F	M	F
Last week	27.1	28.1	26.5	6.1	4.6	7.0	22.9	0.0	15.6	13.6	0.0	9.6
A few weeks ago	20.5	11.8	14.1	10.5	8.1	11.3	34.4	21.3	5.2	24.1	23.6	17.3
A few months ago	32.9	16.0	17.5	31.1	11.1)	21.1	21.4	52.0	21.5	22.5	18.13)	9.6
About a year ago	7.2	14.7	12.2	17.2	23.5	18.9	11.3	18.1	27.0	15.7	8.3	5.8
More than a year ago	11.5	29.3	29.7	35.1	50.8	41.7	10.0	8.5	30.7	24.0	45.5	57.7
Don't know	0.9	0.0	0.0	0.0	1.9	0.0	0.0	0.0	0.0	0.0	4.5	0.0

Have you ever used a public breath-testing machine? (%)

	Metropolitan			Rural		
	18-20	21-26	31-40	18-20	21-26	31-40
Yes	32.6	44.5	36.9	20.6	36.0	54.0
No	67.4	55.5	63.1	79.4	64.0	46.0

Have you ever used a public breath-testing machine? (%)

	Metropolitan						Rural					
	18-20		21-26		31-40		18-20		21-26		31-40	
	M	F	M	F	M	F	M	F	M	F	M	F
Yes	38.6	25.5	51.6	35.7	44.6	30.3	17.8	24.0	34.7	37.6	64.3	38.5
No	61.4	74.5	48.4	64.3	55.4	69.7	82.2	76.0	65.3	62.4	35.7	61.5

IF YES: When was the last time you used one?

	Metropolitan			Rural		
	18-20	21-26	31-40	18-20	21-26	31-40
Last week	2.3	2.0	0.0	26.8	0.0	0.0
A few weeks ago	8.2	2.5	0.0	20.8	17.1	0.0
A few months ago	31.2	21.0	0.0	22.4	14.5	5.0
About a year ago	21.2	13.4	7.6	29.9	15.7	13.5
More than a year ago	37.1	61.2)	92.4	0.0	52.6	81.4

IF YES: When was the last time you used one?

	Metropolitan						Rural					
	18-20		21-26		31-40		18-20		21-26		31-40	
	M	F	M	F	M	F	M	F	M	F	M	F
Last week	0.0	6.5	3.1	0.0	0.0	0.0	56.3	0.0	0.0	0.0	0.0	0.0
A few weeks ago	9.1	6.5	3.8	0.1	0.0	0.0	43.7	0.0	0.0	36.2	0.0	0.0
A few months ago	45.0	6.5	19.3	23.9	0.0	0.0	0.0	42.8	15.0	13.9	7.0	0.0
About a year ago	13.0	35.96)	17.0	6.9	5.1	10.7	0.0	57.2	29.8	0.0	13.0	15.0
More than a year ago	32.9	44.8	56.7	69.1	94.9	89.3	0.0	0.0	55.1	49.8	80.0	85.0

How often do you consume alcohol? (%)

	Metropolitan			Rural		
	18-20	21-26	31-40	18-20	21-26	31-40
Never	0.4	0.0	0.6	1.4	2.0	0.0
Daily	1.7	0.7	3.2	1.7	3.5	6.5
A few times per week	21.1	31.1	34.2	17.8	29.3	36.7
Once a week	22.0	26.7	14.0	28.9	24.7	17.6
A few times per month	23.3	16.5	21.3	22.6	12.3	15.0
Once a month	12.0	7.3	7.9	16.6	9.5	6.7
Less than once per month	18.2	17.8	17.9	11.0	18.8	14.1
Don’t know/Varies	1.2	0.0	0.9	0.0	0.0	3.3

How often do you consume alcohol? (%)

	Metropolitan						Rural					
	18-20		21-26		31-40		18-20		21-26		31-40	
	M	F	M	F	M	F	M	F	M	F	M	F
Never	0.0	0.8	0.0	0.0	1.5	0.0	0.0	2.8	0.0	4.2	0.0	0.0
Daily	2.3	1.0	1.4	0.0	4.1	2.5	3.3	0.0	6.8	0.0	3.0	9.6
A few times per week	25.5	16.3	44.2)	17.6	34.8	33.7	26.0	9.6	46.0	11.4	51.8	23.5
Once a week	24.2	19.8	26.8	26.6	20.2	9.3	35.7	22.1	33.3	15.5	12.9	21.7
A few times per month	22.7	24.0	16.2	16.8	16.8	24.8	24.1	21.1	10.0	14.7	12.4	17.4
Once a month	10.0	14.1	1.4	13.3	6.8	8.7	5.7	27.6	0.0	19.5	6.5	6.9
Less than once per month	14.6	22.1	10.0	25.7	15.8	19.5	5.2	16.8	3.9	34.7	6.5	20.9
Don’t know/Varies	0.6	1.8	0.0	0.0	0.0	1.5	0.0	0.0	0.0	0.0	7.0	0.0

On a typical drinking occasion, how many alcoholic drinks would you have? (%)

	Metropolitan			Rural		
	18-20	21-26	31-40	18-20	21-26	31-40
One	7.6	7.6	17.0	2.3	8.9	6.9
Two	8.1	20.1	28.2	7.9	14.9	18.7
Three	13.4	14.4	25.7	12.7	12.5	17.8
Four	13.4	12.2	5.3	3.1	12.6	10.2
Five	13.3	16.6	6.3	8.7	5.7	12.5
Six to nine	25.7	19.9	9.4	29.5	26.4	24.2
Ten+	16.7	9.2	3.8	35.9	17.0	3.3
Don’t know	1.7	0.0	4.3	0.0	2.0	6.3

On a typical drinking occasion, how many alcoholic drinks would you have? (%)

	Metropolitan						Rural					
	18-20		21-26		31-40		18-20		21-26		31-40	
	M	F	M	F	M	F	M	F	M	F	M	F
One	7.6	7.6	4.1	11.2	12.8	20.1	0.0	4.7	3.2	15.2	3.0	10.5
Two	3.1	13.6	10.0	30.5	26.9)	29.1	10.5	5.1	10.7	19.6	6.5	29.6
Three	8.3	18.9	12.8	16.1	24.9	26.3	1.8	23.8	13.9	11.0	15.4	20.0
Four	11.2	15.8	13.7	10.7	3.7	6.50)	3.8	2.4	10.4	15.2	8.9	11.3
Five	12.0	14.7	21.3	11.7	7.7	5.3	10.4	7.0	0.0	11.9	15.9	9.6
Six to nine	30.7	20.4	28.0	11.6	13.3	6.5	17.9	41.4	36.5	15.2	32.9	16.5
Ten+	24.8	8.0	10.2	8.1	2.7	4.6	55.6	15.6	25.4	7.7	7.0	0.0
Don’t know	2.4	0.9	0.0	0.0	7.9	1.5	0.0	0.0	0.0	4.3	10.5	2.6

Which one of the following statements best describes your attitude to drinking and driving? (%)

	Metropolitan			Rural		
	18-20	21-26	31-40	18-20	21-26	31-40
If I am driving, I don’t drink	93.6	44.2	46.6	95.4	52.3	52.9
If I am driving, I restrict what I drink	5.8	54.3	52.1	4.6	47.7	47.1
If I am driving, I do not restrict what I drink	0.0	0.8	1.3	0.0	0.0	0.0
Can’t say	0.6	0.7	0.0	0.0	0.0	0.0

Which one of the following statements best describes your attitude to drinking and driving? (%)

	Metropolitan						Rural					
	18-20		21-26		31-40		18-20		21-26		31-40	
	M	F	M	F	M	F	M	F	M	F	M	F
If I am driving, I don’t drink	90.1	97.4	32.5	56.3	37.8	53.2	91.0	100.0	39.8	66.2	45.8	59.1
If I am driving, I restrict what I drink	8.7	2.6	64.6	43.7	59.3	46.8	9.0	0.08)	60.2	33.8	54.2	40.9
If I am driving, I do not restrict what I drink	0.0	0.0	1.5	0.0	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Can’t say	1.2	0.0	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

How often do you plan ahead to avoid drink-driving? (%)

	Metropolitan			Rural		
	18-20	21-26	31-40	18-20	21-26	31-40
All the time	83.5	67.1	73.9	81.6	70.9	79.5
Most of the time	9.2	21.4	16.2	8.2	23.3	11.9
About 50/50	2.4	6.1	2.6	0.9	3.7	5.5
Occasionally	1.6	1.3	2.4	0.9	0.0	0.0
Never	3.3	3.4	4.9	8.3	2.0	3.0
Don’t know	0.0	0.7	0.0	0.0	0.0	0.0

How often do you plan ahead to avoid drink-driving? (%)

	Metropolitan						Rural					
	18-20		21-26		31-40		18-20		21-26		31-40	
	M	F	M	F	M	F	M	F	M	F	M	F
All the time	75.9	91.7	51.8	82.7	62.2	82.6	73.8	89.7	59.3	83.9	74.1	84.3
Most of the time	12.6	5.5	29.6	13.0	21.7	12.1	14.0	2.3	33.6	11.9	19.4	5.2
About 50/50	3.6	1.0	10.3	1.7	4.0	1.5	1.8	0.0	7.1	0.0	3.0	7.8
Occasionally	2.3	0.9	1.4	1.3	4.4	0.9	1.8	0.0	0.0	0.0	0.0	0.0
Never	5.6	0.9	5.4	1.3	7.7	2.8	8.5	8.1	0.0	4.3	3.5	2.6
Don’t know	0.0	0.0	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

How often do you plan ahead to avoid drink-driving but end up drink-driving anyway? (%)

	Metropolitan			Rural		
	18-20	21-26	31-40	18-20	21-26	31-40
All the time	0.0	0.0	3.9	1.2	0.0	2.9
Most of the time	0.3	2.3	0.7	1.0	0.0	0.0
About 50/50	0.5	0.0	1.9	0.0	0.02)	0.0
Occasionally	12.6	22.6	17.9	8.1	17.9	16.6
Never	86.5	75.1	75.6	89.7	82.1	80.6

How often do you plan ahead to avoid drink-driving but end up drink-driving anyway? (%)

	Metropolitan						Rural					
	18-20		21-26		31-40		18-20		21-26		31-40	
	M	F	M	F	M	F	M	F	M	F	M	F
All the time	0.0	0.0	0.0	0.0	2.7	4.8	0.0	2.5	0.0	0.0	3.1	2.7
Most of the time	0.7	0.0	3.3	1.3	1.6	0.0	2.0	0.0)	0.0	0.0	0.0	0.0
About 50/50	0.0	1.0	0.0	0.0	3.2	1.0	0.0)	0.0	0.0	0.0	0.0	0.0
Occasionally	17.7	7.3	31.6	13.9	23.8	13.7	13.0	3.1	22.5	12.5	23.2	10.7
Never	81.64)	91.6	65.1	84.8	68.7	80.6	85.0	94.4	77.5	87.5	73.7	86.6

Think of a time when you planned to avoid drink-driving but DID DRINK DRIVE. How had you planned to avoid drink-driving? (%)

	Metropolitan			Rural		
	18-20	21-26	31-40	18-20	21-26	31-40
Not drink any alcohol	31.1	12.2	15.3	8.6	18.6	8.7
Limit the amount of alcohol I drank	7.6	36.5	26.6	24.1	0.0	29.5
Count or space my drinks	4.5	6.3	4.5	0.0	0.0	0.0
Drink low-alcohol beer	0.0	0.0	2.2	0.0	0.0	0.0
Drink more water or non-alcoholic drinks	0.0	2.8	0.0	0.0	0.0	0.0
Not take my car	10.1	14.2	0.0	27.5	0.0	16.1
Get someone else to drive	16.2	22.3	32.3	12.9	41.3	0.0
Take a taxi	8.8	11.4	7.5	15.5	19.3	22.1
Use public transport	3.2	0.0	2.7	0.0	0.0	0.0
Walk	0.0	0.0	2.7	10.3	10.6	29.5
Drink at home or close to home	0.0	0.0	0.0	0.0	9.6	7.4
Stay overnight after drinking	8.9	3.2	6.4	15.5	0.0	0.0
Sleep in my car	0.0	0.0	2.7	0.0	0.0	0.0
Leave car at someone’s house	0.0	3.1	2.7	0.0	0.0	0.0
I have never driven after drinking	0.0	0.0	4.5	12.9	0.0	0.0
Other	8.9	2.8	4.5	15.5	10.3	0.0
Can’t say	5.1	0.0	10.8	0.0	9.6	8.7

Think of a time when you planned to avoid drink-driving but DID DRINK DRIVE. How had you planned to avoid drink-driving? (%)

	Metropolitan						Rural					
	18-20		21-26		31-40		18-20		21-26		31-40	
	M	F	M	F	M	F	M	F	M	F	M	F
Not drink any alcohol	27.3	39.1	12.6	11.2	9.0	23.0	13.4	0.0	0.0	47.1	13.8	0.0
Limit the amount of alcohol I drank	6.6	9.7	34.9	40.0	28.4	24.5	37.8	0.0	0.0	0.0	23.4	40.0
Count or space my drinks	6.6	0.0	9.0	0.0	8.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Drink low-alcohol beer	0.0	0.0	0.0	0.0	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Drink more water or non-alcoholic drinks	0.0	0.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Not take my car	10.3	9.7	9.0	26.1	0.0	0.0	26.9	28.5	0.0	0.0	13.8	20.0
Get someone else to drive	14.0	20.7	18.4	31.3	41.4	21.3	0.0	35.7	50.8	26.7	0.0	0.0
Take a taxi	7.6	11.3	12.5	8.7	9.7	4.9	24.3	0.0	31.8	0.0	23.4	20.0
Use public transport	0.0	9.7	0.0	0.0	4.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Walk	0.0	0.0	0.0	0.0	4.9	0.0	0.0	28.5	17.4	0.0	1.7	60.0
Drink at home or close to home	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.9	0.0	0.0	20.0
Stay overnight after drinking	13.3	0.0	4.5	0.0	4.9	8.2	24.4	0.0	0.0	0.0	0.0	0.0
Sleep in my car	0.0	0.0	0.0	0.0	4.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Leave car at someone’s house	0.0	0.0	4.5	0.0	4.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I have never driven after drinking	0.0	0.0	0.0	0.0	4.1	4.9	0.0	35.7	0.0	0.0	0.0	0.0
Other	13.3	0.0	4.0	0.0	8.2	0.0	24.4	0.0	0.0	26.2	0.0	0.0
Can’t say	7.6	0.0	0.0	0.0	9.0	13.1	0.0	0.0	15.9	0.0	13.8	0.0

Think of a time when you planned to avoid drink-driving and DID AVOID DRINK-DRIVING. How had you planned to avoid drink-driving? (%)

	Metropolitan			Rural		
	18-20	21-26	31-40	18-20	21-26	31-40
Not drink any alcohol	41.0	30.6	29.2	31.2	27.5	24.6
Limit the amount of alcohol I drank	1.2	14.6	17.3	2.1	7.0	16.7
Count or space my drinks	0.6	1.5	1.1	0.0	0.0	0.0
Drink low-alcohol beer	0.0	0.0	1.1	0.0	2.1	2.9
Drink more water or non-alcoholic drinks	7.0	3.1	1.7	0.0	2.0	2.9
Limit the amount of money I took to spend on alcohol	0.9	0.0	0.0	0.0	1.6	1.4
Not take my car	8.8	11.7	4.3	14.0	13.1	25.4
Get someone else to drive	40.1	37.7	39.2	32.6	30.1	38.2
Take a taxi	23.4	25.2	22.1	27.2	27.9	36.3
Use public transport	7.6	3.5	3.5	3.1	0.0	3.8
Use a special courtesy bus	0.4	0.0	0.7	0.0	0.0	0.0
Walk	1.5	3.8	0.6	6.6	3.6	12.9
Drink at home or close to home	0.6	1.5	2.3	3.9	0.0	2.4
Stay overnight after drinking	3.5	5.3	2.7	12.9	3.4	5.2
Sleep in my car	0.0	0.0	0.0	1.0	1.6	0.0
Use a breath-testing machine to check my blood alcohol level	0.0	0.0	0.0	0.0	0.0	2.4
I have never avoided drink-driving	0.0	0.0	0.0	2.7	1.6	0.0
Other	2.9	2.2	2.3	0.0	4.1	1.7
Can’t say	0.8	0.0	1.8	1.8	2.1	1.7

Think of a time when you planned to avoid drink-driving and DID AVOID DRINK-DRIVING. How had you planned to avoid drink-driving? (%)

	Metropolitan						Rural					
	18-20		21-26		31-40		18-20		21-26		31-40	
	M	F	M	F	M	F	M	F	M	F	M	F
Not drink any alcohol	33.6	48.5	24.1	36.9	18.9	36.6	22.8	39.4	15.0	41.4	23.2	25.9
Limit the amount of alcohol I drank	0.7	1.8	20.4	9.1	18.7	16.2	4.2	0.0	6.4	7.6	12.3	20.6
Count or space my drinks	1.2	0.0	1.6	1.3	2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Drink low-alcohol beer	0.0	0.0	0.0	0.0	2.7	0.0	0.0	0.0	3.9	0.0	6.1	0.0
Drink more water or non-alcoholic drinks	3.8	10.3	4.9	1.3	0.0	2.9	0.0	0.0	0.0	4.3	0.0	5.4
Limit the amount of money I took to spend on alcohol	0.0	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.3	0.0	2.7
Not take my car	12.9	4.6	8.0	15.3	4.0	4.5	15.0	12.9	17.9	7.7	31.0	20.6
Get someone else to drive	38.6	41.6	32.3	43.0	43.2	36.3	34.7	30.5	31.7	28.2	36.0	40.2
Take a taxi	22.1	24.7	26.2	24.3	21.8	22.3	29.9	24.5	32.6	22.7	29.9	41.9
Use public transport	6.3	9.0	3.1	4.0	6.0	1.6	3.6	2.6	0.0	0.0	0.0	7.1
Use a special courtesy bus	0.0	0.8	0.0	0.0	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Walk	1.2	1.9	6.4	1.3	0.0	1.0	7.8	5.4	6.8	0.0	13.4	12.5
Drink at home or close to home	1.2	7.8	0.0	0.0	1.6	0.0	0.0	0.0	0.0	0.0	0.0	4.4
Stay overnight after drinking	5.3	1.7	4.6	6.1	4.2	1.6	20.8	5.1	6.4	0.0	3.1	7.1
Sleep in my car	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	3.3	0.0	0.0
Use a breath-testing machine to check my blood alcohol level	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.4
I have never avoided drink-driving	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.4	0.0	3.3	0.0	0.0
Other	3.8	1.9	0.0	4.4	1.6	2.9	0.0	0.0	0.0	8.6	3.6	0.0
Can’t say	0.7	0.9	0.0	0.0	1.6	1.9	3.6	0.0	3.9	0.0	3.6	0.0

Have you done any of the following to avoid drink-driving in the PAST MONTH? (%)

	Metropolitan			Rural		
	18-20	21-26	31-40	18-20	21-26	31-40
Not drank any alcohol while you were out	68.7	62.2	54.2	69.3	63.0	36.7
Limited the amount of alcohol you drank	23.2	60.5	51.7	28.3	63.2	54.7
Counted or spaced your drinks	15.2	40.7	25.9	18.1	42.2	31.5
Drank low-alcohol beer	5.3	18.0	20.7	5.6	18.0	27.9
Drank more water or non-alcoholic drinks	48.2	53.4	45.1	47.8	56.1	35.9
Limited the amount of money you took to spend on alcohol	23.1	20.5	6.1	25.1	21.8	12.3
Not taken your car	63.4	58.8	30.4	69.7	64.0	64.7
Got someone else to drive	75.1	72.9	51.5	70.6	79.3	55.2
Taken a taxi	64.3	54.4	29.5	63.7	64.3	53.1
Used public transport	50.0	33.9	15.7	32.3	27.2	13.9
Used a special courtesy bus	10.1	2.2	2.1	11.7	6.2	8.4
Walked	41.7	35.2	21.2	58.2	46.7	40.2
Drank at home or close to home	58.2	57.0	51.3	69.0	67.3	56.1
Stayed overnight after drinking	56.2	44.8	23.8	65.2	49.0	20.0
Slept in your car	4.1	2.4	2.4	14.1	6.0	2.8
Used a breath-testing machine to check your blood alcohol level	3.8	2.8	2.4	0.9	6.0	2.3
None of these	1.8	2.7	6.6	4.0	1.6	1.6

Have you done any of the following to avoid drink-driving in the PAST MONTH? (%)

	Metropolitan						Rural					
	18-20		21-26		31-40		18-20		21-26		31-40	
	M	F	M	F	M	F	M	F	M	F	M	F
Not drank any alcohol while you were out	67.3	70.3	55.4	69.2	54.8	53.9	62.0	76.9	60.3	66.1	38.8	34.8
Limited the amount of alcohol you drank	22.2	24.4	63.8	57.1	67.6	39.6	29.7	26.8	68.2	57.6	54.7	54.7
Counted or spaced your drinks	16.2	14.1	42.1	39.1	39.7	15.5	19.4	16.9	52.8	30.5	28.8	33.9
Drank low-alcohol beer	6.8	3.8	23.7	12.0	38.0	7.7	6.7	4.6	24.3	11.0	34.8	21.7
Drank more water or non-alcoholic drinks	44.4	52.2	51.5	55.4	43.4	46.4	41.6	54.3	65.4	45.7	32.3	39.1
Limited the amount of money you took to spend on alcohol	22.8	23.4	20.7	20.3	6.9	5.6	35.2	14.7	25.8	17.3	9.4	14.8
Not taken your car	68.8	57.6	69.9	47.3	30.6	30.4	72.6	66.6	71.9	55.3	62.3	66.9
Got someone else to drive	72.9	77.4	73.1	72.6	54.1	49.5	79.1	61.8	85.0	72.9	57.7	53.0
Taken a taxi	61.5	67.4	60.5	48.5	34.5	25.7	61.4	66.1	69.4	58.6	45.3	60.0
Used public transport	52.5	47.4	40.0	27.7	22.6	10.5	37.2	27.3	18.6	36.8	12.9	14.8
Used a special courtesy bus	12.6	7.3	4.4	0.0	2.9	1.5	17.9	5.3	7.9	4.4	7.0	9.6
Walked	45.6	37.5	48.1	21.9	22.6	20.1	56.9	59.6	45.8	47.7	42.3	38.2
Drank at home or close to home	59.6	56.7	59.4	54.6	46.2	55.1	73.8	64.0	68.2	66.2	57.7	54.7
Stayed overnight after drinking	60.0	52.1	55.5	33.8	23.7	23.8	56.1	74.5	54.0	43.4	22.9	17.4
Slept in your car	5.9	2.1	3.0	1.7	4.4	0.9	25.0	2.9	11.4	0.0	3.0	2.6
Used a breath-testing machine to check your blood alcohol level	4.7	2.7	1.4	4.3	1.5	3.1	1.8	0.0	3.6	8.6	0.0	4.3
None of these	2.0	1.7	4.1	1.3	3.7	8.7	0.0	8.1	0.0	3.3	3.5	0.0

In the last year, have you driven when you thought you were over the limit or might be over the limit? (%)

	Metropolitan			Rural		
	18-20	21-26	31-40	18-20	21-26	31-40
Yes	20.1	23.3	15.2	22.9	22.8	19.5
No	79.5	76.7	84.8	77.1	77.2	80.5
Don't recall	0.3	0.0	0.0	0.0	0.0	0.0

In the last year, have you driven when you thought you were over the limit or might be over the limit? (%)

	Metropolitan						Rural					
	18-20		21-26		31-40		18-20		21-26		31-40	
	M	F	M	F	M	F	M	F	M	F	M	F
Yes	24.7	15.2	31.4	15.0	24.5	8.1	45.9	34.3	18.9	0.0	10.5	20.0
No	74.6	84.8	68.6	85.0	75.5	91.9	54.1	65.7	81.1	100.0	89.5	80.0
Don't recall	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Have you ever been a passenger of a driver who was most likely over the legal alcohol limit? (%)

	Metropolitan			Rural		
	18-20	21-26	31-40	18-20	21-26	31-40
Yes	48.8	43.1	40.6	34.3	36.3	33.9
No	49.4	55.4	57.5	65.7	63.7	66.1
Don't recall	1.7	1.5	1.9	0.0	0.0	0.0

Have you ever been a passenger of a driver who was most likely over the legal alcohol limit? (%)

	Metropolitan						Rural					
	18-20		21-26		31-40		18-20		21-26		31-40	
	M	F	M	F	M	F	M	F	M	F	M	F
Yes	51.0	46.6	51.4	54.6	34.6	41.8	46.6	22.0	34.5	16.9	45.2	27.0
No	48.4	53.4	45.6	45.4	64.2	58.2	50.6	78.0	65.5	83.1	52.3	73.0
Don't recall	0.6	0.0	3.1	0.0	1.2	0.0	2.9	0.0	0.03)	0.0	2.5	0.0

How many times have you been caught drink-driving? (%)

	Metropolitan			Rural		
	18-20	21-26	31-40	18-20	21-26	31-40
None	97.5	97.9	94.9	100.0	100.0	89.2
Once	2.5	0.7	4.5	0.0	0.0	5.8
Twice or more	0.0	1.4	0.6	0.0	0.0	4.9

How many times have you been caught drink-driving? (%)

	Metropolitan						Rural					
	18-20		21-26		31-40		18-20		21-26		31-40	
	M	F	M	F	M	F	M	F	M	F	M	F
None	95.2	100.0	95.9	100.0	93.4	96.0	100.0	100.0	100.0	100.0		100.0
Once	4.8	0.0	1.4	0.0	5.1	4.0	0.0	0.0	0.0	0.0	12.4	0.0
Twice or more	0.0	0.0	2.7	0.0	1.5	0.0	0.0	0.0	0.0	0.0	10.5	0.0

What are the main reasons you have driven when you thought you were over the limit or might have been over the limit? (%)

	Metropolitan			Rural		
	18-20	21-26	31-40	18-20	21-26	31-40
Never driven when (thought) over the limit	72.4	63.4	74.1	79.5	73.7	71.4
Confidence in ability to drive/judge not dangerous	2.2	5.1	7.4	1.7	1.8	4.2
Thought close to 0.05/ OK after blood test	0.0	2.2	3.3	0.0	5.9	2.8
Perceived need/desire to go home/elsewhere	8.9	11.5	5.7	9.4	7.4	4.7
Driving more convenient	3.6	5.8	1.6	2.6	1.8	1.4
Driving cheaper option	0.0	1.3	0.0	0.0	2.0	0.0
Lack of access to alternative transport	2.5	4.4	2.8	3.3	3.9	0.0
Driving considered safest option	0.9	1.7	0.0	0.0	0.0	1.4
Geographical reasons (short distance, back streets)	1.8	4.6	1.7	0.0	3.4	5.8
Designated driver fell through	0.6	0.0	0.9	0.0	0.0	0.0
Was the least drunk	0.0	0.0	0.0	0.0	0.0	3.0
Alcohol still in system from previous night	3.2	0.0	0.0	4.4	2.0	0.0
Didn’t want to leave car	0.0	0.8	1.3	0.0	1.8	1.4
I was young and stupid	1.2	1.3	1.2	0.0	1.6	1.6
Other	3.1	3.1	2.6	0.0	0.0	3.7
Don’t know/Just do	1.6	0.6	0.9	1.7	0.0	2.8

What are the main reasons you have driven when you thought you were over the limit or might have been over the limit? (%)

	Metropolitan						Rural					
	18-20		21-26		31-40		18-20		21-26		31-40	
	M	F	M	F	M	F	M	F	M	F	M	F
Never driven when (thought) over the limit	63.9	81.4	52.4	74.7	68.1	78.6	58.9	100.0	58.8	89.5	64.7	77.4
Confidence in ability to drive/judge not dangerous	2.6	1.7	8.8	1.3	7.0	7.7	3.3	0.0	3.6	0.0	3.0	5.2
Thought close to 0.05/ OK after blood test	0.0	0.0	2.7	1.7	5.6	1.5	0.0	0.0	7.5	4.1	3.0	2.6
Perceived need/desire to go home/elsewhere	12.3	5.2	15.3	7.7	7.6	4.3	18.9	0.0	11.4	3.2	10.0	0.0
Driving more convenient	3.8	3.5	9.0	2.6	1.2	1.9	5.2	0.0	3.6	0.0	0.0	2.6
Driving cheaper option	0.0	0.0	1.4	1.3	0.0	0.0	0.0	0.0	3.9	0.0	0.0	0.0
Lack of access to alternative transport	3.3	1.7	6.1	2.6	4.1	1.9	6.7	0.0	7.6	0.0	0.0	0.0
Driving considered safest option	0.0	1.9	1.7	1.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.6
Geographical reasons (short distance, back streets)	3.6	0.0	4.4	4.7	2.7	0.9	0.0	0.0	3.6	3.2	9.4	2.6
Designated driver fell through	1.2	0.0	0.0	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0
Was the least drunk	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.5	2.6
Alcohol still in system from previous night	5.3	1.0	0.0	0.0	0.0	0.0	8.9	0.0	3.9	0.0	0.0	0.0
Didn’t want to leave car	0.0	0.0	0.0	1.7	2.9	0.0	0.0	0.0	3.6	0.0	3.0	0.0
I was young and stupid	1.3	1.0	1.4	1.3	2.7	0.0	0.0	0.0	3.2	0.0	3.5	0.0
Other	3.6	2.6	4.4	1.7	3.7	1.9	0.0	0.0	0.0	0.0	0.0	6.9
Don’t know/Just do	2.3	0.8	0.0	1.3	0.0	1.5	3.3	0.0	0.0	0.0	3.0	2.6

What are the main reasons you DON'T drive when you are over the limit or might be over the limit? (%)

	Metropolitan			Rural		
	18-20	21-26	31-40	18-20	21-26	31-40
Usually drive	0.6	0.7	0.0	0.0	0.0	0.0
Not confident in ability to drive	9.2	10.2	8.6	7.7	5.6	7.9
Fear of being caught/arrested for drink-driving	16.7	11.8	12.3	19.6	16.8	15.1
Fear of losing licence	33.5	29.0	20.8	42.7	25.6	37.4
Fear of getting fined	8.0	6.0	4.4	9.8	4.0	10.9
Fear of having a road crash/injuries (self/others)	66.3	61.8	70.4	70.9	68.9	49.6
Would feel bad/guilty if something happened	2.6	4.3	4.8	5.1	1.8	2.8
Convenient to walk/cycle/Live close by	0.3	0.0	0.0	0.0	0.0	1.4
Alternative transport available (public/other driver)	1.2	0.0	0.0	0.0	0.0	2.8
Someone convinces me not to drive (partner/friend)	0.6	0.6	0.0	0.0	0.0	0.0
Dangerous/Unsafe	0.5	0.8	2.0	0.0	2.0	2.8
Irresponsible/Stupid/You're a bloody idiot	1.5	2.3	2.8	0.0	0.0	0.0
I don't drink (much)/Never over the limit	0.4	0.7	2.1	0.0	2.0	1.4
Have a family	0.0	0.0	2.6	0.0	0.0	3.7
Know someone who was injured/died in a drink-driving accident	2.2	0.8	1.4	0.0	0.0	0.0
Other	3.2	3.7	2.7	0.0	3.8	7.7
Don't know	1.3	2.2	1.5	0.0	1.8	3.9

What are the main reasons you DON'T drive when you are over the limit or might be over the limit? (%)

	Metropolitan						Rural					
	18-20		21-26		31-40		18-20		21-26		31-40	
	M	F	M	F	M	F	M	F	M	F	M	F
Usually drive	1.2	0.0	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Not confident in ability to drive	9.0	9.4	7.4	12.9	5.4	1.2	5.2	10.2	3.9	7.4	5.9	9.6
Fear of being caught/arrested for drink-driving	15.5	17.9	10.4	13.2	9.0	14.9	20.1	19.1	21.8	11.4	18.3	12.2
Fear of losing licence	39.0	27.6	38.2	19.7	31.9	12.4	48.6	36.8	32.1	18.7	47.2	28.7
Fear of getting fined	7.9	8.2	9.0	3.0	5.8	3.4	7.0	12.6	0.0	8.2	9.4	12.2
Fear of having a road crash/injuries (self/others)	58.1	75.1	55.9	67.9	69.3	71.2	60.1	81.7	63.2	74.9	42.9	55.6
Would feel bad/guilty if something happened	2.4	2.7	4.2	4.3	5.4	4.3	5.2	5.1	3.6	0.0	0.0	5.2
Convenient to walk/cycle/Live close by	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.6
Alternative transport available (public/other driver)	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.2
Someone convinces me not to drive (partner/friend)	1.2	0.0	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dangerous/Unsafe	0.0	1.0	1.7	0.0	1.5	2.5	0.0	0.0	0.0	4.1	0.0	5.2
Irresponsible/Stupid/You're a bloody idiot	1.2	1.8	1.7	3.0	1.2	4.0	0.0	0.0	0.0	0.0	0.0	0.0
I don't drink (much)/Never over the limit	0.0	0.9	1.4	0.0	2.4	1.9	0.0	0.0	0.0	4.1	0.0	2.6
Have a family	0.0	0.0	0.0	0.0	1.5	3.4	0.0	0.0	0.0	0.0	0.0	6.9
Know someone who was injured/died in a drink-driving accident	2.5	1.9	1.5	0.0	1.2	1.5	0.0	0.0	0.1	0.0	0.0	0.0
Other	2.9	3.4	1.4	6.0	2.9	2.5	0.0	0.0	3.6	4.1	10.5	5.2
Don't know	0.0	2.6	4.3	0.0	1.5	1.5	0.0	0.0	3.6	0.0	3.5	4.3

FOR FULLY-LICENSED DRIVERS ONLY (NOT PROBATIONARY)

As a PROBATIONARY DRIVER, if you wanted to drink alcohol when you went out, did you do any of the following to avoid drink-driving? (%)

	Metropolitan		Rural	
	21-26	31-40	21-26	31-40
Not drank any alcohol while you were out	72.0	60.8	69.3	46.9
Limited the amount of alcohol you drank	28.8	35.6	41.3	33.6
Counted or spaced your drinks	19.9	20.1	22.5	20.0
Drank low-alcohol beer	6.7	9.8	10.7	15.3
Drank more water or non-alcoholic drinks	48.9	37.6	55.3	36.2
Limited the amount of money you took to spend on alcohol	15.7	8.2	22.2	13.0
Not taken your car	66.0	38.9	75.1	56.2
Got someone else to drive	75.9	54.7	81.0	49.2
Taken a taxi	69.0	49.7	77.1	59.2
Used public transport	45.3	31.6	35.0	22.5
Used a special courtesy bus	11.9	5.0	23.4	11.1
Walked	43.5	36.6	77.0	57.4
Drank at home or close to home	53.7	42.9	67.6	39.5
Stayed overnight after drinking	59.4	44.4	62.9	43.5
Slept in your car	16.9	15.7	22.8	22.2
Used a breath-testing machine to check your blood alcohol level	8.5	0.5	9.2	5.3
None of these	2.9	8.2	1.5	8.1

As a PROBATIONARY DRIVER, if you wanted to drink alcohol when you went out, did you do any of the following to avoid drink-driving? (%)

	Metropolitan				Rural			
	21-26		31-40		21-26		31-40	
	M	F	M	F	M	F	M	F
Not drank any alcohol while you were out	70.7	73.3	55.4	65.0	63.2	75.7	45.8	47.9
Limited the amount of alcohol you drank	31.3	26.3	41.7	30.9	47.9	34.3	32.3	34.8
Counted or spaced your drinks	23.4	16.4	23.6	17.3	22.1	22.9	22.9	17.4
Drank low-alcohol beer	10.3	3.0	19.5	2.5	10.8	10.5	12.9	17.4
Drank more water or non-alcoholic drinks	48.8	49.0	32.9	41.2	61.5	48.8	32.9	39.1
Limited the amount of money you took to spend on alcohol	19.3	12.0	8.0	8.4	18.6	10.0	26.1	15.7
Not taken your car	70.9	61.0	37.5	39.9	80.1	69.8	58.8	53.9
Got someone else to drive	84.0	67.5	57.0	52.9	89.6	71.8	57.7	41.7
Taken a taxi	69.8	68.3	45.5	52.9	76.1	78.1	62.3	56.5
Used public transport	56.1	34.3	37.2	27.2	40.4	29.3	23.5	21.7
Used a special courtesy bus	13.4	10.4	5.6	4.6	28.5	17.9	12.9	9.6
Walked	56.9	29.8	38.7	35.0	82.8	70.9	62.3	53.0
Drank at home or close to home	62.5	44.7	50.4	37.1	79.3	55.2	45.8	33.9
Stayed overnight after drinking	66.6	51.9	47.9	41.8	76.0	48.9	49.3	38.2
Slept in your car	23.3	10.3	25.3	8.4	44.3	0.0	36.4	9.6
Used a breath-testing machine to check your blood alcohol level	10.0	6.9	1.2	0.0	11.0	7.3	3.5	6.9
None of these	2.7	3.0	8.8	7.7	0.0	3.2	9.4	6.9

IF FULLY LICENSED FOR MORE THAN ONE MONTH

In your first year as a FULLY-LICENSED DRIVER, if you wanted to drink alcohol when you went out, did you do any of the following to avoid drink-driving? (%)

	Metropolitan		Rural	
	21-26	31-40	21-26	31-40
Limited the amount of alcohol you drank	55.0	54.2	58.4	46.9
Counted or spaced your drinks	45.1	36.0	35.2	33.0
Drank low-alcohol beer	15.2	14.6	23.2	23.7
Drank more water or non-alcoholic drinks	61.2	43.8	53.5	38.5
Limited the amount of money you took to spend on alcohol	18.3	8.9	24.3	17.3
Not taken your car	71.1	42.8	71.1	63.8
Got someone else to drive	82.6	63.4	79.3	65.0
Taken a taxi	71.8	52.2	77.1	62.4
Used public transport	50.7	37.3	31.2	29.7
Used a special courtesy bus	7.9	5.3	17.9	15.1
Walked	50.9	34.1	70.8	53.3
Drank at home or close to home	62.2	45.0	67.9	50.2
Stayed overnight after drinking	55.2	42.3	63.9	48.8
Slept in your car	12.3	13.6	10.5	17.5
Used a breath-testing machine to check your blood alcohol level	8.0	4.8	6.5	6.1
None of these	0.6	9.3	4.0	8.4

In your first year as a FULLY-LICENSED DRIVER, if you wanted to drink alcohol when you went out, did you do any of the following to avoid drink-driving? (%)

	Metropolitan				Rural			
	21-26		31-40		21-26		31-40	
	M	F	M	F	M	F	M	F
Limited the amount of alcohol you drank	56.7	53.2	59.9	49.8	59.6	57.0	51.8	42.6
Counted or spaced your drinks	50.0	40.0	41.4	31.9	35.3	35.2	36.9	29.6
Drank low-alcohol beer	22.2	8.1	28.0	4.3	28.2	17.8	22.9	24.3
Drank more water or non-alcoholic drinks	63.2	59.1	35.8	49.8	61.1	45.5	29.9	46.1
Limited the amount of money you took to spend on alcohol	23.1	13.3	12.4	6.2	28.6	19.7	6.5	27.0
Not taken your car	76.8	65.2	45.3	40.9	75.4	66.5	65.2	62.6
Got someone else to drive	86.9	78.2	65.7	61.6	86.4	71.7	61.7	67.8
Taken a taxi	78.0	65.5	55.0	50.1	80.1	73.9	65.2	60.0
Used public transport	62.0	39.0	42.8	33.1	36.0	26.1	26.9	29.6
Used a special courtesy bus	10.2	5.6	7.0	4.0	17.8	17.9	13.5	16.5
Walked	64.2	37.3	37.9	31.3	78.5	62.5	51.8	54.7
Drank at home or close to home	69.6	54.6	56.4	36.2	82.9	52.0	52.8	47.8
Stayed overnight after drinking	59.3	51.0	46.3	39.3	72.1	55.2	55.8	42.6
Slept in your car	18.4	6.0	20.4	8.4	17.4	3.2	26.4	9.6
Used a breath-testing machine to check your blood alcohol level	11.7	4.3	7.8	2.5	9.6	3.2	12.9	0.0
None of these	0.0	1.3	8.8	9.6	0.0	8.3	10.0	6.9

In an average week, how many hours would you spend driving?

Metropolitan			Rural		
18-20	21-26	31-40	18-20	21-26	31-40
12.07	11.36	11.42	10.77	10.12	10.15

In an average week, how many hours would you spend driving?

Metropolitan						Rural					
18-20		21-26		31-40		18-20		21-26		31-40	
M	F	M	F	M	F	M	F	M	F	M	F
12.21	11.92	12.68	10.00	11.81	11.12	10.56	10.98	11.43	8.73	12.61	7.98

How many crashes have you been involved in AS A DRIVER during the PAST THREE YEARS? (%)

	Metropolitan			Rural		
	18-20	21-26	31-40	18-20	21-26	31-40
None	57.8	51.4	77.2	63.0	77.8	84.4
One	29.1	34.7	18.0	25.2	17.2	10.9
Two or more	13.0	14.0	4.8	11.8	5.0	4.7

How many crashes have you been involved in AS A DRIVER during the PAST THREE YEARS? (%)

	Metropolitan						Rural					
	18-20		21-26		31-40		18-20		21-26		31-40	
	M	F	M	F	M	F	M	F	M	F	M	F
None	57.6	58.1	52.8	49.8	78.1	76.5	53.6	72.3	77.4	78.1	80.6	87.8
One	27.5	30.9	35.3	34.0	15.3	20.1	27.9	22.5	15.8	18.7	9.4	12.2
Two or more	14.9	11.0	11.8	16.2	6.6	3.4	18.5	5.1	6.8	3.2	10.0	0.0

IF YES, How many of these crashes resulted in someone going to hospital? (%)

	Metropolitan			Rural		
	18-20	21-26	31-40	18-20	21-26	31-40
None	94.3	95.7	97.7	82.4	93.1	76.3
One	5.7	4.3	2.3	17.6	6.9	23.7

IF YES, How many of these crashes resulted in someone going to hospital? (%)

	Metropolitan						Rural					
	18-20		21-26		31-40		18-20		21-26		31-40	
	M	F	M	F	M	F	M	F	M	F	M	F
None	97.0	91.4	93.9	97.4	100.0	96.0	88.8	71.7	100.0	85.5	100.0	42.9
One	3.0	8.6	6.1	2.6	0.0	4.0	11.2	28.3	0.0	14.5	0.0	57.1

How many crashes have you been involved in AS A PASSENGER OR PEDESTRIAN during the PAST THREE YEARS? (%)

	Metropolitan			Rural		
	18-20	21-26	31-40	18-20	21-26	31-40
None	64.4	71.0	93.2	79.6	77.3	98.4
One	21.2	23.5	6.8	10.0	14.5	1.6
Two or more	14.4	5.4	0.0	10.4	8.1	0.0

How many crashes have you been involved in AS A PASSENGER OR PEDESTRIAN during the PAST THREE YEARS? (%)

	Metropolitan						Rural					
	18-20		21-26		31-40		18-20		21-26		31-40	
	M	F	M	F	M	F	M	F	M	F	M	F
None	60.2	68.9	73.4	68.7	90.3	95.4	73.8	85.4	72.8	82.2	96.5	100.0
One	21.8	20.5	18.9	28.3	9.7	4.6	10.4	9.6	15.4	13.6	3.5	0.0
Two or more	18.0	10.6	7.8	3.0	0.0	0.0	15.9	5.0	11.9	4.2	0.0	0.0

IF YES, How many of these crashes resulted in someone going to hospital? (%)

	Metropolitan			Rural		
	18-20	21-26	31-40	18-20	21-26	31-40
None	90.5	86.3	92.2	91.0	82.1	100.0
One	7.5	13.7	7.8	9.0	8.9	0.0
Two or more	2.0	0.0	0.0	0.0	8.9	0.0

IF YES, How many of these crashes resulted in someone going to hospital? (%)

	Metropolitan						Rural				
	18-20		21-26		31-40		18-20		21-26		31-40
	M	F	M	F	M	F	M	F	M	F	M
None	91.8	88.6	81.7	90.3	87.4	100.0	86.0	100.0	71.2	100.0	100.0
One	6.6)	8.7	18.3	9.7	12.6	0.0	14.0	0.0	14.4	0.0	0.0
Two or more	1.6	2.6	0.0	0.0	0.0	0.0	0.0	0.0	14.4	0.0	0.0

What is the highest education level that you have completed? (%)

	Metropolitan			Rural		
	18-20	21-26	31-40	18-20	21-26	31-40
Some secondary	13.8	10.6	29.1	17.6	19.3	54.7
Year 12	41.8	21.3	16.5	55.4	36.8	20.3
Trade certificate/Diploma	4.6	14.2	8.2	8.1	14.0	6.3
Some TAFE	7.7	5.0	1.3	2.7	3.5	4.7
Some University	27.0	5.7	3.2	16.2	5.3	0.0
University Degree or higher	5.1	42.6	41.8	0.0	21.1	14.1
Can’t say/Refused	0.0	0.7	0.0	0.0	0.0	0.0

What is the highest education level that you have completed? (%)

	Metropolitan						Rural					
	18-20		21-26		31-40		18-20		21-26		31-40	
	M	F	M	F	M	F	M	F	M	F	M	F
Some secondary	16.3	11.2	16.7	4.3	25.3	32.5	18.9	16.2	20.7	17.9	64.5	45.5
Year 12	43.9	39.8	19.4	23.2	12.0	20.5	56.8	54.1	41.4	32.1	16.1	24.2
Trade certificate/Diploma	1.0	8.2	16.7	11.6	13.3	3.6	13.5	2.7	20.7	7.1	6.5	6.1
Some TAFE	8.2	7.1	2.8	7.2	1.3	1.2	5.4	0.0	3.4	3.6	3.2	6.1
Some University	26.5	27.6	5.6	5.8	2.7	3.6	5.4	27.0	3.4	7.1	0.0	0.0
University Degree or higher	4.1	6.1	38.9	46.4	45.3	38.6	0.0	0.0	10.3	32.1	9.7	18.2
Can't say/Refused	0.0	0.0	0.0	0.0	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0

What is your usual occupation? (%)

	Metropolitan			Rural		
	18-20	21-26	31-40	18-20	21-26	31-40
Professional	3.1	14.2	18.4	1.4	10.5	6.3
Owner or Executive	0.0	1.4	3.2	0.0	0.0	1.6
Owner of Small Business	2.0	1.4	1.9	0.0	0.0	3.1
Sales	14.8	14.2	12.0	14.9	7.0	7.8
Semi-Professional	3.1	15.6	13.9	6.8	19.3	29.7
Other White Collar	10.7	12.8	9.5	5.4	10.5	7.8
Skilled	5.6	13.5	15.2	9.5	28.1	14.1
Semi-Skilled	8.7	6.4	4.4	9.5	8.8	4.7
Unskilled	4.1	2.8	2.5	8.1	1.8	6.3
Farm Owner	2.6	0.7	0.0	5.4	1.8	1.6
Farm Worker	0.5	0.0	0.0	0.0	0.0	0.0
No Occupation	44.9	16.3	19.0	39.2	12.3	17.2
Can't say/Refused	0.0	0.7	0.0	0.0	0.0	0.0

What is your usual occupation? (%)

	Metropolitan						Rural					
	18-20		21-26		31-40		18-20		21-26		31-40	
	M	F	M	F	M	F	M	F	M	F	M	F
Professional	2.0	4.1	12.5	15.9	22.7	14.5	0.0	2.7	6.9	14.3	12.9	0.0
Owner or Executive	0.0	0.0	1.4	1.4	1.3	4.8	0.0	0.0	0.0	0.0	3.2	0.0
Owner of Small Business	1.0	3.1	0.0	2.9	2.7	1.2	0.0	0.0	0.0	0.0	3.2	3.0
Sales	7.1	22.4	9.7	18.8	14.7	9.6	10.8	18.9	6.9	7.1	6.5	9.1
Semi-Professional	3.1	3.1	15.3	15.9	16.0	12.0	5.4	8.1	13.8	25.0	25.8	33.3
Other White Collar	8.2	13.3	11.1	14.5	5.3	13.3	2.7	8.1	6.9	14.3	6.5	9.1
Skilled	9.2	2.0	19.4	7.2	20.0	10.8	13.5	5.4	37.9	17.9	25.8	3.0
Semi-Skilled	12.2	5.1	6.9	5.8	8.0	1.2	13.5	5.4	10.3	7.1	3.2	6.1
Unskilled	6.1	2.0	5.6	0.0	1.3	3.6	10.8	5.4	3.4	0.0	9.7	3.0
Farm Owner	4.1	1.0	1.4	0.0	0.0	0.0	5.4	5.4	0.0	3.6	0.0	3.0
Farm Worker	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
No Occupation	45.9	43.9	16.7	15.9	8.0	28.9	37.8	40.5	13.8	10.7	3.2	30.3
Can’t say/Refused	0.0	0.0	0.0	0.0	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0

What country were you born in? (%)

	Metropolitan			Rural		
	18-20	21-26	31-40	18-20	21-26	31-40
Australia	78.1	85.8	84.2	98.6	94.7	96.9
Asia	10.7	5.7	4.4	0.0	0.0	0.0
India	0.5	0.0	0.6	0.0	0.0	0.0
England/Wales/Northern Ireland/Scotland/UK	2.6	1.4	1.9	1.4	0.0	1.6
Ireland/Republic of Ireland	0.0	0.0	0.6	0.0	0.0	1.6
Greece	0.0	0.0	0.6	0.0	0.0	0.0
Italy	0.0	0.0	0.6	0.0	0.0	0.0
Other Europe	4.6	2.8	5.1	0.0	3.5	0.0
New Zealand	0.5	2.1	0.0	0.0	1.8	0.0
Pacific Islands	0.0	0.0	0.6	0.0	0.0	0.0
USA	0.5	0.0	0.6	0.0	0.0	0.0
Central America	0.0	1.4	0.0	0.0	0.0	0.0
South America	1.5	0.0	0.0	0.0	0.0	0.0
Africa	0.5	0.0	0.0	0.0	0.0)	0.0
Middle East	0.5	0.7	0.6	0.0	0.0	0.0

What country were you born in? (%)

	Metropolitan						Rural					
	18-20		21-26		31-40		18-20		21-26		31-40	
	M	F	M	F	M	F	M	F	M	F	M	F
Australia	72.4	83.7	86.1	85.5	81.3	86.7	100.0	97.3	93.1	96.4	96.8	97.0
Asia	14.3	7.1	4.2	7.2	8.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0
India	1.0	0.0	0.0	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
England/Wales/Northern Ireland/Scotland/UK	3.1	2.0	0.0	2.9	2.7	1.2	0.0	2.7	0.0	0.0	0.0	3.0
Ireland/Republic of Ireland	0.0	0.0	0.0	0.0	1.3	0.0	0.0	0.0	0.0	0.0	3.2	0.0
Greece	0.0	0.0	0.0	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Italy	0.0	0.0	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0
Other Europe	6.1)	3.1	4.2	1.4	2.7	7.2	0.0	0.0	3.4	3.6	0.0	0.0
New Zealand	1.0	0.0	2.8	1.4	0.0	0.0	0.0	0.0	3.4	0.0	0.0	0.0
Pacific Islands	0.0	0.0	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0
USA	0.0	1.0	0.0	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Central America	0.0	0.0	2.8	0.0	0.0	0.0	0.0	0.0	0.0)	0.0	0.0	0.0
South America	1.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Africa	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle East	0.0	0.0	0.0	1.0	1.4	1.2	0.0	0.0	0.0	0.0	0.0	0.0