



**SUBMISSION TO TRAVELSAFE:  
VEHICLE IMPOUNDMENT FOR DRINK DRIVERS**

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## Executive Summary

This submission has been prepared in response to the Parliamentary Travelsafe Committee's *Inquiry into vehicle impoundment for drink drivers* to address research relevant to the committee's investigation into whether:

- Drink drivers in Queensland continue to drive illegally after being apprehended by police or disqualified from driving by the courts;
- The incidence of repeat drink driving undermines the effectiveness of existing penalties for drink driving offences; and
- Vehicle impoundment and/or ignition key confiscation are cost-effective deterrents that will reduce drink driving recidivism, relating to other existing or potential methods of managing offenders.

The submission addresses a wide range of issues related to the extent of recidivist drink driving and unlicensed driving and methods to better manage the problem, including vehicle impoundment. It draws on a wide-range of relevant studies undertaken by CARRS-Q over recent years, as well as Australian and international literature. While the body of the report is structured in a way to reflect this research, this Executive Summary is organised according to the questions raised in the Committee's Discussion Paper *Inquiry into vehicle impoundment for drink drivers*.

**1. Do drink drivers in Queensland continue to drive illegally after being apprehended by police or disqualified by the courts?**

**2. Is this a significant number of drivers?**

**3. How often do drink drivers in Queensland continue to do this?**

The available evidence indicates that many drink driving offenders continue to drive after their licence has been disqualified. Surveys in Victoria (Robinson, 1977) and Western Australia (Smith & Maisey, 1990) have found that over 30% of respondents admitted driving while disqualified. Observed and self-reported levels of disqualified driving in the UK and US range from 25-70% (Hedlund & McCartt, 2002; McCartt, Geary & Berning, 2003).

More recently, CARRS-Q undertook a comprehensive survey of over 300 unlicensed driving offenders as they left the Brisbane Magistrates Court (Watson, 2004). The offenders in the study reported driving unlicensed on average for 2.4 years before being detected. More particularly, they reported making 14 trips per week on average, while driving unlicensed. Among the disqualified drivers (who had mainly lost their licence for drink driving) in this sample, the average number of trips reported each week was 11.4.

In addition, crash statistics suggest that unlicensed driving is a relatively small, but common behaviour. For example, unlicensed drivers represented 6.3% of the drivers involved in fatal crashes in Queensland between 1994 and 1998. Of these drivers, almost one-third were disqualified or suspended from driving (Watson, 2004). Moreover, an analysis of the Queensland crash data has indicated that unlicensed drivers are almost three times more likely to be involved in a crash than a licensed driver, and that in the event of a crash, those involving unlicensed drivers are twice as likely to result in a fatality or serious injury. The crash risks associated with disqualified and suspended driving were even higher. Consistent with these results, the serious crashes involving unlicensed drivers are more likely to feature risky driving behaviours, such as drink driving, speeding and motorcycle use, than those involving licensed drivers (Watson, 2004).

Therefore, although it is difficult to estimate the total number of disqualified and other unlicensed drivers on the road, this issue appears significant. Even if the lowest estimate were accurate, when the relative crash risk of these drivers is taken into account, the significance in terms of road safety is unquestionable. From another perspective, in terms of the effectiveness of loss of licence as a sanction, if offenders continue to drive once disqualified, its deterrent effect could be seriously undermined (see section 3).

#### **4. What are the costs and benefits of vehicle impoundment and forfeiture?**

The exact costs of impoundment and/or forfeiture programs will vary depending on the method of implementation adopted. However, in most jurisdictions where these programs are in force a user pays system applies. The offender has to pay fees such as towing and storage in order to reclaim their vehicle. However, in some programs due to various difficulties, this has not always been feasible.

In most jurisdictions in which impoundment is in effect there have been significant reductions in the recidivism of offenders whose vehicles have been impounded. These reductions have been reported to be anywhere between 18-80%, at least while the sanction is in effect (DeYoung, 1999; Voas, Tippetts, & Taylor, 1999). However, despite the availability of vehicle-based sanctions and their potential effectiveness, their usage appears to be relatively low, largely due to administrative and practical problems associated with their implementation (see section 4.5.1).

#### **5. What are the costs and benefits of ignition key confiscation?**

As noted in the Travelsafe discussion paper New South Wales, Victoria, and Tasmania currently have legislation giving police the power to confiscate ignition keys from drivers who are apprehended for drink driving. To date there have been no evaluations of these programs so their effectiveness remains unclear.

**6. Should vehicle impoundment or key confiscation be used in Queensland to prevent drink drivers from repeating or continuing the offence?**

Based on the available evidence, a strong case exists for the implementation of vehicle impoundment for repeat drink drivers and unlicensed drivers in Queensland. Promising evidence is emerging from both North America and New Zealand that vehicle impoundment (in conjunction with other sanctions) can be effective in reducing the recidivism rates of both drink drivers and disqualified (and other unlicensed) drivers. However, some of the overseas programs have encountered significant implementation difficulties, such as ensuring the penalty is applied in a consistent manner, dealing with attempts to evade punishment by offenders changing the registration details of vehicles, and issues to do with the storage and disposal of vehicles (see section 4.5.1). Consequently, the implementation of a vehicle impoundment scheme in Queensland would require careful planning to ensure that it manages these potential difficulties and complements the existing administrative and legislative framework for managing recidivist offenders. Particular attention would need to be given as to whether it would be best to use a judicially-based model, an administrative model, or a combination of the two. In addition, it would be critical to monitor the performance of the scheme and undertake a comprehensive evaluation.

**9. Can other recidivist drink driving countermeasures be used to improve the effectiveness of vehicle sanctions? How?**

There are a variety of vehicle sanctions that are in force across Australia and around the world. For example, licence (registration) plate sanctions have been somewhat effective in North America. However, perhaps the most promising vehicle sanction is the use of alcohol ignition interlocks, particularly in combination with rehabilitation. It is possible that a combination of vehicle sanctions as well as other sanctions could be effective in dealing with drink drivers who continue to drive once disqualified.

Combining rehabilitation programs with licence sanctions has also been shown to be an effective countermeasure in the reduction of drink driving. Because vehicle sanctions do not seem to produce long term behaviour change, combining them with rehabilitation appears to be a more effective approach. For example, promising reductions in recidivism have been achieved through the combination of rehabilitation and alcohol ignition interlocks. In addition, it appears that the effects achieved through this approach persist after the interlock is removed. Another potential rehabilitative countermeasure for drink driving is brief interventions which have been shown to significantly reduce alcohol consumption. Due to the link between alcohol consumption, alcohol dependence and drink driving, brief interventions are also worth further consideration (see section 4.6).

While the available evidence confirms that many recidivist offenders share common characteristics, they are not necessarily a homogenous group. Accordingly, it is likely that some sanctions will work better (either in isolation or in combination) with some

offenders than others. Therefore, it is essential to develop a comprehensive and integrated system for managing recidivist offenders featuring:

- the use of a graduated structure of financial penalties and licence disqualification, which can be easily understood by both offenders and the general community;
- the use of vehicle sanctions, such as alcohol ignition interlocks and vehicle impoundment, in combination with rehabilitation;
- ongoing monitoring of the performance of offenders, either through court-based processes such as Probation or administrative systems run by driver licensing authorities (**see section 6**).

**10. How effective are existing penalties under the Transport Operations (Road Use Management) Act 1995 in reducing repeat drink driving?**

**11. Are the powers provided to police to manage drink driving under the Transport Operations (Road Use Management) Act 1995 enough?**

In Queensland, licence disqualification, fines, and imprisonment are the current sentencing options for drink drivers. Licence disqualification has been shown to be an effective deterrent for a considerable proportion of the population. A large majority of offenders do not re-offend. However, the current legal sanctions may not produce long-term behavioural change among recidivists. This is particularly true of those offenders who continue to drive while disqualified (**see section 4.2**).

The perceived risk of detection for disqualified and other unlicensed driving in Queensland appears relatively low. Indeed, the recent CARRS-Q survey of unlicensed drivers indicated that around one-third of the offenders failed to have their licence checked, on at least one occasion, when they came into contact with the police (primarily through RBT) (Watson, 2004). While the police have the power to randomly check licences in Queensland, it is difficult for them to do so systematically because open licence holders are not, in practice, required to carry their licence when they drive. Consequently, a strong argument exists for the introduction of compulsory carriage for open licence holders, to enable the police to conduct more widespread random checking of licences at the roadside (**see section 4.7**).

**12. How effective is the Police Powers and Responsibilities Act 2000 in reducing the number of individuals driving carelessly, dangerously, in racing or speeding trials or in a way that makes unnecessary noise or smoke?**

**13. Should the Police Powers and Responsibilities Act 2000 be amended to include drink driving as a ‘prescribed offence’ enabling police officers to impound drink drivers’ vehicles?**

In Queensland, police have the power to impound vehicles of drivers who commit a prescribed ‘hooning’ offence (eg, careless driving, excessive noise, racing). In terms of its effectiveness, no formal evaluation has been conducted. However, a recent study undertaken by CARRS-Q found that some car enthusiasts believed that the anti-hooning provisions were not being applied in a consistent manner (Armstrong & Steinhardt, 2006).

It should also be noted that there may be differences between ‘hooning’ offenders and recidivist drink drivers and unlicensed drivers, in terms of their psychological and socio-demographic characteristics. If so, this could mean that this approach is not readily transferable to recidivist drink drivers and unlicensed drivers (see **section 4.5.1**).

**14. What effect, if any, do successful appeals against licence suspension or disqualification have on drink driving behaviour and existing penalties for drink driving?**

**15. Should the appeals process for drink driving be tightened to reduce the incidence of successful appeals in Queensland?**

In Queensland, first time drink driving offenders are eligible to apply for a restricted ‘work’ licence which enables them to continue driving under limited circumstances. Applicants must satisfy the court that they are a fit and proper person and that they, or their family, would suffer extreme hardship if they were not allowed to drive. In Queensland, restricted licences are not available to recidivists or offenders who registered a BAC above 0.15% when apprehended.

There have been some concerns raised about the use of restricted licences for drink driving offenders. Firstly, it has been argued that the widespread use of restricted licences may undermine the deterrent value of licence loss, among current and potential offenders (Watson & Siskind, 1997). Secondly, providing restricted licences on employment grounds only could devalue the importance of educational and domestic functions. Interestingly, Queensland-based research has indicated that full licence disqualification is more effective in reducing overall offence and crash rates compared to restricted licences. However, restricted licences perform no worse in reducing alcohol related crashes and offences compared to full licence loss (Watson & Siskind, 1997; Watson, Siskind & King, 2000).

In addition, the need to drive for work proved a significant predictor of continued unlicensed driving among offenders in a recent Queensland study (Watson, 2004). This highlights how driving for work can act as a powerful motivator for unlicensed driving, particularly when the risk of apprehension (by the Police or the employer) is low. Consequently, there is a need to examine whether restricted licences could be enhanced to reduce unlicensed driving, without compromising the general deterrent effect of licence loss. One way to achieve this may be to require drivers on restricted licences to fit an alcohol ignition interlock, which would also incorporate a time-lock (see section 4.2.2).

**16. Is vehicle impoundment and key confiscation legislation successful in reducing the number of recidivist drink drivers in other Australian jurisdictions and overseas?**

**17. Should Queensland introduce legislation that is consistent with the legislation in other Australian jurisdictions?**

There are a number of jurisdictions both overseas and in Australia that have some form of impoundment legislation. Overseas evaluations indicate that these programs are relatively successful in reducing recidivism among the offenders whose vehicles have been impounded. As noted earlier, these reductions have been reported to be anywhere between 18-80% at least while the sanction is in effect. However, there is a lack of clear data on whether the reductions in recidivism continue once the vehicle is returned to the offender. It is also not clear whether there is any general deterrent effect of vehicle impoundment. There are also some limitations in introducing such programs depending upon the implementation approach taken (see section 4.5.1).

Current drink driving countermeasures (particularly RBT and licence disqualification) have been shown to be effective among the general driving population and many offenders, but not necessarily with 'hard-core' recidivists. As noted earlier, there is a need to develop a more comprehensive and integrated system for managing drink drivers and other recidivist offenders, which recognises their unique characteristics. The available evidence suggests that vehicle based sanctions (particularly vehicle impoundment and alcohol ignition interlocks) should be incorporated into these offender management systems. Complementary measures should include financial penalties, licence actions and rehabilitation programs. Technological advances such as electronic licences should also be monitored. Finally, the available evidence suggests that the perceived risk of being detected for disqualified and other unlicensed driving in Queensland is relatively low. Accordingly, there is need to develop improved detection methods, such as the introduction of compulsory carriage of licence for open licence holders, to enable the more widespread checking of licences by the police. Such legislation is available in NSW and Tasmania (see section 6).

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# 1. Introduction

This submission has been prepared in response to the Parliamentary Travelsafe Committee's *Inquiry into vehicle impoundment for drink drivers*. This response will address research relevant to the committee's investigation into whether:

- Drink drivers in Queensland continue to drive illegally after being apprehended by police or disqualified from driving by the courts;
- The incidence of repeat drink driving undermines the effectiveness of existing penalties for drink driving offences; and
- Vehicle impoundment and/or ignition key confiscation are cost-effective deterrents that will reduce drink driving recidivism, relating to other existing or potential methods of managing offenders.

The submission addresses a wide range of issues related to the extent of recidivist drink driving and unlicensed driving and methods to better manage the problem. It draws on the findings of a series of research papers, details of which are provided in the reference list. Although the focus of the Travelsafe Committee's discussion paper is on repeat drink drivers, it must be acknowledged that many jurisdictions have implemented impoundment programs for both repeat drink drivers and unlicensed drivers. It is also the case that these groups often overlap and the management of one may have significant impacts on the other. As a result, this submission will address issues relating to both recidivist drink driving and unlicensed driving.

This submission is underpinned by a wide-range of research studies conducted by the Centre for Accident Research and Road Safety (CARRS-Q), including:

- the development and evaluation of the "Under the Limit" drink driving rehabilitation program (eg. Siskind, Sheehan, Schonfeld, & Ferguson, 2000; Ferguson, Schonfeld, Sheehan, & Siskind, 2001; Sheehan, Schonfeld, & Davey, 1995);
- an examination of the specific deterrent effect of restricted licences on the subsequent crash and offence rates of drink drivers, compared with full disqualification (Watson & Siskind, 1997; Watson, Siskind, and King, 2000);
- an international review of the effectiveness of drink driving rehabilitation programs (Ferguson, Sheehan, Davey, & Watson, 1999);
- an investigation of recidivist drink driving behaviour and the effectiveness of countermeasures such as licence loss, rehabilitation and interlocks (eg. Freeman, 2004);
- an investigation into the psychosocial characteristics and on-road behaviour of unlicensed drivers (eg. Watson, 2004); and

- a review of the Victorian *drink driver rehabilitation and education program* (eg. Sheehan, Watson, Schonfeld, Wallace, & Partridge, 2005)

The authors would like to particularly acknowledge the input of Professor Mary Sheehan, Dr. Mark King, and Dr. James Freeman to this submission.

## **2. Scale and nature of the repeat drink driving problem**

Sanctions for drink driving (in tandem with enforcement initiatives like RBT) have been effective in reducing the number of drink drivers as well as reducing alcohol related crashes in Queensland and around the world (Homel, Carseldine, & Kearns, 1988). However, drink driving continues to be a serious problem in Queensland. In 2003 approximately 38% of fatal crashes involved alcohol and/or drugs (Queensland Transport, 2004). Despite the fact that most offenders do not re-offend, there are a significant number of offenders who seem resistant to current sanctions and continue to drink and drive. For these repeat offenders (recidivists), current legal sanctions do not appear effective in preventing further drink driving offences (Freeman, 2005; Yu, 2000).

### **2.1. Prevalence of repeat drink driving**

This sub-group of offenders is surprisingly large with research demonstrating that approximately 20 to 30% of convicted drink drivers have prior drink driving offences (Beirness, Mayhew, & Simpson, 1997; Brown, Nadeau, Lageix, Lepage, Tremblay, & Seraganian, 2002; Hedlund & McCartt, 2002; Wiliszowski, Murphy, Jones & Lacey, 1996). In Queensland, of the 24661 drink drivers detected in 2004, 3679 (14.9%) were recidivists (had at least one previous drink driving offence in 2002 and/or 2003) (Queensland Transport, 2005). It must be noted however; that this figure only represents those recidivists detected by police and therefore may underestimate the actual number of recidivists on the road.

In terms of crash risk, repeat offenders are considered more likely to be involved in an alcohol related crash than first-time offenders and non-offenders. Researchers have reported that an estimated one-third of drivers considered responsible for a crash have been previously convicted of a DWI offence (Beirness, Mayhew, & Simpson, 1997). In Queensland, 13.9% of alcohol related crash involved drivers in 2004 were “recidivists”, as they had either more than one breach in 2004, or one breach in 2004 and at least one breach in 2003 and/or 2002 (Queensland Transport, 2005). This data only spanned three years of offences and therefore probably underestimates the number of crashes involving recidivists.

### **2.2. Characteristics of recidivists**

Research has also shown considerable individual differences between first-time and repeat drink driving offenders (Bailey & Bailey, 2000; Ferguson, Sheehan, Davey & Watson, 1999; Beirness, Mayhew, & Simpson, 1997). It has been argued that first-time offenders are predominantly social drinkers who may make a judgement error in their decision to drive after drinking (Ferguson, et al., 1999). These drivers are usually deterred from committing further offences by their experience of formal sanctions such as fines and licence disqualification, as well as informal social sanctions such as disapproval from family and friends (Ferguson et al., 1999).

Although not a homogenous group, most repeat offenders are male, and in contrast to first-time offenders, are usually apprehended with a high BAC reading i.e. above 0.15mg% (Beirness, Simpson, & Mayhew, 1997; Stewart, Boase & Reid, 2002; Voas & Tippetts, 2002; Queensland Transport, 2005). It has been proposed that repeat offenders high BAC readings are an indication of alcohol misuse and/or alcohol dependency problems (Bergman, Hubicka, & Laurell, 2002; Beirness, Simpson, & Mayhew, 1997). It has been suggested that approximately half of repeat offenders meet the criteria for alcohol dependence (Beirness, Simpson, & Mayhew, 1997).

Other differences have been reported between recidivists and first offenders (Jones & Lacey, 2000; Gould & Gould, 1992), including that recidivists are more likely to display hostility, aggression, sensation-seeking, lack of impulse control and to have a criminal history (traffic and non-traffic). These factors can influence the effectiveness of traditional sanctions. Essentially a recidivist's attitude to the law and societal values may differ from other drivers meaning that the impact of sanctions designed for the general community may have little effect on this sub-group.

For example, in a survey of recidivist drink drivers in Queensland, the results indicated that simply punishing repeat offenders may not produce long-term behavioural change and in fact they may be immune or impervious to the threat of legal sanctions (Freeman, 2004). While these offenders did perceive the sanctions and penalties for drink driving to be severe, they did not perceive them to be either swift or certain. Freeman (2004) also points out that recidivists' drink driving behaviours "...are highly entrenched" (Freeman, 2004, p.203) and that this coupled with high levels of alcohol consumption could negate the effect of sanctions for some offenders. Freeman (2004) suggests that while current sanctions are effective for most offenders, for a number of 'hard core' offenders, focus may need to be placed on both their drinking and drink driving behaviours.

### **3. Scale and nature of the unlicensed driving problem**

While unlicensed driving may not play a direct causative role in road crashes, like alcohol or speeding, it still represents a major threat to road safety by undermining the effectiveness of current sanctions. Road safety authorities in Australia have increasingly relied on the use of traffic law enforcement methods, particularly Random Breath Testing (RBT) and speed cameras, to improve road safety (Watson et al, 1996). Consequently, there is a need to ensure that the penalties and sanctions under-pinning the driver management system are both credible and effective.

In this regard, unlicensed driving undermines the integrity of the tools used to manage driver behaviour (Watson et al, 1996). Either intentionally or otherwise, unlicensed drivers are prepared to operate outside the licensing system, dramatically reducing the ability of authorities to monitor and manage their behaviour.

Furthermore, licence disqualification is very important in managing driver behaviour. Loss of licence has been shown to be a highly effective deterrent compared to other penalties and sanctions traditionally applied to drivers (Jones & Lacey, 2000; McArthur & Kraus, 1999; Nichols & Ross, 1990). In a Queensland study examining the records of over 25,000 disqualified drink drivers it was found that crash and offence rates during the disqualification period were about one third of the rate incurred during legal driving (Siskind, 1996). However, unlicensed driving arguably

serves to reduce the overall effectiveness of licence loss. The specific deterrent effect of licence loss will be minimal among offenders who continue to drive. Its general deterrent effect will also be undermined if the public perceive there is little risk of being apprehended for driving without a valid licence (Watson, 2004).

### **3.1. Prevalence of unlicensed driving**

Among disqualified drivers, self-report surveys suggest that unlicensed driving is relatively common. Surveys in Victoria (Robinson, 1977) and Western Australia (Smith & Maisey, 1990) have found that over 30% of respondents admitted driving while disqualified. Similar surveys in the United Kingdom (Mirrlees-Black, 1993) and the United States (Williams, Hagen & McConnell, 1984; Ross & Gonzales, 1988) have found that somewhere between 25% and 70% of disqualified drivers continue to drive while disqualified. Studies have also shown that many unlicensed drivers drive regularly (Job, Lee, & Prabhakar, 1994; Watson, 2004). More recently, CARRS-Q undertook a comprehensive survey of over 300 unlicensed driving offenders as they left the Brisbane Magistrates Court (Watson, 2004). The offenders in the study reported driving unlicensed on average for 2.4 years before being detected. More particularly, they reported making 14 trips per week on average, while driving unlicensed. Among the disqualified drivers in this sample, the average number of trips reported each week was 11.4.

In addition, crash statistics suggest that unlicensed driving is a relatively small, but common behaviour. For example, unlicensed drivers represented 6.3% of the drivers involved in fatal crashes in Queensland between 1994 and 1998. Of these drivers, almost one-third were disqualified or suspended from driving (Watson, 2004). Moreover, an analysis of the Queensland crash data has indicated that unlicensed drivers are almost three times more likely to be involved in a crash than a licensed driver, and that in the event of a crash, those involving unlicensed drivers are twice as likely to result in a fatality or serious injury. The crash risks associated with disqualified and suspended driving were even higher. Consistent with these results, the serious crashes involving unlicensed drivers are more likely to feature risky driving behaviours, such as drink driving, speeding and motorcycle use, than those involving licensed drivers (Watson, 2004).

### **3.2. Characteristics of unlicensed drivers**

Drivers may be unlicensed for a wide variety of reasons. Within the Queensland context, unlicensed drivers include those: whose licence has expired; who drive a vehicle for which they are not appropriately licensed; who have lost their licence due to suspension or disqualification; or who have never held a licence. As such, unlicensed drivers do not necessarily represent a homogenous group. Indeed, recent Queensland research has confirmed that the unlicensed driver types vary considerably in their psychosocial characteristics and on-road behaviour. For example, the survey of unlicensed driving offenders conducted in Brisbane found significant differences between the offender types in terms of their socio-demographic characteristics (age, education level, prior criminal convictions); driving history (prior convictions for unlicensed driving and other traffic offences); whether they were aware of being unlicensed; the degree to which they limited their driving while unlicensed; and their drink driving behaviour (Watson, 2004).

The differences among unlicensed drivers also appear to influence their crash involvement patterns. For example, in the Brisbane survey of offenders, a more deviant sub-group of offenders was identified who included the disqualified, not currently licensed and never licensed drivers. These drivers reported higher levels of prior criminal offending, alcohol misuse and self-reported drink driving (Watson, 2004). Consistent with this, an analysis of Queensland crash data indicates that never licensed and disqualified/suspended drivers have the highest risk of being involved in a crash. For example, while unlicensed drivers as a whole were found to be almost three times more likely to be involved in a crash than licensed drivers, this crash risk rose to 3.84 for the disqualified/suspended drivers and 5.38 for the never licensed drivers (Watson, 2004).

In terms of those drivers driving while disqualified, research suggests that most of these offences occur in conjunction with other offences, such as drink driving, refusing a breath test or reckless driving (NRMA, 1991). Research has also shown that there is a higher incidence of alcohol impairment among unlicensed drivers involved in serious crashes, compared to licensed drivers (Harrison, 1997; Watson, 1997; FORS, 1997). This is most pronounced among disqualified drivers, "perhaps reflecting a high representation of recidivist drink drivers in that group" (FORS, 1997).

### **3.3. Factors contributing to unlicensed driving**

Researchers have suggested that a relatively high level of unlicensed driving is primarily a function of a low perceived risk of being apprehended (Nichols & Ross, 1990; Ross, 1991). Indeed, research in Queensland has suggested that the public's perceived risk of apprehension is lower for unlicensed driving than for other offences (such as speeding and drink driving) (Watson et al, 1996; Watson, 2004).

It has also been suggested that the avoidance of punishment can have an impact on the level of unlicensed driving. Basically, the more an offender avoids detection and hence punishment for an offence the more likely he/she will think they are immune from punishment. This seems to persist even in the face of occasional evidence to the contrary (Stafford & Ward, 1993). This has been confirmed in a survey of unlicensed drivers in Queensland. Watson (2004) found that punishment avoidance predicted both the frequency of unlicensed driving and the intention to drive unlicensed in the future. A number of surveys have also indicated that the most common reasons that people drive unlicensed are employment, family reasons and lack of public transport (Job et al, 1994; Watson, 2004). For example, in Watson's (2004) survey, 58.3% of unlicensed drivers stated that they needed to drive for work purposes.

Together, the results of Watson's (2004) study suggested that both personal and social factors exert the strongest influence over unlicensed driving behaviour. At the personal level, these were: the need to drive for work purposes; exposure to punishment avoidance; personal attitudes to unlicensed driving; and anticipated punishments for the behaviour. At a social level, the strongest factors related to the social learning construct of differential association, namely: being exposed to significant others who both engage in unlicensed driving (behavioural dimension) and who hold positive attitudes to the behaviour (normative dimension).

Overall, it seems that for a number of reasons unlicensed driving is quite prevalent, particularly among disqualified drivers. It is also the case that these drivers are often also recidivist drink drivers. Therefore it is important to reduce the level of disqualified driving to improve the deterrent impact of licence sanctions and reduce the negative impact of recidivist drink drivers on road safety.

## **4. Countermeasure options**

### **4.1. Function of sanctions**

A variety of legal sanctions are applied to drink drivers throughout the motorised world, including: fines; licence actions (e.g., restriction; suspension; disqualification); rehabilitation; vehicle sanctions (e.g., alcohol ignition interlocks; vehicle impoundment); confinement (e.g., imprisonment; home detention). These sanctions aim to reduce the incidence of drink driving based on principles such as reform (specific deterrence and rehabilitation); general deterrence; incapacitation; and retribution (Beirness, Mayhew, & Simpson, 1997; Jones & Lacey, 2000; Nichols & Ross, 1990; Watson, 1998).

Reform involves an individual no longer needing to, or choosing not to, engage in criminal activity. Reform operates through two processes: rehabilitation and specific deterrence. The aim of rehabilitation is to resolve the underlying factors involved in committing an offence such as drink driving in order to produce long term behavioural change and ultimately prevent re-offence. Specific deterrence is based on the principle that the fear of further punishment will prevent a person from engaging in future illegal behaviour (Jones & Lacey, 2000).

General deterrence refers to an individual refraining from committing an offence as a result of observing others being punished or by being warned of the penalties for committing such an offence. For a sanction to be an effective general deterrent, the behaviour of the general public would have to be affected, not just the behaviour of those who have experienced the sanction directly.

The tenets of deterrent theory suggest that for both specific and general deterrence to be effective sanctions must be swift, certain and severe. That is, sanctions are most effective when current and future offenders perceive a high likelihood of apprehension, and believe that the resulting punishment will be both severe and swift (Freeman, 2005; Watson, 1998). Among the general population, the evidence suggests that it is the certainty of sanctions, rather than their severity, which appears the most important deterrent to drinking and driving (Ross, 1991).

Finally, in the case of drink driving, legal sanctions (especially licence disqualification periods and imprisonment) can act to incapacitate offenders by preventing them from driving and hence making it difficult if not impossible for them to re-offend (Beirness, Mayhew, & Simpson, 1997; Jones & Lacey, 2000). However, in the case of licence disqualification, this incapacitation effect is far from perfect, since many offenders continue to drive unlicensed.

## **4.2. Licence actions**

Licence actions include a range of restrictions that are designed to deprive offenders from the use of their driver's licence. In North America, the primary licence actions are suspension and revocation. Although these terms are used interchangeably, suspended licences are reinstated automatically after the period of suspension while a driver who has had their licence revoked must reapply at the end of the period to have it reinstated (Nichols & Ross, 1990). Although this same distinction is made in Australia, in the case of drink driving the term licence disqualification is used instead of revocation, while suspension is used less widely with drink driving offenders (Watson, 1998). In this submission licence suspension will be used in reference to North American research and disqualification will generally be used in reference to Australian research.

### **4.2.1. Full licence suspension or disqualification**

For the general population, a large volume of North American literature has demonstrated licence suspension to be one of the most effective methods for reducing further drink driving offences (Jones & Lacey, 2000; McArthur & Kraus, 1999; Nichols & Ross, 1990). In fact, compared to other sanctions, disqualification periods have proven to be the most effective short-term countermeasure that can be applied to drink drivers (Nichols & Ross, 1990; Ross, 1991). The effectiveness of licence sanctions can also extend beyond drink driving offences, as research has demonstrated sanctions such as these can improve overall road safety by reducing the general level of traffic violations and crashes by reducing the exposure of offenders (DeYoung, 1997b; Mann, Vingilis, Adlaf & Anglin, 1991; Nichols & Ross, 1990).

These findings have also been confirmed in Australia (Siskind, 1996) with a Queensland study, involving 25,000 disqualified drink drivers' traffic records, reporting that crash and offence rates were reduced by approximately two thirds during the disqualification period compared to those drivers who had their licence reinstated earlier (Siskind, 1996). A limitation of licence suspension and/or disqualification periods is that despite the general positive effects of licence removal on both drink driving behaviour and general road safety, researchers have raised concerns regarding the ability of the sanction to produce long term behavioural change (McArthur & Kraus, 1999; Watson & Siskind, 1997). Apart from incapacitating or deterring offenders from committing similar offences, licence disqualification periods do little to provide long-term solutions for problem offenders. Such offenders may need to address harmful and/or irresponsible drinking behaviours, before the drinking and driving sequence can be successfully broken. As a result, legal sanctions are increasingly being combined with other countermeasures (e.g., rehabilitation programs) to increase the prospect of establishing behavioural change.

As noted earlier, another limitation of licence disqualification is that many offenders simply drive unlicensed (Bailey & Bailey, 2000). A considerable body of North American research has repeatedly demonstrated that a large percentage of disqualified drivers continue to drive (Hedlund & McCartt, 2002; McCartt, Geary & Berning, 2003). In addition, large proportions of drink driving offenders fail to reapply for their licence when they are eligible (Ross, 1991; Voas & DeYoung, 2002).



### **4.2.2. Restricted licences**

There has been some suggestion that licence disqualification is overly punitive, especially in cases where not having a licence would cause hardship to an offender (eg., lose their employment). To address this issue, some jurisdictions including Queensland have a restricted licence ('work' licence) available for some offenders. In Queensland, 'work' licences are only issued to first time drink driving offenders. Applicants must satisfy the court that they are a fit and proper person and that they, or their family, would suffer extreme hardship if they were not allowed to drive. In Queensland, restricted licences are not available to recidivists or offenders who registered a BAC above 0.15% when apprehended. It allows disqualified drivers to drive their vehicle for work purposes under specific conditions including maintaining a zero BAC and only driving during designated hours (required for work).

Not surprisingly, some concerns have been raised about the use of restricted licences in Queensland. Firstly, the widespread use of restricted licences may undermine both specific deterrence (by failing to break an offender's reliance on driving) and general deterrence (by creating the impression that licence loss is neither certain or inevitable) (Watson & Siskind, 1997). Secondly, providing restricted licences on employment grounds only is discriminatory; it devalues the importance of educational and domestic functions (Duhs, Dray, & Watson, 1997).

CARRS-Q studies have found no statistical difference between the re-offence rates of drink drivers granted restricted licences with those receiving full licence disqualifications, at least during the term of the sanction. However, restricted licences do not deliver the same reductions in overall offences and crashes (Watson & Siskind, 1997; Watson, Siskind & King, 2000). In addition, it is important to note that Magistrates are selective about granting restricted licences, tending to favour older drivers with better driving records. Therefore the results do not necessarily support the wider use of restricted licences, since they may not be as effective with more recalcitrant offenders. Furthermore, the authors noted that further research was required to determine whether restricted licences undermine the general deterrent effect of licence loss for drink driving (Watson & Siskind, 1997; Watson, Siskind & King, 2000).

However, it is important to note that the need to drive for work proved a significant predictor of continued unlicensed driving among offenders in the recent Queensland survey of unlicensed drivers (Watson, 2004). This highlights how driving for work can act as a powerful motivator for unlicensed driving, particularly when the risk of apprehension (by the Police or the employer) is low. Consequently, there is a need to examine whether restricted licences could be enhanced to reduce unlicensed driving, without compromising the general deterrent effect of licence loss. One way to achieve this would be to require drivers on restricted licences to fit an alcohol ignition interlock, which would also incorporate a time-lock.

### **4.3. Fines**

Monetary fines are often applied in conjunction with licence disqualification to increase the deterrent effects of sanctions. However, research into the effects of fines has not received the same level of focus as licence disqualification (Brooker, 2001).

In a recent study on the effect of increased penalties for drink driving in NSW, it was found that increasing fines did not significantly reduce re-offence rates in metropolitan areas (Briscoe, 2004). This study confirms other research suggesting that increasing the severity of a penalty or sanction in isolation may have limited effect on illegal behaviours (Ross, 1991). It has also been suggested, however, that fines can be used to pay for drink driving countermeasures and programs or be used as an incentive by waiving fines in return for participation in programs such as alcohol ignition interlocks and rehabilitation (Fell, Voas, & Lacey, 2002).

#### **4.4. Imprisonment**

Another current sentencing option for drink drivers is imprisonment. Prison terms are most often applied to hard-core repeat offenders who continue to drink and drive and appear to be undeterred by fines and licence loss. However, research shows that imprisonment does not appear to decrease the likelihood of further drink driving offences in the long term (Beirness, Mayhew, & Simpson, 1997). Comprehensive reviews of the effects of imprisonment for drink driving offences in a number of countries have concluded that the effect of imprisonment is mainly due to the physical prevention from driving whilst imprisoned (Beirness, Mayhew, & Simpson, 1997). Furthermore, researchers have demonstrated that where legislation has been passed to provide mandatory imprisonment for drink driving, the option is rarely taken due to the high cost and administrative burden of prison sentences (Canada Safety Council, 1997).

#### **4.5. Vehicle sanctions**

A number of studies have found that driving while unlicensed is more prevalent among those people that have access to a vehicle (Ross & Gonzales, 1988; Watson, 2004). For example, Watson's (2004) survey of unlicensed drivers in Queensland found that 62.5% of offenders reported that they owned the car that they were driving at the time of being detected. Interestingly, 32% of those offenders who had never held a licence also reported driving a vehicle which they owned. Consistent with these findings, a number of vehicle-based sanctions are increasingly being used throughout the world to reduce the opportunity for offenders to drive without a licence and/or continue to drink drive. This strategy is particularly relevant for persistent offenders, who appear undeterred by the threat of further punishment. Vehicle sanctions can also act to incapacitate an offender making it difficult or impossible to re-offend. The main types of vehicle sanctions currently being used in different jurisdictions are: vehicle immobilisation, impoundment, and forfeiture; licence (registration) plate sanctions; and alcohol ignition interlocks. These sanctions have been implemented in different ways and in different combinations across jurisdictions and target different types of offenders (drink drivers; disqualified drivers; other unlicensed drivers).

##### **4.5.1. Impoundment, immobilisation and forfeiture**

While the terms immobilisation, impoundment, and forfeiture are often used interchangeably, vehicle impoundment generally involves the removal of a vehicle to a storage facility for specified period. Vehicle immobilisation involves securing of a vehicle by steering lock or wheel clamp and vehicle forfeiture involves the ownership of a vehicle to be forfeited, allowing authorities to sell and off-set costs. Most jurisdictions use vehicle immobilisation, impoundment or forfeiture for serious/repeat

drink driving offenders and/or driving while disqualified/suspended offenders. The process can be incremental, with increasing periods of impoundment/immobilisation or actual forfeiture being applied to recidivists (Watson, 2004).

In 1989, the Canadian province of Manitoba introduced administrative licence suspension and vehicle impoundment for drink driving (DUI) and driving while suspended (DWS) offenders. First offenders have their vehicle impounded for 30 days and repeat offenders for 60 days. In an evaluation of the program researchers were unable to disentangle the effects of two initiatives, but found encouraging results (Beirness, Simpson, Mayhew, & Jonah, 1997). For example, they found a 12% overall reduction in alcohol-related driver fatalities and 26% reduction in single vehicle night crashes (general deterrent effect). They also found a 27% reduction in repeat DWS (driving while suspended) offences in the first four years (specific deterrent effect). Researchers suggest that the general deterrent effect was likely to be primarily due to the administrative licence suspension (Beirness, Simpson, Mayhew, & Jonah, 1997).

In 1993, the US state of Ohio introduced vehicle sanctions for DUI (driving under the influence) and DWS offences. This involved DUI offenders having their vehicles sanctioned for: 90 days first offence; 180 days second offence; and forfeiture for third offence. DWS offenders had their vehicle sanctioned for: 30 days first offence; 60 days second offence; and forfeiture for third offence. The legislation allowed different counties to implement immobilisation and/or impoundment programs, prior to forfeiture.

In Franklin County, Ohio a vehicle immobilisation/impoundment program was introduced. An evaluation of the program (Voas, Tippetts, & Taylor, 1997) showed positive results, with recidivism rates reduced during the sanction period as well as for the 12 months after the sanction period ended. Specifically, effect sizes of 50–60% were observed during the sanction period and 25–35% during the post sanction period.

In Hamilton County, Ohio an impoundment only program was introduced. An evaluation of this program (Voas, Tippetts, & Taylor, 1997) showed similar results as in Franklin County. Specifically, during the sanction period, recidivism for DUI offenders was reduced by 60–80%; and during the post sanction period, recidivism was reduced by 30-50% in relation to the comparison group. These results suggest that the effect of vehicle impoundment may extend beyond the impoundment period itself. However, it has been suggested that this is not indicative of a specific deterrent effect (the offender fearing further sanctions) but rather a continued incapacitation effect due to the offender no longer having access to a vehicle: either from the driver not reclaiming the vehicle or a non-offending owner restricting access.

In 1995, California introduced vehicle impoundment and forfeiture for suspended and other unlicensed drivers. Vehicles are impounded for 30 days for first offenders with forfeiture of the vehicle for those with prior DUI or DWS offences. Results of evaluations of the Californian impoundment program suggest that impounding the vehicle of those driving while suspended may have a significant impact in reducing their risk of continued driving and ultimately involvement in crashes (specific deterrence) (DeYoung, 1999). Specifically it was found that first offenders whose vehicles were impounded had 18.1% fewer convictions and 24.7% fewer crashes in the following year than a comparison group whose vehicles were not impounded.

Also, repeat offenders whose vehicles were impounded had 34.2% fewer convictions and 37.6% fewer crashes (DeYoung, 1999). In a follow up study it was found that the threat of impounding vehicles did not necessarily change the behaviour of suspended drivers who are in a position to continue driving (general deterrence) (DeYoung, 2000). While there seems to be no evidence of a general deterrent for vehicle impoundment in this instance, the evidence of a specific deterrent does provide an argument in support of the countermeasure.

In 1999, New Zealand introduced a range of measures to target unlicensed driving, including: photo licences, compulsory carriage of licence and vehicle impoundment. The vehicle impoundment provisions allowed police to impound vehicles of disqualified and suspended drivers; never licensed and expired drivers, for 28 days if they had been previously detected by police (Watson, 2004). In the evaluation of the program (LTSA, undated) it was impossible for researchers to disentangle the individual effects of three measures. However, the overall effects were that the proportion of crash involved disqualified and other unlicensed drivers fell by two percentage points (representing a reduction of one quarter in crash involvement). There was also a 38% reduction in the number of disqualified driving offences detected by police in the three years after implementation. It is important to note that the number of vehicle impoundments remained relatively high during the period, for reasons that remain unclear.

In Queensland, police have the power to impound vehicles of drivers who commit a prescribed 'hooning' offence (eg, careless driving, excessive noise, racing). Offender's vehicles are impounded at the time of the alleged offence for a period of 48 hours. Repeat offences can incur a court ordered period of impoundment for three months. Continued recidivism could mean an offender's vehicle is forfeited to the state. In the period between November 2002 and September 2004, 1549 vehicles were confiscated, 20 had been impounded for repeat offences and three were eligible to be forfeited to the state (Armstrong & Steinhardt, 2006).

In terms of its effectiveness of the Queensland program, no formal evaluation has been conducted. However, it has been suggested that amongst car enthusiasts there is a degree of uncertainty as to what constitutes a prescribed offence and a feeling that the sanction may be overly punitive (Armstrong & Steinhardt, 2006). It should also be noted that there may be differences between 'hooning' offenders and recidivist drink drivers and unlicensed drivers, in terms of their psychological and socio-demographic characteristics. If so, this would suggest that a different approach may be required to the implementation of impoundment for recidivist drink drivers and unlicensed drivers.

#### ***4.5.1.1. Implementation difficulties***

Despite the potential benefits associated with using vehicle impoundment and/or forfeiture there are a number of limitations and implementation difficulties that need to be considered. Firstly, some have argued that vehicle impoundment and forfeiture is overly punitive, particularly for the offender's family. Also, in North American programs, it has been shown that at least half the vehicles driven by suspended drivers are owned, in part or in whole, by a non-offender (Voas & DeYoung, 2002). Most laws provide for the impoundment of non-offender owned vehicles and according to

Voas, Tippetts, and Taylor (1999) the courts will generally support this if the owner knew that the driver was unlicensed or under the influence at the time.

However, in cases where the owner was not aware of the driver's circumstances the onus is on the owner of the vehicle to provide evidence of this and to agree to conditions of release. These conditions often include agreeing to not allow the offender access to the vehicle while their licence is disqualified. These agreements seem to be relatively successful (Peck and Voas, 2002; Voas, Tippetts, & Taylor, 1999); however, preliminary results from a vehicle immobilisation program in Ohio, indicate that judges failed to apply the sanction uniformly, particularly when offenders were driving vehicles belonging to other people (Stewart, Voas & Taylor, 1995). Another issue is that nearly all successful impoundment programs provide for the impoundment of a vehicle at the time of offence. Those programs that delay impoundment until after the court proceedings can result in offenders selling the vehicle or transferring ownership to family or friends. Moreover, this brings up the issue of natural justice where it could be argued that the alleged offender is being punished prior to being proven guilty by a court. In an attempt to deal with this issue, some jurisdictions have introduced legislation that prohibits offenders from transferring vehicle titles following a DUI or DWS arrest (Voas, 1992; Voas, Tippetts, & Taylor, 1999; Peck and Voas, 2002). In New Zealand impoundment is used for unlicensed driving offences rather than drink driving. They argue that in the case of a disqualified driver the police are merely enforcing an already existing court order (Elliot, 2003). This could lessen concerns that people are being punished before being found guilty by the courts.

Vehicle impoundment has also caused some jurisdictions problems in terms of recovering costs and vehicle storage (LTSA, undated; Peck and Voas, 2002; Voas, Tippetts, & Taylor, 1999). Peck & Voas (2002) outline that for many jurisdictions vehicle impoundment was functionally equivalent to forfeiture because many drivers failed to retrieve their vehicles after impoundment. The study identified cities in California where as many as half the vehicles impounded for 30 days were never picked up. Most impoundment programs involve a user pay system. Under this system the offender pays for the storage, towing etc. at the end of the impoundment period in order to have the vehicle released. It has been suggested that many DUI and DWS offenders cannot afford to pay these fees and/or are driving vehicles of little value (Voas, 1992; Peck and Voas, 2002).

Despite the availability of vehicle-based sanctions and their potential effectiveness in the reduction of DWS and DUI, their usage appears to be low. This seems to be largely due to administrative and practical problems associated with their implementation. Further investigation is required into the implementation issues related to impoundment programs. It has also been suggested that data specifically relating to impoundment needs to be collected as part of the program in order to enhance future evaluations (Voas & DeYoung, 2002).

#### **4.5.2. Licence (registration) plate sanctions**

A number of jurisdictions in the United States have implemented licence (registration) plate sanctions for suspended drivers. In Oregon and Washington, the police were empowered to place a 'zebra' sticker on the registration plate of suspended drivers when detected. If the driver was unable to show within 60 days that he/she had a valid

licence or that the vehicle was registered to another person, the vehicle's registration was cancelled (Clayton, 1997). An evaluation of these programs suggested that they were effective in reducing the level of moving violations and convictions for drink driving and driving while suspended, among offenders (specific deterrence). A general deterrent effect was only found in Oregon. The researchers attributed this to differences in the way the law was implemented and enforced in each state (Voas, Tippetts & Lange, 1997). For example, in Oregon, the vehicle driven at the time of the DWS offence was stickered whether it was owned by the offender or not. In Washington however, the vehicle was only stickered if it was owned by the offender. There was also a lack of data on the administration of the program in Washington making an evaluation of the effectiveness harder to achieve. Researchers reported that in Oregon where data was available the administration of the program went smoothly, however both these programs only operated for limited periods and have now lapsed (Clayton, 1997).

There is also some evidence that impounding registration plates can reduce recidivism among repeat offenders. This approach tends to present fewer practical difficulties to enforcement agencies than impounding the vehicle itself (Clayton, 1997). Given the limited trials conducted to date, it is difficult to determine whether licence (registration) plate sanctions would represent a cost-effective option in the Australian context. Developments in the area should continue to be monitored.

Voas & DeYoung (2002) reviewed various vehicle sanction programs in California, Minnesota, New York, Ohio, Oregon & Washington and concluded that all programs demonstrated reductions in recidivism which was associated with denying offenders the use of their vehicle for 1 – 6 months. However, they found that the evidence for vehicle impoundment was more compelling than that for vehicle forfeiture, licence plate impoundment or licence plate marking.

### **4.5.3. Alcohol ignition interlocks**

An alcohol ignition interlock is a device that measures an individual's blood alcohol content. The device is connected to the ignition of a vehicle and is designed to prevent the starting of a vehicle in the event that the driver's blood alcohol concentration exceeds a predefined limit. Interlocks are administered either judicially or administratively and are generally a condition of licence renewal (Freeman, 2004; Sheehan, Watson, Schonfeld, Wallace, & Partridge, 2005).

In contrast to other countermeasures that focus primarily on traditional deterrence-based strategies, interlocks provide drivers with the opportunity to develop and practice strategies to avoid drink driving (Weinrath, 1997). In addition, the device allows drivers to re-enter the licensing system legally rather than permitting offenders to continue to drive unlicensed without supervision (Beirness & Simpson, 1991). Alcohol ignition interlock programs also aim to prevent a vehicle being started should the driver exceed the previously specified BAC level (incapacitation), to break the connection between drinking and driving, and offer many offenders the opportunity to maintain employment (Beirness & Simpson, 1991).

The majority of interlock studies have demonstrated significant reductions in recidivism whilst the interlock is installed in participants' vehicles (Bjerre, 2002; Frank, Raub, Lucke, & Wark, 2002; Rauch, Berlin, & Berlin, 2002; Vezina, 2002).

For example, an evaluation of the interlock program in Quebec (Vezina, 2002) reported a reduction in recidivism of 80% for first-offenders and 74% for repeat offenders while ignition interlocks were fitted on their vehicles. Researchers evaluating a program in Sweden (Bjerre, 2002) found that whilst in the program there was no recidivism among the participants and that alcohol consumption had reduced significantly.

It is important to note that these studies may have an inherent bias in the treatment group. In many programs, including those evaluated in Sweden and Quebec, participation in the program is voluntary. It is possible that those in the treatment group are more motivated to change their drink driving behaviour. Also, even in programs where an interlock is a condition of licence reinstatement, such as that in Illinois, drivers who are not motivated may simply choose not to reinstate their licence (Frank et al., 2002).

In an attempt to control for motivation, researchers in Maryland conducted the only complete randomised interlock trial (Beck, Rauch, and Baker, 1997). The study involved 1396 repeat drink driving offenders who were randomly assigned to one of two treatment groups: either early reinstatement of their licence with the condition of an interlock being installed and attendance of Alcohol Anonymous (AA) meetings, or a comparison group which completed a drink driving rehabilitation program. The researchers reported a 60% reduction in recidivism rates in the interlock and AA condition compared to the comparison group. The results of this study seem to indicate that the interlock program does have an effect on recidivism rates even after the effects of motivation are controlled for.

It is important to note that the reduction in recidivism found in these studies does not seem to continue once the interlock is removed; following this the recidivism rates become comparable between interlock and non-interlock drivers (Bjerre, 2002; Frank et al., 2002; Rauch et al., 2002; Vezina, 2002). Overall, the research suggests that interlocks are effective in incapacitating individuals, but the device does not appear to produce long-term behaviour change or rehabilitation (Frank et al., 2002; Rauch et al., 2002). Indeed, there is some evidence that interlocks may only delay recidivism, with re-offence rates returning once they are removed (Tippetts & Voas, 1997; Weinrath, 1997). This suggests that the reduced recidivism related to interlocks may be primarily an incapacitation effect rather than a reform effect (Watson, 1998).

More recently, a small sample of current interlock trials in North America (Maryland, Alberta) and in Europe (Sweden) are combining treatment, rehabilitation and intensive supervision programs with interlock installation with the aim being to increase the possibility of long-term behavioural change (Beck et al., 1997; Marques, Tippetts, Voas, & Beirness, 2001). Although most of these programs have not been comprehensively evaluated, early indications suggest that programs provide positive results including a reduction in post-interlock recidivism (Marques et al., 2001; Voas, Tippetts, & Taylor, 1999).

In 2001, the first trial of alcohol ignition interlocks was conducted in Queensland. The study aimed to determine whether interlocks in combination with rehabilitation were more effective than the rehabilitation alone in reducing drink driving. The study provided some insight into why interlocks are only effective while installed in offenders' vehicles. The high alcohol consumption levels of some participants

suggest alcohol misuse or dependency problems, which highlights the need to incorporate rehabilitation into the program (Freeman, 2005).

There are a number of limitations to alcohol ignition interlock programs. Firstly, the majority of current interlock programs are voluntary with offenders being offered reductions in licence disqualification periods as an incentive to participate in the programs. As a result many voluntary interlock programs suffer from low participation rates. It appears that the privilege of driving legally may not be a strong motivator to have an interlock installed (Beirness, 2001). Further incentives or procedures may be needed to ensure interlock participation rates greatly increase.

Another approach is a mandatory interlock program, which may result in increased participation rates (Beirness, 2001). In Victoria, a mandatory interlock program applies to repeat offenders and some serious first time offenders (eg BAC over 0.15%; culpable driving). When offenders apply to have their licence reinstated following disqualification, the Magistrate may order an interlock be installed as a condition of re-licensing (Sheehan, Watson, Schonfeld, Wallace, & Partridge, 2005). The program is in the early stages; however participation rates are informally reported to be high.

A noted concern, however, is that in the jurisdictions where mandatory programs exist some magistrates do not routinely order offenders to install the device and even when ordered by the courts, some offenders simply do not comply with the sentence requirements (Beirness, 2001).

It has been suggested that interlocks could form part of a comprehensive system needed to deal effectively with convicted drink driving that includes not only interlock installation, but also rehabilitation and other combinations of sanctions (Sheehan, Watson, Schonfeld, Wallace, & Partridge, 2005).

#### **4.6. Rehabilitation**

As discussed previously, it has been argued that legal sanctions such as licence and vehicle actions fail to produce long term behavioural change in drink drivers (Frank et al., 2002; McArthur & Kraus, 1999; Rauch et al., 2002; Watson & Siskind, 1997). Rehabilitation programs were developed in an attempt to address this issue, to provide an alternative to expensive and ineffective prison terms and to deal with the associated problems of the offender's drinking behaviour (Beirness, Simpson, & Mayhew, 1997; Ferguson, et al., 1999).

Drink driving rehabilitation programs attempt to change offenders' drink driving behaviour through education and/or treatment (Wells-Parker, 1994). Education programs are based on the assumption that offenders drink and drive due to lack of knowledge and therefore make poor decisions. The aim of these programs is to separate drinking from driving by providing participants with the knowledge and skills to avoid further offending behaviour. This is achieved by giving participants a better understanding of alcohol related impairment and the risks associated with drink driving (Popkin, 1994; Wells-Parker, 1994). The programs also aim to increase awareness of the seriousness of excessive alcohol consumption in an attempt to reduce alcohol consumption in the participants (Wells-Parker, 1994).

Psychotherapy or counselling-based programs target an offender's drinking problems (Popkin, 1994). These programs are based on an assumption that offenders drink and



drive due to a prevailing drinking problem (Popkin, 1994). Psychotherapy programs usually involve individual face-to-face contact in which effectiveness is measured by reductions in alcohol consumption (Popkin, 1994).

In most jurisdictions, the majority of current rehabilitation programs involve a combination of these approaches (Homel, Carseldine, & Kearns, 1988; Sanson-Fisher, Redman, Homel, & Key, 1990; Ferguson et al, 1999). Rehabilitation programs differ in how they are delivered across jurisdictions. Some are mandated by law and re-licensing is contingent upon their completion. Others require attendance in programs at the discretion of the court (as is the case in Queensland) or are voluntary. Furthermore, such programs are usually used in conjunction with other sanctions such as licence disqualification periods and fines (Ferguson et al., 1999).

Traditionally, there have been difficulties regarding research into the effectiveness of drink driving rehabilitation programs to reduce further offending. A number of early evaluations both in North America and Australia reported that such programs did not reduce the prevalence of repeat offending (Foon, 1988; Jones & Lacey, 1991; Sanson-Fisher et al., 1986) and that licensing sanctions were a more effective countermeasure in reducing drink driving (Popkin, 1994). For example, Foon (1988) reviewed 28 drink driving rehabilitation programs and reported that there was little evidence that such interventions reduce further drink driving offences. Similarly, Sanson-Fisher, et al. (1986) examined the goals and effectiveness of 27 drink driving rehabilitation programs operating in both Australia and New Zealand. In these early evaluations, researchers questioned the likely cost-effectiveness of rehabilitation programs.

Despite these early negative results, more recent studies have demonstrated that drink driving rehabilitation programs can reduce recidivism and alcohol-related crashes (DeYoung, 1997a; Wells-Parker, Bangert-Downs, McMillan and Williams, 1995). For example, Wells-Parker et al., (1995) conducted a meta-analysis of 215 drink driving rehabilitation programs. This study indicated that on average rehabilitation programs produce a 7–9% reduction in drink driving offences and alcohol-related crashes. The review suggested that those rehabilitation programs that incorporate a combination of intervention aspects were the most effective (Wells-Parker et al., 1995).

The most promising indications of the effectiveness of rehabilitation programs involve interventions that have focused primarily on recidivist drink drivers (DeYoung, 1997a; Siskind, Sheehan, Schonfeld, and Ferguson, 2000). In addition, DeYoung (1997a) found that the combined use of rehabilitation with licence actions was associated with the lowest recidivism rates for both first and repeat drink driving offenders.

In Queensland, the rehabilitation program available to drink driving offenders is the “Under the Limit” (UTL) program. This 11-week program is offered by the courts in conjunction with a probation order. The program aims to help drink driving offenders establish strategies to separate future episodes of drinking from driving. Development of the UTL program was based on best practice models for the treatment of drinking and drink driving and used a cognitive behavioural treatment focus in its approach (Sheehan, Schonfeld, & Davey, 1995). A major outcome evaluation of the UTL program that compared the recidivism rates for offenders’ completing the program

with those of a control group, Siskind, et al. (2000), found that the UTL program reduced recidivism among repeat offenders but did not produce any positive change in first offenders.

In an evaluation of the UTL program's impact on social and behavioural issues of offenders, Ferguson, Schonfeld, Sheehan, & Siskind (2001) found that there were no differences in lifestyle measures, knowledge, attitudes or reported drinking between the group of offenders who participated in the program and a control group of offenders. There was however change in reported drink driving in that those who completed the program were significantly more likely to report the intention to avoid drink driving and to have engaged in fewer instances of drink driving in the previous six months.

Another potential rehabilitative countermeasure for drink driving is brief intervention. Although brief interventions can vary in their design and implementation, "they are usually short (5-20 minutes) focused counselling sessions that incorporate motivational techniques, feedback about the problems associated with alcohol, and setting recommended drinking limits" (Sheehan, Watson, Schonfeld, Wallace, & Partridge, 2005, p.45).

Meta-analyses (Bien, Miller, & Tonigan, 1993; Wilk, Jensen, & Havighurst, 1997) of brief interventions indicate that they contribute to reduced alcohol consumption levels. In study by Wilk et al. (1997) it was found that heavy drinkers receiving brief interventions were two times more likely to moderate their drinking when compared with drinkers receiving no intervention. A major advantage of brief interventions is the possibility of providing effective treatment at relatively low cost (Wutzke, Shiell, Gomel, & Conigrave, 2001). It must be noted that evaluations of brief interventions are not directly related to drink driving and outcome measures often involve levels of alcohol consumption. However, because there is a link between alcohol consumption, alcohol dependence and drink driving, brief interventions are worth further consideration as a potential drink driving countermeasure. For example, it may be feasible to implement a brief intervention at the time when drink driving offenders return to have their licence reinstated.

Overall it seems that rehabilitation can be an effective countermeasure for drink driving. This is especially so if it applies a multi-strategy approach and is combined with other sanctions such as licence disqualification. It is still the case however, that due to the lack of homogeneity among drink driving offenders no one program will work for all (Sheehan, Watson, Schonfeld, Wallace, & Partridge, 2005).

#### **4.7. Improved detection and compulsory carriage of licence**

Research indicates that there is a need to improve the detection of unlicensed drivers at the roadside. In Queensland, developments have been made in this area such as the introduction of MINDA, a system providing a link with some police vehicles and Queensland Transport's licence and registration databases (Travelsafe, 1988). Evaluations of MINDA have proven very successful with a fourfold increase in the level of detection for unlicensed driving, unregistered vehicles and outstanding warrants (Watson et al., 1996). Continued development in this area is required to enhance the ability of police to verify the validity of licences at the roadside.

Despite these technological developments, research has highlighted a need for more widespread checking of driver's licences. The perceived risk of detection for disqualified and other unlicensed driving in Queensland appears relatively low. Indeed, the recent CARRS-Q survey of unlicensed drivers indicated that around one-third of the offenders failed to have their licence checked, on at least one occasion, when they came into contact with the police (primarily through RBT) (Watson, 2004). This perception of low detection risk could ultimately undermine the specific and general deterrent value of licence sanctions. This experience can also contribute to punishment avoidance which as mentioned earlier could contribute to higher frequency of unlicensed driving.

A difficulty in conducting more widespread licence checking in Queensland is the lack of compulsory carriage of licence laws. For example, while the police have the power to randomly check licences in Queensland, it is difficult for them to do so systematically because open licence holders are not, in practice, required to carry their licence when they drive. New South Wales and Tasmania currently require drivers to carry their licences, which facilitates the checking of licences in those states.

A strong argument exists for the introduction of compulsory carriage of licence for open licence holders and for police to conduct more widespread random checking of licences at the roadside. Without these initiatives it will remain difficult to improve the detection of unlicensed driving, heighten the drivers' perceived risk of detection and hence increase the deterrent value of licence sanctions.

#### **4.8. Electronic licences**

Electronic driver's licences are based on "smart card" technology and can serve as the ignition key of a vehicle and contain driver's licence information such as licence status, licence type, and any licence restrictions or conditions. When integrated with the electronic engine control of a vehicle, it can serve as an ignition interlock device preventing an individual who is not supposed to drive from driving (e.g., if they have a disqualified or suspended licence). This technology is currently being developed and if it is implemented could have a significant impact on road safety (Watson, 2004). CARRS-Q is aware that Queensland Transport is examining these issues as part of their development of the new Queensland (Digital) Driver's Licence.

### **5. Research needs**

Further research is needed into current and potential countermeasures for recidivist drinking and disqualified drivers. This submission has highlighted a number of issues that requires further research:

- the effectiveness of restricted licences and whether they undermine the general deterrent impact of licence loss;
- the feasibility of enhancing the management and enforcement of restricted licences by the use of ignition interlock technology;
- the feasibility of introducing brief intervention models of rehabilitation in the context of drink driving;

- the role of technology in preventing illegal driving (eg, electronic licences); and
- enhancing the effectiveness of impoundment programs for different types of offenders (including cost effectiveness of impoundment for ‘hooning’ and implementation issues).

It is also necessary to pursue efficient and comprehensive collection of drink driving, unlicensed driving and impoundment (if implemented) data so as to ensure thorough and methodologically sound evaluations. There should also be a continuation of research monitoring the profile of recidivist drink and unlicensed drivers. A better understanding of the characteristics and motivations of these offenders will improve countermeasure development and ultimately improve road safety outcomes.

## 6. Conclusions

Current drink driving countermeasures (particularly RBT and licence disqualification) have been shown to be effective among the general driving population and many offenders, but not necessarily with ‘hard-core’ recidivists. As such, there is a need to develop more comprehensive and integrated systems for managing drink driving and other recidivist offenders, which recognises their unique characteristics.

CARRS-Q recently completed a major review of the drink driver rehabilitation and education program in Victoria. This review highlighted the need for a multi-strategy approach to deal with drink driving offenders including the following issues relevant to Queensland:

- the use of a graduated structure of financial penalties and licence disqualification, which can be easily understood by both offenders and the general community;
- the use of vehicle sanctions, such as alcohol ignition interlocks, in combination with rehabilitation for recidivist offenders; and
- the ongoing monitoring of the performance of offenders, utilising either court-based processes such as Probation or administrative systems run by driver licensing authorities (Sheehan, Watson, Schonfeld, Wallace & Partridge, 2005).

The available evidence suggests that vehicle impoundment could provide a further effective option to incorporate into offender management systems. For example, vehicle impoundment could be considered as an appropriate penalty for:

- recidivist drink driving offenders who fail to comply with the requirements of an alcohol ignition interlock order;
- recidivist drink driving offenders who are unlikely to, or unable to, comply with an alcohol ignition interlock order (eg. based on the assessment of a Magistrate or by their own admission); and
- recidivist unlicensed drivers.

Alternatively, it may be more effective to use vehicle impoundment and alcohol ignition interlocks in tandem. For example, vehicle impoundment could be applied during the offender's disqualification period and the alcohol ignition interlock required upon re-licensing.

In addition, it is feasible that the effectiveness of restricted licences for (first time) offenders could be enhanced by the application of ignition interlock technology to act as a barrier to illegal vehicle use. Other technological advances such as electronic licences should also be monitored.

Finally, the available evidence suggests that the perceived risk of being detected for disqualified and other unlicensed driving in Queensland is relatively low. Accordingly, there is need to develop improved detections methods, such as the introduction of compulsory carriage of licence for open licence holders, to enable the more widespread checking of licences by the police.

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