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## **Immediate licence suspension to deter high-risk behaviours**

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### **Abstract**

Immediate licence suspension, commonly referred to as administrative licence suspension in North America, is an increasingly common sanction used in a number of Australian jurisdictions. While differences exist in the way this sanction is applied across jurisdictions, it essentially involves the immediate suspension of the licence following detection by the police for certain offences. Typically the sanction has been used as a response to high-level drink driving offences. A review of the empirical evidence suggests strong support for the effectiveness of administrative licence suspension laws. The laws have been found to have both a general and specific deterrent effect. Specifically, introduction of the laws has been found to be associated with reductions in fatal and injurious crashes, both overall and alcohol related, as well on a number of measures often used as a proxy for alcohol-related crashes including night-time crashes, single-vehicle crashes, and crashes among younger drivers. Furthermore, the laws have shown evidence of motivating behaviour change among drink driving offenders, with substantial reductions in drink driving recidivism and self-reported impaired driving, particularly when combined with alcohol treatment programs. Options for future expansion of the laws to other offence types including high-range speeding and dangerous driving offences and more widespread implementation of the laws throughout jurisdictions are explored.

### **Keywords**

Immediate licence suspension, administrative licence suspension, drink-driving, speeding, dangerous driving, unlicensed driving

### **Introduction**

Road trauma is a leading cause of premature death and injury in Australia and has significant social and economic costs. Of particular concern is the causative role of high-risk behaviours such as impaired driving and speeding regularly cited as primary factors in many road fatalities (ATSB, 2001; Chikritzhs, Stockwell, Heale, Dietze & Webb, 2000; Crombie, 2002; Roads and Traffic Authority, 2000). Of fatally injured drivers and motorcycle riders in Australia in 1998, 18% had a blood alcohol concentration (BAC) of .15 g/100ml or greater, compared to 8% with a BAC between .05 and .149 (ATSB, 2001). In other words, of those fatally injured drivers with a BAC above the legal limit in Australia of .05, 68% were extremely intoxicated. A similar trend is observed among drivers and riders involved in fatal crashes, with 11% recording a BAC of .15 or greater, compared to 7% with a BAC between .05 and .149 (ATSB, 2001). More recent state-level data reveals that this pattern is continuing. In 2003, 33% of fatalities on Queensland roads had a BAC above .05 and 24% above .15 (Queensland Transport, 2005). Further, in 2006 in New South Wales 22.5% of fatal crashes involved alcohol (Road Traffic Authority, 2006).

There is also consistent evidence highlighting the relationship between increased vehicle speed and increased crash risk and crash severity (Aarts & van Schagen, 2006; Elvik,

Christensen, & Amundsen, 2004; Kloeden, McLean, & Glonek, 2002; Kloeden, McLean, Moore, & Ponte, 1997; Lynam & Hummel, 2002; Taylor, Lynam, & Baruya, 2000). Further, this relationship appears to be exponential and more marked on roads with higher posted speed limits (Fildes, Rumbold, & Leening, 1991). Substantial speed variances between vehicles has also been found to be associated with increased crash susceptibility (Cirillo, 1968; Kloeden et al., 2002; Kloeden et al., 1997; Research Triangle Institute, 1970; Solomon, 1964). In Queensland, excessive speed has been found to be a contributing factor in as much as 27.2% of fatal crashes and a large proportion of injury crashes (Queensland Government, 2005; Queensland Transport, 2007).

Licence sanctions, in which offending drivers are not allowed to drive for a specified period, are the most common form of punishment for serious high-risk driving behaviours such as drink driving and speeding. A number of licence sanction options are available to restrict the driving privileges of offending drivers. The two major types are suspension and cancellation. The distinction between the two types of sanction is that under licence suspension, once the specified period has lapsed, the suspended licence is automatically reinstated, while under licence cancellation the offender is disqualified from holding a licence and must go through the appropriate channels to reapply for their drivers licence (Nichols & Ross, 1990). The terms revocation and disqualification are often used interchangeably to describe the process of licence cancellation. For the purpose of this paper, we will use the terms most commonly used in the Australian context; suspension and cancellation.

Licence suspension can be administered through the judicial system or administratively. Licence suspensions were traditionally handled judicially, with suspension contingent upon conviction and offenders allowed to drive up until the case is heard in court (Nichols & Ross, 1990). More recently, in North America and Australia, there has been a shift toward administrative licence suspension processes. In administrative licence suspension, the licence is suspended by the police or licensing authorities without the driver being convicted by the court. Thus, the licence suspension process is achieved more rapidly. The suspension is independent of the penalties received if, or when, the case is heard in court, and the offending driver retains the right to due process and the right to appeal their case in the judicial system (Henderson & Kedjidan, 1992; NHTSA, 2003).

Administrative licence suspension sanctions vary in the time lag between the commission of an offence or infringement and the actual suspension of the licence. Immediate licence suspension laws allow the police or licensing authority to instantly suspend an offender's licence at the site of a specific offence. That is, the licence of the offending driver is suspended, and in some cases even confiscated, at the point of detection for the infringement. Other administrative licence suspension sanctions are delayed, with the suspension occurring in the days or weeks following the infringement, but before or instead of the case being heard judicially. For both immediate and delayed licence suspension there is variation in the amount of discretion involved in the application of subsequent penalties, including suspension periods, fines and demerit point loss. Automatic licence suspension refers to mandatory penalties applied without discretion on the part of the officer or licensing authority. In other cases, discretion is afforded to officers and licensing authorities as to whether to impose a licence suspension and, in cases where licence suspension does result, the extent of the subsequent penalties.

Immediate licence suspension sanctions have traditionally been applied to drink driving offences, where drivers refuse a chemical test or their BAC exceeds a specified limit. There

are a number of differences in immediate licence suspension laws depending on the jurisdiction, including the BAC level at which licences are immediately suspended, the length of suspension, whether subsequent penalties are mandatory or discretionary, and whether there is physical confiscation of the licence. Immediate licence suspension provides a swift and certain penalty and protects the public by restraining offenders from repeating a traffic offence or committing another. However, a major limitation of immediate licence suspension rests in the fact that many suspended drivers do not refrain from driving. Some have also argued that the laws are a denial of natural justice in that the penalty is imposed before the driver has the opportunity to have their guilt or innocence determined by a court.

This study forms part of a larger program of research investigating the effectiveness of immediate licence suspension sanctions and possible directions for the future expansion of the laws. This paper reviews the empirical evidence regarding immediate licence suspension sanctions throughout the world and reviews the application of such laws in Australia. The paper also reports on findings from a consultative process with Australian police organisations and traffic authorities and concludes with a number of recommendations for legislative and statutory changes necessary for the development of new or enhanced directions in enforcement policy.

### **Application of immediate licence suspension sanctions in Australian jurisdictions**

A number of Australian jurisdictions currently implement immediate licence suspension laws for a range of traffic offences. Primarily the laws are a response to high-range drink driving offences. In some states, immediate licence suspension sanctions also apply to high-range speeding offences and dangerous driving charges. A number of jurisdictions are yet to implement immediate licence suspension sanctions including Western Australia, the Australian Capital Territory and Tasmania.

In both Victoria and New South Wales, immediate licence suspension sanctions apply to drivers detected with a BAC in excess of 0.15 g/100ml, those who refuse or attempt to alter a breath or blood test or to second or subsequent offences. New South Wales extends the sanction to drivers detected with a BAC in excess of 0.08 g/100ml. Further, immediate licence suspension options are also available for high-range speeding offences (more than 45km/h over the posted limit) in New South Wales. While automatic licence suspension penalties exist for high range speeding offences in Victoria, these sanctions are not immediate.

In recent years, both Queensland and South Australia have enacted legislation allowing for immediate licence suspension for a range of offences. In Queensland, offences for which immediate licence sanctions apply include high-range drink driving offences (BAC 0.15 g/100ml or greater), failure to provide a breath or blood sample, being charged with a low level drink driving offence while another similar charge is pending, and dangerous driving offences with an accompanying BAC of greater than 0.05 g/100ml. Further, these sanctions apply to out-of-state drivers also, if the offence was committed in Queensland.

In South Australia, immediate licence suspension laws apply for drink driving offences with a BAC of 0.08 g/100ml or greater, with offenders immediately losing their licence for six months for offences with a BAC ranging from 0.08-0.149 and for 12 months for offences with a BAC of 0.15 or greater. In addition, immediate licence suspension also applies to second or subsequent low-range drink driving offences, and for high-range speeding offences (45km/h

or more above the posted speed limit) detected through non-automated speed enforcement methods. Finally, in the Northern Territory immediate licence suspension laws exist for first time drink driving offences with a BAC at or above 0.15 g/100ml, repeat drink driving offences with a BAC at or above 0.08 g/100ml, or for refusing to supply a breath test or blood sample.

### **Review of the effectiveness of immediate licence suspension**

A review of the local and international literature was conducted to investigate the effectiveness of immediate licence suspension options. Most of the research comes from North American studies of administrative licence loss for drink driving offences. Indeed, there were no Australian evaluations of the effectiveness of immediate licence suspension. Despite a range of methodological difficulties, almost all of the studies reviewed found significant reductions in overall fatalities, alcohol-involved fatalities, or a surrogate measure of alcohol involved crashes (such as night-time single-vehicle crashes), associated with the introduction of immediate licence suspension. Furthermore, most studies also demonstrated reductions in recidivism, particularly when combined with alcohol treatment.

Immediate licence suspension sanctions have been argued to have both a general and specific deterrent effect. In relation to drink driving offences, the reduction in overall fatalities and injuries associated with immediate licence suspension is argued to be evidence of a general deterrent impact of the laws, while the reduction in alcohol-involved fatalities and injuries, as well as recidivism, is argued to be evidence of a specific deterrent impact (Voas, Tippetts & Fell, 2000).

#### *Impact on Crash Fatalities and Injuries*

A number of studies have highlighted the impact of immediate licence suspension laws on alcohol-involved fatalities and injuries. Rogers (1995), evaluating immediate licence suspension laws in California, reported a 12.7% reduction of alcohol-involved crash fatalities and injuries one year after implementation of the laws. In neighbouring Nevada, a 41% reduction in alcohol-involved fatalities was found (Henderson & Kedjidan, 1992), while in the Canadian province of Ontario, Mann, et al. (2002) reported a significant 17.3% reduction in the proportion of alcohol-involved fatalities. Eisenberg (2003) also found significant reductions in the incidence of both high-range alcohol fatalities and any alcohol-involved fatalities associated with implementation of the laws. Finally, Villaveces, et al. (2003) reported significantly reduced rates of both overall and alcohol-involved fatalities when administrative license suspension was enacted.

A number of studies have also evaluated the impact of immediate licence suspension on overall fatality and injury rates, as well as outcomes often used as surrogate measures for alcohol involvement in a crash, such as night-time and single-vehicle accidents. In a nationwide study conducted in the United States, Legge and Park (1994) found a significant reduction in overall fatalities, and in particular single-vehicle night-time fatalities, associated with implementation of immediate licence suspension laws. In separate Californian studies, Rogers (1995) found an 11.6% reduction in night-time fatalities and injuries and a 10.1% reduction in single-vehicle night-time fatalities and injuries following the implementation of the laws, while McCarthy (2003) found a significant reduction in older driver fatalities. Finally, Muller (1989), in an evaluation conducted in Oklahoma, reported an estimated 7 to 10% reduction in fatalities associated with implementation of the sanction.

There is also evidence to suggest effectiveness of administrative licence suspension sanctions, even if not immediate. In a meta-analysis, Wagenaar, Zobeck, Williams and Hingson (1995) reported a 5% reduction in alcohol-involved fatalities, as well as a 5% reduction in night-time fatalities, associated with the introduction of these laws. In another comprehensive review, Whetten-Goldstein, Sloan, Stout and Liang (2000) found reductions in overall fatalities, single-vehicle night-time fatalities, and alcohol-involved fatalities among older drivers, associated with administrative licence suspension laws. Finally, Zador, Lund, Fields and Weinberg (1989), using cross-sectional time-series data from 48 states from 1978 to 1985, reported a significant effect of administrative licence suspension on highway fatalities.

Not all studies have produced findings supporting the effectiveness of immediate licence suspension in reducing overall fatality and injury rates. Chaloupka, Saffer and Grossman (1993) and Noland and Karlaftis (2005) both found no evidence that implementation of the laws led to a reduction in overall fatalities. Similarly, while Eisenberg (2003) found a significant impact of the laws on alcohol-involved fatalities, no significant reductions in total fatalities, weekend night time fatalities, single-vehicle fatalities or fatalities amongst younger drivers were observed. Finally, Ruhm (1996) found no significant impact of the laws on overall fatalities and suggested that any perceived evidence of effectiveness was most likely a product of the combined influence of numerous laws and interventions implemented contiguously.

#### *Impact on Drink Driving Recidivism*

In addition to reducing rates of alcohol-related fatalities and injuries, the specific deterrent effect of immediate licence suspension laws can also be measured by assessing the impact of the laws on rates of drink driving recidivism. In an Ohio study, Voas, Tippetts and Taylor (2000) found a significant reduction in recidivism following introduction of the laws. First time offenders drink-driving recidivism decreased from 15% to 5% while an even greater reduction was observed for repeat offenders with recidivism dropping from 25% to 7%. Even when the sanctions were not immediate, Lacey, Stewart, Marchetti and Jones (1990) found a significant 39% reduction in drink driving recidivism contingent upon enactment of the laws in Nevada. Finally, in a Canadian study, Beirness, Simpson, Mayhew and Jonah (1997) also reported reductions in drink driving recidivism.

There is also evidence to suggest that immediate licence suspension laws can significantly reduce rates of self-reported alcohol-impaired driving and subsequent alcohol-related crash involvement. Mann, et al. (2000) reported a significant 35% reduction in self-reported drink driving behaviour following implementation of the laws. Also, in a retrospective study conducted in California, Rogers (1997) reported a significant 30% reduction in subsequent alcohol-related crashes among both first-time and repeat offenders suspended under the sanction compared to similar offenders detected prior to the implementation of the laws.

However, not all studies report positive findings of administrative licence suspension laws on drink driving recidivism. Stewart, Gruenewald and Parker (1992), found no significant impact of the laws in either Mississippi or Louisiana. They did however find a significant reduction in drink driving recidivism in North Dakota following the introduction of the laws.

#### *Impact in conjunction with other interventions and/or laws*

One of the difficulties in evaluating the effectiveness of immediate licence suspension laws is the fact they are often implemented concurrently with a number of other laws, programs and

interventions. Thus, it is often difficult to disentangle the separate effects of each intervention or law on specific outcomes. Indeed, Voas and colleagues (2000) suggested that the significant results observed in their study were the product of several concurrent laws. A number of studies have investigated the effectiveness of immediate and administrative licence suspension in conjunction with other interventions and laws.

DeYoung (1995) examined the effectiveness of immediate licence suspension used in combination with alcohol treatment and observed significantly lower levels of drink driving recidivism among offenders who received both alcohol treatment and immediate licence suspension compared to those offenders who received immediate licence suspension only. Those who only received licence suspension had rates of recidivism 43% higher than those who also received alcohol treatment.

Eisenberg (2003) reported a significant 4.5% reduction in fatalities amongst young drivers when immediate licence suspension was combined with zero-tolerance laws, while Beirness, Simpson and Mayhew (1997) found that, when combined with vehicle impoundment, immediate licence suspension was associated with a 27% reduction in alcohol-involved fatalities. Rios and colleagues (2006) evaluated a three-pronged approach aimed at young drivers, consisting of graduated licensing, a zero-tolerance approach to impaired driving, and immediate licence suspension for a range of dangerous driving behaviours. The scheme resulted in significant reductions in fatal crashes, as well as speeding-related, alcohol-related and late-night fatalities amongst young drivers. Finally, Muller (1989) reported a 9% reduction in fatalities associated with the enactment of evidence per se laws and immediate licence suspension.

### **Consultation with Australian police and traffic organisations**

Given the strong overseas evidence regarding the effectiveness of administrative licence suspension but the lack of local evaluations, police organisations and traffic authorities from throughout Australia were consulted regarding their views and experience. The agencies reported on the perceived effectiveness of the application of the laws in their jurisdiction, as well as potential recommendations for legislative and statutory changes necessary for the continued development of the laws.

#### *Views on current effectiveness of laws in Australia*

The majority of consulted organisations reported public safety benefits associated with, and public support for, immediate licence suspension laws. It was unanimously agreed that there are strong advantages to immediately removing from the road, dangerous drivers who pose a considerable road safety risk to themselves and other road users. Furthermore, an atmosphere of fairness amongst the general public surrounding immediate licence suspension laws was reported, with many believing that individuals committing high-range speeding and drink driving offences deserve to immediately lose their licences.

There was also acknowledgment that, from the perspective of deterrence theory, immediate licence suspension laws add an element of swiftness to punishment and thus are more likely to have a deterrent impact. Moreover, the potential benefits for the judicial system, with higher rates of case resolution, less delays, and greater levels of consistency and certainty in punishment, were seen as major advantages of immediate licence suspension laws. The importance of public education to increase the general deterrent impact of the laws was also stressed.

One potential problem identified by the organisations was the risk of imposing immediate licence suspension sanctions on individuals who perhaps might later be found not guilty of the alleged offence. There was also considerable concern for the right of the offender to fairness and due process. While advocates for civil liberties argued that immediate licence suspension operates outside of the presumption of innocence, the counterargument was made that there is a need to balance the rights of the individual and public safety. It was argued that any departure from traditional principles of justice could be justified on the grounds of needing to protect the public from serious, high-risk offenders. Consequently, many of the consulted organisations argued that there was a necessity for unequivocal evidence regarding the guilt of the offender when considering immediate licence suspension sanctions as a punishment.

However, one organisation highlighted that, for offences where time is needed to gather the necessary evidence to lay a charge such as dangerous or negligent driving, it may be difficult to impose a sanction that is “immediate”, as it has been traditionally defined. In response to this concern, a number of organisations suggested developing a more flexible definition of “immediate”, to reflect that immediate licence suspension can occur at either the time of the offence or the time charges are laid.

There was unanimous agreement among the consulted organisations that immediate licence suspension laws should be one element of a package of penalties. That is, in most instances if an offence is viewed as severe enough to warrant immediate loss of licence then the offence should also be accompanied by a monetary fine, demerit points and in some cases court proceedings and even jail time or community service. A concern expressed by one organisation was that it is critical for accompanying penalties, such as fines and demerit points, to be enforced as well as the suspension, if the laws are to have the desired effect, especially in the case of recidivists.

Finally, concerns regarding the impact of the laws on police resources were also identified, as well as potential conflicts with existing laws and provisions. The predominant resource concern pertained to the extra time taken to issue immediate licence suspension notices at the time of an offence, as well as the procedural guidelines that would subsequently follow. Immediate licence suspension laws might also clash with existing driving provisions such as “hardship licences”. Further, the lack of compulsory carriage of licences in some jurisdictions or for some classes of drivers could also make enforcement of immediate licence suspension laws problematic.

#### *Views on expanding laws to include lower range drink driving offences*

As stated, immediate licence suspension sanctions for drink driving offences exist in a number of Australian jurisdictions. In Victoria, Queensland and the Northern Territory, drivers caught driving with a BAC above .15 g/100ml are subject to immediate licence suspension sanctions, while the laws are expanded further in New South Wales and South Australia to include any driver caught driving with a BAC above .08 g/100ml. As noted earlier, drivers with a BAC ranging from .05 to .149 are involved in a significant number of fatal crashes, and thus deterring drivers from operating a vehicle with a BAC of .10 or greater could have a significant benefit in terms of fewer fatalities and injuries. Subsequently, organisations were asked to comment on the appropriateness of expanding the sanction to include drink driving offences with a BAC of .10 or above.

Among those consulted, enforcement agencies were generally supportive of the expansion of the laws and expressed few practical concerns regarding the extension of the current provisions. However, some organisations did express concern about the size of the potential increase in the number of immediate licence suspensions that would occur as a consequence of the expansion of the laws. In New South Wales, where provisions already exist for immediate licence suspension for lower-range drink driving offences, representatives reported that there has been a high deterrent value associated with immediate licence suspension for drivers detected with a BAC between .08 and .149.

It was noted that the current practice of immediate licence suspension for drivers detected with a BAC of .15 or above may have little deterrent effect for many of these drivers who are alcohol-dependent. At least one representative considered that vehicle impoundment might be a more effective sanction for this group. Several agencies noted that drivers detected at .10 to .149 are less likely to be alcohol-dependent and thus, immediate licence suspension might have a greater deterrent effect on these drivers.

The potential to increase the amount of unlicensed driving and therefore expose more drivers “to the criminal justice system”, with more “driving while disqualified” charges was noted. The issue of the impact on police resources associated with the increased number of drivers to be processed was also noted. However, it was acknowledged by a number of agencies that many offenders in the 0.10 to 0.149 g/100ml range are repeat offenders, and thus, under many of the current immediate licence suspensions laws in place in various Australian jurisdictions, would be subject to existing provisions.

#### *Views on expanding laws to include other high-risk driving behaviours*

In their traditional form, immediate licence suspension laws appear to be justified where: (1) there is strong evidence that the offence has been committed; (2) the offence merits restraining the offending driver from driving to protect the public; and, (3) such immediate suspension is practical. These three criteria are clearly met for high-range drink driving offences which are detected by a breath analysis device. However, one could also argue that these criteria are also largely met for other offences such as culpable driving, dangerous driving causing death, and high-range speeding offences. The results of the consultations were largely supportive of the extension of immediate licence suspension to these offences. Most organisations agreed that there is certainly strong evidence that the offence has been committed before such charges are laid. Further, notable past cases where drivers charged with these offences have committed additional serious offences while awaiting trial were highlighted.

However, concerns were expressed regarding the feasibility of immediate licence suspension in such cases given that the process of gathering evidence is often time-consuming and cumbersome and charges are not laid until some time after the offence has occurred. Many organisations stated that immediately suspending a driver’s licence from the date of detection could potentially deny drivers the right of due process. It was suggested by one agency, and others agreed, that immediate licence suspension sanctions could occur from the time that the person is charged, rather than at the actual time of the offence. While for some offences the suspension would be far from immediate per se, the sanction would still occur quite some time before the matter is heard in court. We have termed such a process as *pseudo-immediate licence suspension*.

There were a number of unique concerns expressed in regards to the expansion of the laws to high-range speeding offences. Many organisations argued that automatic suspension would be highly impractical in cases where the alleged offence was detected by automated enforcement methods (such as a fixed or mobile speed camera). Specifically, not only is there a considerable time lag between the alleged offence and the driver being notified of the infringement, but the registered owner of the vehicle may not always necessarily be the driver at the time of the alleged offence. Further, the issue of the impact of such changes on police resources was noted. Most agencies suggested that personal service of the sanction would be the preferred method of notice delivery to prevent instances where offenders claim to not have received the notice of suspension and thus delay proceedings. Thus, if the police were to be responsible for serving the sanction this would be considerably taxing on police resources.

As noted earlier both New South Wales and South Australia have provisions allowing for the immediate licence suspension of drivers manually caught (by officers on routine or traffic duty) for high-range speeding offences (45 km/h or more over the posted speed limit). A number of consulted stakeholders from other jurisdictions considered it to be inappropriate to have penalties for the same offence that differed according to the manner in which the offence was detected (i.e., by speed camera or manually). Interestingly, New South Wales agencies did not identify any significant problems with their current practice of immediate licence suspension for manually detected offences only. Indeed, they reported no problems arising in Parliament when enacting the legislation and no complaints by offenders and/or lawyers regarding unfairness.

Organisations noted a number of considerations that would need to be met if any extension of the laws were to proceed. Firstly, any new legislation would require appropriate avenues for overturning the suspension and such avenues would need to be able to be conducted swiftly so as to minimise the potential impact on innocent individuals. Secondly, immediate licence suspension was viewed as best suited to offences associated with high rates of recidivism and associated problems, such as alcoholism. In saying that, offenders who commit such offences are likely to offend despite the sanction given that they have shown a disregard for the law, and the behaviour may be compulsive in nature. Thirdly, it was argued that governments must be careful not to propose an excessive number of additional offences for which immediate licence sanctions would apply, but rather progressively and properly evaluate the impact of adding these offences, before introducing further extensions of the laws.

Representatives supported, in principle, the concept of short-term immediate licence suspension where there was a need to prevent the offence from continuing or recurring, but where the severity of the offence was not sufficient to warrant longer-term suspension. However, two main drawbacks were identified. The first was the inability to identify drivers who were subject to a short-term suspension due to delays in recording suspensions on licensing databases. The second concern raised was whether being without a licence for a short term would deter drivers from continuing to drive, given the low probability of detection within the short period of suspension. There was some agreement that short-term licence suspension might be worthwhile for special groups of drivers who were required to carry their licence (i.e., learner and provisional drivers, professional drivers) and for whom, therefore, seizure of the licence was possible.

## **Recommendations and conclusions**

The conclusions and recommendations presented below incorporate the findings of the literature review and consultations with stakeholders. A number of factors have complicated the evaluation of the effectiveness of immediate licence suspension. Firstly, the sanction has commonly been introduced as part of a package of law enforcement and community education initiatives. Secondly, many evaluations have used imprecise proxy measures to assess the extent of alcohol involvement in fatal crashes (such as single-vehicle night time fatalities). Finally, studies have typically not accounted for variance in outcome measures explained for by such factors as per capita alcohol consumption, per vehicle distance travelled, unemployment, and so on. Nonetheless, the findings are predominantly supportive of a positive impact of the laws on crashes, fatalities and recidivism. Thus, the laws have been shown to have both a specific and general deterrent impact.

Several key differences between the North American and Australian context suggest that immediate licence suspension may be somewhat less effective in Australia. Firstly, the North American practice is to apply administrative licence suspension to all detected drink drivers. It is possible that both general and specific deterrence are greater with drivers who have a lower BAC and are thus less likely to be alcohol-dependent than would be found with the high-range drink driving offenders. Secondly, in the United States, the increase in the certainty, as well as the swiftness of the penalty may have underpinned the effectiveness of administrative licence suspension. For example, administrative licence suspension was introduced in the US to not only enhance the swiftness with which penalties are applied, but to address the inconsistent application of penalties by the courts. In Australia, the certainty of detection and the certainty of the penalty are arguably much higher than in the US as mandatory penalties already exist. Therefore, the increase in swiftness alone associated with immediate licence suspension may result in an overall effect that is not as great as demonstrated in North American studies.

Agencies were generally in unanimous agreement that expansion of the laws to lower range drink driving offences (BAC between .10 and .149) would have a significant deterrent impact. Further, there was unanimous agreement that high-range speeding offences were sufficiently severe to warrant immediate licence suspension sanctions. However, a number of organisations felt that the practical issues associated with immediate licence suspension for camera-detected speeding offences were insurmountable and that penalties for the same offence should be identical regardless of how they are detected. Therefore, most organisations opposed the introduction of immediate licence suspension for only those high-range speeding offences that were detected manually.

Two offences seen as being likely to attract strong political and public support for the imposition of immediate licence suspension were dangerous driving causing death and culpable driving. Organisations unanimously agreed that immediate licence suspension should be applied to offenders charged with such offences. Agencies supported the extension of immediate licence suspension on the grounds of the public's right to be protected from further risk, but identified some practical problems that would need to be addressed. Organisations noted that any new legislation would require appropriate and swift avenues for overturning the suspension, minimal ambiguity surrounding the evidence to ensure that the offence was committed by the alleged offender, and that immediate licence suspension was best suited to offences associated with high rates of recidivism and associated problems.

The following recommendations are suggested drawing from findings of the consultation phase: (1) that the number of drivers detected with a BAC of .10 to .149 as a function of whether they are first or subsequent offenders be investigated to estimate how many drivers would be affected by the potential expansion of immediate licence suspension; (2) that data for drivers detected with a BAC of .10 to .149 be examined to establish whether they are less likely to drive unlicensed than those with a BAC of .15 or greater; (3) that following the outcomes of recommendations (1) and (2), consideration be given to extending immediate licence suspension to drivers detected with a BAC of .10 to .149; (4) that the driver licence be suspended immediately upon a driver being charged with culpable driving or dangerous driving causing death, irrespective of the offending driver's BAC; and, (5) further investigation of the potential offences for which short-term licence suspension for learner, provisional and professional drivers would be both appropriate and feasible should be undertaken.

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### **References**

- Aarts, L., & van Schagen, I. (2006). Driving speed and the risk of road crashes: A review. *Accident Analysis & Prevention*, 38(2), 215-224.
- Australian Transport Safety Bureau (ATSB). (2001). *Monograph 5: Alcohol and Road Fatalities*. Australian Transport Safety Bureau: ACT.
- Beirness, D., Simpson, H. & Mayhew, D. (1997). *Evaluation of administrative licence suspension and vehicle impoundment programs in Manitoba*. Ottawa, Transport Canada.
- Beirness, D.J., Simpson, H.M., Mayhew, D.R. & Jonah, B.J. (1997). *The impact of administrative license suspension and vehicle impoundment for DWI in Manitoba*. In: Mercier-Guyon, C. (Ed.), *Proceedings of the 14th International Conference on Alcohol, Drugs and Traffic Safety*, Centre d'Etudes et de Recherches en Medecine du Trafic, Annecy, France, pp. 919–925.
- Cirillo, J. A. (1968). Interstate system crash research; study II, interim report II. *Public Roads*, 35(3), 71-76.
- Chaloupka, F.J., Saffer, H., Grossman, M. (1993). Alcohol-control policies and motor-vehicle fatalities. *Journal of Legal Studies* 22, 161–186.
- Chikritzhs, T., Stockwell, T., Heale, P., Dietze, P. & Webb, M. (2000). *Trends in Alcohol-Related Road Injury in Australia, 1990-1997*. National Alcohol Indicators, Bulletin No. 2.

Crombie, H. (2002). *The Impact of Transport and Road Traffic Speed on Health*. Health Development Agency: London.

DeYoung, D.J. (1995). *An evaluation of the effectiveness of California drinking driver programs* (Report No. 146). Sacramento, CA: Department of Motor Vehicles.

Eisenberg, D. (2003). Evaluating the effectiveness of policies related to drunk driving. *Journal of Policy Analysis and Management*, 22(2), 249-274.

Elvik, R., Christensen, P., & Amundsen, A. (2004). *Speed and road accidents: An evaluation of the Power Model*. Oslo: Institute of Transport Economics.

Fildes, B. N., Rumbold, G., & Leening, A. (1991). *Speed Behaviour and Drivers' Attitude to Speeding* (No. Report No. 16). Melbourne: Monash University Accident Research Centre.

Henderson, A. & Kedjidjan, C. (1992). Administrative License Revocation: Are we Driving Drunks off the Road? *Traffic Safety*, 92(4), 6-8.

Kloeden, C. N., McLean, A. J., & Glonek, G. (2002). *Reanalysis of Travelling Speed and the Risk of Crash Involvement in Adelaide South Australia*. Canberra: Department of Transport and Regional Services, Australian Transport Safety Bureau.

Kloeden, C. N., McLean, A. J., Moore, V. M., & Ponte, G. (1997). *Travelling Speed and the Risk of Crash Involvement: Volume 1 - Findings*. Adelaide: NHMRC Road Accident Research Unit. The University of Adelaide.

Lacey, J.H., Stewart, J.R., Marchetti, L.M. & Jones, R.K. (1990). *An Assessment of the Effects of Implementing and Publicizing Administrative Licence Revocations for DWI in Nevada. Final Report*. North Carolina University, Mid-America Research Institute, NHTSA.

Legge, J.S. & Park, J. (1994). Policies to reduce alcohol-impaired driving: evaluating elements of deterrence. *Social Science Quarterly*, 75 (3), 594-606.

Lynam, D., & Hummel, T. (2002). *The effect of speed on road deaths and injuries: literature review*. Prepared for the Swedish National Road Administration.

Mann, R.E., Smart, R.G., Stoduto, G., Adlaf, E.M., Vingilis, E., Beirness, D. & Lamble, R. (2000). Changing drinking-and-driving behaviour: the effects of Ontario's administrative driver's license suspension law. *Canadian Medical Association Journal*, 162(8), 1141-1142.

Mann, R.E., Smart, R.G., Stoduto, G., Beirness, D., Lamble, R. & Vingilis, E. (2002). The early effects of Ontario's administrative driver's license suspension law on driver fatalities with a BAC >80mg%. *Canadian Journal of Public Health*, 93(3), 176-180.

McCarthy, P. (2003). Effects of alcohol and highway speed policies on motor vehicle crashes involving older drivers. *Journal of Transportation and Statistics*, 6(2/3), 51-65.

Muller, A. (1989). Business recession, alcohol consumption, drinking and driving laws: impact on Oklahoma motor vehicle fatalities and fatal crashes. *American Journal of Public Health*, 79(10), 1366-1370.

National Highway Traffic Safety Administration (2003). *Administrative License Revocation (Suspension)*. Volume 1, Number 1. NHTSA: Washington, D.C.

Nichols, J.L. & Ross, H.L. (1990). The Effectiveness of Legal Sanctions in Dealing with Drinking Drivers. *Alcohol, Drugs and Driving*, 6(2), 33-60.

Noland, R.B. & Karlaftis, M.G. (2005). Sensitivity of crash models to alternative specifications. *Transportation Research Part E: Logistics and Transportation Review*, 41(5), 439-458.

Queensland Government. (2005). *Queensland Road Safety Action Plan 2004-2005 - Safe 4 Life*. Brisbane: Queensland Transport, Department of Main Roads, Department of Emergency Services.

Queensland Transport. (2005). *Road Traffic Crashes in Queensland: A Report of the Road Toll, 2003*. Brisbane: Queensland Transport.

Queensland Transport. (2007). *Feature article: Easter Road Toll*. Retrieved October 26, 2007, from [http://www.transport.qld.gov.au/resources/file/ebbfda022c94b3f/Feature\\_article\\_5\\_May\\_2007.pdf](http://www.transport.qld.gov.au/resources/file/ebbfda022c94b3f/Feature_article_5_May_2007.pdf)

Research Triangle Institute. (1970). *Speed and accidents. Vols. I & II*. North Carolina: Research Triangle Institute.

Rios, A., Wald, M., Nelson, S., Dark, K., Price, M. & Kellermann, A. (2006). Impact of Georgia's Teenage and Adult Driver Responsibility Act. *Annals of Emergency Medicine*, 47(4), 369-369.

Roads and Traffic Authority. (2000). *Speed: Problem Definition and Countermeasure Summary*. Roads and Traffic Authority: New South Wales.

Roads and Traffic Authority. (2006). *Road Traffic Crashes in New South Wales: Statistical Statement for the Year Ended 31 December 2006*. Sydney: NSW Centre for Road Safety.

Rogers, P.N. (1995). *The general deterrent impact of California's 0.08% blood alcohol concentration limit and administrative per se license suspension laws. An evaluation of the effectiveness of California's 0.08% blood alcohol concentration and administrative per se license suspension laws, Volume 1*. Sacramento, California: California Department of Motor Vehicles, Research and Development Section. CAL-DMV-RSS- 95-158.

Rogers, P.N. (1997). *The specific deterrent impact of California's 0.08% blood alcohol concentration limit and administrative per se license suspension laws. An evaluation of the effectiveness of California's 0.08% blood alcohol concentration and administrative per se license suspension laws, Volume 2*. Sacramento, California: California Department of Motor Vehicles, Research and Development Section. CAL-DMV-RSS- 97-167.

Ruhm, C.J. (1996). Alcohol policies and highway vehicle fatalities. *Journal of Health Economics* 15, 435-454.

Solomon, D. (1964). *Crashes on main rural highways related to speed, driver and vehicle*. Washington, D.C.: Bureau of Public Roads. U.S. Department of Commerce

Stewart, K., Gruenewald, P.J. & Parker, R.N. (1992). Assessing legal change: recidivism and administrative per se laws. *Journal of Quantitative Criminology*, 8(4), 375-394.

Taylor, M. C., Lynam, D. A., & Baruya, A. (2000). *The effects of drivers' speed on the frequency of road accidents*. TRL Report, No. 421. Crowthorne, Berkshire: Transport Research Laboratory.

Villaveces, A., Cummings, P., Koepsell, T.D., Rivara, F.P., Lumley, T. & Moffat, J. (2003). Association of Alcohol-related Laws with Deaths due to Motor Vehicle and Motorcycle Crashes in the United States, 1980-1997. *American Journal of Epidemiology*, 157(2), 131-140.

Voas, R.B., Tippetts, A.S. & Fell, J. (2000). The relationship of alcohol safety laws to drinking drivers in fatal crashes. *Accident Analysis & Prevention*, 32(4), 483-492.

Voas, R.B., Tippetts, A.S. & Taylor, E. (2000). *Effectiveness of the Ohio Vehicle Action and Administrative License Suspension Laws*. National Public Services Research Institute; National Highway Traffic Administration.

Wagenaar, A.C., Zobeck, T.S., Williams, T.D. & Hingson, R. (1995). Methods used in studies of drink-drive control efforts: A meta-analysis of the literature from 1960 to 1991. *Accident Analysis & Prevention*, 27(3), 307-316.

Whetten-Goldstein, K., Sloan, F.A. & Stout, E. & Liang, L. (2000). Civil liability, criminal law, and other policies and alcohol-related motor vehicle fatalities in the United States: 1984–1995. *Accident Analysis & Prevention*, 32(6), 723-733.

Zador, P.L., Lund, A.K., Fields, M. & Weinberg, K. (1989). Fatal crash involvement and laws against alcohol impaired driving. *Journal of Public Health Policy*, 10(4), 467-485.