

an independent formal evaluation on the GLS changes will be undertaken.

These latest reforms are the most significant changes made to the GLS in South Australia, and this package means that we now have one of the best GLS in the country. The new laws have now been in place for 11 months and with no significant issues reported in that time, there is a level of confidence that the laws have been accepted by the community and are working well.

This result would not have been achieved without the combined effort of road safety stakeholders who worked together to develop and implement changes that will be of lasting benefit to young people in South Australia. Crucial support was also gained by providing the evidence for change in a variety of ways, so that the community and key stakeholders understood the road safety risks facing younger drivers, the reasons for the changes, and the evidence that the restrictions could save lives.

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# Expanding the Victorian Alcohol Interlock program to all convicted drink-drivers

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## Abstract

The Victorian Alcohol Interlock Program was established in 2003 and expanded in 2006. In 2014 the Victorian Parliament passed legislation to significantly extend the mandatory requirement for alcohol interlocks. This initiative came into force on 1 October 2014. All drink-drivers in Victoria whose driver licences or learner permits are cancelled must now fit an alcohol interlock to any vehicle they drive once relicensed. Alcohol Interlocks are required for all:

- Probationary and learner drink-drivers at all BAC levels;
- First time drink-drivers with a BAC over 0.07;
- First time drink-drivers with a BAC under 0.07 whose driver licences are cancelled;
- All repeat drink-drivers;

- Drivers committing offences such as refusing to provide a breath or blood sample, or culpable driving under the influence of alcohol.

The minimum cancellation period is three months and the minimum alcohol interlock condition six months. VicRoads is now managing first-time drink-drivers whose driver licence or learner permit is cancelled and who record a BAC reading of less than 0.10. Courts continue to manage all other drink-drivers. As part of the changes, concrete criteria have been introduced for the removal of alcohol interlock conditions. Both VicRoads and the Courts will use these criteria. A new IT system supports the program. This article outlines the policy decisions behind the new legislation and the challenges in implementing the expanded alcohol interlock program.

## Introduction

Despite the introduction of extensive countermeasures, drink-driving remains a major contributor to road trauma.

In Victoria, approximately 25% of drivers killed and 11% of drivers seriously injured are alcohol impaired. Repeat drink-drivers comprise 30% of all drink-drivers detected by Victoria Police.

Following earlier successes in reducing drink-driving brought about by reducing BAC limits, including a zero BAC requirement for novice and commercial drivers; extensive Random Breath Testing activities; strong licence sanctions, fines and potential imprisonment; and the introduction of alcohol interlocks; the number of drink-driving crashes has stabilised.

In this context, the previous Victorian Parliament determined to take further action to tackle drink-driving. This included expanding police powers to impound the vehicles of drink-drivers; introducing a new offence of driving under the influence of both alcohol and drugs; and requiring all convicted drink-drivers to fit an alcohol interlock to any vehicle they operated.

This paper addresses the last of these measures: expanding the Victorian Alcohol Interlock Program.

## The Victorian Alcohol Interlock Program

Alcohol interlocks are a proven drink-driving countermeasure, with international evidence suggesting they are highly effective in reducing drink-driving episodes while fitted (e.g. Elder, Voas, Beirness, Shults, Sleet, Nichols, and Compton R, 2011; Goodwin, Kirley, Sandt, Hall, Thomas, O'Brien, Summerlin, 2013).

The Victorian Alcohol Interlock Program was legislated in 2002 and became operational in 2003. The Road Safety (Alcohol Interlocks) Act 2002 granted Courts the power to impose alcohol interlock conditions on drink-drivers with a first offence of 0.15 BAC or higher. Courts were required to impose an alcohol interlock condition on repeat offenders at this level. Minimum fitment periods were generally six months in duration, however a minimum three year fitment period was required for serious offences such as very high range repeat drink-driving.

Removal of an alcohol interlock condition was also managed by Courts. Offenders were required to obtain a Compliance Assessment Report from their alcohol interlock suppliers and an alcohol assessment from a drink-driving education and assessment agency. Magistrates were to take into account the offender's alcohol consumption during the alcohol interlock condition period, their 'physical and mental condition' and the wellbeing of the community in reaching a decision to remove the alcohol interlock. No set standards for these criteria were established.

The alcohol interlock program was expanded in 2006. The new legislation required alcohol interlock fitment for:

- First offenders under 26 years of age with a probationary driver licence and a BAC reading of 0.07 or more;

- First offenders aged 26 or more with a BAC reading of 0.15 or more;
- All repeat offenders with the exception of low level BAC offences;
- Refusing a blood or breath test; and
- Repeat serious alcohol-related vehicle offences under the Sentencing Act 1991, such as culpable driving

The operation of the alcohol interlock program remained largely as it was established under the 2002 legislation. By 2014, approximately 5,400 alcohol interlock conditions were being imposed each year and the Victorian Alcohol Interlock Program had 7,500 active participants.

## Commitment to expand the Victorian Alcohol Interlock Program

The Road Safety Amendment Bill 2014 included a commitment to extend the mandatory requirement for alcohol interlocks to all drink-drivers in response to the continuing contribution of drink-driving to road trauma. VicRoads was also requested to identify the means to expand the alcohol interlock program without increasing the burden on Courts created by managing additional alcohol interlock condition impositions and removals.

These two factors, accelerated implementation and no net increase in Court burden, created policy challenges that needed to be resolved quickly in order to achieve a successful rollout of the expanded program.

## Key policy challenges

### 1. Scope of drivers and riders included in Stage 1

Planning for the accelerated implementation of this initiative quickly revealed concerns about community readiness, complexities in the Victorian legislation and limitations in IT systems that together indicated a staged approach was warranted. Surveys and consultations conducted in Victoria to inform the development of road safety strategies and action plans consistently indicate strong community support for measures to address drink-driving, including alcohol interlocks. However, it is a commonly held view that low level infringements by fully licensed drivers represent errors of judgement or inadvertent offending. By implication, the community believe penalties for this behaviour should not be unduly harsh.

It was felt that quickly introducing alcohol interlocks for low level BAC offences committed by full licence holders (including commercial drivers) may be poorly supported and could undermine efforts to address drink-driving. Greater community understanding that a low detected BAC reading does not correlate well with prior drinking behaviour or future offending is required, as is comfort with the widespread use of alcohol interlocks. Further work is now being conducted in Victoria to assess community support for additional drink-driving countermeasures.

Overlaying this issue, Part 5 of the Victorian Road Safety Act 1986, dealing with alcohol and drug offences, has become increasingly complex due to multiple additions and revisions since it was first drafted. This creates challenges for Victoria Police, Courts and lawyers in understanding, interpreting and applying the Act.

Addressing the complexities in the Act was outside the scope of this initiative and the compressed timeframe. To attempt to remedy this complexity would have risked delivery of the expanded alcohol interlock program. Consequently, only changes required to deliver on the government commitment were made. A project to address the complexities in the Act is in discussion at present.

The third significant challenge was that the VicRoads Driver Licensing System (DLS) is a legacy system, which is complex and expensive to change. While some revisions were inevitable given new legislation, limiting the scope of the initial changes was important for delivering on the initiative in a timely manner. The limitations of the DLS, in combination with other factors, also drove a new IT solution that became integral to the design of the expanded alcohol interlock program.

Identification of these challenges resulted in a recommendation to the previous Government to adopt a two-staged implementation approach, with most changes occurring in 2014 and the remainder to follow prior to the end of 2017. This approach was accepted.

Through the combined efforts of Victoria's road safety partners and the establishment of a dedicated project team, Stage 1 of the expanded alcohol interlock program came into force on 1 October 2014. From this date alcohol interlocks are required for all:

- Probationary and learner drink-drivers;
- First time drink-drivers with a BAC over 0.07; under 0.07 if their driver licences or learner permits are cancelled;
- All repeat drink-drivers;
- All drivers committing offences such as refusing to provide a breath or blood sample, or culpable driving under the influence of alcohol.

This means there are only two groups of drink-drivers in Victoria not subject to an alcohol interlock. The first group is full licence holders committing a first offence with a BAC reading between 0.05 and 0.07. The second group is commercial drivers with a first offence below 0.07 who are issued with a Traffic Infringement Notice but who have the matter heard by a court and successfully mount an argument for licence retention.

All drink-drivers subject to an alcohol interlock condition have their driver licences or learner permits cancelled. The shortest minimum cancellation period is three months (for learner permit and probationary licence holders) and the minimum alcohol interlock condition period six months.

Repeat offenders will continue to have 12 month (second offence) or four year (third and subsequent offence) minimum alcohol interlock condition periods.

## 2. Court burden

The Victorian court system, like most, experiences heavy demand. VicRoads was asked to ensure that no additional burden be placed on courts as a result of expanding the alcohol interlock program. As all offenders were being managed by courts at the time and a doubling of offender numbers was expected, this meant that an alternative management system was required.

Examination of alcohol interlock management systems across jurisdictions suggested either a fully administrative system or a hybrid administrative and court system would meet the requirement set for the Victorian Alcohol Interlock program. By partially or wholly moving offender management outside the court system, court burden could be managed.

Consideration of the options indicated that a hybrid court plus administrative system was likely to meet Victoria's needs. VicRoads would manage less complex cases: first-time drink-drivers whose driver licence or learner permit was cancelled and who recorded a BAC reading of less than 0.10. Courts would manage all other drink-drivers. This could include offenders otherwise eligible for the administrative system if they faced multiple charges.

VicRoads modelling indicated this division would result in a net reduction in court burden. It would also allow courts to focus on more serious offending where judicial management was likely to be most needed.

Drink-drivers could enter the alcohol interlock management system either through a Traffic Infringement Notice or through a court appearance. Provided that the offence met the criteria for the administrative system the offender would be managed from relicensing through to alcohol interlock condition removal by VicRoads.

As VicRoads had not previously managed alcohol interlock program participants, this decision necessitated the instigation of a major change management process within the Corporation's Registration and Licensing business. A new system was required that could manage estimated starting volumes of 5,000 new offenders per annum as well as a growing number of offenders over time who would be slower to achieve alcohol interlock condition removal or who might become in scope for VicRoads management.

## 3. Managing alcohol interlock performance

To address the scale and timeframe of the implementation, VicRoads created a dedicated Alcohol Interlock Project Team and multiple concurrent policy development and implementation groups. The decision to establish an administrative process applicable to an estimated 5,000 convicted drink-drivers per annum created challenges for VicRoads in the management of offender volumes and monitoring of alcohol interlock performance. Examination

of the resource implications of manually processing this volume of drink-drivers suggested an IT solution should be investigated. While a small alcohol interlock management team would still be required even if a suitable IT solution could be procured, it was not considered sustainable to establish a large staff contingent to manually manage the volumes involved.

VicRoads therefore went to market to source an IT solution that would automate many of the tasks involved in managing drink-drivers with an alcohol interlock condition. Of the vendors shortlisted, it became apparent on demonstration that only one product presented to VicRoads could perform the functions required. This vendor was therefore selected to develop the new VicRoads Alcohol Interlock Management System (AIMS).

AIMS is built on web-based appointment management software, heavily modified to provide appropriate workflows for alcohol interlock condition management. AIMS is highly configurable, providing opportunities for VicRoads to make running changes and facilitating more major revisions by the vendor as required. It automatically imports offence data stored in VicRoads Driver Licensing System and creates a profile for each offender. AIMS also receives nightly data exports from alcohol interlock suppliers, establishing that an offender has an alcohol interlock installed in a vehicle, along with vehicle details, install date and other data.

At monthly servicing events, data downloaded from alcohol interlocks by service agents is transmitted to AIMS, and populates each offender's record. Decision rules built into AIMS calculate offender performance against criteria established by VicRoads, for example vehicle use and violation counts, to determine potential readiness for alcohol interlock condition removal.

Despite the very tight timeframes involved, AIMS was ready for rollout as the first offenders under the new legislation finished their driver licence cancellation periods (end January 2015). AIMS functionality has been progressively implemented to agreed milestones, as each new system capability set has been required. This staged rollout has accommodated the accelerated implementation timetable for the alcohol interlock program while ensuring that functionality is in place when needed.

The AIMS system has a user portal that allows offenders to log in, view their status, raise queries and apply for alcohol interlock condition removal.

The monitoring and management of offender performance by a government body rather than courts challenged VicRoads and its road safety partners to develop a model that was fair and equitable to offenders but did not involve VicRoads acting as a tribunal. The working group considering offender performance reviewed the literature and consulted subject matter experts to derive decision making principles. The available data and best practice examples together indicated a robust program would include the use of driver identification technology; compliance-based removal; support for low income

offenders; and advertisement of the alcohol interlock program as a general deterrence measure.

Alcohol interlock removal criteria should be based on objective measures using alcohol interlock data and include: evidence of driver identity and vehicle usage; no attempts to start the vehicle with alcohol present for a set number of months; and no attempts to tamper with the alcohol interlock device. These principles were used to establish a set of behavioural requirements that, if met, would qualify the offender for alcohol interlock removal. These included that the offender must demonstrate:

- Personal usage of the vehicle in any month for which data is to count toward removal
- A minimum five months violation free interlock breath sample data immediately prior to alcohol interlock removal
- No attempts to tamper with the alcohol interlock

Offenders would be:

- Allowed to use the first month of alcohol interlock fitment as a 'learning month', where violations of the zero BAC requirement would not have negative consequences
- Permitted to have periods of non-use of the vehicle provided these did not exceed five consecutive months
- Required to restart the data collection period if consecutive non-use was six months or longer
- Allowed roll starts due to mechanical incidents, as long as a breath sample was provided on starting the vehicle
- Required to collect additional alcohol interlock data if they violated the zero BAC requirement or tampered with the device. The five months violation free data resets from the month following any violation
- Treated as having a mouth alcohol sample (rather than a violation) if able to record a second, 'clean' breath sample within an hour of a violation sample
- Allowed to request a review if an offender believed violations were caused by someone else.

These criteria were built into the programming of the AIMS system, allowing it to automatically process and publish offender performance data.

In order for the vehicle usage requirement to be verifiable, Victoria introduced mandatory camera interlocks for offences committed after commencement of the new legislation. Photos for each month in which a vehicle is driven during the alcohol interlock condition period are visually checked by VicRoads staff to verify that the offender has driven it, and are also used to check identity if an offender claims a violation was caused by another person.

Tampering is verified by a combination of alcohol interlock event data, physical inspection by service agents and submission of a report to VicRoads.

Stakeholder agreement was reached to adopt these criteria for both VicRoads and Court managed offenders, to ensure equitable treatment and offer Courts a concrete performance standard. Courts would continue to also take other matters into account in reaching a decision about alcohol interlock condition removal. Victoria increased support for low income offenders by extending concessions on alcohol interlock installation and maintenance to broader groups of concession card holders.

A high level TAC communications campaign across all main channels was used to advertise the changed laws and serve as a general deterrence measure. This campaign will be repeated at intervals along with other drink-driving campaigns to reinforce the messaging.

## Future developments

Given that alcohol interlocks are most effective while fitted and recidivism gradually returns to pre-interlock levels (Goodwin et al, 2013), addressing the behaviour that underlies the offending will assist in maximising the long term impact of alcohol interlock programs.

### 1. Alcohol Interlock Data

One area already receiving attention is the more strategic use of alcohol interlock data. Rather than being used only at the end of an alcohol interlock condition to determine suitability for removal, alcohol interlock data is increasingly employed to provide ongoing behavioural feedback to users and as a trigger for further interventions with regard to alcohol use.

Violations of the zero BAC requirement during alcohol interlock fitment are commonly used as a criterion to extend the time for which the device must be used. This practice recognises that violations indicate the offender is not yet able to separate drinking from driving. The Victorian Alcohol Interlock Program intervenes in this way.

Violations, low level readings that do not trigger violations (under 0.02), mouth alcohol readings, tampering events etc. can also be used to provide behavioural messaging to offenders. These interventions can:

- support the separation of drinking from driving by warning offenders about the potential consequences of continued triggering events (such as extended device fitment periods);
- provide immediate feedback that extension or other consequences have occurred as a result of violations;
- offer tips, strategies, referral options and so on to assist in addressing alcohol consumption.

Positive reinforcement and supportive messaging can also be delivered for periods of compliance with alcohol interlock condition requirements.

The Victorian AIMS system can be configured to automatically deliver this form of intervention to program participants. VicRoads will consider how AIMS can be used to serve effective behavioural messaging that increases program compliance and potentially addresses participants' alcohol use.

### 2. Alcohol consumption

Addressing drink-drivers' attitudes and behaviour toward alcohol is an important measure to prevent recidivism. Education programs are a staple intervention for drink-driving, and Victoria is no different in requiring certain drink-driving cohorts to complete an alcohol education program.

Victoria also has a requirement for court-managed drink-drivers with alcohol interlock conditions to undergo an alcohol use assessment prior to removal of the interlock licence condition. The assessment occurs in the month preceding the hearing, and provides courts with information about the offender's alcohol use and therefore risk of re-offending once the alcohol interlock condition is removed.

VicRoads is interested in investigating evidence-based interventions for alcohol consumption, to establish their potential to extend the capacity of the Victorian drink-driving scheme to reduce recidivism.

## Conclusion

Alcohol interlocks will remain an intervention of choice for drink-driving and their use is likely to increase across jurisdictions and cohorts of drink-drivers. Maximising the impact of alcohol interlock programs through intelligent application of interlock data and supplemental interventions that address alcohol consumption will assist in improving immediate recidivism rates and have the potential to address the longer term degradation in recidivism observed to date.

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