



## ALCOHOL INTERLOCKS: TAKING RESEARCH TO PRACTICE

PROCEEDINGS OF THE 10<sup>TH</sup>  
INTERNATIONAL ALCOHOL  
INTERLOCK SYMPOSIUM



The knowledge source for safe driving

# The Traffic Injury Research Foundation

The mission of the Traffic Injury Research Foundation (TIRF) is to reduce traffic-related deaths and injuries.

TIRF is an independent, charitable road safety institute. Since its inception in 1964, TIRF has become internationally recognized for its accomplishments in identifying the causes of road crashes and developing program and policies to address them effectively.

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# **ALCOHOL INTERLOCKS: TAKING RESEARCH TO PRACTICE**

## PROCEEDINGS OF THE 10<sup>TH</sup> INTERNATIONAL ALCOHOL INTERLOCK SYMPOSIUM

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Their continued commitment to this international symposia series encourages the ongoing pursuit of innovative ideas, the sharing of perspectives and the development of collaborative partnerships among governments, practitioners, researchers, policymakers and industry that is needed to advance the field.

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opinions, insights and expertise to help guide the development and implementation of alcohol interlock programs across jurisdictions and around the world. The content of this report is based on the summary of discussion and perspectives at the Symposium and does not reflect the views of individual presenters, participants or sponsors.

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# INTRODUCTION AND GOALS

The 10<sup>th</sup> Annual Alcohol Interlock Symposium was held in Australia for the first time in 2009, reflecting the progress that Australia has made in recent years in terms of new programs and the expansion of existing programs. The decision to hold the Symposium here was made to recognize the progress that has been achieved and the gains that have been made in these interlock programs.

The Alcohol Interlock Symposia Series has been successful as a result of the many speakers and participants who attend the event every year. This year's symposium has an interesting and dynamic array of speakers representing diverse expertise and experience in the field of alcohol interlocks. TIRF greatly appreciates them taking time out of their busy schedules to share their knowledge and to participate in the discussions that are important function of this international event. TIRF is also happy to welcome more than 85 participants representing 15 countries this year. These individuals share their experience with alcohol interlocks in a wide range of programs to help advance the field, stimulate dialogue and develop new ideas.

This is a very exciting time in the field of interlocks. Progress in recent years has been substantial in relation to technological advances, increased interest in and support among governments and the public, and a renewed emphasis on communication, coordination and cooperation between researchers, practitioners, government and industry to improve program delivery.

With regard to technology, new models of alcohol interlocks are beginning to include features that assist jurisdictions in identifying the driver who provided the breath test which has been an ongoing concern for the courts. In addition, efforts are underway to increase the frequency of reporting with the intent of being able to provide data in real time. And some manufacturers are exploring the potential to further enhance technology and also identify the location of those individuals driving with an interlock device using a GPS component.

There has also been a growing interest in and demand for information among politicians and the public. For example, governments and legislators in Canada, the United States, Europe and Australia have reached out to experts in the field in order to learn more about the technology, the research, and program strategies to guide government decision-making and new initiatives. In the past two years, legislators and policymakers have become very engaged in the issue and are actively exploring ways to

leverage knowledge to improve road safety and the quality of life of their citizens in tangible ways. Their commitment to finding solutions is to be commended and their increased understanding of the importance of reconciling policy issues with the operational practices demonstrates leadership.

There has also been growing activism among grassroots and community organizations to demand action to address the impaired driving problem at a political level. Their ability to effectively convey the impact of this problem in a meaningful way that moves beyond the numbers to personalize the message is essential to capture attention and place the focus on available and viable solutions and what is needed to implement them.

Most importantly, the focus on program development and implementation has become a priority across jurisdictions. Many states and provinces have identified needed improvements to existing programs and are moving to effect these changes. This is the case in British Columbia and Ontario (Canada), in California and Virginia (United States), and also in Victoria (Australia).

Still more jurisdictions are moving to expand their programs to include new classes of participants, including France and Sweden, and nine U.S. jurisdictions which have moved to include first offenders in their programs. Finally, other jurisdictions are working to launch new programs as is the case in the Netherlands, Belgium, Slovenia, and in the Northern Territories (Australia). Not surprisingly, there has been a sustained growth in interlock program participation as a result of these efforts and this work must continue.

It is increasingly acknowledged that practitioners require support and guidance to turn legislative initiatives into programs with high levels of participation, and to ensure that programs meet their intended goal of protecting the public. At the same time, there is a growing recognition of the opportunities of the alcohol interlock to support long-term risk reduction when partnered with a suitable treatment component to begin to change behaviour. More work is needed to both understand and identify optimal strategies to leverage this potential.

Agencies and jurisdictions are also actively reaching out to one another to share experiences, establish partnerships, and learn from the activities of others. Communication among practitioners in the field has grown exponentially with the goal of building teams and working effectively to manage resources and improve outcomes. The same is true for partnerships that are being established between government and industry to advance the field to benefit road users.

As a result, the purpose of the 10<sup>th</sup> Annual Alcohol Interlock Symposium is to continue the dialogue in relation to identifying and resolving challenges associated with implementation efforts. More importantly, the focus is directed toward bridging the gap between research and practice, as well as between policy and practice to truly streamline implementation and overcome barriers to progress.

The agenda of this year’s symposium was designed to bring together the many components that are essential to program implementation including ways that challenges are being addressed, how to incorporate treatment to augment effectiveness in the long-term, and how to build cooperative partnerships across agencies and jurisdictions. The Symposium and subsequent proceedings from it are designed to assist legislators, decision-makers, agency administrators, and practitioners who have faced challenges implementing alcohol interlock programs in their jurisdiction. By bringing research into practice, improvements can be made in the delivery of alcohol interlocks to a variety of populations. The information presented in this report summarizes the challenges faced when implementing alcohol interlock programs and offers potential solutions to overcome these barriers based on the experiences of jurisdictions throughout the world.



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# THE IMPACT OF DRUNK DRIVING ON THE JUSTICE SYSTEM



Based on a presentation by Chief Magistrate Ian Gray, Victoria, Australia

Impaired driving has a profound impact on all segments of the justice system including law enforcement, the courts, and probation. In an effort to reduce the occurrence of impaired driving, agencies and programs must form partnerships and seek to collaborate to develop new problem-solving approaches and strategies that provide both short-term and long-term risk reduction. At the same time, they must balance punishment with positive and rehabilitative approaches. One example of this approach is currently underway in the state of Victoria.

Of all of the states in Australia, Victoria has had the lowest road toll during the past five years. Alcohol, however, is still a significant factor as 25% of all fatal crashes involve a driver with a blood alcohol concentration (BAC) or breath alcohol concentration (BrAC) over 0.05% with most being over 0.15%. Of concern, the presence of alcohol in fatal pedestrian crashes has also increased greatly over the last few years. To illustrate the impact of this problem on Victoria's courts in 2008, there were 8,000 impaired driving cases in Victoria which made it the fourth most common offence for which a person was charged. The second most common offence was driving while suspended/disqualified with 14,000 cases. As a result, the courts in Victoria are filled with impaired and suspended drivers. In an effort to combat this problem, Victoria has set a goal of reducing the occurrence of drunk driving by 30%.

The Victoria police are assuming a major role in reducing this problem and are responsible for reinforcing the 'don't drink and drive' message to the public. Since February 2000, a new road safety Arrive Alive strategy has been implemented that enables the police to take drivers off the road immediately if their BAC is greater than 0.10%.

Law enforcement is not the only segment of the justice system that has been affected by the impaired driving problem. The large number of cases involving impaired and suspended drivers has had a profound impact on the courts as well. The courts are responsible for ensuring sentencing outcomes and they must also strive to guarantee that sentences reflect the community's views on impaired driving. As such, the courts are becoming more active with the use of alcohol interlocks as a sanction for impaired drivers.

The alcohol interlock program in Victoria is mandatory and focuses on young drivers, high-BAC offenders, and recidivists. The interlock program is partnered with education and rehabilitation measures so that there is an emphasis on more than just punishment. As evidence of its impact, in the past year, more than 6,000

applications were made to gain an interlock licence and install the device and more than 4,000 applications to deinstall interlocks were made. In order for an offender to be considered eligible for the interlock program, they must first complete their original licence suspension. Program administrators have found that most offenders are compliant with the program guidelines and will successfully complete the program.

In conjunction with the interlock program, public education about impaired driving is another important tool that has been utilized in Victoria for many years now. In Victoria, there is a belief that it is better to intervene early with appropriate risk assessment and harm reduction measures. For young drivers that are found to have a BAC greater than 0.07%, they will be required to install the interlock for at least six months. It has been suggested that the effects of alcohol on the body should be taught to novice drivers at the time of licensing to make youth more aware of the potential consequences of drinking and driving. As a condition of licence reinstatement, offenders are also required to take one or more education programs and this approach has had promising results for some offenders. It has also been suggested that education about impaired driving should be provided at the time of licensing for all individuals and not only youth.

Based upon the experiences of Victoria, it has been determined that punitive measures alone may not be the most effective way of handling the problem and an approach which embraces a variety of strategies is needed. The alteration of driver behaviour involves multiple elements that are both punitive and rehabilitative as sentencing reflects the public's need to punish and deter but also to rehabilitate and the interlock supports this approach. Rehabilitation combined with a driving disqualification has been identified as the best approach. In order for this to work, there must be consultation and collaboration with community groups to develop new programs which similarly combine therapy and education with sanctions and supervision.

What is now needed is a problem-solving approach to sentencing – punishment and deterrence must be outcomes but the focus should also be on identifying and addressing the underlying causes of the criminal behaviour (rehabilitation). The courts play a major role in developing a package of measures to address each impaired driver and sentencing discretion is needed so that judges have the flexibility to meet the needs of individual offenders at the time of sentencing. This approach however, is not without drawbacks as it can be burdensome in terms of resource consumption (assessment and treatment can be costly).

Ultimately, firm, fair, and constructive sentencing should always be the objective and judicial authority should be brought to the monitoring of offenders. A proposed sentence for impaired drivers that achieves this goal is the use of a restrictive licence combined with education, rehabilitation, and an interlock for a period of at least 18 months. In order to effectively impose and oversee these interventions collaboration is needed among all involved parties including licensing agencies, the courts, probation, and treatment officials. Through the formation of partnerships and the sharing of information every facet of the system can contribute to implementing this problem-solving approach.

# ALCOHOL CONSUMPTION AND PUBLIC HEALTH



Based on a presentation by Dr. Rob Moodie, Nossal Institute for Global Health, Australia

The excessive consumption of alcohol carries with it many social burdens, one of which is impaired driving. The prevention of this criminal act requires an examination of the factors that allow it to occur. This involves, among other things, the availability and promotion of alcohol in society. Impaired driving is but one of many risks associated with heavy alcohol consumption.

Heavy alcohol consumption also results in numerous and extensive costs, particularly in the realm of healthcare. In Australia, a National Preventative Health Task Force that was instituted to reform the healthcare system identified alcohol as a major problem because it is associated with high risk behaviours. The harms related to alcohol consumption are massive and total more than \$15 billion per year in Australia as a result of crime, road trauma, loss of productivity, and the provision of healthcare services.

Alcohol consumption can lead to impaired driving and is also a factor in 80% of street level engagements by police. Increased concern about the issue has also resulted from a recent 77% increase in alcohol-related hospitalizations. At the same time there has also been an increase in the promotion of alcohol usage amongst the 13-17 year old age group.

Several issues must be addressed as part of a strategy to combat the problem of excessive alcohol consumption. There are four primary areas where attention should be focused in Australia:

- > **Liquor licensing** – In Victoria, there have been two new liquor licences issued every day for the last twenty-two years. This has substantially increased the availability of alcohol. The more readily available that alcohol is to the public, the greater the likelihood of consumption. The creation of stricter laws and regulations regarding who is permitted to distribute alcohol and in what quantity would likely influence the level of consumption.
- > **Regulation of promotion/sponsorship** – Sports figures and celebrities are paid large sums of money to promote the consumption of alcohol and this has been shown to influence youth. Greater regulation of sponsorship and advertisements would help to limit youth exposure to alcohol. Reducing the promotion of alcohol by these 'role models' and monitoring its sale and promotion at sporting events, may make alcohol less appealing to this vulnerable age group.

- > **Effect on youth** – The age at which youth begin to experiment with alcohol consumption continues to drop and the actual drinking age continues to decline. The goal should be to deter young people from drinking and to educate them about the effects and consequences that alcohol consumption can have. More work is needed to regulate the exposure that underage youth have to alcohol and greater efforts are needed to establish open dialogue and provide education to assist young people in making healthier and safer choices.
- > **Taxes and pricing strategies** – Decisions must be made with regard to the taxation of alcohol. Minimum pricing strategies are needed as stores have been found to be selling large quantities of alcohol at low prices. The development of sensible taxation and pricing strategies will have an effect in controlling the availability and quantity of alcohol that is accessible to the public.

In order to accomplish these tasks, a progressive, determined, comprehensive, and sustained course of action is required in Australia. Partnerships involving practitioners and policymakers from various sectors including health, welfare, and justice are needed to stimulate action. To begin addressing the excessive alcohol consumption problem, the following steps are needed:

- > the collection of more data on the wholesale and retail sales of alcohol;
- > the development of sensible alcohol regulation and policy;
- > increased public education about the nature and magnitude of the problem, with a special emphasis placed on underage youth consumption; and,
- > a communication strategy to convey that these measures are important to protect citizens.

In Australia, these recommendations are now being implemented with the goal of reducing long-term risky drinking by approximately one-third. Through the use of these strategies there is hope that the social burdens stemming from the excessive consumption of alcohol will be curbed and that the occurrence of impaired driving will decrease as a consequence.

# PROGRAM IMPLEMENTATION



## Program Implementation in Australia

Based on presentations by Ron Shanks, Dept. for Transport, Energy, and Infrastructure, South Australia; Peter Nelson, VicRoads, Victoria, Australia; Daya Withaneachi, Centre for Road Safety, New South Wales, Australia; and, Les Libbesson, Guardian Interlock, Tasmania and Northern Territory, Australia

The creation and development of alcohol interlock programs in Australia has increased in the last few years with new program trials occurring in several states. To date, programs have been established in South Australia, New South Wales, Victoria, Queensland, and most recently the Northern Territory. An interlock trial has been implemented in Tasmania, and discussions regarding the creation of an interlock program in Western Australia are also ongoing. Each of these programs has faced challenges during their initial implementation as well as a variety of issues that impede their delivery. The following is a synopsis of some of these challenges encountered along with the responses that agency administrators have developed to address them. Many of these issues are common to alcohol interlock programs around the world and Australia offers some examples of creative solutions that can be utilized elsewhere.

One of the greatest challenges facing alcohol interlock programs in Australia is a series of perceived technical issues. A concern for many jurisdictions is whether or not interlock technology is accurate, reliable, and whether it can be easily circumvented. Earlier versions of alcohol interlock devices could be easily bypassed due to their limited anti-circumvention features. Modern interlock technology however, has greatly reduced opportunities for circumvention and tampering with the device. Research also indicates that tampering and circumvention rates decrease over time while offenders are on the device, perhaps as the offender becomes more accustomed to using the device and gains an understanding of the sophisticated technology involved and the futility of trying to avoid the device without detection (Vanlaar and Robertson 2008).

These concerns about the reliability and effectiveness of the device led both South Australia and Victoria to conduct additional testing of the interlock devices that they had selected. During the implementation phase of their interlock program, South Australia was concerned about an offender's ability to tamper/circumvent the device. Several tests were performed in an effort to prove the interlock's accuracy and the program authority was satisfied with the results. They also concluded that the lack of crashes involving interlock-restricted drivers was evidence of the device's reliability. In Victoria, on-road testing was conducted and overseen by an independent body to assess the reliability of the device. They also attempted to address

technical issues associated with data reporting by conducting an operational trial of supplier systems (installation and maintenance, training, data management, provision of reports to courts). Technology initiatives in Victoria included the development of passive sensor technology and personal identifiers for interlock devices. The testing in both instances was considered successful and increased confidence in the alcohol interlock device.

Another major issue that most alcohol interlock programs face is low program participation rates as this can lead to other problems such as unlicensed driving. Many offenders who are ordered to install an interlock device fail to do so which increases the unlicensed driver population. Studies conducted over the past two decades estimate that between 25-75% of suspended or revoked drivers continue to drive (Waller 1985; Hagen et al. 1980; Sadler and Perrine 1984; Peck et al. 1985; Ross and Gonzales 1988; Griffin III and De La Zerda 2000). There are many reasons why an offender may choose not to comply with an installation order including inconvenience, stigma, and a delay between the time of licence suspension and interlock eligibility.

Low program participation rates are a problem that has been encountered by many states in Australia including South Australia, NSW, and the Northern Territory. Typical strategies that have been employed internationally to remedy low participation and compliance rates involve appealing to the offender by making the use of the interlock more attractive or the alternative more unpleasant. Examples include the use of incentives such as reduced fines, waiving or reducing insurance surcharges, and significant reductions in the length of hard licence suspension. In an effort to increase participation, South Australia has included an incentive for those who enter the interlock program. These offenders get their licence back earlier than those who elect not to participate. South Australia will also be shifting to a mandatory scheme for their interlock program (scheduled for May 2010) which will increase the number of offenders in the program. New South Wales is also considering making their program mandatory. In this jurisdiction there were 80,000 offenders eligible to have an interlock installed between 2003 and 2009 but only a small percentage of these offenders entered the interlock program. Education initiatives have also been created in an attempt to promote the program among defence lawyers who have the ability to encourage their clients to ask for an interlock order in court.

Inconsistent availability and access to service centres is also problematic in some jurisdictions. For example, the Northern Territory already has a mandatory program but due to the remote nature of the state, offenders can opt out. There have been 319 orders to install and only 129 offenders are eligible to participate based on location (these offenders do not have the necessary access to service centres to allow for installation/monitoring and thus, are unable to participate).

The accommodation of offenders who live in rural areas is another challenge that many Australian interlock programs face. The availability of alcohol interlocks in rural areas is often much lower than in urban centres. Compounding this problem, offenders in these rural areas rely heavily on the ability to drive for the

purposes of employment, court hearings, and treatment but also because of insufficient means of alternate transportation. In rural areas, offenders may not be able to have the interlock installed and serviced as needed in their community and it may require long commutes to urban centres which can take time away from employment and family obligations as well as obligations to the court. Rural jurisdictions may also find monitoring and reporting more problematic if court or probation services are not routinely or consistently available. Australia's population is widespread with many individuals living in remote communities that are far away from urban centres, presenting a challenge to states who try to accommodate these offenders.

South Australia, Victoria, New South Wales, and the Northern Territory have all faced this obstacle when implementing an interlock program. In an effort to address this problem, Victoria has made the condition that an offender should not have to drive more than 150km for interlock installation and/or servicing. New South Wales has also sought to increase the number of installers within the state. In the Northern Territory, much of the population is spread out over large areas, many of which are sparsely populated. The Northern Territory also has a large indigenous population which must be dealt with in a culturally sensitive manner that incorporates the community as a whole and takes into consideration this population's marginalized position within society. Efforts will continue in all of these jurisdictions to ensure that offenders are able to participate in these programs without unreasonable demands.

Coupled with the challenges of low participation rates and rural populations, many jurisdictions must also find ways to manage the cost issue. The cost to offenders to have an interlock installed is approximately \$70 (USD) and between \$50-70 per month for monitoring. Offenders who are indigent or have low incomes may have a difficult time paying these fees in conjunction with all of the other fees and costs that come with an impaired driving conviction. This may ultimately result in them being unable to participate in the interlock program. No offender should be barred from participation in an interlock program because of cost. Many jurisdictions have made accommodations for indigent offenders by waiving or reducing court fees, creating sliding fee scales, or establishing indigent funding schemes. It should be noted that interlocks cost between \$3-4 per day. Moreover, the cost is routinely raised as a concern despite the fact that the magnitude of the indigent population in any jurisdiction is unknown.

In Australia, cost has been identified as an issue that leads to low participation rates and many of the states have set up a scheme to help those offenders who have lower incomes. In South Australia, a concession scheme was set up for eligible card holders and offers a 30% reduction in fees. Victoria also offers a concessional rate for low income participants that is \$50 less than the standard interlock rate. In New South Wales, the cost for participation in the interlock program is substantial and can range from \$1,800 to \$2,500. A subsidy scheme (\$50 per month) was developed for people with disabilities and is paid from the Roads and Traffic Authority Fund. The subsidy is provided for holders of one of three valid concession cards issued by the Australian government: 1) health care card, 2) pensioner concession card, or 3) commonwealth seniors card. Those offenders who do not have a disability but have lower economic means

have difficulty participating as a result of the high costs. How to best accommodate indigent offenders will be an ongoing discussion in these jurisdictions, particularly those that have large indigenous populations and large rural areas.

In order for alcohol interlock programs to enhance the delivery of services, there must be good and ongoing communication and cooperation among the central agencies involved in the program. Each of these agencies should work collaboratively and have a clear understanding of their respective role and responsibilities in relation to the program. This is an important step to streamline workflow an area where problems often occur due to miscommunication or a lack of clarity. In order to streamline the workflow the establishment of consistent reporting procedures with vendors and service providers is required. Several of the states in Australia encountered problems coordinating among stakeholders. New South Wales found it challenging to develop policy and procedures for the servicing of the interlock device and Victoria experienced problems trying to adapt existing interlocks and supporting systems to the state's road safety objectives. Victoria was successful in streamlining their process by clarifying and articulating the responsibilities of each stakeholder and establishing common language among service providers for reporting purposes.

The solidification of program procedures and streamlining of workflow is one portion of successful program implementation. Another step in this process is promoting the interlock program to the public and gaining their support for the initiative. The ability to raise public awareness about the importance of addressing the impaired driving problem and communicating effective strategies for dealing with it (such as interlocks) is an important and substantial undertaking. Several of the states in Australia identified this as a challenge. Public education can be achieved through the use of a variety of mediums including advertisements, brochures, posters, media campaigns, and public service announcements. In order for these initiatives to be effective, agencies must have the available resources to disseminate them. In an effort to raise public awareness regarding their interlock program, South Australia utilized media campaigns and New South Wales promoted community involvement, especially in rural areas.

Interstate mobility of interlock offenders is a growing issue in Australia because there are currently no reciprocal arrangements in place to track or accommodate offenders who relocate from one state to another. If an offender is participating in an interlock program in one state, there is no mechanism that will allow them to transfer to an interlock program in another state if they relocate. The creation of reciprocal arrangements between states and territories for service provision is essential. Currently, the Northern Territory has set out provisions that will allow interlock offenders from other states to bring the interlock with them. A national approach to interlock programs is required in Australia and the various states have begun meeting to discuss the development of a common strategy. Continued communication among program managers in different jurisdictions will hopefully lead to a cooperative arrangement to ensure that

offenders who relocate do not avoid the interlock and drive unlicensed. It is important to guarantee that these offenders remain compliant with their conditions and continue to have access to services, such as treatment despite relocation.

The final challenge identified by Australian program administrators is the decision of whether or not to include a treatment component in the alcohol interlock program. Research has suggested that alcohol interlocks, in combination with an appropriate treatment program, may facilitate behaviour change among offenders (Beirness 2001). However, the device alone cannot - and should not - be expected to change behaviour as it is only designed to incapacitate. Alcohol interlock programs that lack a treatment component miss a valuable opportunity for those identified offenders with alcohol issues to recognize the impact of their drinking and move towards readiness for change.

States in Australia have struggled with whether to include a treatment component in their interlock programs. South Australia for example, does not have a treatment component but if an interlock offender re-enters the system within five years of device removal, they will be required to be assessed for alcohol dependence. In Victoria, there are rehabilitative measures in place as an offender may be required to complete treatment in conjunction with participation in the interlock program. The order to enter into treatment can be introduced by Magistrates as a condition attached to the sentence. Otherwise, it occurs toward the end of the licence suspension and prior to the installation of the interlock device. A problem that has been encountered is that there is no way to track offenders who are ordered to have an assessment but do not comply. New South Wales also elected to include a treatment component in their interlock program – it involves a brief intervention that all offenders must undergo with a medical doctor. This program is called the “Drink-less program” and it requires all offenders that apply for an interlock licence to attend a consultation with a doctor no earlier than 28 days before the end of the disqualification period. The issue of treatment is one that is likely to be revisited in these jurisdictions as needed, particularly as program participation grows.

Alcohol interlock programs in Australia have faced some challenges and ongoing issues that still require resolution. Through continued dialogue, cooperation, and shared creativity, agencies can develop responses and solutions to these problems. It is important that issues such as the ones discussed here, be identified and considered during program development to ensure that they do not hinder the delivery of services when the program becomes operational. The ability of programs to adapt to these issues is important. In Australia, program administrators have made efforts to begin to deal with barriers that have arisen and will continue to enhance the efficiency and effectiveness of interlock services in their jurisdictions using a collaborative approach.

## Program Implementation in North America

Based on presentations by Toby Taylor, Oklahoma Board of Tests, United States; Paul Boase, Transport Canada, Canada; Honourable David Hodges, Texas Center for the Judiciary, United States; Chuck O'Donnell, New Brunswick Registrar of Motor Vehicles, Canada; and, Les Libbesson, Guardian Interlock, Australia

Similar to Australia's experiences, alcohol interlock programs in North America have encountered a number of implementation challenges. Several of the issues are prevalent across jurisdictions to differing extents and the responses and solutions that have been developed in North America may be applicable elsewhere. In recent years, program administrators have had to revise and update existing device standards and certifications to reflect new advances in technology and also to manage the constraints imposed by economic downturns, both of which have required creative solutions. The issues discussed below will continue to pose hurdles for agencies and will require renewed attention in the coming years. The good news is that implementation has become a prime focus and progress is being made.

A key issue that was raised during this panel was the certification and testing of alcohol interlock devices and the evolution of technical standards. These standards for alcohol interlocks vary across jurisdictions and according to the requirements set by each jurisdiction. The goal of a technical standard is to ensure uniformity among devices, consistent quality, and efficacy in these devices. Standards with a variety of requirements currently exist in the U.S., Canada, the European Union, and Australia. In addition to being guided by a national technical standard in each country, in the U.S. many jurisdictions also have a state technical standard for devices or manufacturers for certification purposes. This certification ensures that the device meets the necessary technical requirements and is approved for use in the state. It also helps jurisdictions ensure that alcohol interlock devices are properly programmed and that the requisite features are operational (e.g., specific BrAC preset limit, timing of re-tests, emergency override). States vary widely in their certification process, resulting in inconsistent practices and regulation of this process across jurisdictions. The National Highway Traffic Safety Administration (NHTSA) developed recommended performance specifications in the U.S. (and is currently developing a new and updated version) but leaves the testing and certification of devices under the purview of individual jurisdictions. Currently in Canada, the federal transportation agency, Transport Canada, has developed technical standards. However, it has no mechanism to require provinces and territories to adopt them. The implementation of these standards is essential to ensure that high-quality and reliable devices are employed.

Initiatives to update technical standards for devices are continuing and reflect ongoing vehicle advances and design improvements. One particular vehicle improvement that has arisen in recent years is the development of hybrid vehicles. Interlock devices are just beginning to be used in these types of vehicles but there are a number of compatibility issues to be addressed. As vehicles continue to advance, more attention must be given to the applicability of interlock devices to newer vehicles and the modifications that are needed to accommodate these new types of vehicles. These design changes will in turn influence

the creation of appropriate technical standards. Ultimately, the discussion of inclusion of interlocks as a standard feature in all new vehicles will result in more substantial advancements in interlock technology to make devices more efficient, unobtrusive, and seamless.

Along with the creation of technical standards and device certification procedures, another issue that program administrators are addressing is the development of appropriate definitions for program violations – e.g., positive breath samples; failure to provide a breath sample; failure to perform a rolling retest; tampering and circumvention. It is important to have clearly defined violations in an interlock program and to ensure that all agency staff and service providers are aware of how violations are defined. It is also critical that offenders understand how violations are defined and what associated consequences may result from non-compliance. At the outset of program development program administrators may consider asking and addressing the following questions:

- > Were violations and consequences explained to the offender? Did they understand them?
- > How is a bypass or illegal start defined and detected?
- > When and by whom are violations reported? How are they reported to the oversight agency?
- > Are there any delays in reporting violations?
- > Is the agency aware of the number of violations that are occurring?

In Oklahoma for example, one goal of the interlock program was to identify the most common violations and then ensure that all offenders understood these definitions and the consequences for committing them. In order to achieve this, the violations had to first be clearly defined. Once definitions have been agreed upon, the focus should then shift to how violations are reported and the responses used to manage them.

Similarly, consistency is required in the reporting of violations. Underreporting can be an issue as vendors may have their own standard definitions - for example, some may only report successful tampering attempts and not unsuccessful ones. Also, not all service providers may report violations in the same way. Subsequently, there is a need to ensure that vendors provide uniform information to the oversight agency using a standard form. This practice can bring consistency to program management and reduce the potential for confusion and error. Agency administrators can establish this process with vendors and their service providers in program requirements. This can also facilitate improved data collection and analysis that in turn can provide agencies with more complete information regarding program compliance.

Contracts (or other mechanisms) between vendors and the program authority should also specify the establishment of processes and/or standards regarding certification, quality control, and expectations. Quality controls are necessary to ensure that the desired services are being provided as required and expected by the state. For example, when there are no uniform standards for the installation of devices (e.g., qualifications of the installer) this can lead to inconsistency across a jurisdiction. Accurate and

current company profiles should be obtained from manufacturers and all installers should be subject to criminal background checks before receiving approval to install devices. These issues should be considered and addressed prior to program implementation. In addition, it is also important to determine whether certain requirements may conflict with other legislation and potentially present challenges with regards to installation practices. For example, in New Brunswick, a problem was encountered when it was discovered that Labour legislation required that all installers be licensed motor vehicle mechanics. The problem was rectified when the Labour Board granted an exemption for those installers who completed a training program and received proper qualifications that were required by vendors. Other jurisdictions have faced problems similar to this which may result in unanticipated implementation delays. (For more information on contracting with vendors and services providers please see <http://aic.tirf.ca/section6/index.php>).

Another issue that requires increased attention is the delivery of education and training for all parties involved (directly or indirectly) with interlock programs. This includes law enforcement, prosecutors, judges, probation officials, licensing agencies, and treatment providers. Education and training initiatives are important because they allow for the dissemination of knowledge and research regarding the use of interlocks which can help to dispel many of the myths that are associated with the device and build staff support for the program. These types of initiatives can also provide hands-on experience for those professionals who will likely encounter the device, such as law enforcement officials who perform roadside stops. Training can ensure that they are familiar with the interlock device, what it looks like, how it operates, and what to look for when determining if the device has been tampered with or circumvented. Prior to commencing education and training initiatives, it is also important to identify the impediments to implementation specific to the jurisdiction, which will differ depending on whether the program is administrative or judicial, so they can be addressed with education.

With regard to the judiciary, the overall goal of any education about interlocks should be how to best achieve consistency in the usage of the interlock device as a sentencing option. Judges often have discretion with regards to ordering installation and in some instances, they will waive this condition. Education is needed to ensure that this does not occur when it is not appropriate. Judges can benefit from education on the importance of using interlocks and why they are a viable sanction for impaired driving offenders. Other judicial concerns that may be areas of interest include: mouth alcohol and false positive breath tests; inconvenience to family members; attributing BAC readings to certain drivers; cost to offenders; accuracy of the device (some judges may remember the shortcomings of older devices); safety concerns (e.g., with respect to running retests); and indigency. In an effort to inform judges about the driving experience, judges are encouraged to drive their vehicles with an interlock installed to gain better understanding of how the device works. Judicial education is especially important in states like Texas where judges play a central role in the interlock program. Currently, it is estimated that up to 75% of judges in this state mandate the interlock as required, achieved in part by the growing emphasis on education about interlocks.

Alcohol interlock programs can also encounter difficulty when appropriate resources or adequate staffing are not allocated to support program delivery. The absence of these two elements certainly affects the ability of practitioners to operate the interlock program. While interlock programs, once established, can facilitate the monitoring of a larger number of offenders, it is still essential to monitor staffing needs. Although an estimated 80% of interlock offenders quickly become compliant, the monitoring of high-risk and non-compliant offenders requires more resources so comparable increases in funding and staffing may be required at times. Without these resources, over time existing staff face a greater potential for burnout and declining support for the program. To facilitate program implementation, resources must be appropriately allocated at the outset to handle the projected number of offenders that will be entering into the program. New Brunswick along with many other jurisdictions is currently experiencing this problem as a small number of individuals are responsible for overseeing the entire program. Similarly, with the current economic climate, many jurisdictions are facing budget cutbacks and it is becoming more difficult to sustain program funding for interlocks, as is the case with other programs.

The final issue that was raised as a challenge in both North America and Australia was a need for reciprocity in interlock programs across jurisdictions. In Canada, there is currently no reciprocity among the provinces/territories, meaning that the various interlock programs are not compatible and arrangements are not easily organized to manage an offender that moves to a different province/territory. Interprovincial operability (program operations and licensing rules) must begin to be considered so that reciprocal arrangements can be developed and implemented to better manage offenders and ensure that they do not drive unlicensed and impaired and that they are still subject to interlock conditions regardless of place of residence. The creation of these arrangements can reduce the number of offenders who drive unlicensed or fail to complete interlock program requirements if they relocate from one jurisdiction to another.

One solution that has been offered to address some of these challenges is the move towards harmonization and uniform alcohol interlock program standards that can be applied universally. There is currently no global approach to the implementation of interlock programs and standards do not exist to help achieve consistency across jurisdictions and programs (like technical standards do for devices although more jurisdictions are giving thought to this approach and reaching out to neighbours). The creation of management protocols would assist in the implementation and administration of interlock programs and harmonize the process internationally by allowing various jurisdictions to work collaboratively to identify challenges and develop solutions. In order for an initiative like this to be undertaken, leadership is essential and there must be an interest expressed by program administrators to develop such protocols. ISO certification for interlock programs is one example of an instrument that could be used to develop these program standards. This type of instrument would employ common language that all countries could adopt to achieve the desired consistency.

# WORKSHOPS



Symposium attendees had the opportunity to participate in one of four special workshop sessions that touched on a variety of issues related to alcohol interlocks. The purpose of these workshops was to engage participants in dialogue about some of the current and future issues being explored in the interlock field. The issues discussed included the use and development of technical standards; identification of essential interlock program policies; the controversy surrounding the proposed installation of interlocks in all vehicles; and lastly, adopting a public health perspective in contrast to the traditional public safety perspective that has been often employed in Australia, North America, and to a much lesser extent in the European Union. The following section briefly summarizes the highlights from the discussion generated by these workshops.

## Technical Standards

Workshop leader: Dr. Johannes Lagois, CENELEC, Europe

This workshop focused on issues related to device standards for alcohol interlocks. To begin the discussion, the workshop leader briefly summarized progress to date and highlighted recently accomplished milestones including the CENELEC standards in the European Union. Recent developments regarding standards in other parts of the world, including Canada and the U.S., were also reviewed.

Participants in this workshop agreed that high quality technical standards are essential to ensure that devices on the market are of good quality. Some participants emphasized that universal standards, rather than national standards could serve to reduce costs for end-users — currently seen as one of the main challenges to increasing participation rates in interlock programs around the world. The reason for this is that type-approval of a manufacturer's device is expensive; if there is only one universal standard instead of a set of national standards then only one type-approval procedure would be required, which would considerably reduce costs. Such a universal standard could perhaps be conceived as a minimal standard to ensure high-quality devices, yet still allowing enough flexibility to adjust to the distinct context of individual jurisdictions.

Some participants also expressed concern about the enforcement of standards and indicated that a standard without a requirement to abide to specifications contained in the standard is of limited use. It was suggested governments play an important role in consistently enforcing adherence to such standards. Finally, the need for program standards, in conjunction with technical standards was also raised during the discussion. However, it is believed that more research is needed before a true program standard could be developed, given that there is so much disparity across programs and little is known about effective

program features. Given this situation, it seems premature to propose program standards and perhaps best practices for programs would be more appropriate.

### **Interlock Program Policies**

Workshop leader: Toby Taylor, Oklahoma Board of Tests, United States

This workshop focused on the range of supporting operational policies that alcohol interlock programs require. There was dialogue to identify the critical components of these policies and whether there are some jurisdictions that can be regarded as good examples of interlock program policy.

The participants in this workshop agreed that more alcohol interlock programs are moving away from being either strict administrative or judicial model to better leverage the strengths of both models which of course has an effect on the development of policy. A growing trend appears to be the combination of the two approaches to program administration (a hybrid) whereby elements from both models are incorporated into policy to best suit the needs of individual jurisdictions and provide flexibility in managing the different risk levels of offenders. Decisions regarding which elements of each model are most appropriate and how they can each be incorporated in policy can be reached following an examination of the situation in individual jurisdictions to determine what resources are available and how they can best be utilized.

Discussion then centered on what policy issues need to be addressed at the outset before program implementation occurs. The issues identified included establishing a process for device certification and calibration, configuration of installations, certification of service providers and installation centers, and establishing reciprocity across jurisdictions. Some participants also suggested that it may be beneficial to distinguish between social and operational definitions of violations (i.e., how the definition is understood versus how it is measured) in programs in an attempt to alleviate confusion for practitioners. It was agreed that there are a significant number of policy issues that are important to address during the implementation of a successful alcohol interlock program and greater exploration of existing policies across jurisdictions will be informative.

### **Public Policy Issues: Interlocks in All Vehicles**

Workshop leader: Paul Boase, Transport Canada, Canada

The discussion in this workshop focused on the public policy issues surrounding the installation and use of interlocks in all vehicles.

The development of an alcohol interlock program will occur gradually, beginning with a subset of individuals such as offenders, young drivers, or commercial drivers (e.g., taxis and buses) before encompassing all drivers. Participants agreed that it was necessary to first establish these targeted programs before attempting to install interlocks in all vehicles to build public acceptance. The imposition of such a

universal measure would likely be met with initial resistance, particularly from non-drinkers who perceive this move as a cost and an unnecessary inconvenience. Therefore, the public must be convinced gradually over time using compelling examples. It was agreed that in order for this type of initiative to be successful, the interlock must be portrayed and valued as a safety feature in the vehicle, much like a seatbelt.

Workshop participants also noted that technological improvements are required to make devices more seamless, reliable, and less intrusive. Policy issues that would require consideration include what the pre-set BAC level would be and at what level a lockout would occur as well as other data management and privacy issues. Other identified areas of concern were the need for a new configuration, particularly for a passive sensor in a cold climate and whether or not to have a two-tiered system (passive and then active if alcohol is detected). Prior to presenting a universal interlock proposal to the public, these issues must be considered and resolved.

### **Moving from Public Safety to Public Health Approach**

Workshop leader: David Stanley, Convenience Advertising, Australia

A discussion of what action is needed to move from a public safety to a public health perspective on alcohol interlocks took place in this workshop. Dialogue focused on barriers and facilitators to this shift and the action needed to initiate this type of dialogue. A public health perspective involves a shift away from a reactionary approach to managing drunk driving offenders to a more preventative one targeting all citizens. This latter approach is more holistic in that it attempts to address the impaired driving problem on multiple levels in an effort to reduce opportunities for this behaviour and prevent its occurrence. The main reason why this perspective is not strongly embraced, particularly in North America, is because the focus of interlocks has traditionally been reactive – targeted towards punishing those who have already committed the act and protecting the public from them in the future. In an effort to shift the focus to prevention, participants agreed that the early targeting of certain high-risk groups would be beneficial. These groups include young males, repeat offenders, and novice drivers. Other identified measures that could be used to prevent impaired driving include restricting the sale of alcohol and educating the public about the effects of alcohol and drugs and their associated risks when driving. All of these steps were considered important to address the impaired driving problem.

In the same vein, it was determined that the installation of alcohol interlocks in all vehicles would be another useful preventative measure. A public health approach to the use of interlock devices would involve a trend towards the use of these devices in all vehicles as a standard feature over time. This way, no one would be able to drive while impaired. In other words, the interlock would be viewed much like a seatbelt – as a safety feature or protective mechanism. Participants agreed that embracing this perspective would have positive outcomes and would likely lead to a reduction in the occurrence of impaired driving. However, it was agreed that this transition would take time and much education would be required to gain broad public support for this initiative.

# TREATMENT OF DRUNK DRIVING OFFENDERS



## Driving While Impaired Recidivism: Putative Neurocognitive Recidivism and Remediation

Based on a presentation by Dr. Thomas Brown, Douglas Mental Health University (McGill) Institute, Canada

The inclusion of a treatment component in alcohol interlock programs has the potential to reduce recidivism following the removal of the device. In this capacity, the alcohol interlock can serve as a nexus between criminal justice sanctions and substance abuse treatment by effectively restricting and controlling an offender's driving privileges while demonstrating to the offender how their alcohol consumption impacts their behaviour. However, although the device separates drinking from driving it cannot be expected to result in long term change in the amount and extent of alcohol consumption on its own. As such, there is a need to partner alcohol interlocks with a more comprehensive treatment intervention for high-risk offenders in order to change behaviour in the long term. The goal is to determine how to get offenders who suffer from alcohol dependency issues into effective treatment programs and to ensure that they comply both with appropriate treatment and the alcohol interlock program.

There is evidence that repeat offenders do not, to date, have a high compliance rate with the conditions of alcohol interlock programs. This may occur because these offenders often suffer from neurotoxicity caused by alcohol abuse and are at increased risk of head trauma. Research suggests that this type of brain impairment has a negative effect both on treatment engagement and potential outcomes. A study was conducted to determine whether or not impaired driving offenders are more prone to exhibit neurocognitive deficits and results revealed that 66% of repeat offenders did possess some deficits. The most common deficits that were observed included memory capacity and executive functioning (helps one plan ahead, regulate behaviour, inhibit negative behaviours) which influences the ability to self-regulate, capacity to learn and retain intervention content, and engage in treatment. This inability to engage in treatment is problematic as 50-90% of convicted impaired driving offenders delay participation in remedial programs which is associated with an increased risk of unlicensed driving.

As a result, there are several implications for alcohol interlock programs. Policies should be designed to engage offenders in remediation work that counters the deficits that they may possess. Many programs that exist tend to be disproportionately burdensome for these offenders and the motivation for immediate gratification leads them to drive unlicensed as opposed to comply with program conditions. Contingency management approaches have proven to work well in dealing with this population – e.g., providing vouchers as incentives for early and successful participation.

Another promising intervention is the use of motivational interviewing. This intervention is designed for unmotivated, resistant individuals with poor problem recognition or acknowledgement. It attempts to elicit reasons from the client why they should change their behaviour which results in getting the offender to be their own advocate for change. A random control trial was conducted of this intervention (20-30 minutes) with impaired drivers and it was found to be promising. The study found a reduction in the number of drinking days following the brief intervention and a greater reduction in risky drinking was observed if the offender was subject to motivational interviewing compared to a control group after 12 months. These types of interventions are perceived as increasing self-competence and validating offenders' own reasons for change and solutions which is necessary to keep them engaged in the treatment process.

The overall implication of this research is that even the most hardcore of cases are not a 'lost cause' when it comes to treatment. These offenders may be amenable to the 'right' intervention adapted to their characteristics. These types of interventions can also be feasibly added to other countermeasures like the alcohol interlock. Brief Alcohol Motivational Interviewing (BAMI) could be incorporated into an interlock program to provide offenders with a treatment component and assist them in changing their behaviour. More research will be needed in the future to examine the impact of these interventions and to determine if their use translates into reduced recidivism as well as better treatment outcomes.

### **Creating Behavioural Change Among Habitual Offenders**

Based on a presentation by Dr. James Freeman, CARRS-Q, Australia

Repeat or habitual offenders are a substantial part of the impaired driving problem. It is important to target this group not only for alcohol interlock consideration but also for treatment interventions. It is equally important to determine what type of intervention is most likely to have the greatest impact in reducing future recidivism with this population and for this, research trials must be conducted. It is estimated that repeat offenders account for 20-30% of all those who drive impaired. They are a heterogeneous group that have several common characteristics – male; high-BACs; unemployed; low family income; older in age; divorced; criminal/traffic convictions; drug use; display a number of anti-social tendencies; suffer from stress and frustration; poor emotional/impulse control; and cognitive deficits. Repeat offenders are also disproportionately represented in crash statistics.

Due to the fact that repeat offenders make up such a substantial percentage of all impaired drivers, it is necessary to determine which offenders are likely to recidivate in the future and then target them for additional intervention. There are several predictors of repeat offending that have shown to be reliable. Research has shown that those who do not complete treatment are at the highest risk of recidivism and are 36 times more likely to be involved in a fatal crash. Other predictors include: alcohol abuse (especially drinking in the home); past behaviour; perception of apprehension certainty; and denial of risk. The best predictors are past impaired driving and the perceived risk of detection on the part of the offender. There

is an inverse relationship between the behaviour and perceived apprehension certainty which means that if these offenders believe that there is a good possibility that they will get caught drinking and driving then they are less likely to engage in that behaviour.

Ultimately, most of these offenders will be apprehended at some point and face sanctions. A study conducted in Queensland, Australia examined whether or not interventions such as rehabilitation programs and alcohol interlocks would have an impact on future recidivism and whether or not this impact would be greater than that of traditional sanctions alone. The study evaluated the *Under the Limit* program which is an education program developed for impaired driving offenders. It consists of eleven lessons (each 90 minutes in length) and attempts to create self-efficacy while getting offenders to replace drinking with other activities. The program promotes controlled drinking and the separation of drinking from driving. The evaluation of this program showed that it had positive effects as those who successfully completed the program reduced their recidivism by 15%. The program had its greatest impact with mid to high level offenders (repeat offenders with high-BACs) and this group reduced their recidivism by 55%.

In examining the alcohol interlock program, the study found that there was an initial unwillingness on the part of repeat offenders to reduce their level of alcohol consumption, as was found with a high number of breath test violations. There were also a high number of false positives that were recorded. One positive finding was that there was a general reduction in breath test violations over time which suggests that alcohol consumption decreased over the four month period that was monitored. The study also noted that offenders cited cost as a major obstacle to participation.

Overall, this evaluation revealed that legal sanctions in isolation are not extremely effective in reducing recidivism and that increasing their severity does not ensure greater levels of deterrence. Other important themes that emerged were the need to address alcohol consumption among high-risk offenders which can be done through assessment and the ordering of appropriate treatment interventions. Lastly, combining interventions is a promising practice as offenders in need can benefit most from a combination of treatment with alcohol interlocks and close monitoring. Legal sanctions alone are not enough to prevent future recidivism. This has important implications for alcohol interlock programs as it speaks to the need to have a comprehensive approach that not only separates drinking from driving but also addresses the underlying causes of offending such as alcohol dependency for those offenders with identified substance abuse issues.

## Supporting Interlock Programs: Treatment Partnerships

Based on presentations by Mark Kelly, Murcotts Driving Excellence, Australia; and, David Wallace, National Center for DWI Courts, United States

The repeat/hardcore impaired driving offender has been identified as the population that causes a significant proportion of drinking and driving related fatalities. For some, this group is the single most important challenge in the battle against impaired driving as they continually drive while impaired, typically at high-BrAC levels, even while under licence suspension. In an effort to prevent the occurrence of repeat offending, a multi-pronged approach is needed based on the development of partnerships between the criminal justice system, licensing agencies, and treatment providers.

The multi-pronged approach embraces a variety of measures that are aimed at not only separating drinking from driving and the use of close monitoring but also at addressing the underlying causes of the behaviour and reducing the offender's level of alcohol consumption. These measures include vehicle impoundment, court-based sanctions, administrative sanctions, alcohol interlocks, education programs, assessment, and treatment. There should be a combination of technological (alcohol interlock), legal (sanctions) and medical (treatment) interventions.

In Victoria, Australia the current impaired driving system for offenders embraces the multi-pronged approach outlined above. Not only do offenders receive court and administrative sanctions for impaired driving, but they are also required to attend a *Drink Driver Education Program*, are assessed for alcohol dependency, may be required to attend treatment, and are fitted with an alcohol interlock for a minimum of six months. *The Drink Driver Program* for recidivists involves harm minimization, relapse prevention, social skills training, cognitive-behavioural therapy, detoxification, and pharmacotherapy. The program has had success and in Victoria the measures that have proven to work include targeted interventions, deferred sentencing, court oversight, screening/counselling, assessment, extended small group education program (12 weeks), interlock with close monitoring, and case management.

The inclusion of these components in the impaired driving system has resulted in the development of extensive networks or partnerships. These partners include the courts, family members and friends, general practitioners, psychologists, drug and alcohol counselors, police prosecutors, case managers, and interlock providers. Each of these segments of the system work collaboratively to achieve the desired outcome of preventing recidivism.

A similar team mentality is utilized in many areas of the United States through the use of DWI (driving while impaired) Courts. These courts target the repeat/hardcore offender and handle cases post-conviction for a period of 12-18 months. These courts offer quick accountability and intensive supervision in combination with assessment and treatment. The supervision level is high and the offender is required to submit to alcohol testing two to three times per week or may be subject to an alcohol interlock or continuous

alcohol monitoring. Compliance is rewarded through positive reinforcement and non-compliance results in graduated sanctions. Even if an offender commits violations they are not removed from the program but are held immediately accountable for their actions. Similarly, compliant behaviour is encouraged through reinforcement techniques.

To operate a DWI Court a team effort is required. The judge, prosecutor, probation officer, treatment practitioner, defence attorney, law enforcement, and other community agencies work collaboratively as a partnership. This practice guarantees an extended support network for the offender and a level of continuity in their program as they always deal with the same individuals who are familiar with their case. Alcohol interlocks can be used in conjunction with the assessment and treatment component of the DWI Court as offenders could be required to start the vehicle several times a day to determine whether or not they are abstaining from alcohol consumption, thus serving as a monitoring mechanism for the drinking behaviour.<sup>1</sup>

The establishment of these kinds of partnerships across segments of the impaired driving system and with treatment practitioners in particular, has many benefits in combating drunk driving. By using a multi-pronged approach an offender not only faces traditional sanctions but can also benefit from assessment and treatment. Through the combination of sanctions, treatment, and alcohol interlocks drinking can be separated from driving and recidivism can be reduced through long-term behaviour change.

## BUILDING PUBLIC SUPPORT



Dialogue and collaboration across governments, NGOs, and communities can lead to greater support for the implementation and delivery of alcohol interlock programs. Through the efforts of organizations of concerned citizens, such as Mothers Against Drunk Driving (MADD), information about drunk driving and the role of interlock programs is actively communicated to the public and policymakers, resulting in increased awareness of and demand for political leadership to support program implementation. Also, by working beyond agency borders, practitioners can form partnerships with other concerned entities in the criminal justice system such as law enforcement, the judiciary, prosecutors, probation, and treatment officials. Over time, these partnerships can strengthen communication, increase funding and training, and enhance strategies to address the impaired driving problem. The following is a synopsis of the influence of some of these partnerships on the drunk driving issue:

### MADD USA

Based on a presentation by Chuck Hurley, Chief Executive Officer, United States

MADD was first established in 1980 in the United States by the mother of a drunk driving victim. Since that time it has launched many successful campaigns to reduce the occurrence of impaired driving. In 2006, the *Campaign to Eliminate Drunk Driving* was created which focuses on four essential elements: mandatory interlocks for all convicted impaired drivers, increased law enforcement efforts, advanced vehicle technology that would make it impossible for a drunk person to start a vehicle, and increased public support. Currently, 11 states have mandatory first offender interlock laws and MADD advocates that all U.S. jurisdictions implement mandatory interlock laws and first offender interlock laws.

Another initiative that MADD is supporting is the *Driver Alcohol Detection System for Safety* (DADSS) - a cooperative research agreement between the National Highway Traffic Safety Administration (NHTSA) and vehicle manufacturers to develop new and advanced technology for use in all vehicles to prevent drunk driving. This new technology must be non-intrusive, accurate, reliable, fast, inexpensive, and durable with a pre-set limit of 0.08% (the legal limit in the U.S.). The goal is to develop a system that can be utilized in all vehicles in the least restrictive way possible for the driver. MADD plans to stay focused on the data and trials of this new technology and other initiatives to eliminate drunk driving.

## MADD Japan

Based on a presentation by Kazuyo Iida, National President, Japan

Interest and concern about impaired driving emerged as an issue in Japan between 1990 and 2000 as sanctions and penalties for impaired driving steadily increased. More recent amendments to the traffic law in 2007 also reflected this shift in attitude and concern. As a response to this growing concern, MADD Japan was established in 2002 and currently has 10 chapters. In an effort to raise awareness about the impaired driving problem, MADD Japan has formed an interlock project team, held several demonstrations, and made a presentation to the Diet (Japanese Parliament). No interlock program exists at present, however, technical guidelines have been created and a pilot interlock program for repeat offenders was established in 2008.

Car manufacturers such as Nissan, Toyota, and Hino have also been working to develop new interlock technology in Japan. Public opinion polls show support for these initiatives as 80% of individuals want interlocks installed in all vehicles of convicted impaired drivers and 50% agree that interlocks should be installed in all new vehicles. At present, the push is for mandatory interlocks for all convicted impaired drivers, treatment and rehabilitation measures, and interlocks in commercial vehicles. While it has achieved great success, MADD Japan has also encountered several challenges including a lack of cooperation among stakeholders (government, car manufacturers, fleet owners) and also cost concerns. It was also challenging when the organization first attempted to mobilize grassroots support for alcohol interlocks, and much public education was required. Progress is being made as evidenced by the strong support for alcohol interlocks that is emerging.

## MADD Canada

Based on a presentation by Andy Murie, Chief Executive Officer, Canada

MADD Canada was established in 1990 and has 110 chapters. The organization focuses on several initiatives including victim services, youth targeted programs, public education and awareness campaigns, input into alcohol policy development, and promoting technological approaches to reducing drunk driving. In 2000, MADD began the Rate the Provinces program which is an annual review of provincial/territorial laws on impaired driving and accompanying recommendations. These report cards have resulted in 150 changes made to provincial/territorial laws. MADD Canada is also an advocate for the use of alcohol interlocks and supports the removal of hard licence suspension before interlock eligibility and the mandatory imposition of interlocks for all offenders convicted of impaired driving. There has been a push to have this mandatory policy implemented and several provinces including Ontario will be enacting laws that require mandatory installation in the near future. There is a belief that growth in interlock programs will come from mandatory interlock requirements in the administrative driver licensing system. The major challenge that MADD Canada has encountered is gaining support to move interlock programs from voluntary to mandatory participation for first offenders.

# PARTNERSHIPS TO REDUCE IMPAIRED DRIVING



Based on presentations by Superintendent Kevin Casey, Victoria Police, Australia; David Wallace, National Center for DWI Courts, United States; Honourable David Hodges, Texas Center for the Judiciary, United States

## Law Enforcement

Law enforcement plays an important role in detecting impaired drivers and removing them from the roadways. Officers must be knowledgeable to identify these drivers and receive training about interlock devices to enable them to identify and manage interlock restricted drivers encountered during traffic stops. In Victoria, Australia an *Arrive Alive* initiative has been created that seeks to reduce fatal and serious injury collisions involving alcohol by 30% between 2008 and 2017. As part of this initiative, police are utilizing random breath testing and mobile 'booze buses' in an effort to identify impaired drivers. Through awareness campaigns, the public has come to accept the performance of these tests. The Victoria police have also formed partnerships with VicRoads, the Department of Justice, the Transport Accident Commission, and Monash University to support impaired driving reductions. They also have links to health, education, and community groups. Through the formation of partnerships such as these, law enforcement is better equipped to understand and deal with the impaired driving problem and has additional support when it comes to implementing programs such as *Arrive Alive*. Additionally, law enforcement may consider establishing strong lines of communication with judges and probation officials to manage probation violations related to the interlock. By forming partnerships such as these, law enforcement will be able to close some of the gaps that allow offenders to avoid the consequences for their non-compliance.

## Prosecutors

Prosecutors can benefit from more education about alcohol interlock devices as they play a role in the handling of impaired driving cases and make recommendations regarding the sanctioning of convicted offenders. Not all prosecutors believe that alcohol interlocks are reliable technology and as a result, there is a need to get them to drive with the interlock on their own vehicle so that they can see how the device works. Peer-to-peer training is another education option that works well with prosecutors. Traffic Safety Resources Prosecutors (TSRPs) can take on this role by educating prosecutors on the importance and effectiveness of the interlock as a sanction for impaired driving offenders. Another feature of the device that prosecutors may have interest in is photo identification. The inclusion of this feature is beneficial in that it provides prosecutors with evidence that can be utilized in court if there is question over whether

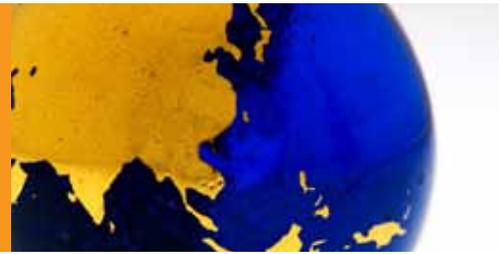
the offender is in fact providing the breath sample should violations occur. Armed with more information about the device, prosecutors can request that judges order offenders to participate in alcohol interlock programs and also encourage their use among defence counsel. Prosecutors have the ability to form partnerships with law enforcement as well as probation and treatment officials to ensure that offenders do not slip through gaps in the system. By establishing clear channels of communication, accurate information regarding individual offenders and their needs can be delivered in a timely fashion which can be helpful in making decisions regarding supervision and treatment options in relation to alcohol interlock programs.

## **Judges**

Judges do not always have the benefit of receiving sufficient or ongoing education or receiving enough research about various sanctions that they may be mandated to impose. In many instances, judges have the ability to waive the installation of an interlock and there needs to be education to ensure that this does not routinely occur. Judges can also benefit from education about the importance of using interlocks and why they are a viable sanction for impaired driving offenders. Areas of focus should include how interlocks work and how alcohol consumption affects the human body. Similar to prosecutors, judges are encouraged to drive their vehicles with an interlock installed to get a better sense of how the device works. In addition, judges need to be familiar with current research findings about the effectiveness of the interlock device as many have preconceived notions originating from failures of older technology. A Judicial Resource Liaison can be of assistance in educating judges on interlocks and how they can utilize them as a sanction in their courtrooms. Interlocks also fit well within DWI courts where partnerships with key agencies are already well-established.

Other practitioners who should be involved in the implementation and delivery of alcohol interlock programs are probation officials, treatment providers, and licensing agencies. All of these agencies should work collaboratively with court officials to streamline workflow and increase program effectiveness. Through collaboration and established lines of communication, the delivery of programming can be improved and fewer offenders will be able to slip through the cracks. For these reasons, the building of support and the establishment of partnerships across agencies to create a continuum of supervision is of critical importance.

# INTERNATIONAL PROGRESS



Alcohol interlock programs continue to be developed and implemented worldwide. The progress of these programs has brought innovative new approaches to dealing with the impaired driving problem. Through the enhancement and evaluation of both offender and commercial alcohol interlock programs, progress can be achieved in the development of best practices and guidelines that can serve as models for nations yet to implement these types of programs. The following jurisdictions are examples of recent progress:

## The Netherlands

Based on a presentation by Desirée Schaap, Dutch Ministry of Transport, the Netherlands

The Netherlands is in the process of developing a mandatory interlock program for first offenders who have a BAC over 0.13% and for all repeat offenders. The objective of the program is to prevent the occurrence of impaired driving and to encourage those who have been convicted to seek counselling and possibly treatment for their alcohol-related issues. The program will include a rehabilitation component that involves small group therapy sessions for offenders (three sessions that last four hours each). The licensing authority is responsible for overseeing the monitoring of all program participants and adequate support for this supervision is being put in place. An indigent fund may also be developed for this program which is likely to entail reduced fees for insurance. A unique element under consideration is the provision of indigent funding tied to program compliance where the offender would have the opportunity to earn assistance based on their performance in the program. The implementation of the alcohol interlock program in the Netherlands is expected to occur by the end of 2010.

## France

Based on a presentation by Dr. Charles Mercier-Guyon, Medical Council of the French Road Safety Association, France

France has had an alcohol interlock program in place for first offenders since 2004. Interlocks were initially introduced as part of a program that focused on alcohol, drugs, and fatigue. Since this time, France has looked to expand the use of interlocks from offenders to commercial vehicles. At present, France is preparing for the implementation of a commercial interlock program focusing on school buses and the cooperation and support of companies and unions has already been garnered for this initiative. A pilot study was conducted with 300 vehicles for a period of six months. Three different devices were tested

during this time frame and the trial was considered successful. There is now the expectation that all new school buses will have interlocks installed starting in January 2010 and that all buses will have them by 2015.

## Sweden

Based on a presentation by Sven Hultman, Swedish Transport Agency, Sweden

Sweden is experiencing a growing alcohol consumption problem due to the availability of lower priced alcohol from other European Union countries. This increase in consumption has had negative consequences for Sweden, including rising levels of impaired driving. At present, Sweden has a two-tiered impaired driving system that involves both administrative and judicial sanctions according to the BAC level. An alcohol interlock program has been implemented in an attempt to reduce the number of offenders who drive unlicensed – offenders can opt to participate in the interlock program for two years instead of accepting a licence suspension. There are currently 4,000-5,000 offenders participating in the program which only represents 12% of eligible offenders. Cost is cited as the main reason why offenders opt not to participate and there is also a 40-50% dropout rate for the program. While participation and successful completion rates are low, studies have shown that the interlock program has reduced recidivism, collisions, health costs, alcohol consumption, and has improved the quality of life by saving marital relationships and helping offenders retain employment. It is also worth noting that in Sweden, a public health perspective is taken with regards to the interlock as 40,000 non-offenders also have the device installed on their vehicles.

# INDIGENT OFFENDERS: IS IT AN ISSUE AND HOW IS IT BEING ADDRESSED



## Indigent Funding Initiatives and Opportunities

Based on a presentation by Erin Holmes, Traffic Injury Research Foundation, Canada

The issue of indigency among participants is a challenge that all alcohol interlock programs encounter. Interlock programs are typically funded using an offender-pay scheme that usually costs an average of \$70 (USD) for installation and an additional \$60-90 (USD) monthly for monitoring (costs vary across jurisdictions). This roughly equals \$3-4 per day, or the cost of one drink. However, there are concerns about the implications for offenders who are unable to pay these costs. Strategies are needed to address this problem as it is not desirable or equitable to have offenders that are unable to participate in interlock programs as a result of their indigent status.

The issue of indigency is often raised at the political level. Jurisdictions struggle with this situation particularly given the current economic climate where budget cutbacks and fiscal restraints are increasingly common. In many jurisdictions, it is not known how many offenders could be classified as indigent and some states do not have any mechanisms in place to track the number of offenders declared indigent. Also, understanding of the term indigency also varies widely. This is an important gap in data. In order for administrators to begin to develop meaningful strategies to address this concern, they must first gauge the magnitude of the problem. More research is needed to measure this problem so that limited resources can be effectively allocated and appropriate strategies developed.

At present, policymakers and agency administrators have yet to develop a uniform approach to managing this problem. There are currently eighteen jurisdictions across the United States that offer some form of indigent funding, each using different criteria to determine what constitutes an indigent offender and how to accommodate the inability to pay. There are also multiple strategies utilized to address this problem which include subsidized funding, government-supported funds, and negotiated rates with service providers (sliding fee scales). The use of indigent funds is the most common strategy currently being employed in the United States; however, there are several drawbacks to this approach because it must be sustained either by funds from the state or an additional fee applied to non-indigent offenders or service providers. The danger associated with this approach is having too many offenders who qualify as indigent and lacking the funds to accommodate all of them.

There is inconsistency not only in the approaches to accommodate indigent offenders but also the creation of criteria to identify who can be declared indigent. Some of the more popular strategies to determine indigency include:

<b>Eligibility Criteria</b>	<b>States</b>
Judicial discretion	Florida; Illinois; Nebraska; New Mexico; North Carolina
Federal poverty guidelines	Colorado; Maryland; Michigan; Pennsylvania; South Carolina; Washington
Food stamp guidelines	Kansas; Oregon; South Carolina; Wyoming
Participation in government assistance program	New Jersey
Inability to pay for defence counsel	Washington
Determination made by an outside agency	California; Virginia

While these measures are useful to determine indigency, it is noted that reliance on only one criterion can be problematic. For example, when left to the discretion of the judiciary, there is little consistency in findings of indigency and this can lead to rapid growth in the number of offenders who are declared indigent and result in the rapid depletion of available funds (as was the case in New Mexico). The use of a single criterion such as the inability to pay for defence counsel is also problematic because this does not necessarily take into consideration all individual expenses; this can lead to declaring an offender to be indigent who truly is not. Of equal concern, the cost of a public defender far exceeds the cost of an interlock device.

A proposed method for evaluating indigency is to adopt a more holistic perspective in examining an individual's ability to pay and taking into account all monthly expenses that they incur. Potential criteria for determining indigency can include: income from employment; income from other sources and unreported income; government assistance/food stamps; number of dependents; living arrangements; monthly expenses (i.e., cable tv, cell phone, vehicle payments, entertainment, etc.); treatment costs; and any additional fines/fees. By examining all of these factors, administrators are better able to accurately gauge an offender's economic situation and will have more context than a single measure would provide. One state that utilizes such an approach is South Carolina where a committee takes into account several of these factors when making indigency determinations. A few jurisdictions have also recently begun evaluating indigency at several points during participation in the program as an offender's economic status may have changed over time.

As governments move forward, it is important to create a strategy or policy that provides guidelines on how to effectively manage this problem. More research is needed to measure the magnitude of the indigent problem and existing approaches and strategies should be evaluated to determine their

effectiveness. Ultimately, researchers, government decision-makers, and practitioners must collaborate to create realistic recommendations and best practices to define indigency, administer funding, and manage associated costs to ensure participation is equitable.

### Accommodating Indigenous Populations in Interlock Programs

Based on a presentation by Kylie Olney, Office of Road Safety, Western Australia

The challenges associated with the participation of indigent offenders and the availability of interlock programs in rural areas are further compounded when the population targeted for intervention is indigenous. Aboriginal populations require special attention and customized programming as cultural sensitivity is essential. The case of Western Australia illustrates this fact and highlights the issues that may arise when attempting to establish an alcohol interlock program under these conditions.

In Western Australia, the Aboriginal population accounts for 3.8% (66,000) of the general population with 41% of these individuals living in remote and isolated areas. This population faces many financial, educational, employment, health, and justice challenges that non-Aboriginals do not. For example:

- > 40% of indigenous Western Australians earn less than \$211/week;
- > only 4% of individuals aged 15 and over have completed high school;
- > unemployment has reached 40% in many remote communities;
- > life expectancy is 16-17 years less than the overall Australian population;
- > Aboriginal people are 21 more times likely to be incarcerated;
- > Aboriginal people account for 40% of the prison population;
- > they are three times more likely to be arrested for impaired driving than non-Aboriginal people; and,
- > they are three times more likely to be injured or killed in motor vehicle crashes (up to 17 times in very remote areas) and the road trauma costs are, on a per capita basis, about three times as much as those for non-Aboriginal people.

As a result of these hardships, establishing an alcohol interlock program is not only a necessity but also a very difficult undertaking. As of October 2009, an alcohol interlock program has not yet been established in Western Australia, although one has been in development for the past eight years. Accompanying legislation is expected to have vehicle sanctions for repeat offenders as well as court-imposed rehabilitation, vehicle confiscation, and compulsory blood testing for all those involved in crashes.

As part of the development process an interlock trial was conducted in Roeburne, a small rural community in Western Australia. The trial involved mining companies, government, the health sector, and the community (including non-government, community, corporate, and government partnerships). The trial had 20-30 participants and the key factor in the program was intense supervision and education. The goal

of this trial was to not only demonstrate the value of the alcohol interlock and to raise awareness but also to create ways to respond to the dynamics of contemporary Aboriginal communities, so as to reflect the cultural complexities and work within the framework of the indigenous culture.

When working with this type of population there is a need to be culturally sensitive -- to respect the values of the community and ensure social, emotional, and cultural wellbeing of the community and participants. At the same time, drinking must be separated from driving. To accomplish this goal an alcohol interlock can be installed on the vehicle while work is being done with the individual, their family, and the community at large. For remote communities such as Roeburne, the alcohol interlock is viewed as a preventative measure and a way to reduce the occurrence of impaired driving through community support. The establishment of partnerships with the community is an essential ingredient of the process as they can guide program administrators and practitioners on how best to provide assistance and deliver services.

Another issue intimately tied to working with indigenous populations is addressing indigency. As previously stated, Aboriginal communities in Western Australia struggle with financial problems and as a result, have high indigent populations. It is likely that there will be in upwards of 300 indigent offenders which would require a \$2 million fund to cover the costs associated with this population. If and when an interlock program is established, this issue must be revisited to identify and develop workable solutions.

# DRUG IMPAIRED DRIVING AND THE POTENTIAL OF ALCOHOL INTERLOCKS



Based on a presentation by Dr. Philip Swann, VicRoads, Australia

In the last nine years in Victoria, approximately 45% of all drivers killed in road crashes tested positive for alcohol or drugs or both substances annually. While a great amount of energy is regularly expended to explain the occasional yearly drops in fatalities, as well as increases in fatalities, no real trends have emerged and the number of fatalities seems to have reached a plateau, suggesting that novel approaches are required to address the problem.

Analysis reveals that there are three groups of fatally injured drivers for whom drugs were a factor. Over nearly the last decade 18.5% of fatally injured car and truck drivers tested positive in the morgue for drugs, 15.1% test positive for only alcohol, and 11.4% test positive for both substances. This third group has used a mix of either alcohol and prescription drugs or alcohol and illegal drugs. Drivers within this latter group could be considered for participation in an alcohol interlock program on a “risk” basis. Especially heavy vehicle drivers seem to stand out in terms of risk within this group of users of both alcohol and other drugs.

When further examining this particular group of drivers, the two most popular legal psychoactive substances are alcohol and nicotine. Both are powerful drugs and are highly addictive. The most popular illegal psychoactive substance is THC, the active and addictive component in cannabis. With respect to the use of psychoactive substances in the Victorian transport industry, from 1999 through 2007 approximately 30% of truck drivers killed tested positive for illicit drugs; this includes 18.2% of truck drivers killed testing positive to stimulants and 4.5% of truck drivers killed testing positive to THC. Of considerable interest, for every truck driver killed there are on average an additional four road users killed (this can be explained by the great difference in the mass of the heavy vehicles and the other passenger vehicles involved in the crash so occupants of those other vehicles are more vulnerable and at a higher risk of dying).

Fatality data from before the late 1990s show similar prevalence levels of stimulant drugs by heavy vehicle drivers, indicative of occupational drug use. For example, based on fatality data from 1990 through 1999 in Victoria, New South Wales and Western Australia, illegal alcohol levels were found among 29.1% of all drivers and among 8.6% of heavy vehicle drivers. Impairing drugs including cannabinoids, opioids, benzodiazepines and stimulants were found among 23.5% of all drivers. However, when looking at

stimulants only, there was an overall prevalence among fatally injured drivers of 4.1% while this was 23% among fatally injured heavy vehicle drivers — nearly a six fold increase in the prevalence among drivers in general.

In sum, the prevalence of stimulant drugs among heavy vehicle driver fatalities in Victoria, New South Wales and Western Australia from 1990 through 1999 was 23% and in Victoria from 1999 through 2007 this was 18.2%. The number one stimulant used was methamphetamine. Interestingly, researchers found in roadside surveys that between 1 in 73 and 1 in 64 heavy vehicle drivers tested positive for methamphetamine. It was also found that drivers reported this stimulant drug allowed them to work very long hours — a pertinent and logical finding in light of the fact that the majority of heavy truck drivers were paid on a per kilometer basis.

Given the severely increased crash risk of heavy vehicle drivers when using stimulants (one study found a crash risk of nearly nine times that of drug free drivers and four times that of other drivers who are using stimulants), heavy vehicles in Australia are considered a major road safety challenge. Traditionally legislative countermeasures for this group included zero tolerance for alcohol use, i.e., a zero blood alcohol concentration (BAC) limit and the regulation of driving hours. More recently, Australia has undertaken a national reform of the heavy vehicle driving hours legislation. This new legislation further regulates driving hours.

In light of these legislative changes, existing approved alcohol interlocks in Victoria would not only allow a company to demonstrate compliance with the heavy vehicle zero BAC legislation, but also compliance with the new regulations for driving hours. The interlock would automatically log the vehicle's operating hours (based on the 'ignition on/ignition off' events that are being logged) and this could be used to demonstrate symmetry between the regulated logbook and the vehicle. Furthermore, alcohol interlocks with a photo-ID component would even allow demonstrating symmetry between the regulated logbook and the individual driver, rather than the vehicle.

Given such opportunities, this begs the question regarding the potential role of an interlock program for heavy vehicle drivers. Pertinent aspects of implementation and delivery are whether the program should be mandatory or voluntary, whether it should be offender-based or for all heavy vehicle drivers, and whether subsidies should be offered to companies to support and encourage implementation. Based on experiences with interlock programs for personal cars, it appears that a mandatory program has a better chance for success.

# ALCOHOL INTERLOCKS FOR FIRST OFFENDERS: A CASE STUDY ON IMPLEMENTATION



Based on a presentation by Robyn Robertson, Traffic Injury Research Foundation, Canada

Many jurisdictions are currently considering mandatory alcohol interlock programs for first offenders. There is a wealth of information that is relevant to this decision-making process and much can be learned from jurisdictions that have already implemented a first offender program.

In the past two decades there has been tremendous growth in alcohol interlock programs for drunk driving offenders and almost all jurisdictions in the United States and Canada have some type of program in place. Historically, participation was linked to a drunk driver's criminal status. Participation was mandatory for repeat and high-BAC offenders – those deemed to be the greatest risk to the public and who had the highest probability of re-offending. Participation was more often voluntary for first offenders. More recently, a trend toward mandatory participation for all offenders has emerged.

There is solid research to support the use of alcohol interlocks with first offenders as studies have found that drunk drivers can drink and drive more than 200 times before being detected and apprehended (Beck et al., 1999). Also, this group of offenders can account for the majority of all drunk driving offences in many jurisdictions. Many first offenders also frequently drive with high-BACs that are more than twice the legal limit and also have a significant risk of crashing (Rauch 2005).

While there may be many good reasons to implement a mandatory first offender interlock program, there are also several challenges. Concerns about the use of alcohol interlocks with first offenders stem from a variety of practical historical issues related to insufficient program resources and weak program implementation. These factors have contributed to low participation rates, even when participation has been mandated. There is also debate about whether resources would be better utilized by focusing on repeat or hardcore offenders who are at a much higher risk of crashing and are responsible for a majority (74-76%) of alcohol-related deaths and injuries (Borkenstein et al. 1964; Simpson et al. 2004; Blomberg et al. 2009) making them a significant risk to the driving public and a priority for participation in interlock programs.

A case study was conducted by TIRF to examine the process of implementing the first offender interlock program in Illinois and to compare this process to other first offender states. In June 2007, Illinois legislation extended the use of alcohol interlocks from repeat offenders to first offenders on a voluntary basis. This legislation had the potential to create significant growth in the population of interlock offenders

and increase the number of participants from 3,000 to as many as 30,000. In order to implement this new program, the Illinois Secretary of State (SOS) was tasked with putting the law into practice. The implementation effort was organized and led by six committees whose goal was to identify and execute needed modifications to key aspects of the program including:

- > Translating the legislation into administrative rules that were also consistent with existing administrative rules;
- > Revising existing forms/letters/notices and creating new forms/letters/notices for first offenders;
- > Changing the existing driver record program to accommodate first offenders;
- > Developing an interlock database to collate and manage reports from interlock vendors and generate automatic responses to a wide variety of events;
- > Developing and delivering statewide training materials to all relevant practitioners across the jurisdiction;
- > Developing and delivering press events and statewide information materials; and,
- > Creating new program fees and developing a strategy for managing indigent offenders.

Each of the six committees ranged in size between seven and 15 staff (with some people participating in multiple committees). The work of each committee took between nine and 20 months to complete and the estimated percentage of time that each committee staff person was allocated to support the implementation of the program during this period ranged from 10% - 90%.

The total cost of implementation for the State of Illinois is estimated at slightly more than \$1.24 million (USD). This estimate includes a variety of costs including a statewide symposium, training, staff salaries, the hiring of additional staff, direct costs, and related costs such as retirement and group insurance costs. The Highway Safety Office provided \$300,000 in Federal highway dollars to support additional staff and staff travel to deliver training and education across the State. IDOT also provided a \$25,000 grant to support the costs of the interlock symposium that was organized for law enforcement.

Overall, the implementation of a first offender program in Illinois went very well and no major challenges occurred when the program took effect. In particular, there were two key factors that were critical to Illinois' successful implementation. First, there was strong political and agency leadership to ensure that adequate staff support and resources were made available. Second, there was strong teamwork, coordination, and communication across agencies and staff roles and responsibilities were clearly articulated. Of equal importance, staff also had some 18 months to adequately prepare for implementation.

Based on Illinois' experience, it is evident that the implementation of first offender interlock programs requires leadership, planning and preparation, teamwork, appropriate staff allocations, and adequate financial allocations. Strong legislation is needed and it must be backed up by execution strategies at an operational level if the intended goals of the program are to be achieved.

There is much that can be learned about the implementation of first offender alcohol interlock programs from the experiences of Illinois and other jurisdictions. An examination of the strategies and processes that have been employed and the diversity of successes and challenges that jurisdictions have experienced can do much to increase understanding of program implementation and guide future efforts relating to first offender alcohol interlock laws.

This article is part of a larger report entitled, *The Implementation of Alcohol Interlocks for First Offenders: A Case Study* which was released in July 2010. The full report is available for download at [www.tirf.ca](http://www.tirf.ca).

# CONCLUSIONS

There is a growing trend towards the increased use and expansion of alcohol interlock programs around the world. An essential part of this process is the development of sound implementation policies and practices that are informed by research. Partnerships between researchers and practitioners are strongly encouraged to formulate critical research questions and to ensure that research findings are relevant to practice and can inform decision-making.

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# NOTES



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