Impaired Driving Countermeasures: an Australian perspective

Dr. Barry Watson

Overview

- The prevalence of impaired driving in Australia
- Regulatory approaches used to manage:
  - Alcohol impaired driving
  - Other drug impaired driving
- Key countermeasures
  - Lower blood alcohol limits
  - Random breath testing (RBT)
  - Random drug testing (RDT)
- Ongoing challenges and future directions
Alcohol-impaired driving: Drink driving
Percentage of drivers and riders killed with BAC of .05 or more in Australia: 1980-2008
(where BAC is known)

Sources: ATSB and BITRE
Percentage of drivers and riders killed with BAC of .05 or more in **Queensland**: 1980-2011
(where BAC is known)

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<th>Year</th>
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Source: Queensland Transport & Main Roads
Evolution of drink driving countermeasures (1)

- **Late 1960s and 1970s**
  - Introduction of ‘per se’ drink driving laws, the use of the breathalyzer and a .08 general alcohol limit
  - First drink driving publicity campaigns conducted

- **1980s**
  - Random Breath Testing (RBT) adopted, supported by intensive mass media publicity campaigns
  - General alcohol limit lowered to .05
  - Mandatory penalties for drink driving introduced, generally entailing loss of licence
Evolution of drink driving countermeasures (2)

- 1990s
  - Introduction of zero alcohol limit for learner, provisional and professional drivers
  - Ongoing refinements of drink driving penalties e.g. immediate licence loss for high-range offenders
  - Increasing utilisation of drink driving rehabilitation

- 2000s
  - Many states introduce alcohol ignition interlocks programs and vehicle impoundment for high-range/repeat offenders
A case study: Drink driving countermeasures in Queensland

- **History:**
  - 1968 - Breathalyzer introduced
  - 1982 - Alcohol limit reduced from .08 to .05
  - 1986 - Reduced Impaired Driving (RID)
  - 1988 - Random Breath Testing (RBT)

- Penalties and sanctions progressively made more severe and certain (e.g. licence loss for drink driving is mandatory for most offenders)

- Policing is supported by mass-media education

Step-wise reductions have coincided with the introduction of new initiatives, but the initial effects do not appear to be maintained. This suggests that the underlying mechanisms are not stable.

Source: Watson et al, 1994
Role of Random Breath Testing (RBT)

- RBT is the primary drink driving law enforcement tool used throughout Australia
- The police have the power to pull over and breath test drivers at any time, irrespective of their behaviour
- Majority of tests are conducted in highly visible, stationary mode (using a bus or police cars)
- Mobile car-based RBT used to detect evaders
- RBT is supported by mass media advertising eg. “Anywhere, anytime” message
- Strong community support for RBT, with 98% approval rating nationally (Petroulias, 2009)
RBT ‘Booze Bus’ Operation

Source: Queensland Transport
Car-based RBT operations

Source: Queensland Police Service
Effectiveness of RBT

- Evaluations suggest that RBT has produced long-term reductions in alcohol-related crashes.
- However, degree of effectiveness appears to be linked to type of program implementation:
  - Initial success linked to ‘boots and all’ approaches featuring high, sustained high levels of testing.
  - Long-term success linked to sustaining testing levels and innovation.
- Many jurisdictions conduct the equivalent of one RBT test per licensed driver every year.
- The perceived risk of being detected for drink driving is generally higher than for other illegal behaviours.

National exposure to RBT (prior 6 months): 1993 to 2008

Source: Pennay, 2008
Drug-impaired driving: Drug driving
Prevalence of drug driving

- Growing concern regarding the prevalence of drug driving and its impact on crash risk
- Internationally, studies have detected drugs in between 9% and 40% of driver fatalities (Davey et al., 2009)
- A Victorian study found 26.7% of motorists killed had drugs other than alcohol in their system (Drummer et al., 2003)
- A Victorian roadside study found 2.4% of drivers tested positive for cannabis or amphetamines, which was twice the drink driving detection rate (Drummer et al., 2007)
- A Queensland roadside survey of 2657 drivers in metropolitan and regional centres found that 3.1% had a drug in their system, with cannabis and opiates being the most common (Davey et al., 2009)
Random drug testing (RDT) (1)

- From 2003, random roadside drug testing has been progressively implemented across Australia.
- These programs target select illicit drugs and are based on ‘per se’ legalisation:
  - It is an offence to be detected with a concentration of the stated illicit drugs in the blood or oral fluid, or to refuse to be tested.
  - The roadside saliva test is specific to cannabis, meth/amphetamine, and MDMA (ecstasy).
  - A laboratory test is undertaken to confirm results.
- RDT is conducted in conjunction with breath testing (and only proceeds if the breath test is passed).

Source: Haworth & Lenne, 2007
Random drug testing (RDT) (2)

- RDT operations tend to target three groups:
  - Truck drivers
  - Young drivers
  - General driving population (Haworth & Lenne, 2007)

- Similar to RBT, RDT is designed to enhance general deterrent effect of laws but testing rates are considerably lower due to high costs and more targeted

- Detection rates for RDT are typically higher than for RBT (currently 1:40 vs. 1:120 in Queensland)

- Limited evaluations of RDT undertaken to date
Random Roadside Drug Testing

Source: Queensland Police Service
Random Roadside Drug Testing

Source: Queensland Police Service
Drink driving challenges

- The rate of reduction in the role of alcohol in driver and rider fatalities crashes appears to have plateaued.
- Over the last two decades, the constraints on the availability of alcohol have been reduced and binge drinking has increased.
  - Producing countervailing negative effects on safety.
- Australia does not utilise fiscal policies to any large extent to manage alcohol use.
- The uptake of alcohol ignition interlocks and drink driving rehabilitation remains relatively low.
Drug driving challenges

- The costs associated with random drug testing makes it difficult to achieve the ‘boots and all’ effect associated with RBT.
- Drug detection methods need to be enhanced and sensitive to changes in drug use within the community (e.g. synthetic drugs).
- Little attention has been given to the prevalence of prescription drugs among drivers nor strategies to address this issue.
- Some research has occurred into the effectiveness of warning labels in prescription drugs comparing Australian and French approach (Smyth, 2012).
Priorities for the future

- Continue to enhance policing programs to maximize their general deterrent effect, while minimizing evasion opportunities
- Better identify drug drivers who are detected with a positive blood alcohol concentration
- Improve the management of recidivist drink driving offenders through the widespread application of alcohol ignition interlocks and vehicle impoundment, accompanied by rehabilitation programs
- Improve the management of recidivist drug drivers
- Develop non-intrusive alcohol ignition interlock devices for use in all motor vehicles