Managing the role of alcohol in road crashes: An Australian perspective

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Overview

- **Achievements**
  - Long-term reduction in alcohol-related driver fatalities
  - High level of community disapproval of drink driving and strong support for countermeasures

- **Countermeasures**
  - Many best-practice countermeasures in place
  - Strong focus on general deterrence oriented policing and offender management

- **Challenges**
  - Where to next with drink driving?
  - Need to better manage drink walking
Where in the world is Queensland?

Australia:
Population = 24.65 million
Land area = 7.7 million km²
Reg. vehicles = 18.4 million
Driver’s licences = 17.2 million

Queensland:
Population = 4.8 million
Land area = 1.7 million km²
Reg. vehicles = 4.3 million
Driver’s licences = 3.8 million
Alcohol-impaired driving: Drink driving
Please note that this graph:

1. Excludes Victoria for all years.
2. Excludes WA for 2015 only.
3. Excludes drivers/riders with a special licence (eg P,L, heavy vehicles) that exceeded their special range limit (eg. zero) but recorded levels below 0.05.
4. Adjustments made for one jurisdiction with a large number of missing BAC values where a driver was reported as not having exceeded BAC limits.

Percentage of drivers and riders killed with BAC of .05 or more in Australia: 1980-2015
(where BAC is known*)

Year

% 44 42 40 37 40 35 34 34 32 28 29 28 30 29 28 26 27 28 28 31 33 26 26 25 23 20 22 19 18

Sources: ATSB and BITRE
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 to now
  - Sustained high levels of random breath testing
  - Introduction of 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 was supported by mass-media education

Source: Watson et al, 1994
Alcohol-related fatalities in Queensland: 1978-1994

Number of driver/rider fatalities

Source: Watson et al, 1994
Random Breath Testing (RBT) (1)

- Primary drink driving enforcement tool
- Conducted in highly visible, intensive manner to act as a general deterrent
- Underpinned by deterrence theory
- Some states conduct the equivalent of one breath test per licensed driver per year
- Evaluations confirm that RBT has produced long-term reductions in alcohol-related crashes
- Public support for RBT is extremely high (96%)

Random Breath Testing (RBT) (2)

RBT ‘booze bus’ and car operations

Source: Police/media in Queensland, New South Wales and Victoria
Random Breath Testing (RBT) (3)
Exposure to RBT activity in previous 6 months, 1993-2013

Source: Petroulias, 2014
Best practice features of RBT

- Research suggests that RBT is most effective when it is **unpredictable, unavoidable & ubiquitous**

- This requires:
  - sustained high levels of testing, which is highly visible, threatening and rigorous
  - that all drivers stopped should be tested
  - that priority be given to highly visible, stationary operations
  - that operational police be educated about the deterrence principles underpinning RBT
  - operations be reinforced by public education

Drink driving sanctions in Queensland (1)

- **24-hour licence suspension** applies to all drivers apprehended with a BAC less than 0.10
- **Immediate licence suspension** for offenders:
  - charged with a mid range or high range drink driving offence (0.10 BAC and over)
  - failing to provide police with a specimen of breath or blood when requested
- **Licence disqualification** (following appearance in court) generally applied to all drink driving offenders
- **Fines** and **period of disqualification** linked to BAC
Drink driving penalties in Queensland: First offenders

<table>
<thead>
<tr>
<th>Blood/breath alcohol concentration (BAC)</th>
<th>Licence disqualification</th>
<th>Maximum fine amount</th>
<th>Maximum term of imprisonment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Over 0.00, but under 0.05 BAC (learner, probationary or provisional licences, and drivers of particular motor vehicles)</td>
<td>3 to 9 months</td>
<td>$1,706</td>
<td>3 months</td>
</tr>
<tr>
<td>0.05 and over, but under 0.10</td>
<td>1 to 9 months</td>
<td>$1,706</td>
<td>3 months</td>
</tr>
<tr>
<td>0.10 and over, but under 0.15</td>
<td>3 to 12 months</td>
<td>$2,438</td>
<td>6 months</td>
</tr>
</tbody>
</table>

Source: Queensland Transport
Drink driving sanctions in Queensland (2)

- However, restricted ‘work’ licences available to certain first offenders with a BAC < .150 on economic hardship grounds
- Voluntary drink driver rehabilitation programs offered in some courts
- Vehicle impoundment introduced for repeat, high-range (BAC ≥.150) offenders in late 2008
- Alcohol ignition interlocks introduced for high-range first offenders and repeat offenders in 2010
Alcohol Ignition Interlock
Drink Driving Education/Media Campaigns

- RBT has historically been supported by high profile education/media campaigns
- Two main approaches adopted:
  - Reinforcing = reinforce purpose of enforcement (e.g., deterrence, likelihood of detection, road safety goal), educate about enforcement practices
  - Transformative = attempt to change cultural attitudes and beliefs about drink driving, increase moral attachment to the law
Example of a “Reinforcing” Message

Source: Western Australian Government
Example of a “Transformative” Message

Source: Transport Accident Commission of Victoria
Drink Driving Attitudes

- Research shows that community attitudes to drink driving have undergone a dramatic positive shift over the last three decades:
  - Generally perceived as a risky behavior and socially unacceptable
- The change is generally attributed to introduction of RBT and associated media and education
  - But changes in general community values towards alcohol may have played a role
Ongoing challenges to managing drink driving (1)

- Alcohol still remains a significant factor in driver and rider fatalities (around 20% nationally)
- Recidivistic drink drivers remain a concern:
  - 15% of Queensland drink driving offenders have at least one previous offence in the preceding three years
  - 14% of crash-involved drink drivers have a previous offence in the preceding three years (Leal et al, 2006)
- The uptake of alcohol ignition interlocks remains relatively low in some Australian states
- Link between drink driving and unlicensed driving
Ongoing challenges to managing drink driving

Over the last two to three decades in Australia:
- Alcohol has become more widely available
- Alcohol consumption has increased
- Problem consumption (e.g. binge drinking) has increased

Current drink driving countermeasures may simply be ‘holding the line’ against more widespread alcohol misuse

Drink walking remains a concern
Percentage of total pedestrian fatalities with a BAC of .05 or more in Queensland: 1993-2014

Source: Queensland Transport
Conclusion: Priorities for the future

- Continue to enhance RBT and related penalties to maximize their general deterrent effect
- Improve the management of recidivist drink driving offenders through widespread use of:
  - alcohol ignition interlocks and vehicle impoundment
  - supported by rehabilitation programs
- Introduce greater controls on alcohol consumption
  or
- Develop non-intrusive alcohol ignition interlock devices for use in all motor vehicles
- Develop new approaches to manage drink walking
Thank you

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BITRE. Data provided by Bureau of Infrastructure, Transport & Regional Economics. Canberra: Department of Infrastructure & Transport.


References (2)


