Managing Drug Driving: an Australian perspective

Professor Barry Watson

9th International Conference on Urban Traffic Safety, 8 -10 August, 2017

Centre for Accident Research & Road Safety - Queensland

CARRS-Q is a joint venture initiative of the Motor Accident Insurance Commission and Queensland University of Technology

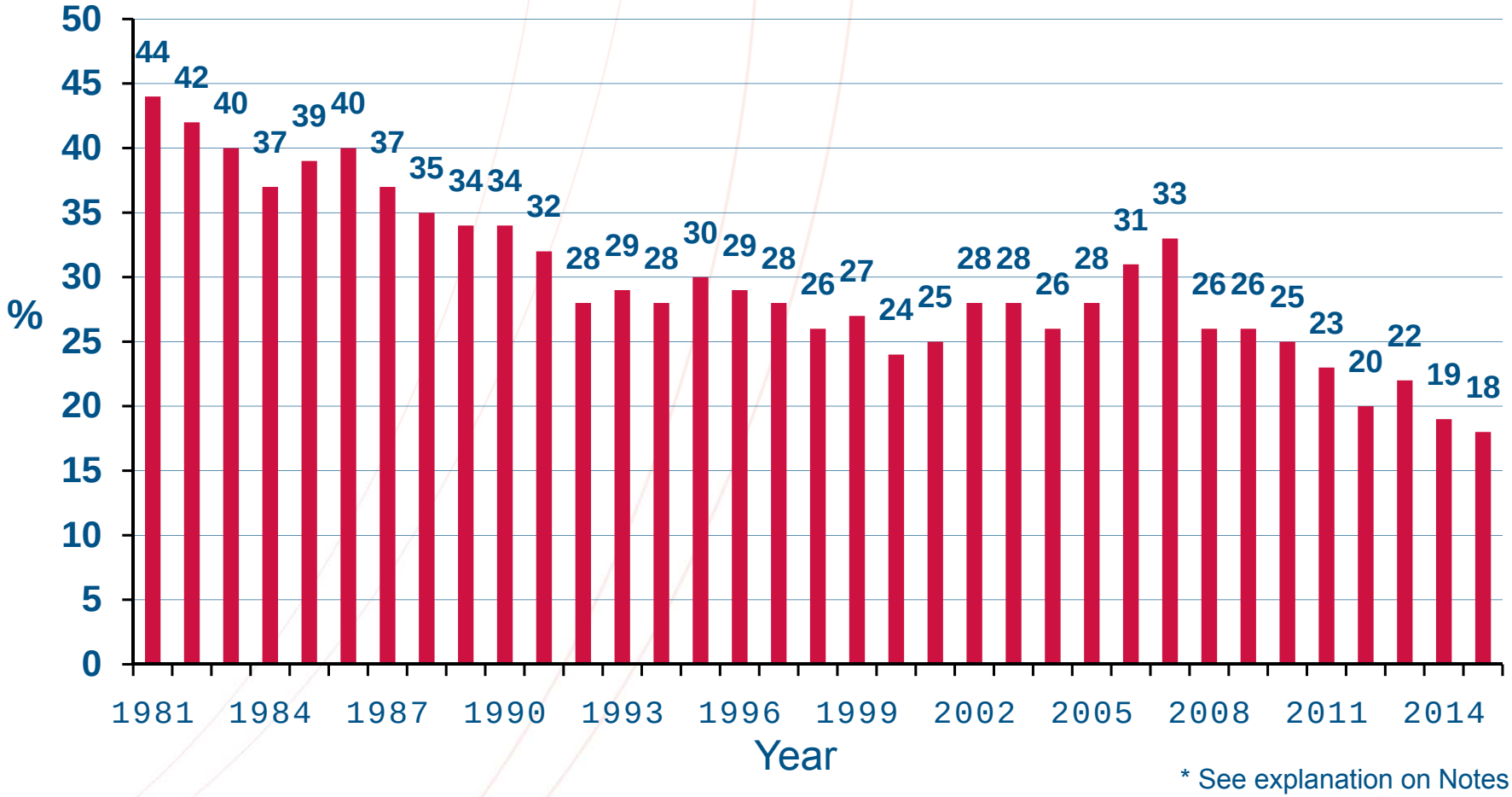
www.carrsq.qut.edu.au

Overview

- Lessons learnt from managing drink driving:
  - The central role of random breath testing (RBT)
- The prevalence of drug driving in Australia
- Key drug driving countermeasures
  - Random drug testing (RDT)
  - Drug driving public education
- Ongoing challenges and future directions

Percentage of drivers and riders killed with BAC of .05 or more in Australia: 1980-2015

(where BAC is known*)



* See explanation on Notes view

Sources: ATSB and BITRE

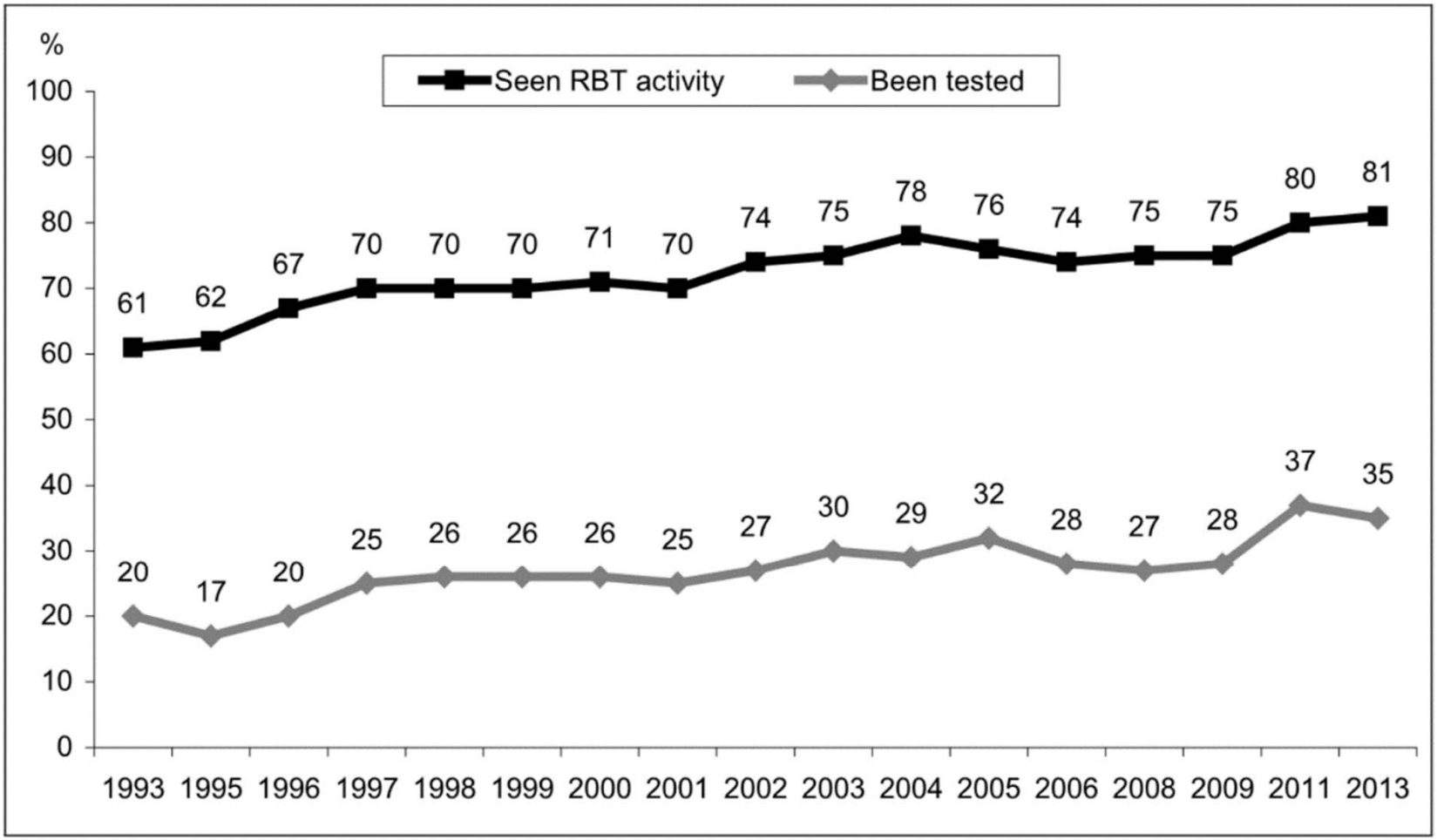
Random Breath Testing (RBT) (1)

- 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 every year
- Evaluations confirm that RBT has produced long-term reductions in alcohol-related crashes
- Public support for RBT is extremely high (96%)

Sources: Homel, 1988; Henstridge *et al*, 1994; Watson *et al,* 1994; Hart *et al*, 2004; Petroulias, 2014

Random Breath Testing (RBT) (2)

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

Sources: Homel, 1988, Watson *et al*, 1994; Hart *et al*, 2004; Bates *et al,* 2012

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 (1)

- Historically, drug driving was dealt with by a "*Driving Under the Influence*" charge, requiring a blood test
- From 2003, random roadside drug testing was progressively implemented across Australian states
- Random drug testing targets particular illicit drugs and is 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 THC (cannabis), methylamphetamine (speed/ice) and MDMA (ecstasy)

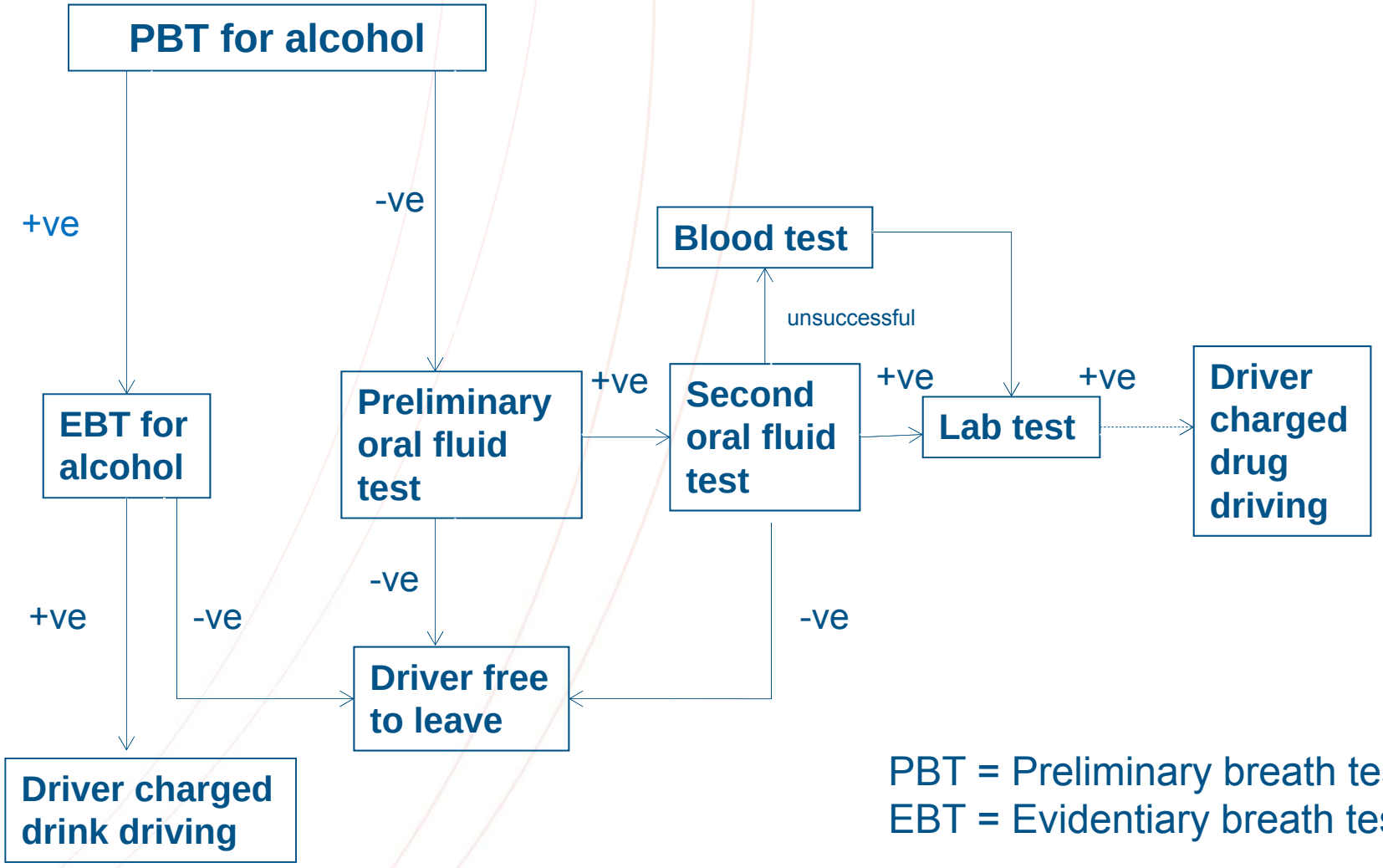
Source: Haworth & Lenne, 2007

Random drug testing (2)

- It is conducted in conjunction with breath testing (and generally only proceeds if the breath test is passed)
- A two-phase saliva test is performed
- A laboratory test is undertaken to confirm results
- Operations tend to target three groups:
  - Truck drivers
  - Young drivers
  - General driving population

Source: Haworth & Lenne, 2007

Random drug testing (3)



PBT = Preliminary breath test
EBT = Evidentiary breath test

Source: Haworth & Lenne, 2007

Preliminary Saliva Test

Source: Queensland Police Service

Random Drug Testing Bus

Source: Queensland Police Service

Random drug testing (4)

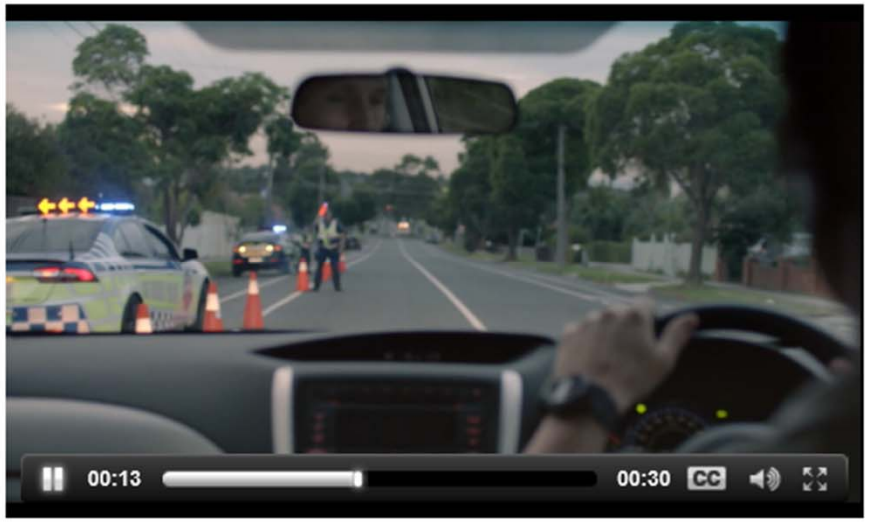
- Some variations in practice exist across the Australian states
- While it is designed to act as a general deterrent, testing rates are considerably lower than those for breath testing - due to higher costs
- Random drug detection rates are typically higher than for random breath testing e.g. 1:38 vs. 1:107 in Queensland (Davey, Armstrong & Martin, 2014)

Queensland penalties for drug driving

- ***Driving with a relevant drug present***
  - The driver is required to attend court where a Magistrate can:
    - Disqualify the driver for 1 – 9 months
    - Impose a fine of up to $1,706
    - Impose a maximum term of imprisonment of up to 3 months
  - Impose stronger penalties for a repeat offender
- ***Driving under the influence of liquor or a drug***
  - The driver is immediately suspended and required to attend court where a Magistrate can:
    - Disqualify the driver for up to 6 months
    - Impose a fine of up to $3,413
    - Impose a maximum term of imprisonment of up to 9 months
  - Impose stronger penalties for a repeat offender

Source: Queensland Government (undated)

Example of a supporting mass-media campaign



More drug tests, more often.

More drug tests, more places, more often. Drug driving is a serious road safety issue. In the last five years approximately 41% of all drivers and motorcyclists killed who were tested, had drugs in their system. The TAC drug driving campaigns were launched to support random roadside testing of illegal drugs in December 2004. Since then there have been several drug driving campaigns highlighting police enforcement and showing how drugs impair driving.

Source: Victorian Transport Accident Commission (TAC, undated)

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 adapt to changes in community-wide drug use (eg. growing use synthetic drugs, cocaine)
- Little attention has been given to the prevalence of prescription drugs among drivers nor strategies to address this issue
- Ongoing court appeals regarding the specificity of random drug testing procedures

Priorities for the future

- Continue to enhance random roadside drug testing practices to maximize its general deterrent effect
- Better identify drug drivers who are detected with a positive blood alcohol concentration
- Improve the management of recidivist drug drivers
- Develop other effective interventions to target drug driving in the community and high-risk industries

References (1)

ATSB (undated). *Alcohol and road fatalities*. Monograph 5. Canberra: Australian Transport Safety Bureau.

Bates, L., Soole, D. & Watson, B. (2012). The effectiveness of traffic policing in reducing traffic crashes. In T. Prenzler (Ed.), Policing and Security in Practice: Challenges and Achievements. London, UK: Macmillan Publishers.

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

Davey, J., Armstrong, K., & Martin, P. (2014) Results of the Queensland 2007-2012 roadside drug testing program: the prevalence of three illicit drugs. *Accident Analysis & Prevention*, 65, pp. 11-17.

Davey, J.D., Freeman, J.E., & Lavelle, A.L. (2009) Screening for drugs in oral fluid: illicit drug use and drug driving in a sample of urban and regional Queensland motorists. *Transportation Research Part F: Traffic Psychology and Behaviour*, 12(4), pp. 311-316.

Drummer ,O. H., Gerostamoulos, J., Batziris, H., Chu, M., Caplehorn, J.R.M., Robertson, M.D. & Swann, P. (2003). The incidence of drugs in drivers killed in Australian road traffic crashes. *Forensic Science International*, 143, 154-162.

Drummer ,O. H., Gerostamoulos, J., Chu, M., Swann, P., Boorman, M., & Cairns, I. (2007). Drugs in oral fluid in randomly selected drivers. *Forensic Science International*, 170, 105-110.

Hart, S., Watson, B. & Tay, R. (2003). Barriers and facilitators to the effective operation of RBT in Queensland. *2003 Road Safety Research, Policing and Education Conference - From Research to Action: Conference Proceedings Peer Reviewed* (pp.137-142). Sydney: NSW Roads & Traffic Authority.

References (2)

Haworth, N.L. & Lenne, M. (2007) Mandatory random roadside drug testing of truck drivers, nightclub patrons and the general driving population in Victoria, Australia. In: *International Conference on Alcohol Drugs and Traffic Safety (T2007)*, 26-30 August, Seattle, USA.

Henstridge, J., Homel, R. & Mackay, P. (1997). *The long-term effects of Random Breath Testing in four Australian states: A time series analysis*, CR 162, Federal Office of Road Safety, Canberra.

Homel R. (1988). *Policing and punishing the drinking driver: A study of specific and general deterrence*. New York: Springer-Verlag.

Petroulis, T. (2014). *Community Attitudes to Road Safety: 2013 Survey Report* Canberra: Department of Infrastructure, Transport, Regional Development & Local Government.

Queensland Government (undated). *Drugs and driving*. Available at: https://www.qld.gov.au/transport/safety/road-safety/drink-driving/drugs (Downloaded on 28.7.2017)

TAC (undated). *More drug tests, more often.*. Available at: http://www.tac.vic.gov.au/road-safety/tac-campaigns/drug-driving (Downloaded on 28.7.2017)

Watson, B., Fraine, G. & Mitchell, L. (1994). Enhancing the effectiveness of RBT in Queensland. *Prevention of Alcohol Related Road Crashes: Social and Legal Approaches Conference*, Brisbane, 20 August 1994. Brisbane: Griffith University.