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Roadside drug testing in Australia: the absence of crash-based evaluations

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seek LIGHT

Introduction to RDT

- Roadside drug testing
- Victoria 2004
- Tasmania 2005
- South Australia 2006
- New South Wales 2006
- Western Australia 2007
- Queensland 2007
- Northern Territory 2008 (heavy vehicle drivers)
- ACT 2011

Expensive

- Each screening test one use only
- Evidentiary testing requires sophisticated laboratory analysis of biological samples
- Fewer tests per unit time
- Estimate of cost per roadside test of around \$143 (Cameron, 2013)
- Therefore, need for thorough evaluation

Reviews of RDT

- NSW (Bryant, Stevens & Hansen, 2009; Rowden et al, 2011)
 - SA (Cossey, 2007)
 - Tasmania (Prichard, Matthews, Julian, Bruno, Rayment & Mason, 2009)
 - Victoria (Boorman, 2007; Boorman & Ouwens, 2009)
 - Western Australia (Woolley & Baldock, 2009)
 - Queensland planning a review, yet to be conducted
 - Other internal reviews may have been conducted but not been published.
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- Number of studies reporting generally on testing results -
Boorman in Victoria (numerous), Thompson in SA (numerous), Grigg et al in Queensland (2013)

Summary of reviews: Methodology

- Process evaluations
- Analyses of enforcement and detection data
- Detection rates difficult to interpret
- WA laboratory testing of negative (second) screening samples – identified low screening test sensitivity, problem addressed
- Also, surveys of drivers to measure deterrence

- But no evaluations of crash data

Summary: findings

- Reviews positive and supportive
- Most jurisdictions use a centralised model, except SA, where testing rolled out to general duty policemen. This allowed SA to have highest testing rate in Australia.
- Other enforcement activities undertaken during RDT

Summary: findings 2

- Detection rates 1/30 to 1/70 except Tasmania.
- SA last two years 1/15
- Methamphetamine generally detected more often than other drugs
- Changes in rates of drug detection explained with reference to drug use patterns and intelligence-led policing
- Success? Increased detection rates & some changes in self-reported attitudes and behaviour

Lack of crash-based evaluations: Methodological issues

- Most important outcome measure: proportion of crash-involved drivers testing positive to drugs
- Need to compare rates of crash-involved drivers testing positive to drugs before and after introduction of RDT
- Need:
 - Reliable testing of all drivers for drugs following a crash
 - Need similar testing processes before and after introduction of RDT (manner of testing, likelihood of testing)
 - Sample size!

Implications

- No crash-based evaluations: no indicator of road safety benefit
- Australian jurisdictions should assess data availability for a before and after evaluation of RDT
- In any case, necessary to collect relevant data to follow drug driving crash rates
 - performance indicator for RDT enforcement
 - evaluate outcomes of changes in practices
(e.g. Cameron, 2013)

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