DUMA BULLETIN

Drug Driving Amongst Police Detainees

Rasika Amerasinghe and Allan Trifonoff

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This DUMA Bulletin summarises the major findings in relation to drug driving among police detainees in South Australia derived from DUMA's Drug Driving Addendum conducted in the second quarters of 2003, 2004 and 2005.

The aim of the Drug Driving Addendum is to gain a better understanding of the extent and nature of drug driving amongst detainees. It does this by measuring the frequency of, and attitudes of police detainees towards, driving a vehicle while they are under the influence of illegal drugs and/or alcohol. In addition, detainees who participate in the Drug Driving Addendum are also asked a series of questions relating to police pursuits, particularly while under the influence of drugs.

In 2003 and 2004 the Drug Driving Addendum was conducted at the two DUMA sites in South Australia (Elizabeth and Adelaide) and at the Western Australian site (East Perth). All sites across Australia participated in the Quarter 2, 2005 Drug Driving Addendum. Hence, it is only possible to compare the results across all DUMA sites from the 2005 addendum. Some comparison will be undertaken across the three sites that took part in the addendum in 2003 and 2004.

What is DUMA?

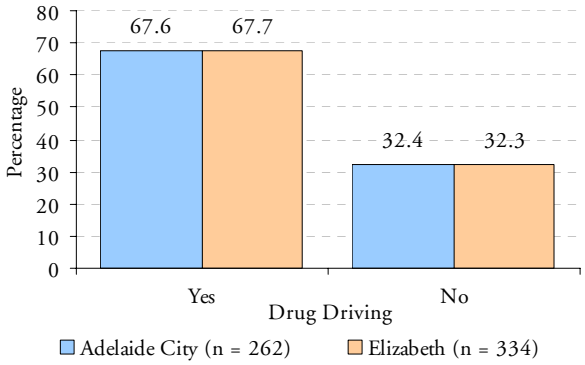
Drug Use Monitoring in Australia (DUMA) is a project coordinated nationally by the Australian Institute of Criminology that seeks to measure drug use among people recently apprehended by the police. At designated sites around Australia (two in South Australia, Queensland and New South Wales, and one in Western Australia) trained local staff conduct quarterly interviews with detainees who have been arrested in the previous 48 hours and are being held in custody. Detainees are also asked to provide a urine sample, which is used to test for the presence of six classes of drugs. Interviews at the South Australian sites (Adelaide City Watchhouse and Elizabeth police station cells) commenced in April 2002.

The data from DUMA are used to monitor patterns of drug use across time, examine the relationship between drugs and crime and assess the need for treatment amongst the offender population. OCSAR produces both quarterly and annual statistical reports based on the South Australia DUMA data. These reports are available from the OCSAR website.

Prevalence and Frequency of Drug Driving

For the three quarters in which the drug driving addendum was run, of the detainees who reported that they had driven in the last 12 months prior to their arrest, just over two thirds at both South Australian sites reported that they had driven after using an illicit drug (67.6% of Adelaide and 67.7% of Elizabeth detainees).

Figure 1: Prevalence of Drug Driving



Source: AIC 2003-2005 DUMA Collection [computer file]

Trends in Drug Driving

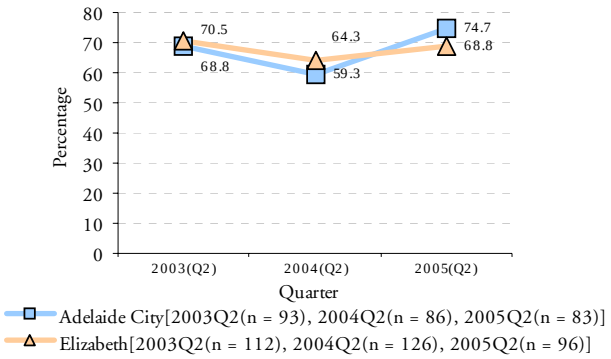
Figure 2 shows the number of detainees at each site who reported that they had driven after taking an illicit drug, as a percentage of the total number of detainees who reporting driving a car or vehicle in the last 12 months in each quarter.

As indicated, the percentage of Adelaide and Elizabeth detainees reporting drug driving showed an increase in Quarter 2, 2005, reversing the decreases reported at both sites in 2004. The Adelaide site showed greater variation, decreasing from 68.8% to 59.3% in the second quarter of 2004, before rising to 74.7% in the second quarter of 2005. In this last quarter, the percentage of Adelaide detainees who reported driving while under the influence of drugs reached the highest level recorded at either site.

Further information regarding the South Australian DUMA findings can be obtained from the Office of Crime Statistics and Research website (www.ocsar.sa.gov.au). General information regarding DUMA in Australia and findings from sites in other jurisdictions can be obtained from the Australian Institute of Criminology website (www.aic.gov.au).

Government of South Australia

Figure 2: Percentage of detainees who reported drug driving in the previous 12 months, by quarter



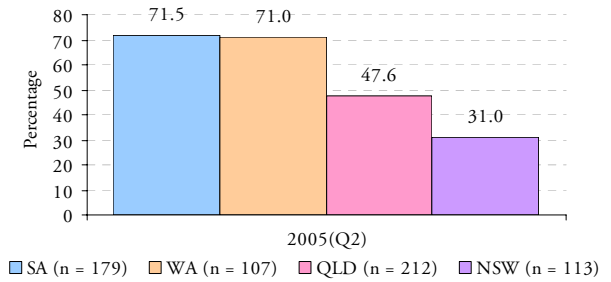
Source: AIC 2003-2005 DUMA Collection [computer file]

Interstate Comparison of Drug Driving

The Drug Driving addendum was run in all seven DUMA sites in Quarter 2, 2005. For the purpose of comparing the results across jurisdictions, site data were aggregated to reflect state responses.

Both South Australian and Western Australian detainees reported the highest levels of illicit drug driving (71.5% and 71.0% respectively). New South Wales detainees reported the lowest levels of drug driving, less then one half the percentage of South Australian and Western Australian respondents (31.0%).

Figure 3: Interstate comparison of detainees who self-reported drug driving

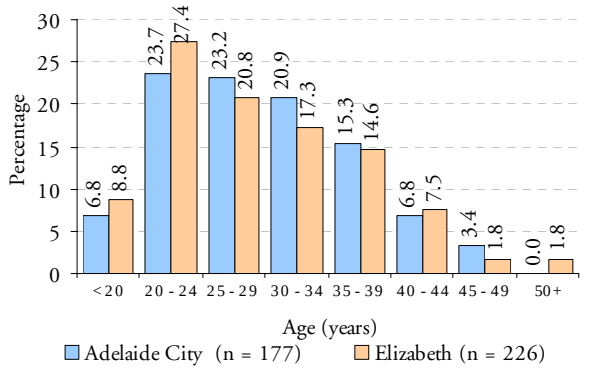


Source: AIC 2005 DUMA Collection [computer file]

Demographics

Figure 4 shows that of the detainees at both South Australian sites who indicated they had driven under the influence of drugs in the previous 12 months, the highest proportion were in the 20 to 29 year age bracket (46.9% of Adelaide and 48.2% of Elizabeth detainees).

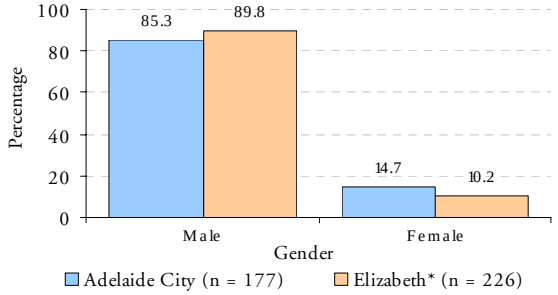
Figure 4: Age of detainees who self-reported drug driving



Source: AIC 2003-2005 DUMA Collection [computer file]

As shown in Figure 5, at both sites the majority of male detainees reported drug driving. While comparatively few females reported driving under the influence of illicit drugs in the previous 12 months, the percentage was slightly higher for Adelaide female detainees (14.7%) compared to Elizabeth female detainees (10.2%).

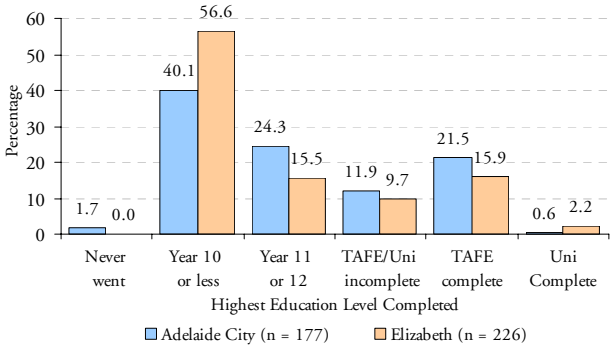
Figure 5: Gender of detainees who self-reported drug driving



Source: AIC 2003-2005 DUMA Collection [computer file].
*Statistically significant relationship between drug driving and gender Elizabeth (d.f =1, n=334) = 14.01, p<0.001.

Most Adelaide and Elizabeth detainees who reported driving under the influence of illicit drugs in the 12 months prior to their arrest had completed year 10 or less as their highest level of education. This applied to a significantly higher percentage of Elizabeth than Adelaide detainees (56.6% compared with 40.1% respectively).

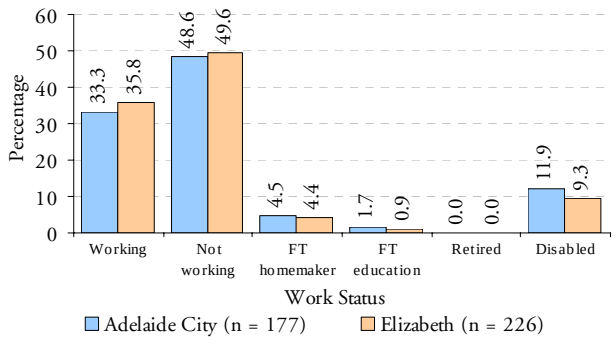
Figure 6: Highest education level of detainees who self-reported drug driving



Source: AIC 2003-2005 DUMA Collection [computer file]
*Statistically significant relationship between drug driving and education at each site: Adelaide City (d.f =5, n=262)=20.67, p<0.01 and Elizabeth (d.f =4, n=334) =12.61, p<0.05.

At both sites, just under half of the drug driving detainees were not working at the time of arrest (48.6% of Adelaide and 49.6% of Elizabeth detainees), while around a third reported being in employment.

Figure 7: Work status of detainees who self reported drug driving



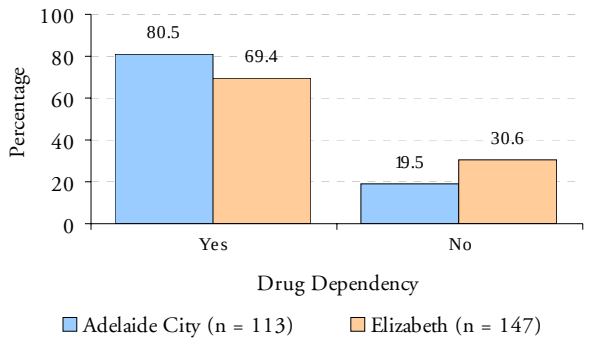
Source: AIC 2003-2005 DUMA Collection [computer file]
*Statistically significant relationship between drug driving and work at each site: Adelaide City (d.f =4, n=262)=15.47, p<0.01 and Elizabeth (d.f =5, n=334) =29.48, p<0.001.

Drug Driving and Drug Dependency Risk

Classification of drug dependency risk among detainees was based on individual responses to six questions and was closely modelled on a universally recognised set of mental health diagnostic criteria: the DSM-IV (Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition). Respondents answering affirmatively to three or more questions were classified as being at risk of drug dependence.

A larger proportion of Adelaide detainees who reported drug driving were classified as a risk of drug dependency (80.5%) than Elizabeth detainees (69.4%). However, levels were high at both sites.

Figure 8: Risk for Drug Dependence* among detainees who self reported drug driving

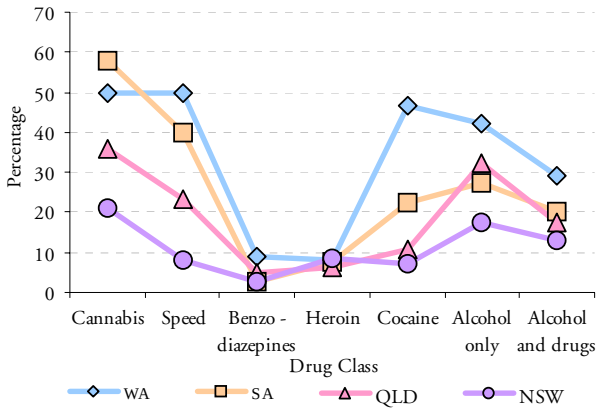


Source: AIC 2003-2005 DUMA Collection [computer file]
*Drug dependency grid was introduced in 2004 (Q1), therefore 64 Adelaide and 79 Elizabeth detainees who reported drug driving in the 2003 addendum have not been included.
**Statistically significant relationship between drug driving and risk of drug dependence Adelaide City (d.f =1, n=167)= 72.33, p<0.001 and Elizabeth (d.f =1, n=221) = 67.56, p<0.001.

Drug Driving and Type of Drug Use

Detainees who reported driving a vehicle in the previous 12 months were asked if they had driven after using any of the drug classes shown in Figure 9. All states recorded comparable patterns of drug use before driving. In comparison with interstate data, South Australian detainees recorded the highest level of cannabis use and the second highest level of speed use.

Figure 9: Interstate comparison of detainees who self-reported drug driving, by type of drug

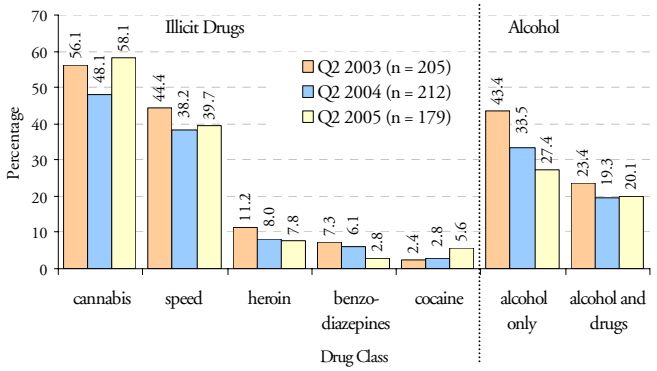


Source: AIC 2005 DUMA Collection [computer file]

Figure 10 provides a more detailed breakdown of drug type for the two South Australian sites. As shown, at both Adelaide and Elizabeth, cannabis was the most common drug used before driving, followed by speed. The percentages reportedly using each illicit drug type remained high across the three periods.

The percentage of detainees who reported driving under the influence of alcohol only decreased over the three quarters in which the drug driving addendum was run. In the first quarter, the percentage using 'alcohol only' was comparable with the percentage using speed. However, by the third quarter this percentage had almost halved. In all three quarters about one in five detainees reported driving after using both alcohol and drugs.

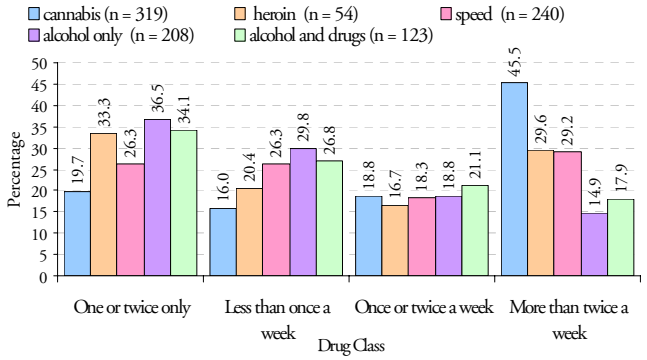
Figure 10: Percentage of detainees reporting drug use while driving a vehicle in the previous 12 months



Source: AIC 2003-2005 DUMA Collection [computer file]

Of those who reported drug driving, cannabis users were more likely to offend multiple times per week (45.5%), whereas those who consumed alcohol only or both alcohol and drugs reported offending less frequently.

Figure 11: Frequency of drug driving per drug category amongst detainees who had drug driven in the previous12 months*



Source: AIC 2003-2005 DUMA Collection [computer file]
*Excludes drug categories with sample sizes less than 50 and excludes 8 detainees who self reported drug driving in the previous 12 months but who did not answer the question relating to frequency of drug use.

Urinalysis Results

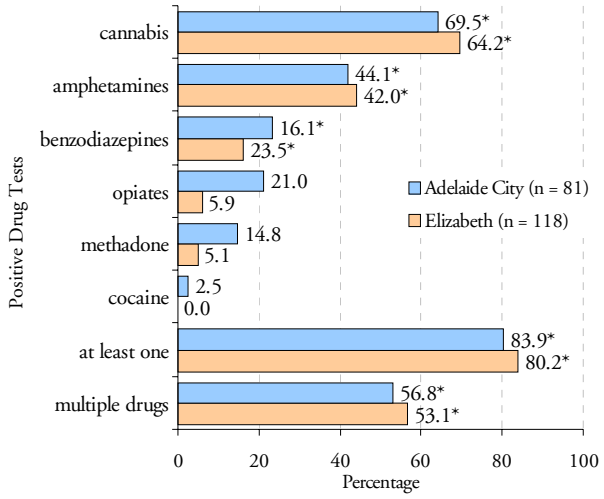
An alternative way of assessing the link between driving and drug use is to examine the urinalysis results of those detainees who reported that they had driven a motor vehicle immediately prior to their arrest. These results are detailed in Figure 12. As shown, at both the Adelaide and Elizabeth sites two thirds of these detainees tested positive to cannabis, while just over one in four tested positive to amphetamines. In total, over 80% tested positive for at

least one drug, while well over half tested positive to multiple drugs.

Overall, these results generally correspond with the patterns of self-reported drug driving by detainees in the 12 months prior to their arrest, with both sets of data showing high levels of drug driving while under the influence of cannabis and amphetamines. However, there were some differences. In particular, a higher percentage of detainees tested positive to benzodiazepines than indicated by the self -reported data. This may be due to benzodiazepines being widely available as a prescription drug and they may not necessarily be used in an illegal manner[1].

In addition, a significantly higher percentage of detainees at both sites tested positive to at least one type of drug (80.2% and 83.9% at Adelaide and Elizabeth, respectively) than self-reported prevalence. This may be due to the fact that urine tests are able to detect drug use up to 2-4 days prior to arrest, and even longer for cannabis and benzodiazepines[2].

Figure 12: Urinalysis results amongst detainees who had driven a vehicle immediately prior to arrest



Source: AIC 2003-2005 DUMA Collection [computer file]
*Statistically significant relationship between drug driving and cannabis, amphetamines, benzoates, any drug or multiple drug urinalysis tests, p<0.001.

Drug Driving and Major Charge

Of those South Australian detainees who reported driving a vehicle just before arrest and who tested positive to at least one illicit drug in their urinalysis sample, over one third (37.2%) were under arrest for a traffic offence, while one quarter were charged with a property offence (25.0%). A very small proportion (2.4%) were arrested for drink driving. This offence profile was slightly different from that recorded by detainees who had driven before arrest and had not tested positive to any drug. As shown in Table 1, a higher proportion of non-drug driving detainees were arrested for drink driving (11.4%) while a lower percentage (14.3%) were arrested for a property offence.

Table 1: Major charge amongst detainees who had driven a vehicle prior to arrest and had provided a valid urinalysis sample

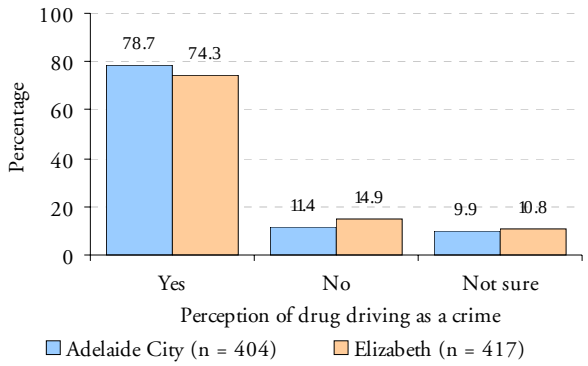
	Drug Driving		Not Drug Driving	
	No.	%	No.	%
violent	27	16.5	5	14.3
property	41	25.0	5	14.3
drugs	4	2.4	1	2.9
drink driving	4	2.4	4	11.4
traffic	61	37.2	15	42.9
disorder	6	3.7	2	5.7
breaches	15	9.1	3	8.6
other	6	3.7	0	0.0
Total	**164**		**35**	

Source: AIC 2003-2005 DUMA Collection [computer file]

Attitudes towards Drug Driving

Around three quarters of Adelaide and Elizabeth detainees who answered the drug driving addendum for all three quarters perceived it to be a crime to drive after using illegal drugs (78.7% and 74.3% respectively). In contrast, around one in eight detainees at both sites believed drug driving to be legal (11.4% and 14.9% respectively), while one in ten were not sure if driving under the influence of illegal drugs was a crime (9.9% and 10.8% respectively).

Figure 13: Perception of the legality of drug driving amongst detainees who had driven a vehicle in the past 12 months



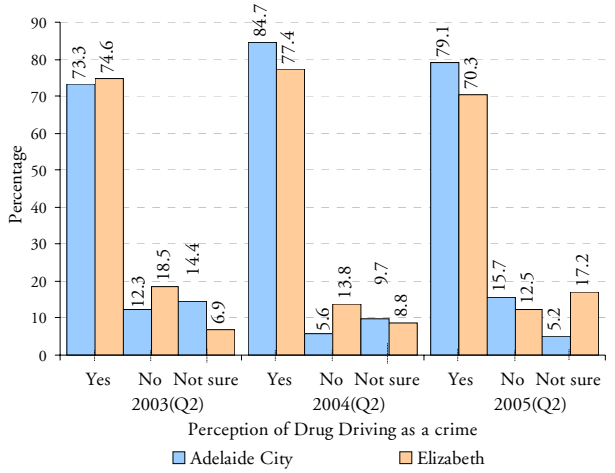
Source: AIC 2003-2005 DUMA Collection [computer file]

Over the three quarters in which the drug driving addendum was run there was a steady decrease (from 14.4% in 2003 to 5.2% in 2005) in the percentage of Adelaide detainees who were 'not sure' if driving after using illegal drugs was a crime, which was matched by a steady increase in the percentage who did not consider drug driving to be illegal (from 5.6% in 2003, to 12.4% in 2004, to 15.7% in 2005). These trends were reversed at Elizabeth, where detainees showed a steady increase in the proportion who were unsure about the legality of drug driving (rising from 6.9% in 2003 to 17.2% in 2005), and a marked decrease in the percentage who considered that this behaviour was not illegal.

[1]Source: Schulte C, Mouzos J & Makkai T 2005. Drug Use Monitoring in Australia: 2004 Annual Report on Drug Use Among Police Detainees. Research and Public Policy Series no 65 Canberra: Australian Institute of Criminology.

[2]Source: Makkai T 2000. Drug Use Monitoring in Australia: Drug Detection Testing Research and Public Policy Series no 25 Canberra: Australian Institute of Criminology.

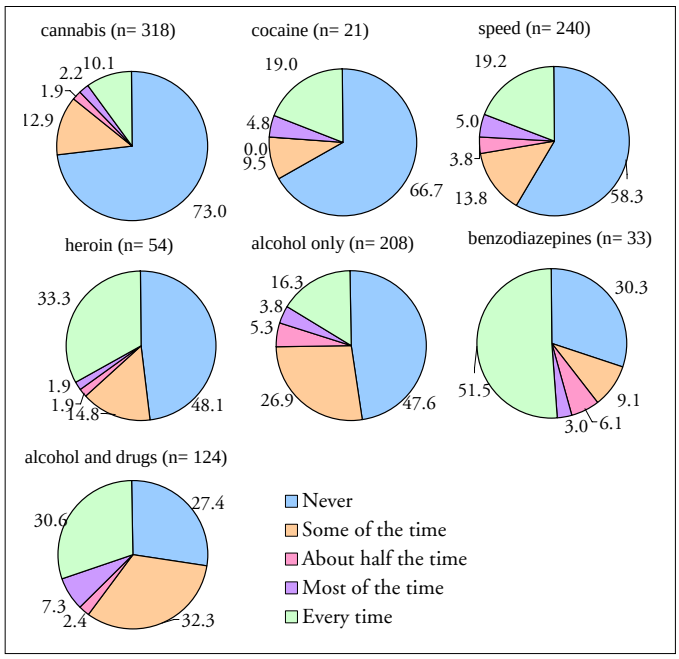
Figure 14: Perception of the legality of drug driving amongst detainees who had driven a vehicle in the past 12 months, by quarter



Source: AIC 2003-2005 DUMA Collection [computer file]

When asked about the impact of drugs on their driving ability, over half of the detainees who had driven a vehicle while under the influence of cannabis, cocaine and speed and just under one half of detainees who had driven while under the influence of heroin and alcohol only, considered their driving ability to be unaffected by the use of these drugs (see Figure 15). Conversely, slightly over a half of detainees who had driven a vehicle while under the influence of benzodiazepines believed their driving ability to be affected 'every time', while a third of those detainees who had driven while under the influence of both alcohol and drugs believed their driving ability to be affected 'some of the time'.

Figure 15: Frequency in which driving ability was perceived to be affected amongst detainees who had driven a car or other vehicle under the influence of drugs*

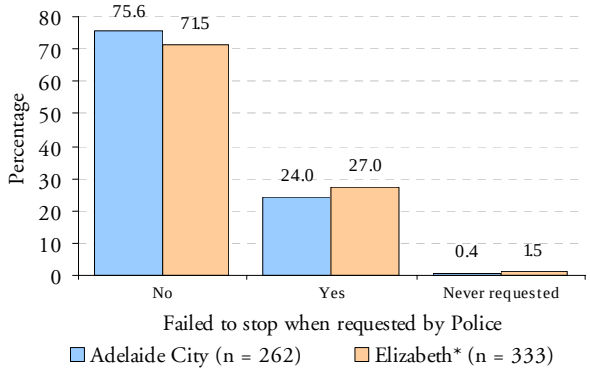


Source: AIC 2003-2005 DUMA Collection [computer file]
*Excludes 8 detainees who self reported drug driving in the past 12 months and did not answer the question relating to frequency of drug use.

Police Pursuits and Drug Use

Around a quarter of detainees at both sites who had driven a vehicle in the previous 12 months reported that they had failed to stop when requested to do so by police (27.0% of Elizabeth and 24.0% of Adelaide detainees).

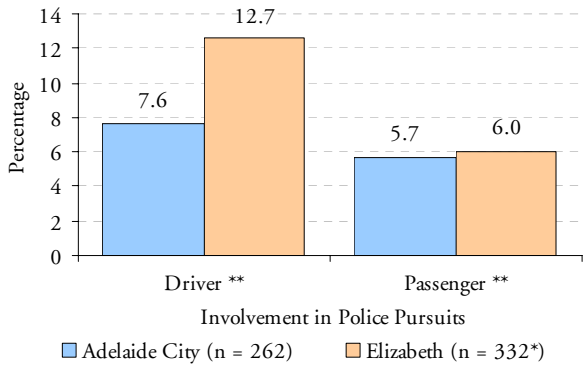
Figure 16: Responses of detainees to police request to stop driving a vehicle



Source: AIC 2003-2005 DUMA Collection [computer file]
*Excludes 1 Elizabeth detainee who had driven in the last 12 months and did not answer the question relating to failure to stop when requested by police.

Of those detainees who reported driving in the 12 months prior to their arrest one in eight Elizabeth and one in thirteen at Adelaide reported that they had been involved in at least one police pursuit as a driver (12.7% and 7.6%, respectively), while over one in twenty detainees at both sites indicated they had been involved in a police pursuit as a passenger in the previous 12 months.

Figure 17: Involvement in police pursuits amongst detainees who had driven a car or other vehicle in the previous 12 months



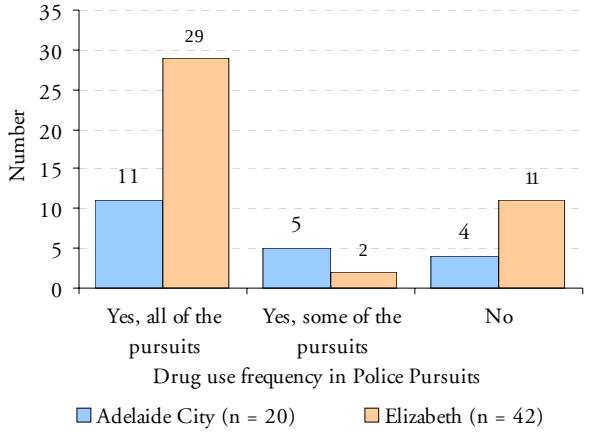
Source: AIC 2003-2005 DUMA Collection [computer file]
*Excludes 2 Elizabeth detainees who had driven in the last 12 months and did not answer the question relating to involvement in a police pursuit.
** Includes 4 Adelaide and 8 Elizabeth detainees who were involved in police pursuits both as a passenger and a driver.

Just under six out of ten of the detainees (56.6%) at both the Adelaide and Elizabeth sites who had been involved in a police pursuit as either a driver or a passenger had been involved in only one pursuit. Over a third had been involved in 2 to 5 police pursuits (34.9%), while one in twenty had been involved in 6 to19 pursuits (4.8%). Around one in twenty detainees had been involved in more than 20 police pursuits (3.4%).

Of the detainees who had driven a car or other vehicle in a police pursuit, as Figure 18 shows, around seven in ten Elizabeth detainees and over one half of Adelaide

detainees indicated they had been using drugs on the day of all of their pursuits.

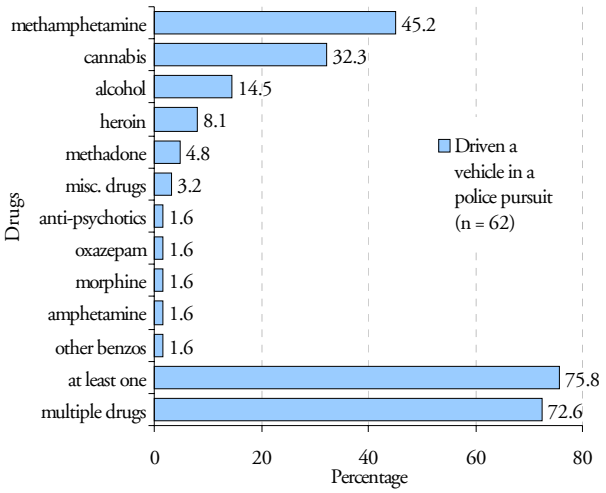
Figure 18: Frequency of drug use amongst detainees who had driven a vehicle in a police pursuit*



Source: AIC 2003-2005 DUMA Collection [computer file]
*Due to small sample sizes, numbers are reported instead of percentages.

The types of drugs that were reportedly used by detainees who had driven a vehicle in a police pursuit are shown in Figure 19. Methamphetamine was the most common drug reported (45.2%), followed by cannabis (32.3%). Around three quarters of detainees had been under the influence of at least one illicit drug in the past 12 months while engaged in a police pursuit.

Figure 19: Drugs used by detainees who had driven a vehicle involved in a police pursuit



Source: AIC 2003-2005 DUMA Collection [computer file]

Conclusion and Policy Implications

The findings from the DUMA Drug Driving Addenda show that police detainees who report driving under the influence of drugs are more likely to be young males aged less than 35 years old. Other findings show that:

- Compared to other DUMA sites, detainees in South Australia had the highest level of self reported drug use prior to driving, including the highest use of cannabis prior to driving.
- A higher proportion of detainees in the Elizabeth Police Station reported being involved in a police pursuit in the 12 months prior to interview than detainees in the Adelaide City Watch House.
- At both South Australian sites, detainees who reported driving under the influence of drugs in the past 12 months were more likely to have been charged with a property offence or a violent offence.
- From a policing perspective, it is of great concern that methamphetamine was reported as the most commonly used drug among detainees who indicated that they had driven a vehicle while engaged in a police pursuit.
- It is also a concern that during Quarter 2 of 2005, around 20% of Adelaide and 30% of Elizabeth detainees who had driven a vehicle within the previous 12 months did not know it was illegal to drive after using drugs.

In South Australia, the data from the DUMA addenda has been used by police and the Department of Transport Energy and Infrastructure to inform the development of the 12 months Drug Driver Testing trial. The DUMA data will also be one of a number of data sources that are collected or referred to throughout the trial period and which will be used to inform the evaluation of the trial.

Authors

Rasika Amerasinghe
Senior Research and Data Analyst
Office of Crime Statistics and Research

Allan Trifonoff
Senior Project Officer
Drug and Alcohol Policy Section
South Australia Police

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Further information regarding the South Australian DUMA findings can be obtained from the Office of Crime Statistics and Research website (www.ocsar.sa.gov.au). General information regarding DUMA in Australia and findings from sites in other jurisdictions can be obtained from the Australian Institute of Criminology website (www.aic.gov.au).

DUMA
DRUG USE MONITORING IN AUSTRALIA