

ROADSIDE DETECTION OF DRUG-IMPAIRED DRIVING

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All Australian indicators suggest that the scale of the problem of drug-impaired driving is roughly one fourth of the scale of the drink-driving problem. Contrasting with this there is

- a public perception that drug-impaired driving does not create an offence; and
- proportionately low arrest and prosecution rates consequent on the lack of suitable detection technology analogous to roadside breath testing.

A review of drug-impaired driving offenders in this jurisdiction shows that there are four drug classes (and only four) of interest. These are phenethylamine-based stimulants (predominantly methylamphetamine), opioids, benzodiazepines and cannabis. Cocaine use is not prevalent amongst drivers or generally. We do not know whether or not solvent abuse is a problem as specimens are not routinely subjected to head-space analysis.

In order for police to prosecute they must have sufficient suspicion of intoxication to arrest and then corroborate the signs observed by collection and analysis of a blood specimen. The opportunity to be successful through observation alone is limited further by the fact that most drivers will be observed only whilst seated in their vehicle.

I have conducted a number of experiments comparing roadside detection options, including:

- measurement of signs using DRE-type protocols;
- saliva testing;
- urine testing;
- observation of general signs of intoxication; and
- pupillometry.

The criteria for selection of a roadside screening test for drug-impaired driving are:

- high sensitivity and specificity;
- strong positive and negative predictive values;
- simple and practical to use;
- low unit cost; and
- capacity to detect impairment that falls short of frank intoxication.

Of the detection options used, only pupillometry meets each of these criteria. It is not now and never will be sufficiently discriminatory to be used as a confirmatory test. However, as a screening test used as a basis for further (confirmatory body fluid) testing its' potential is unrivalled.