

Driving after using alcohol and drugs, roadside testing, and risk perception among people who use drugs in Canberra, ACT

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Key Findings:

- The percentage reporting drug driving has been consistently higher than reports of drink driving in both samples (people who inject drugs and people who use ecstasy and other stimulants).
- Cannabis was the most common substance used before driving among people who use ecstasy and other stimulants, whereas heroin was typically the most commonly used drug among people who regularly inject drugs (although percentages for heroin, cannabis and methamphetamine have converged in recent years among this group).
- Exposure to roadside breath testing for alcohol has increased over time in both samples.
- At least one in ten people who have driven reported participating in roadside drug testing in the past six months in both samples (peaking at 26% in 2017 among the sample of people who inject drugs).
- Alcohol had greatest endorsement for accident risk and being apprehended by police by the sample who regularly use ecstasy and other stimulants; alcohol had greatest endorsement for accident risk, while alcohol, methamphetamine and cannabis had similar high endorsement of police apprehension, by the sample of people who inject drugs.
- The perceived likelihood of a motor vehicle accident and, in particular, likelihood of police apprehension, has increased over time for ecstasy, cannabis and methamphetamine (as rated by consumers of these substances) amongst the sample who use ecstasy.

Background:

- One of the most serious road safety concerns is driving under the influence (DUI) of alcohol and/or illicit drugs (1-2).
- There have been multiple studies confirming that alcohol consumption impairs driving ability (e.g., 3-6) and some illicit drugs can similarly have negative effects on driving performance (e.g., 5-8).
- In all Australian jurisdictions, it is an offence for a person to drive a vehicle if the person has a blood alcohol concentration (BAC) over the legal limit (0.05% alcohol content) and/or with any trace of THC, methamphetamine and/or MDMA. People convicted of drink or drug driving can receive a penalty including loss of licence, a fine and/or imprisonment.
- Roadside breath testing (RBT) for alcohol has been conducted in ACT for several decades, and roadside drug testing (RDT) was introduced in ACT in 2011.
- More recently, the ACT police has adapted an intelligence-based roadside drug and alcohol testing, conducting fewer random tests in favour of a targeted approach to identify those drivers engaging in these behaviours (9).
- This Bulletin will use interview data from sentinel samples of people who regularly use drugs collected in Canberra between 2007-2018 to describe trends in driving after using alcohol and illicit drugs, exposure to RBT and RDT, and perceptions of accident risk and risk of police apprehension when driving after consuming alcohol and illicit drugs.

Methodology:

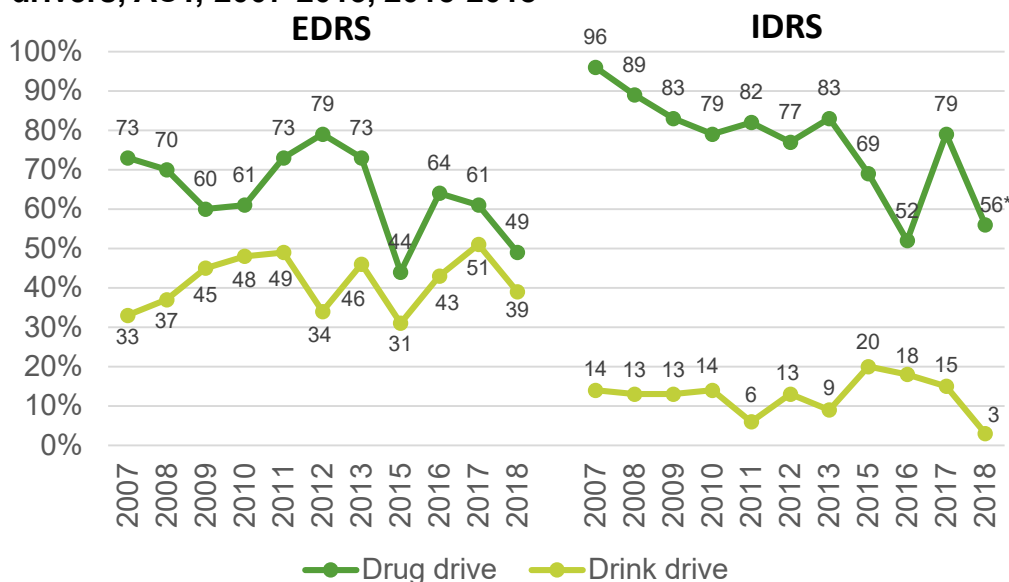
- Illicit Drug Reporting System (IDRS) interviews: Annual face-to-face interviews with approximately 100 people who regularly inject drugs, recruited mainly through needle and syringe program sites and through word-of-mouth in Canberra, ACT; and
- Ecstasy and Related Drug Reporting System (EDRS) interviews: Annual face-to-face interviews with approximately 100 people who regularly use ecstasy and other illicit stimulants, recruited mainly via social media advertising and through word-of-mouth in Canberra, ACT.
- Full details of the methods for [IDRS](#) and [EDRS](#) are available for download.
- Drink driving was assessed by asking participants if they had driven while over the legal limit for alcohol in the past six months (noting this relies on perception of BAC); drug driving was assessed by asking participants if they had driven within three hours of taking an illicit or non-prescribed drug in the last six months (hereafter referred to 'driving after illicit drug use').
- Participants were also asked to rate (from 'very unlikely' to 'very likely') risk of having an accident and of being apprehended by the police if they were to drive under the influence of alcohol, methamphetamine, cannabis and ecstasy.
- Driving data were not collected in 2014.

Table 1. Number of participants per year and the percentage of recent (i.e., past six month) drivers in the EDRS and IDRS samples, ACT, 2007-2013, 2015-2018

	2007	2008	2009	2010	2011	2012	2013	2015	2016	2017	2018
EDRS total sample	74	83	101	73	80	51	77	99	100	100	100
EDRS n (%) reported driving	64 (87)	63 (76)	82 (81)	56 (77)	70 (88)	38 (75)	60 (78)	88 (89)	74 (74)	89 (89)	86 (86)
IDRS total sample	101	101	100	101	98	99	100	100	100	100	100
IDRS n (%) reported driving	44 (44)	45 (46)	40 (40)	43 (43)	34 (35)	40 (40)	35 (35)	35 (35)	33 (33)	34 (34)	34 (34)

Note: recent refers to past 6 months. Driving questions were not asked in 2014.

Figure 1. Past 6 month self-reported driving over the (perceived) legal limit for alcohol and after using illicit drugs among recent drivers, ACT, 2007-2013, 2015-2018

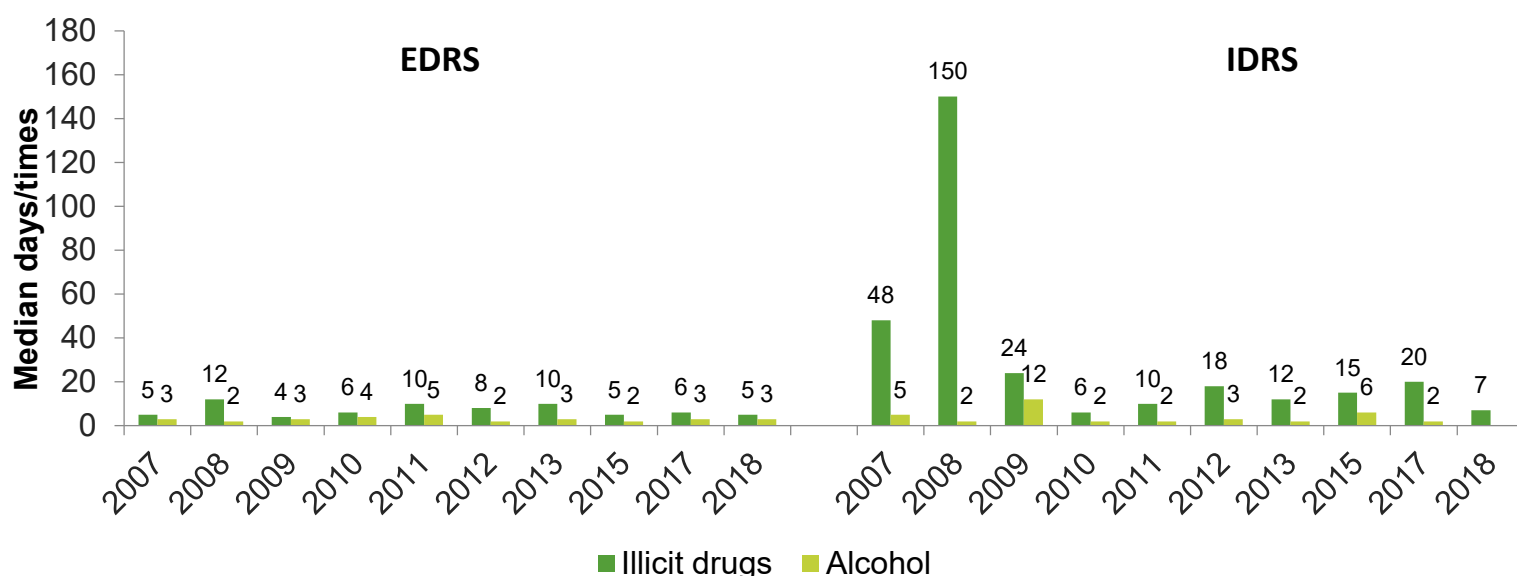


Note: recent refers to past 6 months, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$ for 2017 vs 2018.

The percentage reporting drug driving has been consistently higher than reports of drink driving in both samples. These percentages have begun to converge in recent years for EDRS with an overall decline in drug driving (49% versus 39% reporting drink and drug driving in 2018, respectively).

With the IDRS sample, the percentage reporting drug driving has mostly declined over time (96% in 2007 to 56% in 2018; excluding an upsurge in 2017 (79%)).

Figure 2. Median days/times[^] of driving after alcohol and illicit drug use among past 6 months (recent) drivers that have recently used the substance, ACT, 2007-2013, 2015, 2017 and 2018



Note: recent refers to past 6 months. [^] In 2018, 2017 & 2015 the questionnaire was asking for median days and in 2013 and prior it asked for median times. Data not collected in 2014.

Among the EDRS sample, the median days/times of DUI of alcohol in the past six months has remained stable at a frequency of approximately once every 2-3 months. The median days/times of DUI of drugs has varied between monthly to every third week.

Larger variations have been observed for driving after illicit drugs among the IDRS sample, ranging from nearly every day in 2008 to monthly in 2010. Median days/times of DUI of alcohol has remained lower; in 2018 no one reported days used.

Figure 3. Past 6 month self-reported driving after illicit drug use among recent drivers that have recently used each substance, ACT, 2007-2013, 2015, 2017 and 2018

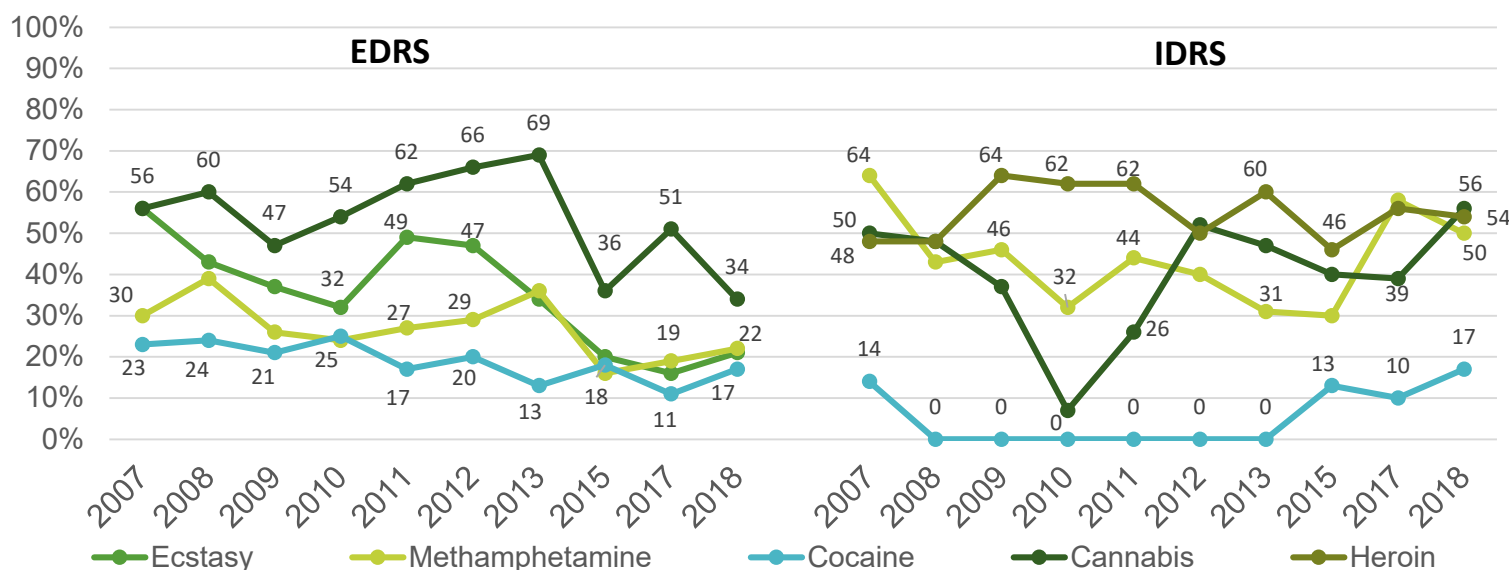
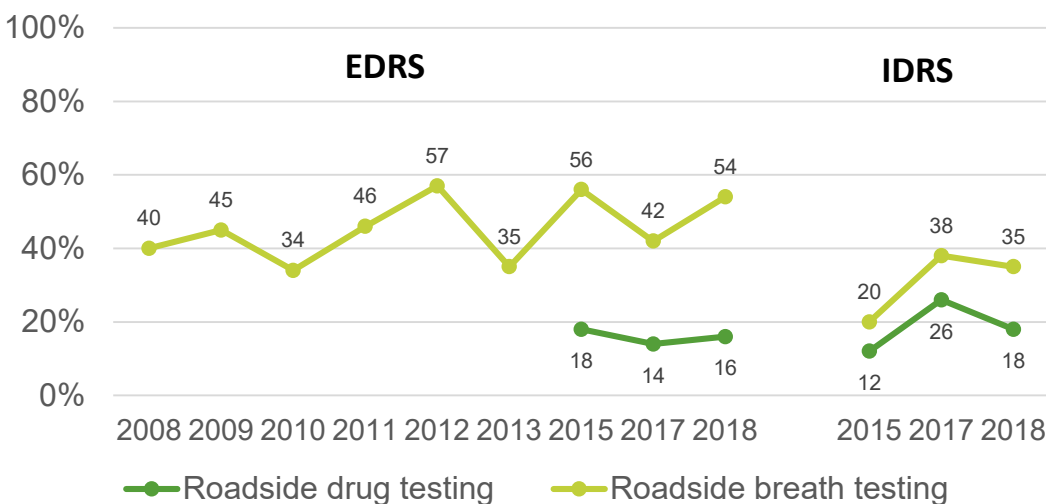


Figure 3 shows the percentage of recent (i.e., past six month) consumers of each drug that report DUI of that drug in the same period. Cannabis has been the most commonly reported substance used prior to driving in the EDRS sample 2007-2018, whereas the primary drug used before driving in the IDRS sample has fluctuated, historically mostly being heroin but converging in 2018 for heroin, cannabis and methamphetamine.

Among the EDRS sample, the percentage of ecstasy consumers who reported DUI of ecstasy has declined from 56% in 2007 to 21% in 2018. Cannabis has fluctuated, but overall has shown a decline from a peak of 69% of cannabis consumers in 2013 to 34% in 2018.

In the IDRS sample, the percentage of people who have recently used heroin who have driven soon after using heroin has remained relatively stable (between 46% and 64%), while there has been a decrease followed by an increase in driving after use of cannabis and methamphetamine amongst consumers.

Figure 4. Past 6 month roadside breath testing and roadside drug testing among recent drivers, ACT, 2008-2013,2015, 2017 and 2018

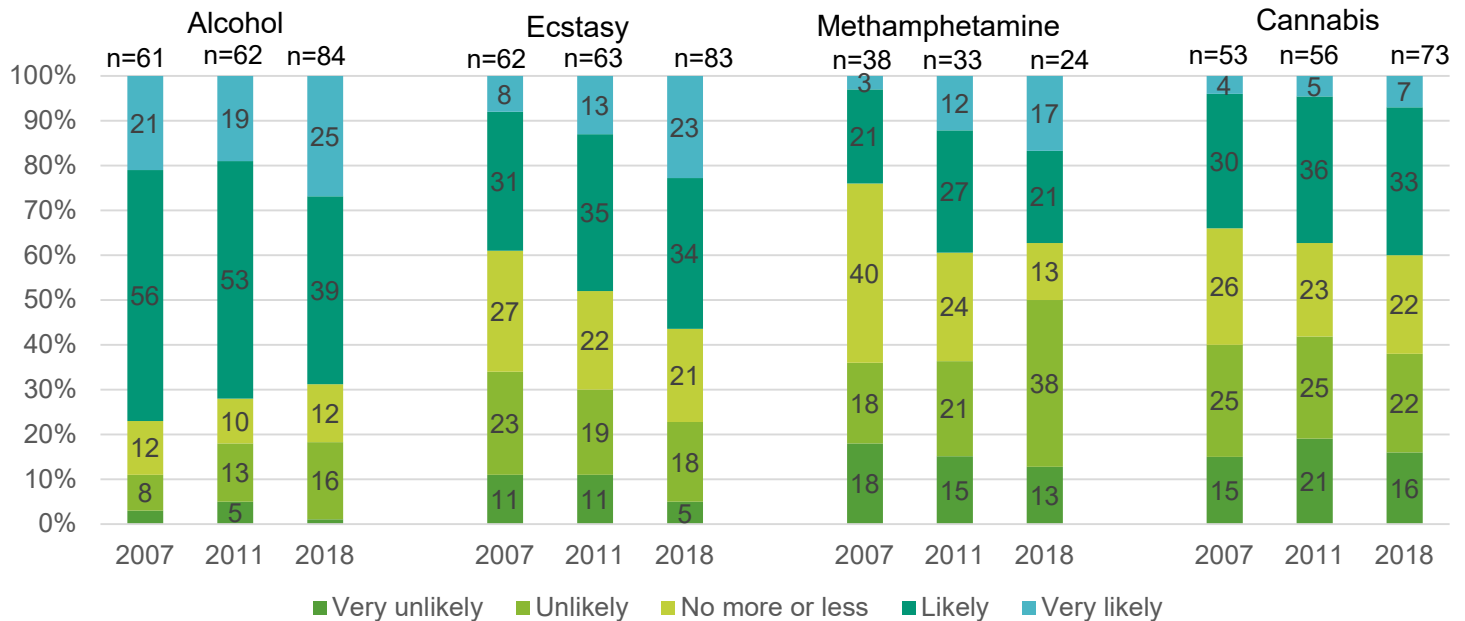


In 2018, over half (54%) of drivers in the EDRS sample reported roadside breath testing in the past six months, whilst 16% reported exposure to roadside drug testing. Exposure to the former increased over time.

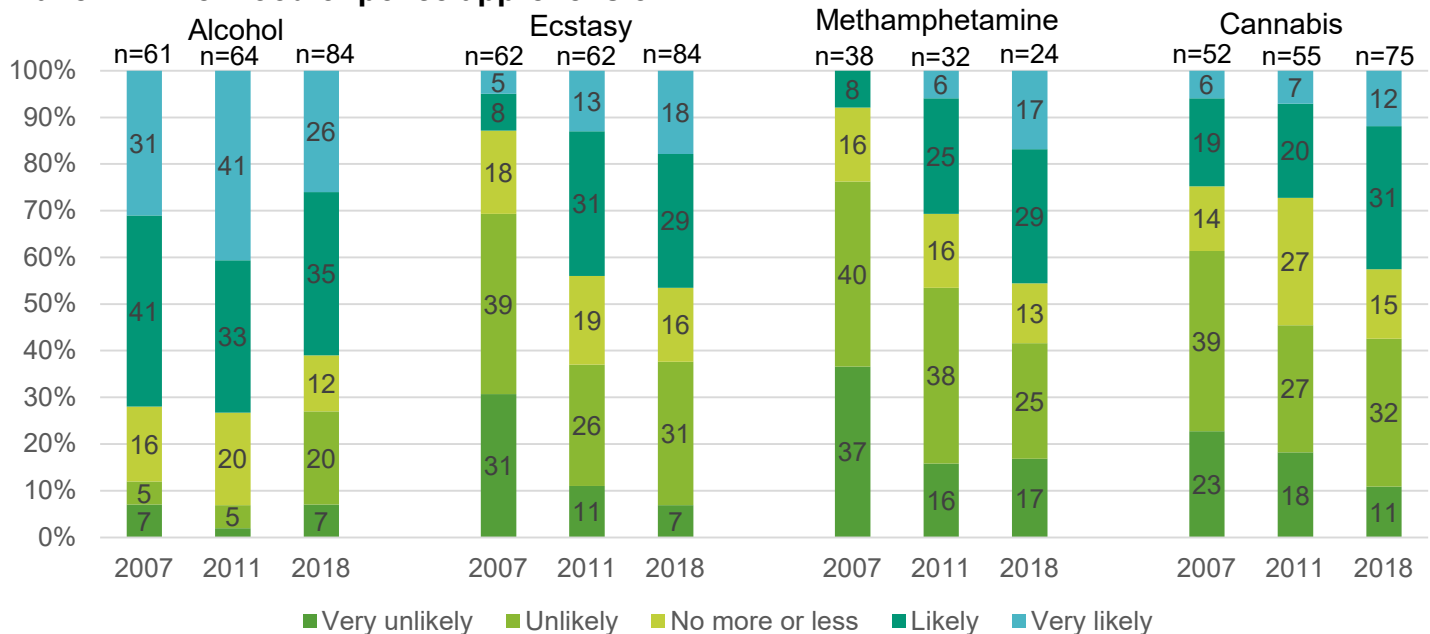
In 2018, over one-third (35%) of drivers in the IDRS sample reported roadside breath testing in the past six months, whilst under one-fifth (18%) reported roadside drug testing.

Figure 5. Perceived likelihood of a motor vehicle accident (Panel A) and of being apprehended (Panel B) among people who self-reported past 6 month driving and use of each drug, ACT, EDRS, 2007, 2011 and 2018

Panel A. Likelihood of a motor vehicle accident



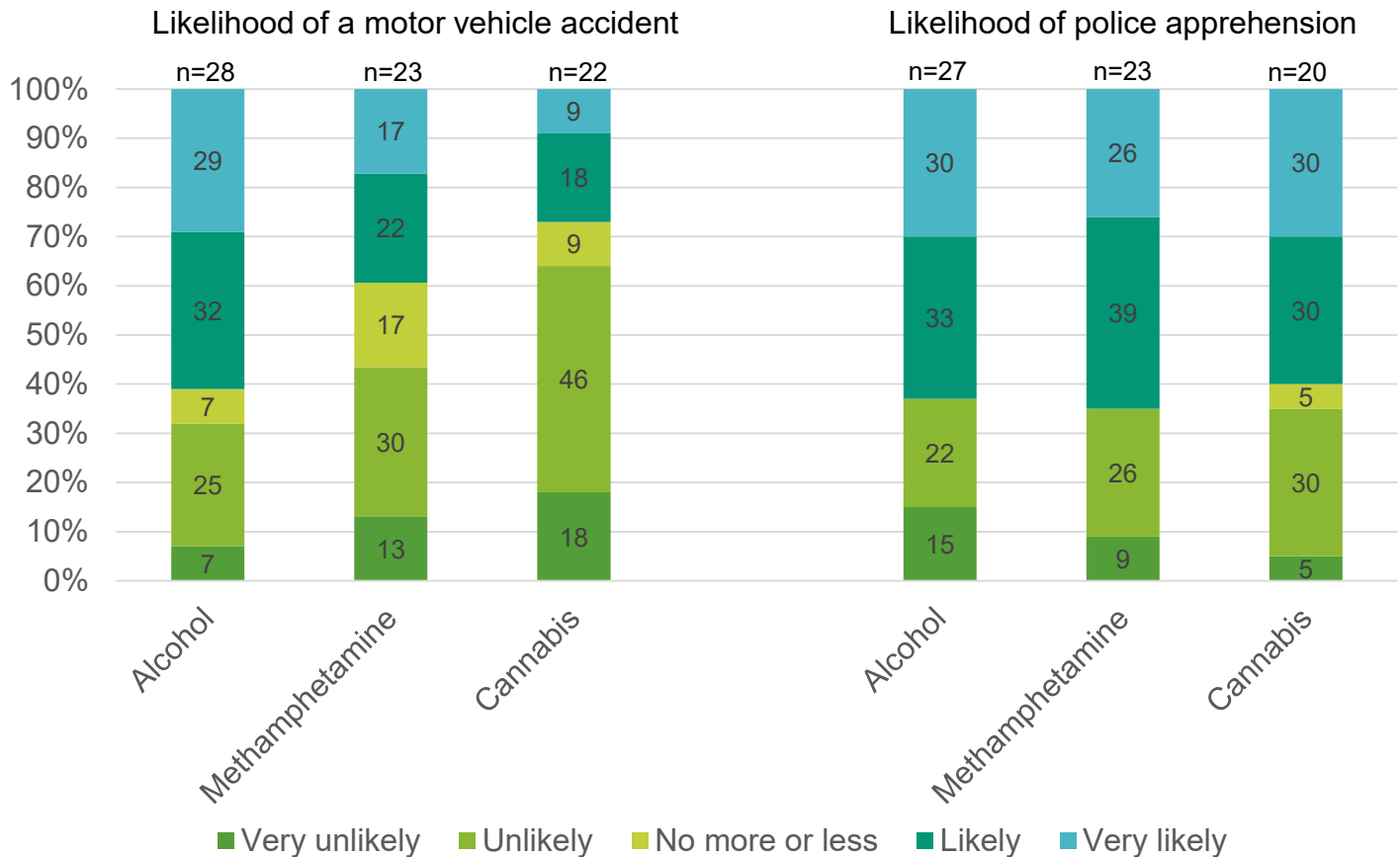
Panel B. Likelihood of police apprehension



Over the course of monitoring, alcohol was perceived by alcohol consumers in the EDRS to have the greatest accident and legal risk as opposed to ratings of risk for other substances (as rated by consumers of these substances).

The perceived likelihood of an accident and, in particular, likelihood of police apprehension, has increased over time for ecstasy, cannabis and methamphetamine (as rated by consumers of these substances) amongst the EDRS sample.

Figure 6. Perceived likelihood of a motor vehicle accident and of being apprehended among people who self-reported past 6 month driving and use of each drug, IDRS, 2018



Note: recent refers to past 6 months. Perceived likelihood of having an accident and being caught of police was only asked in 2018 for the IDRS sample. Ecstasy excluded due to small numbers reporting use.

In 2018, alcohol was perceived to have the greatest accident risk and cannabis the least amongst consumers of the respective substances in the IDRS sample.

The perception of apprehension was similar for alcohol, methamphetamine and cannabis, with over half ($\geq 60\%$) of recent drivers in the IDRS perceiving police apprehension to be likely or very likely.

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