Informing Drug Alerts in Australia (IDAA) Survey:

Awareness of, responses to, and preferences for communication of drug alerts

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Acknowledgements

We acknowledge the legacy of people who use drugs within research and recognise the contributions of lived experience within this project.

We acknowledge the traditional custodians of the lands on which this work was undertaken and pay our respects to Elders past and present. NDARC and NUAA are located on the unceded territories of the Gadigal and Bedegal peoples, who are the Traditional Owners of these lands.

Contributors

We thank all participants for sharing their time and expertise with us via the Informing Drug Alerts in Australia (IDAA) survey. We thank everyone who contributed to the development and piloting of the IDAA survey, particularly those who contributed via our two IDAA Reference Groups.

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List of Abbreviations

ACT   Australian Capital Territory

IDAA   Informing Drug Alerts in Australia

NDARC   National Drug and Alcohol Research Centre

NSW   New South Wales

NT   Northern Territory

NUAA   New South Wales Users and AIDS Association

QLD   Queensland

SA   South Australia

TAS   Tasmania

VIC   Victoria

WA   Western Australia

Executive Summary

Public drug warnings ('drug alerts') issued by health agencies notify the public of the presence of higher risk drugs in circulation in local markets, promoting harm reduction behaviours among people who use drugs. Drug alerts are increasingly being issued in Australian states and territories, but little is understood about how people who use drugs interact with alerts.

The Informing Drug Alerts in Australia (IDAA) study aims to understand how people who use drugs engage with drug alerts and their preferences for risk communications about drugs in their area. From July to September 2023, participants aged 18 and over who used illegal drugs and reported living in Australia were invited to complete an online survey about awareness of, responses to and preferences for drug alerts in Australia. This report outlines findings from the IDAA survey.

Participant characteristics

Of the 567 participants who completed the survey, the median age was 36 years. Half of participants identified as woman/female (49%) and the majority identified as straight or heterosexual (70%). Most participants lived in the eastern states of Australia, primarily New South Wales (33%), Victoria (24%) and Queensland (13%). Over half lived in capital cities (54%). Just over 1 in 3 had completed a university degree (37%) and a similar proportion were employed full time (36%).

Drug use and related behaviours

Around 2 in 3 participants reported using drugs monthly or less often (43%) or weekly/fortnightly (23%) in the past year, compared to more frequent use. Half had used methamphetamine in the past year (50%), and around 2 in 5 had used cocaine (43%) and/or MDMA (42%). Around 4 in 5 (82%) said they typically used at least one harm reduction strategy when using drugs in the past year (for example, safer dosing).

Awareness of past alerts

Around 3 in 4 participants had seen or heard about a drug alert in Australia in the past 5 years (77%). When asked about the most recent alert, most people (82%) said they had seen or heard about this alert within the past 12 months. Over 1 in 3 said the alert was released by a government agency (36%) or harm reduction agency/peer-based drug user organisation (34%). The most common drug types mentioned in the alert were MDMA (30%), methamphetamine (18%) and cocaine (14%). Over half found out about it via social media sites such as Facebook and Instagram (58%). Around 1 in 3 found out about it on their own (35%) or from a friend or family member (31%). Most shared information from the alert with someone else, and almost 2 in 3 (65%) wanted to know more information after learning about the alert.

Responses to the most recent alert

Over 2 in 5 participants (46%) said they had ever used the drug type mentioned in the most recent alert, before or after the alert. However, most did not encounter drugs matching the alert (71%) or try to obtain drugs matching the alert (79%). Over half changed their use of the drug type mentioned in the alert after finding out about the alert, either by stopping using the drug entirely (18%), avoiding using drugs matching the alert specifically (20%) or changing their use behaviours (18%; most commonly by practicing safer dosing such as using a smaller amount or adhering to 'start low, go slow'). Of those who continued to use the drug type as usual, half (53%) said the alert did not have an impact because they were already using suggested harm reduction strategies.

Preferences for future alerts

Over half (55%) of participants were interested in knowing about all future alerts, regardless of whether this related to their location or drugs they use. Most (80%) wanted to find out about alerts via social media sites. When asked how important it is to include various information in alerts, almost 2 in 3 (63%) said it was 'very important' to describe adverse drug effects. Almost 4 in 5 (77%) said future alerts should be triggered by significant clusters of overdose events, and half (51%) said peer reports of adverse events should trigger an alert. Almost 3 in 4 (72%) said the purpose of alerts should be to empower people who use

drugs to make informed decisions. The most trusted sources to issue credible drug alerts were drug checking services (77% of people highly/completely trusted these services to issue credible alerts) and harm reduction or peer organisations (73% highly/completely trusted). This was compared to 48% highly/completely trusted for government health agencies and 26% for law enforcement agencies. When prompted about their preferences for future risk communications about drugs in their area, around 1 in 5 said they would prefer to receive alerts for specific higher-risk drugs only (19%). Almost half (48%) said they would prefer to receive alerts in combination with regular updates of broader drug trends for their local area (for example, average monthly purity), and 1 in 3 (33%) wanted to receive regular updates only.

Conclusions

Our participants demonstrated high engagement with drug alerts and a broad interest in receiving further information about drugs in their area. Most people already practiced harm reduction behaviours such as safer dosing, and many viewed drug alerts as a way to empower people to make informed decisions about their drug use. Existing alerts could be expanded to include alternative risk communication formats, modes of communication and sources of information. Communication via harm reduction services and peer-based drug user organisations was viewed as particularly important given high levels of trust in these organisations.

Infographic summaries

567 people who used illegal drugs completed the IDAA survey from July to September 2023

49% woman/female

36 years median age
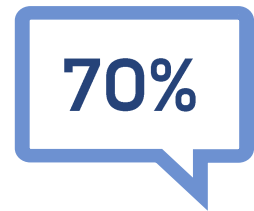
70% identified as straight/heterosexual

Place of usual residence

2% Northern Territory

13% Queensland

9% Western Australia

33% New South Wales

9% South Australia

5% Australian Capital Territory

6% Tasmania

24% Victoria
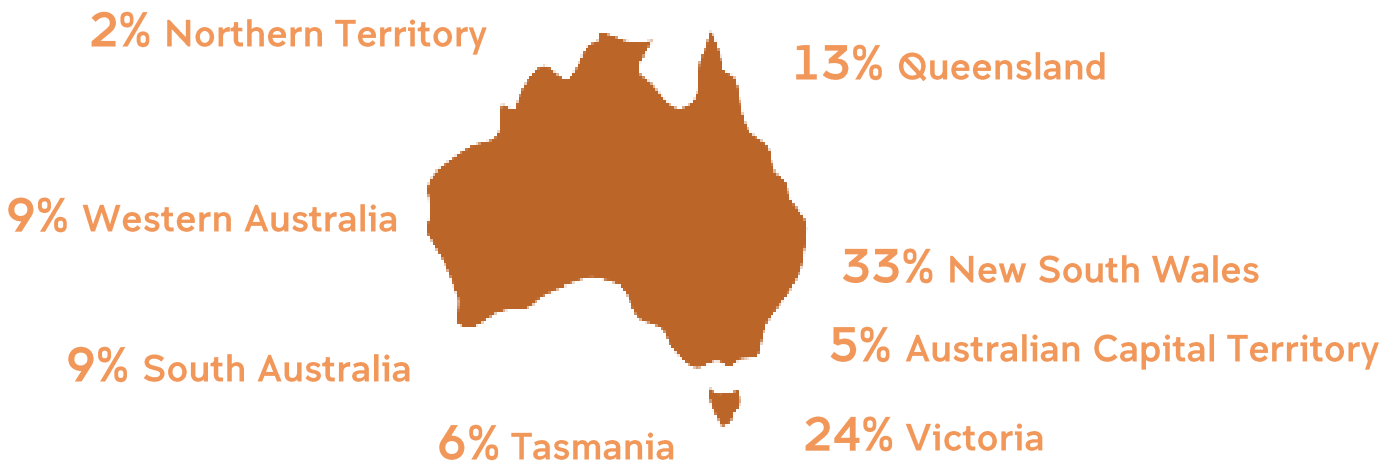
54% lived in capital cities

37% university/college degree

36% employed full time
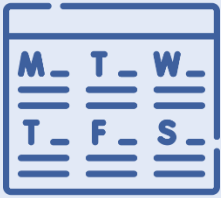
When asked about their drug use and related behaviours in the past year...

43%
used drugs monthly or less often, versus more frequently

82%
typically used one or more harm reduction strategies

74%
had **not** tested drug contents in the past year

Drugs used in past year

methamphetamine **50%**

cocaine **43%**

MDMA/ecstasy **42%**

benzodiazepines^ **31%**

LSD/acid **27%**

24% ketamine

20% pharmaceutical opioids

13% GHB/GBL

11% heroin

23% other drugs

64%
accessed a health service for AOD support

21%
accessed drug treatment

15%
experienced an overdose

77% of people had seen or heard about a drug alert in the past 5 years. When asked about the most recent alert...
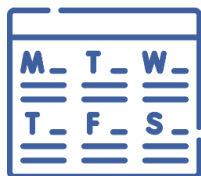
82% saw/heard about it in the past year

58% found out about it via a social media site

35% found out about it on their own (not from someone else)

Drugs mentioned in the most recent alert

MDMA/ecstasy **30%**

methamphetamine **18%**

cocaine **14%**

ketamine **11%**

10% heroin

9% fake benzodiazepines

2% opioids

2% NPS sold as LSD~

58% shared information from the alert

65% wanted to know more information after learning about the alert

36% said it was released by a government health agency

Of people who had seen an alert in the past 5 years and responded, when asked about their response to the most recent alert...

46%
had used the drug type mentioned in the alert after the alert

79%
did not try to obtain drugs matching the alert

71%
did not encounter drugs matching the alert

Responses to the most recent alert

18%
Continued to use but changed use behaviours

44%
No change (continued to use as usual)

20%
Avoided using drugs matching the alert

18%
Stopped using this drug entirely
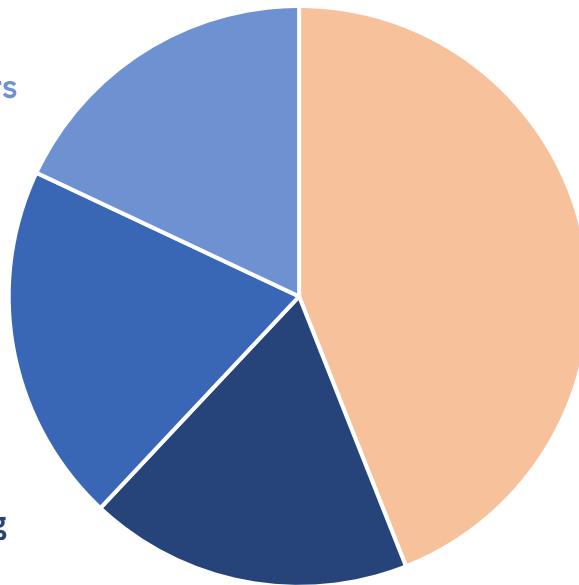
50%
of people who changed their use did so by practicing safer dosing

53%
of people who did not change their use already used harm reduction strategies

When asked about their preferences for future drug alerts and broader risk communications...

55%
were interested in knowing about all future alerts

80%
wanted to find out about alerts via social media sites

63%
said it was 'very important' to describe adverse drug effects

Preferences for future risk communications

n.p.
Other (including none)

19%
Alerts for specific higher risk drugs

48%
Combination of alerts & regular updates

33%
Regular updates of broader trends for drugs in local area
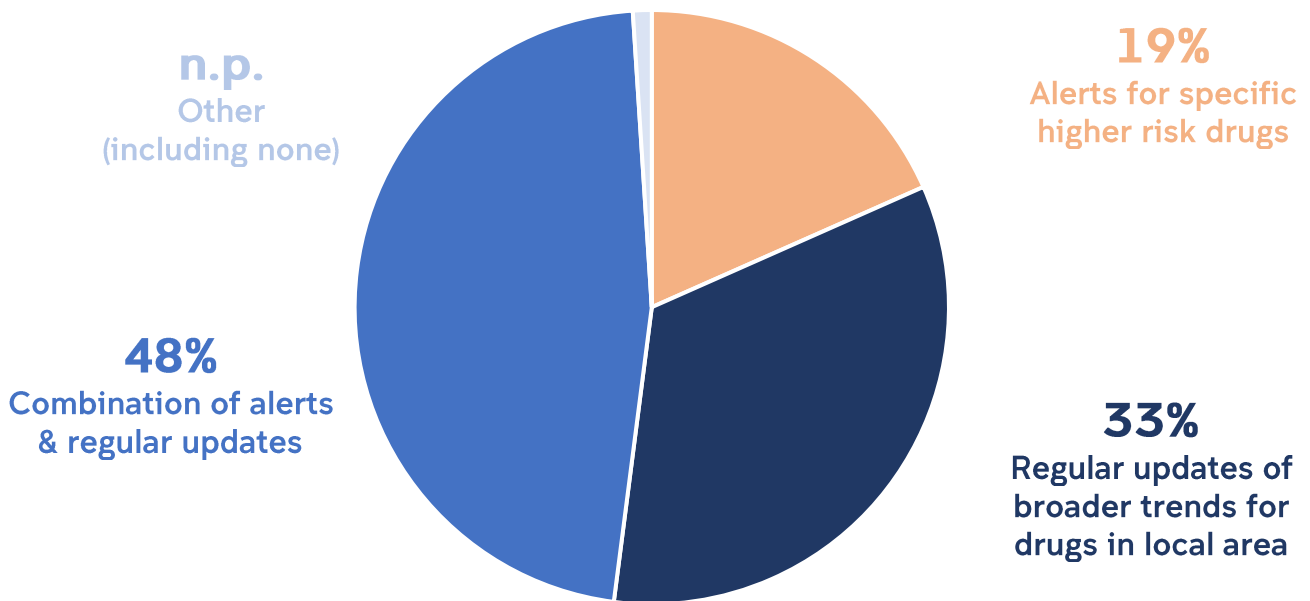
77%
said alerts should be triggered by overdose clusters

72%
said alerts should empower people to make informed decisions
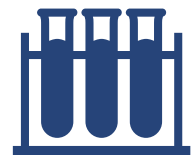
77%
highly/completely trusted drug checking services to release alerts

1. Background

Public drug warnings ('drug alerts') issued by health agencies notify the public of the presence of higher risk drugs in circulation in local markets, promoting harm reduction behaviours among people who use drugs. Co-ordinated alert reporting systems are increasingly recognised as a key component of broader harm reduction strategies and have been implemented across several high-income countries globally, generally in tandem with drug early warning systems (EWS) [1-3]. EWS are designed to rapidly identify emerging threats in local drug markets, typically using indicator data from law enforcement and health agencies (e.g., drug seizures data) [3, 4]. Following risk assessment of a given threat, key information is disseminated to the public and/or stakeholders (e.g., healthcare professionals) to ensure preparedness and inform strategic responses.

Drug alert systems are still in their infancy in Australia and the alert landscape is rapidly evolving [5]. Within the last 5 years, the two most populous Australian states (New South Wales and Victoria) have implemented formal systems to trigger public health drug alerts via state government health departments [6, 7]. These alerts are increasingly produced in collaboration with peer-based drug user organisations [8]. In addition to these formal alert mechanisms, harm reduction agencies across several states and territories routinely release their own community alerts based on peer reports of unexpected adverse effects or chemical analysis of samples brought in by community members for testing [8-10]. In states and territories where formal alert systems do not exist, alerts have also been issued ad-hoc via media releases (e.g., [11-13]. From November 2023, all alerts issued Australia-wide are now compiled on The Know website, allowing consumers to easily access information about alerts in their local area or in other jurisdictions [14].

As public drug alerts become more prevalent and alert communication systems are developed, there is increasing interest in how consumers engage with alerts 'in the wild'. The Informing Drug Alerts in Australia (IDAA) project was guided by three core aims examining awareness of, responses to and preferences for drug alerts among people who use drugs:

- Explore awareness of drug alerts;
- Examine the effects of drug alerts on behaviour;
- Identify preferences for the design and dissemination of drug alerts in future.

2. Methods

2.1. Participants and recruitment

From July–September 2023, we conducted a cross-sectional online survey of people who use drugs (the Informing Drug Alerts in Australia/IDAA survey) regarding their awareness of, responses to and preferences for communication of drug alerts. People were eligible to participate if they were aged 18 years or older, had resided in Australia for the past 6 months or longer, and had used illegal or non-prescribed psychoactive drugs in the past year (excluding cannabis). Recruitment was carried out via advertisements on social media (Facebook, Instagram), web forums (e.g. Bluelight), posters in services, darknet forums (e.g. Dread), and word of mouth (see Figure 1 for example recruitment materials). Participants who completed the survey could elect to enter a prize draw to win one of 15 AUD$50 Giftpay vouchers.

Figure 1. Examples of survey recruitment materials
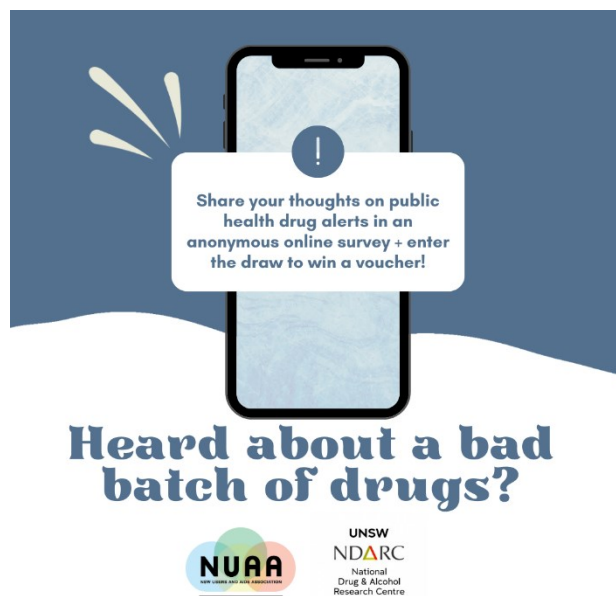
2.2. Measures

The questionnaire was developed by a research team comprising individuals from the National Drug and Alcohol Research Centre (NDARC) and the NSW Users and AIDS Association (NUAA). Survey items were developed in collaboration with two Reference Groups comprising people who use drugs and people with experience in alert dissemination and early warning systems (Figure 2).

Figure 2. Consultation and development process for the IDAA survey

Time period	Activity	
December 2022–January 2023	Initial reference group meetings	
January–March 2023	Research team generate draft survey items based on meeting discussions	
March–April 2023	Reference groups review draft survey	
May 2023	Research team incorporate feedback & upload survey	Reference groups pilot survey
July 2023	Research team incorporate feedback from piloting	Survey launched

The survey included items relevant to demographic characteristics, drug use and related behaviours (for example, health service utilisation), awareness of past alerts, characteristics of and responses to the most recently seen alert, and preferences for future drug alerts and broader risk communication about drugs. The full questionnaire is included in Appendix A.

2.3. Analyses

All analyses were conducted in IBM SPSS Statistics 27 using unweighted data. We computed descriptive statistics as percentages for each variable, including cross-tabulations by state or territory of usual residence where appropriate. To ensure confidentiality, we suppressed small cell sizes for cross-tabulations (n≤5 but not 0) and percentage denominators (n≤10 but not 0).

2.4. Ethics

Ethics approval was provided by the UNSW Human Research Ethics Committee (HC210404).

3. Results

Of a total 2,585 responses, 1,779 met study eligibility criteria. We experienced ongoing issues with duplicate and fraudulent responses. After removal of these responses, the final sample size included 567 participants (see Figure 3). The median survey completion time was 13.4 minutes.

Figure 3. Decision tree outlining removal of ineligible and invalid responses
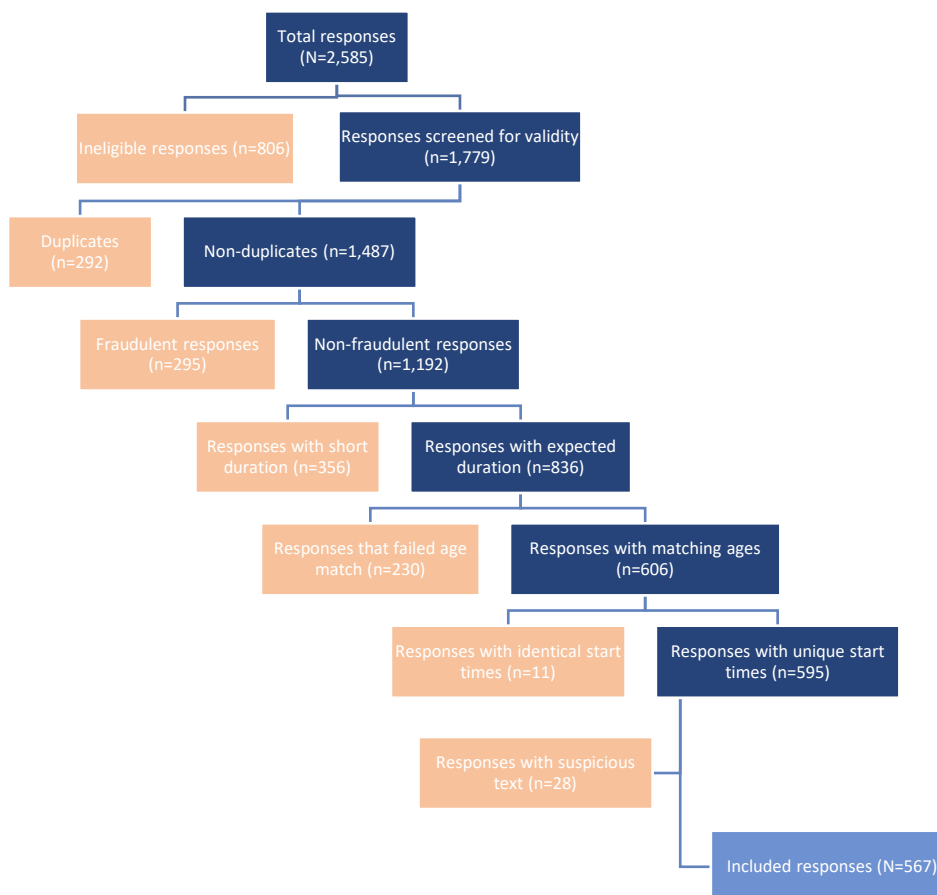
Notes
1. Ineligible responses were identified based on the study eligibility criteria, that is age<18, resided in Australia for past 6 months=FALSE and/or used illegal drugs in the past 12 months=FALSE or responses to 'drug use' questions indicated use of only cannabis and/or legal drugs.
2. Duplicates were identified using inbuilt flags in Qualtrics, that is Q_BallotBoxStuffing=TRUE, Q_RelevantIDDuplicate=TRUE or Q_RelevantIDDuplicateScore>=75.
3. Fraudulent responses were identified using inbuilt flags in Qualtrics that detect responses where the respondent is likely a bot, that is Q_RecaptchaScore<0.5 or Q_RelevantIDFraudScore>=30.
4. Age match test based on multiple questions asking for age. Records with non-matching responses were removed.
5. Where records had an identical start time, these records were flagged and removed.
6. Responses that were completed in <300 seconds were flagged as suspicious and removed.
7. Text checks involved reading free text responses to assess whether these contained indicators that the respondent was suspicious/fraudulent (e.g., specific sentences that match across multiple submissions).

3.1. Demographics

Of the 567 included participants, around half were aged in their 30s or 40s, with a median age of 36 years (range: 18-73). Half of participants listed their gender identity as woman/female (49%). Just under 3 in 4 identified as straight/heterosexual (70%). Most participants resided in New South Wales (33%), Victoria (24%) or Queensland (13%), and just over 1 in 2 lived in capital cities (54%). Over 1 in 3 had completed a university or college degree (37%), and a similar proportion were currently employed full time (36%). These proportions were relatively consistent across jurisdictions, with some variations for residential area and education level (Table 1).

Table 1. Participant demographics, total and by jurisdiction

	Total (N=567)	NSW (n=188)	ACT (n=29)	VIC (n=138)	TAS (n=31)	SA (n=49)	WA (n=48)	NT (n=9)	QLD (n=71)
% Age group									
18-24 years	13	11	--	17	--	12	23	--	10
25-29 years	13	9	--	22	--	14	17	--	--
30-39 years	**32**	27	**69**	**36**	**42**	29	17	--	28
40-49 years	25	**31**	--	15	29	**31**	**25**	--	**30**
50-59 years	12	15	0	9	--	--	15	--	14
60-69 years	5	7	0	--	0	--	--	--	13
70-79 years	--	--	0	0	0	0	--	0	0
% Gender identity									
Woman or female	**49**	**52**	--	**49**	55	57	44	--	**49**
Man or male	46	45	**71**	41	42	39	**50**	--	**51**
Non-binary	5	4	--	8	0	--	--	0	0
Another term	--	0	0	--	--	0	0	--	0
% Sexual orientation									
Straight/heterosexual	**70**	72	57	63	69	67	77	78	79
Gay or lesbian	9	7	--	13	--	15	--	--	--
Bisexual	19	19	29	21	--	17	17	--	17
Another term^	3	--	--	--	--	--	--	0	--
% Residential area									
Capital city area	**54**	48	**71**	65	32	58	63	--	43
Non-capital city area*	46	**52**	29	35	**68**	42	37	--	**57**
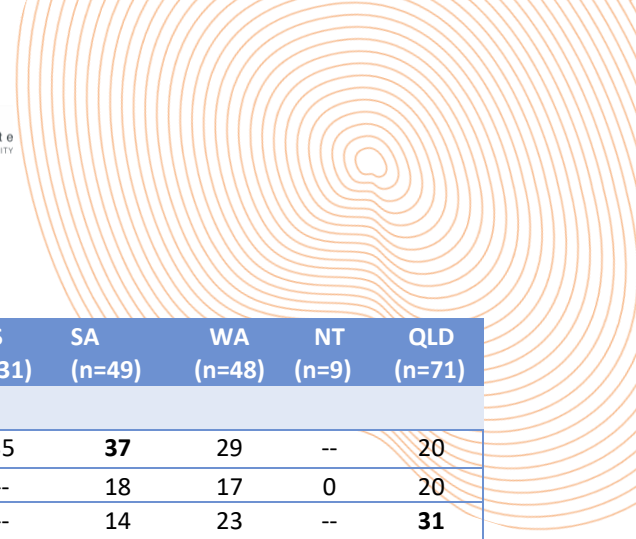
	Total (N=567)	NSW (n=188)	ACT (n=29)	VIC (n=138)	TAS (n=31)	SA (n=49)	WA (n=48)	NT (n=9)	QLD (n=71)
% Highest qualification completed									
Year 11 or below	29	**35**	24	21	35	**37**	29	--	20
Year 12	15	12	--	17	--	18	17	0	20
Trade/technical	18	18	--	17	--	14	23	--	**31**
University/college	**37**	**35**	59	**44**	**39**	31	**31**	--	30
% Current employment									
Not employed	28	**34**	--	31	29	22	23	--	24
Full time	**36**	**34**	76	**36**	29	**31**	44	--	23
Part time/casual	25	24	21	22	**32**	**31**	19	--	**31**
Self employed	6	3	0	7	--	--	--	0	15
Other#	6	5	0	4	--	12	13	0	--

-- Not published due to small cell sizes (n≤5 but not 0).

*Regional and remote areas. ^Responses included asexual, pansexual and queer. #Responses included people who were retired and those on a disability pension.

Note. All numbers are column percentages; bolded cells indicate highest percentage of that column category. Columns may not sum to 100 due to rounding. Excludes missing and 'Don't know' responses. Data are not representative of all people who use drugs, and caution should be exercised when making interpretations.

3.2. Drug use & related behaviours

3.2.1. Frequency of recent drug use & drug types used

Around 2 in 5 participants indicated that they used drugs monthly or less often in the past 12 months (43%). This proportion was similar for women and men but varied by age group (Figure 4).

Figure 4. Frequency of drug use in the past 12 months, overall and by age group or gender identity

Legend: Monthly or less often ■ Weekly or fortnightly ■ More than weekly but less than daily ■ Daily or more often

	Monthly or less often	Weekly or fortnightly	More than weekly but less than daily	Daily or more often
Total (N=564)	43	23	15	19
Age group (n=564)				
18-24 years	60	21	13	
25-29 years	50	28	8	14
30-39 years	41	25	12	21
40-49 years	36	20	18	26
50-59 years	45	18	20	17
60-69 years	29	25	21	25
70-79 years				
Gender identity…				
Woman/female	42	19	15	25
Man/male	47	26	14	14
Non-binary	35	35		
Another term^				

▨ Not published due to small cell sizes (n≤5 but not 0).

^Responses included asexual, pansexual and queer.

Note. Rows may not sum to 100 due to rounding. Excludes missing and 'Don't know' responses. Data are not representative of all people who use drugs, and caution should be exercised when making interpretations.

The most common drugs that participants reported using in the past 12 months were methamphetamine (50%), cocaine (43%), and MDMA/ecstasy (42%). Over 2 in 3 participants reported use of multiple drugs (69%) (Figure 5).

Figure 5. Drug types used on any occasion in the past 12 months (n=547)

Drug type	Percentage
Multiple drug use	69%
Methamphetamine	50%
Cocaine	43%
MDMA/ecstasy	42%
Benzodiazepines*	31%
LSD/acid	27%
Ketamine	24%
Pharmaceutical opioids*	20%
GHB/GBL/1,4-BD	13%
Heroin	11%
Other psychoactive substances^	23%

*Refers to non-prescribed use of benzodiazepines or pharmaceutical opioids. ^Responses included cannabis, amphetamine/speed, psilocybin/mushrooms, DMT and pharmaceutical stimulants (e.g. dexamphetamine).

Note. Percentages do not sum to 100 as participants were able to select multiple response options. Excludes missing and 'Don't know' responses. Data are not representative of all people who use drugs, and caution should be exercised when making interpretations.

3.2.2. Harm reduction behaviours & drug testing

Most participants (82%) reported engaging in at least one harm reduction strategy on a typical occasion when using drugs in the past 12 months. The most common strategies included obtaining drugs from a trusted source (52%) and practicing safer dosing (50%) (Figure 6).

Figure 6. Use of harm reduction strategies on a typical occasion when using drugs in the past 12 months (n=548)
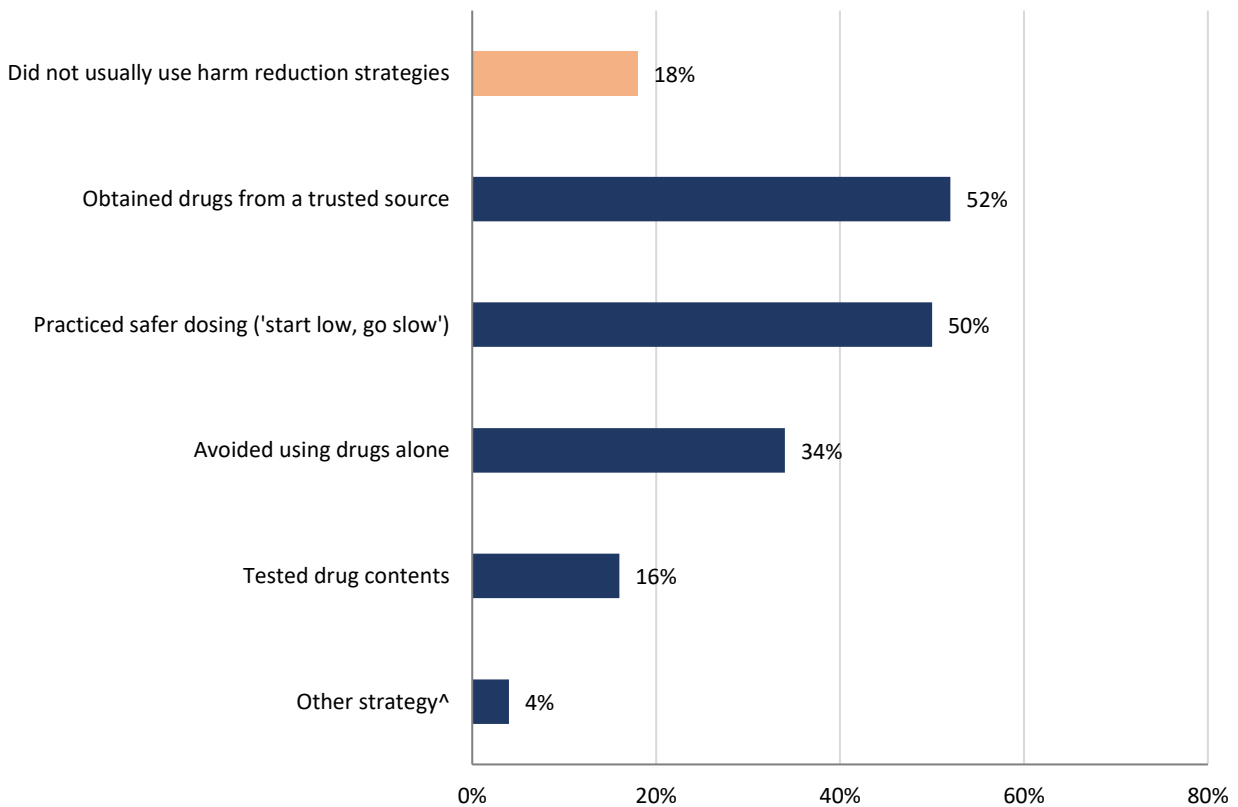
^Responses included carrying naloxone, asking a peer or web forum about drug quality or avoiding using alcohol with other drugs.

Note. Percentages do not sum to 100 as participants were able to select multiple response options. Excludes missing and 'Don't know' responses. Data are not representative of all people who use drugs, and caution should be exercised when making interpretations.
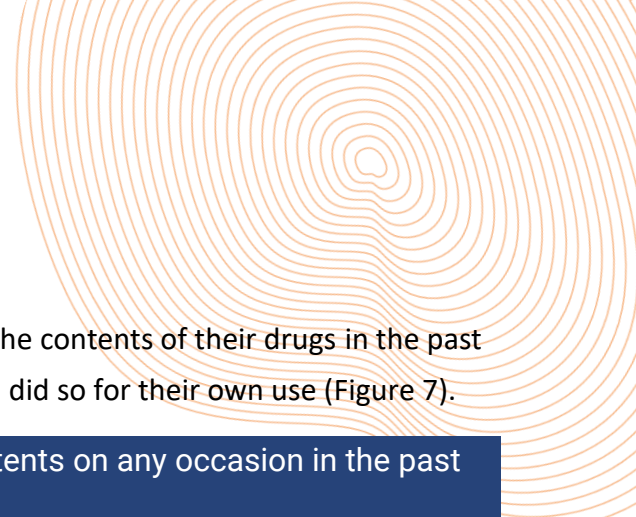
Around 3 in 4 participants reported that they had not tested the contents of their drugs in the past 12 months (74%). Among people who had tested drugs, 1 in 5 did so for their own use (Figure 7).

Figure 7. Proportion of participants who tested drug contents on any occasion in the past 12 months (n=559)
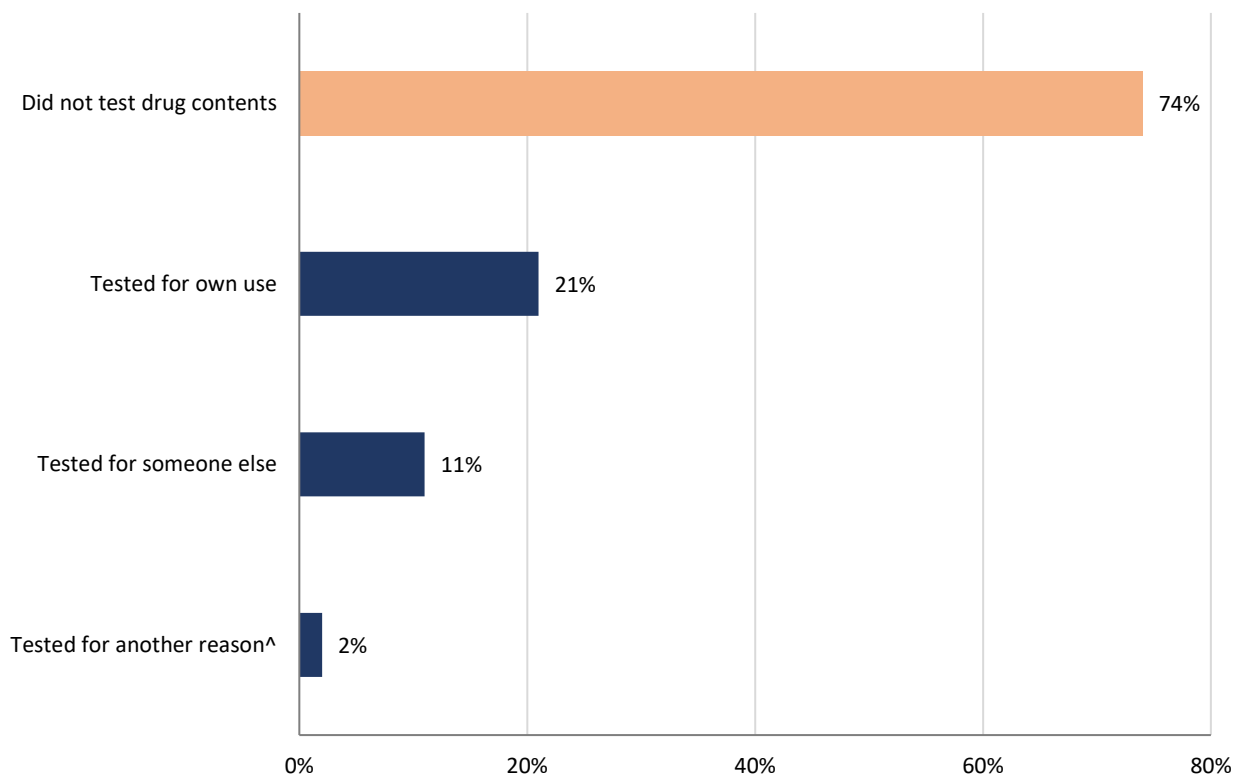
^Responses included conducting quality checks on drug test kits for darknet market vendors (e.g. Test4Pay).

Note. Percentages do not sum to 100 as participants who indicated they had tested drug contents were able to select multiple response options out of testing for self, testing for someone else and testing for another reason. Excludes missing and 'Don't know' responses. Data are not representative of all people who use drugs, and caution should be exercised when making interpretations.
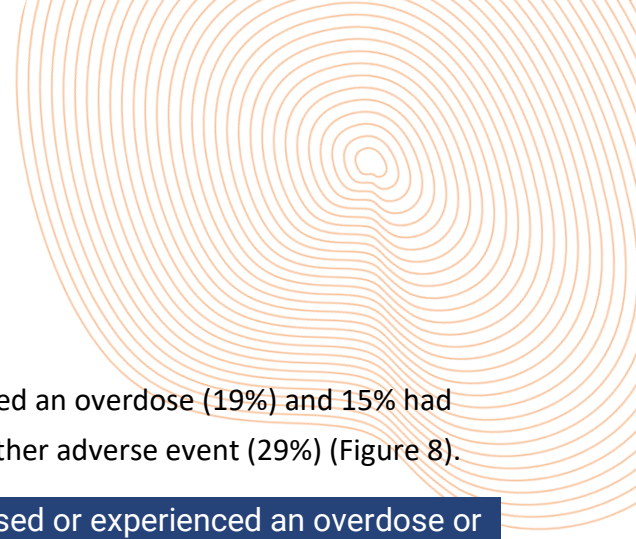
3.2.3. Overdose and other adverse events

In the past 12 months, around 1 in 5 participants had witnessed an overdose (19%) and 15% had experienced one. Almost 1 in 3 had recently experienced another adverse event (29%) (Figure 8).

Figure 8. Proportion of participants who had ever witnessed or experienced an overdose or other adverse event
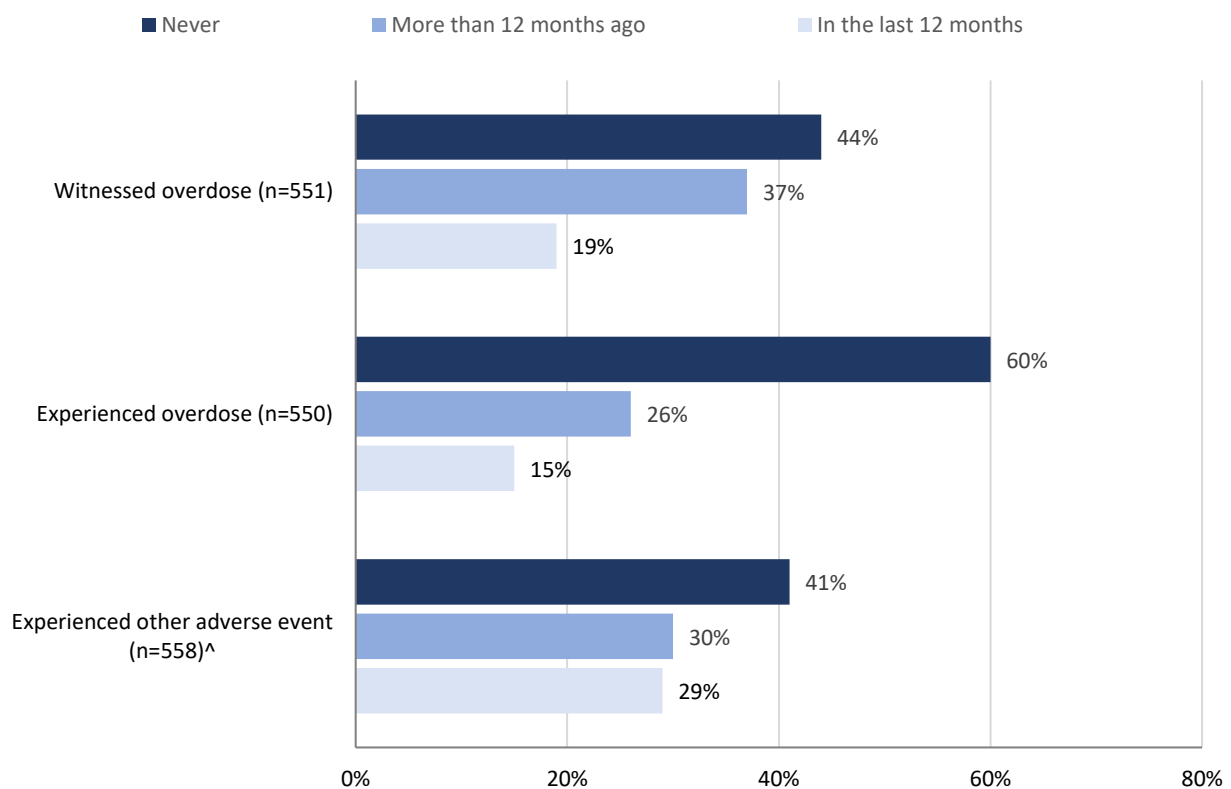
^'Other adverse event' was defined in the question as any harmful or very unpleasant drug effect where the person felt that their health and safety was at immediate risk.

Note. Percentages may not sum to 100 due to rounding. Excludes missing and 'Don't know' responses. Data are not representative of all people who use drugs, and caution should be exercised when making interpretations.

3.2.4. Access to treatment and other health services

Around 1 in 5 participants had recently accessed drug treatment, including counselling, rehabilitation and opioid agonist treatment. This proportion varied by age and gender (Figure 9).

Figure 9. Proportion of participants who had ever been in any form of drug treatment, overall and by age group or gender identity
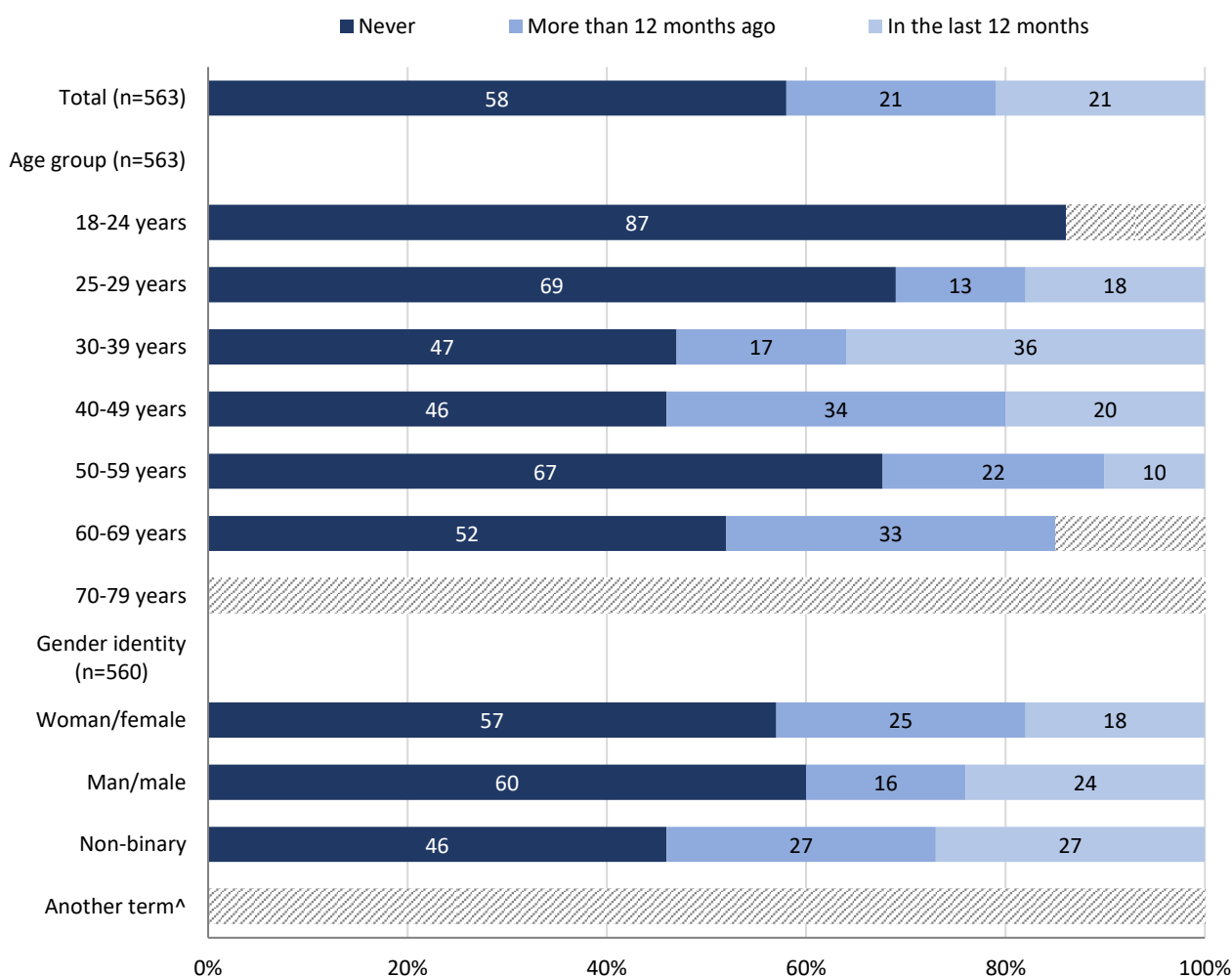
Legend: ■ Never ■ More than 12 months ago ■ In the last 12 months

Category	Never	More than 12 months ago	In the last 12 months
Total (n=563)	58	21	21
Age group (n=563)			
18-24 years	87		
25-29 years	69	13	18
30-39 years	47	17	36
40-49 years	46	34	20
50-59 years	67	22	10
60-69 years	52	33	
70-79 years			
Gender identity (n=560)			
Woman/female	57	25	18
Man/male	60	16	24
Non-binary	46	27	27
Another term^			

▨ Not published due to small cell sizes (n≤5 but not 0).

^Responses included asexual, pansexual and queer.

Note. Rows may not sum to 100 due to rounding. Excludes missing and 'Don't know' responses. Data are not representative of all people who use drugs, and caution should be exercised when making interpretations.
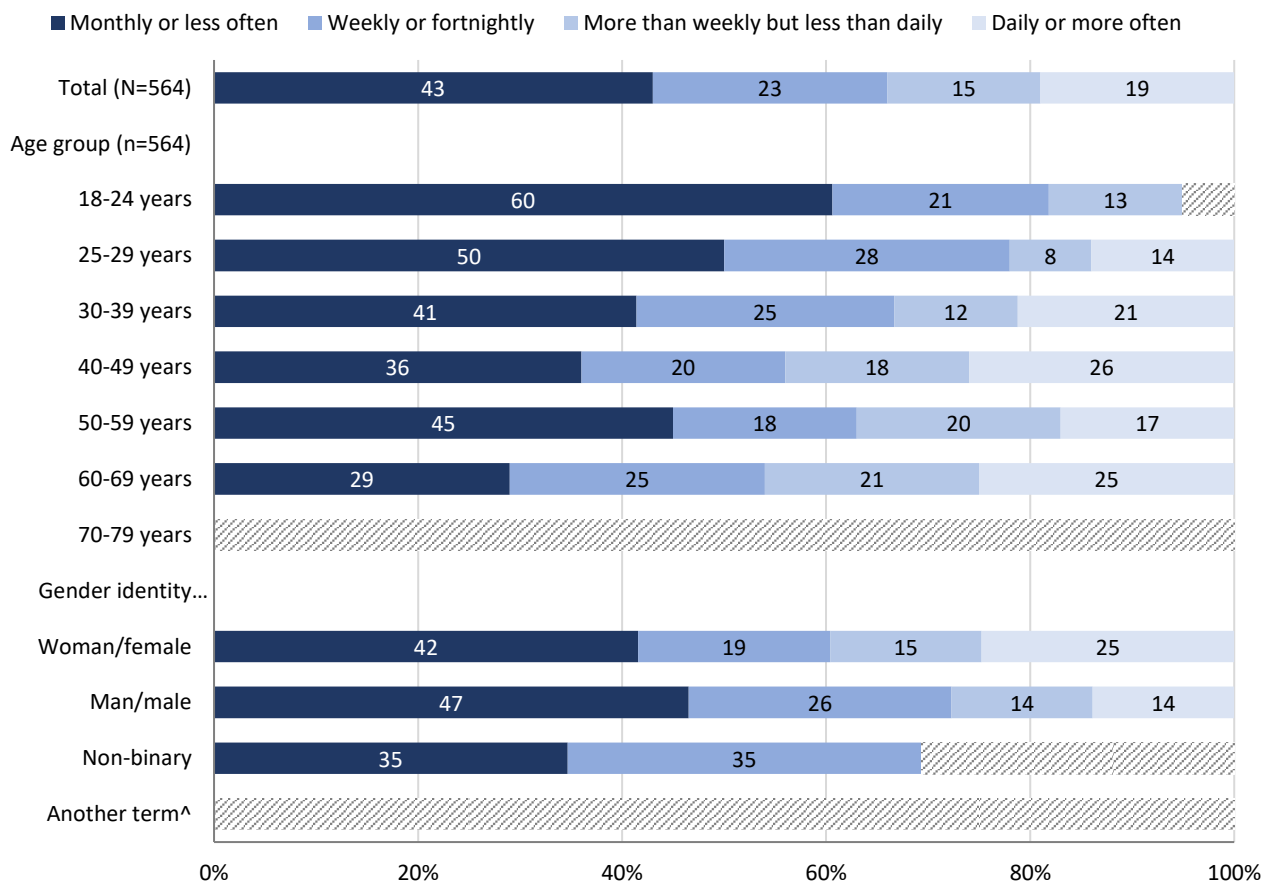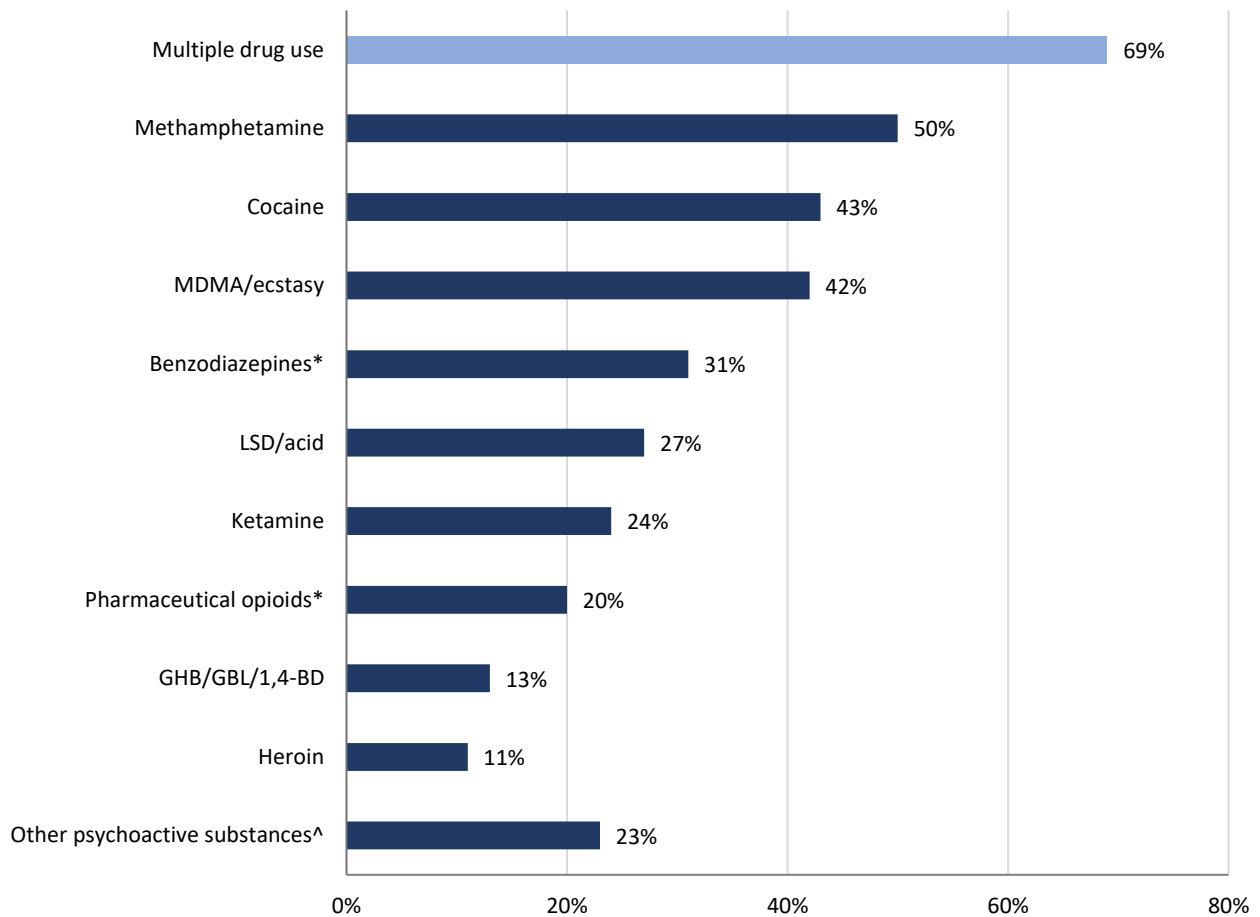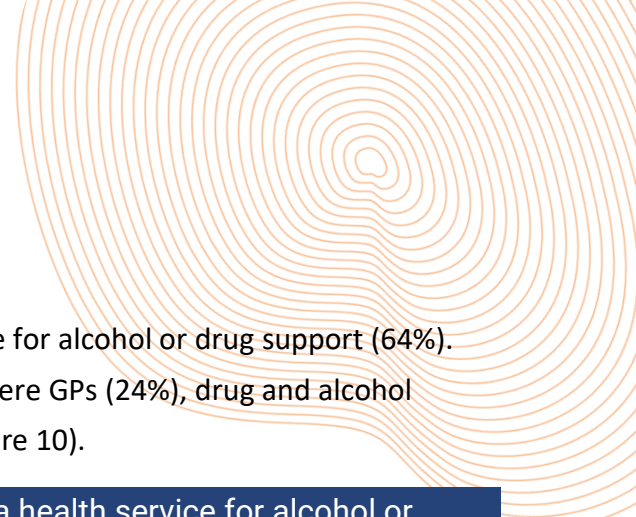
Over 2 in 3 participants had recently accessed a health service for alcohol or drug support (64%). The most common services accessed in the past 12 months were GPs (24%), drug and alcohol counsellors (18%), and psychiatrists/psychologists (16%) (Figure 10).

Figure 10. Proportion of participants who had accessed a health service for alcohol or drug support in the past 12 months (n=561)
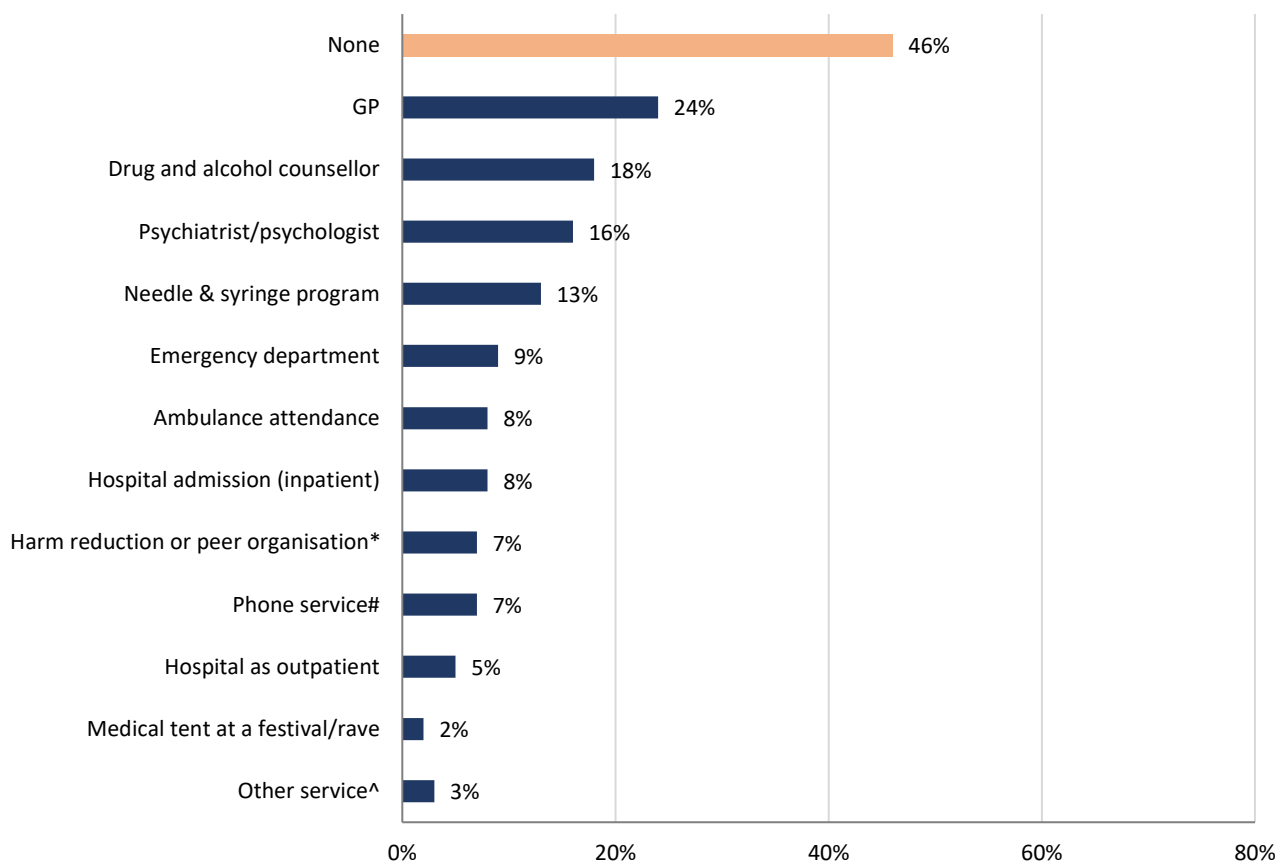
*Examples provided in the question included DanceWize, Save-A-Mate, CanTEST. #Examples provided in the question included Poisons Information Centre, Alcohol and Drug Information Service (ADIS). ^Responses included residential rehabilitation, Narcotics Anonymous and specialist doctors.

Note. Numbers do not sum to 100 as participants who had accessed any health service were able to select multiple responses. Excludes missing and 'Don't know' responses. Data are not representative of all people who use drugs, and caution should be exercised when making interpretations.

3.3. Awareness of past drug alerts

3.3.1. How many people had seen or heard about an alert

Over 3 in 4 participants had seen a drug alert in Australia in the past 5 years (77%), most commonly for MDMA (39%), cocaine (26%) or methamphetamine (25%) (Figure 11). Around 4 in 5 participants reported that they had most recently seen an alert within the past 12 months (82%).

Figure 11. Proportion of participants who had seen a drug alert in the past 5 years, by drug type mentioned in the alert (n=536)
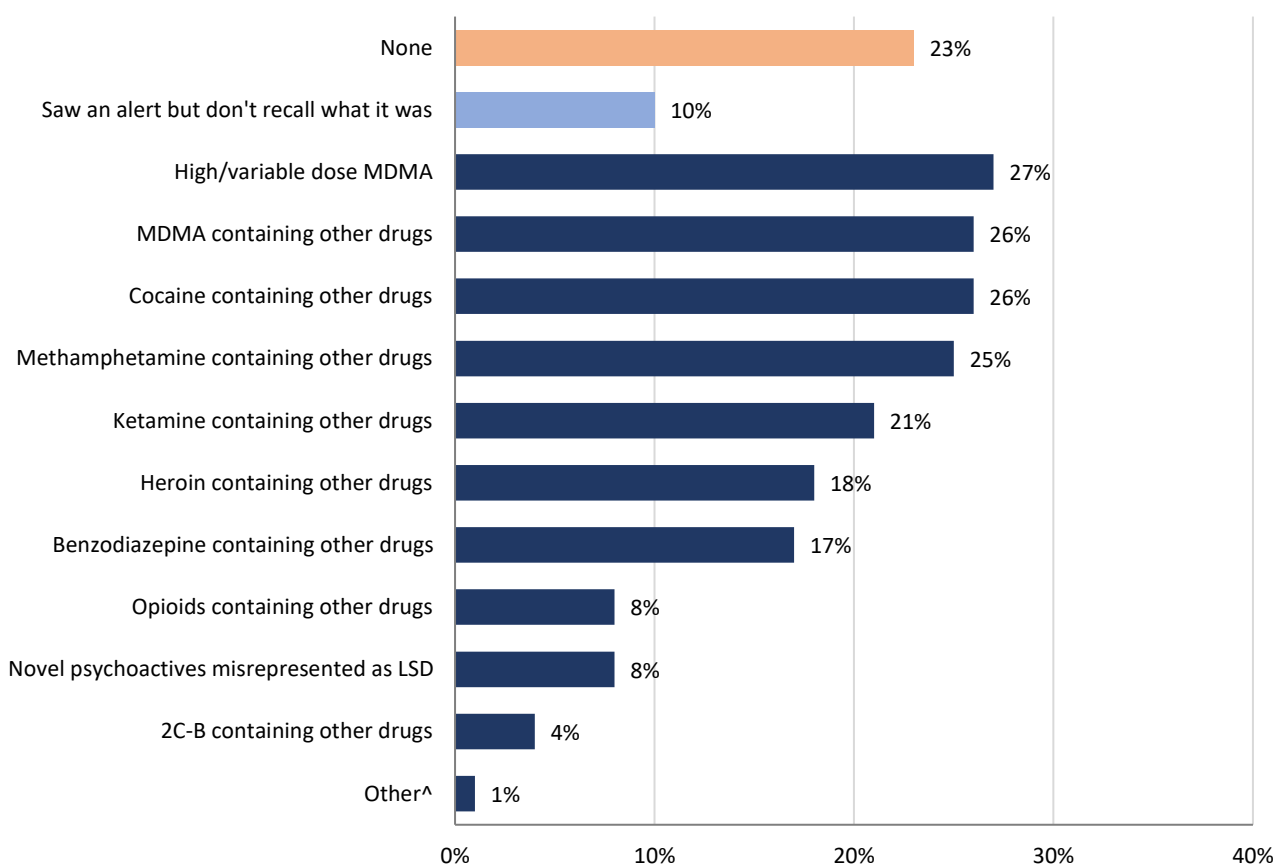
^Responses included GHB containing other drugs.

Note. Numbers do not sum to 100 as participants who had seen any alert were able to select multiple responses. Excludes missing and 'Don't know' responses. Data are not representative of all people who use drugs, and caution should be exercised when making interpretations.

3.3.2. What drug was mentioned in the most recent alert

Participants who recalled the drug type mentioned in the most recent alert they had seen or heard about were asked to describe key characteristics of this alert. The most recent alert was most often for methamphetamine, MDMA or cocaine (Figure 12).

Figure 12. Proportion of participants by most recent alert seen/heard about in the past 5 years (n=331)
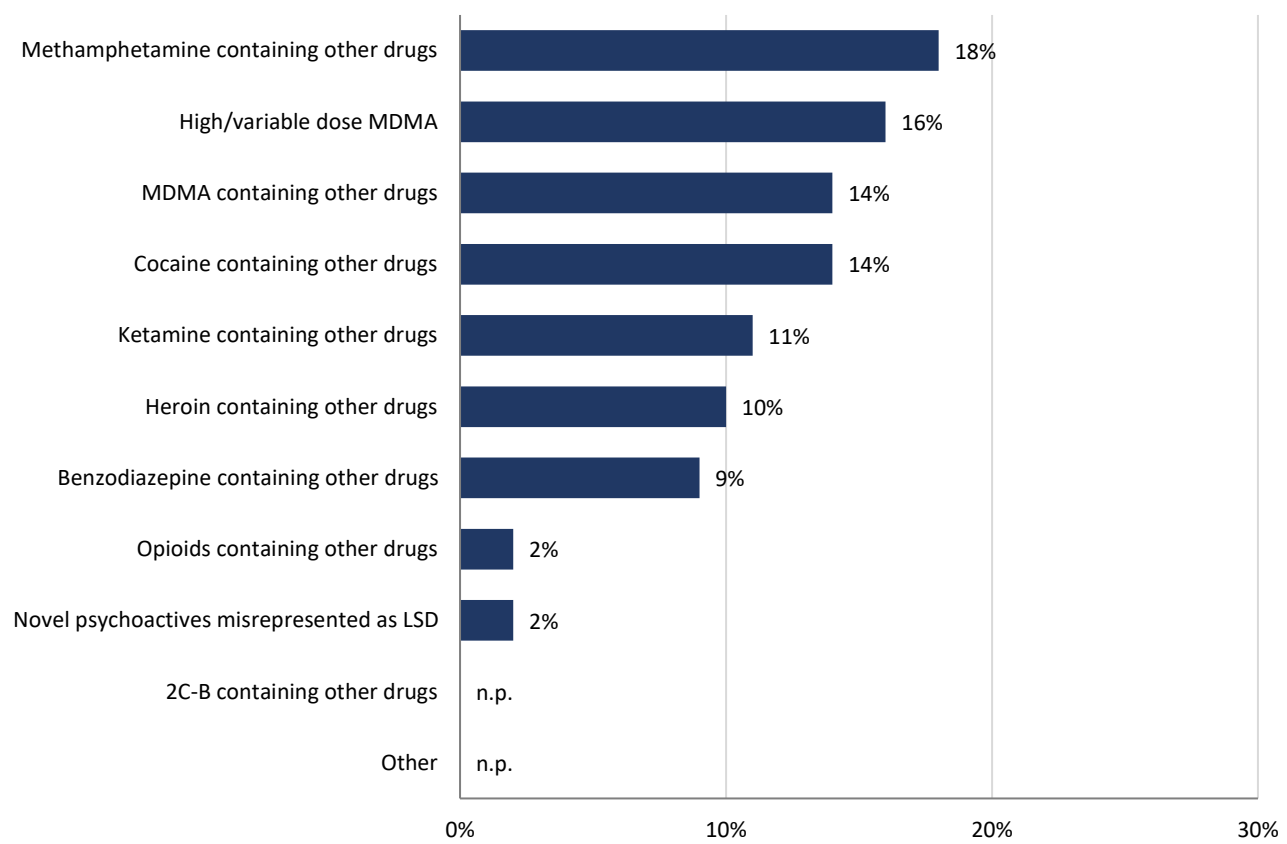
Drug	Percentage
Methamphetamine containing other drugs	18%
High/variable dose MDMA	16%
MDMA containing other drugs	14%
Cocaine containing other drugs	14%
Ketamine containing other drugs	11%
Heroin containing other drugs	10%
Benzodiazepine containing other drugs	9%
Opioids containing other drugs	2%
Novel psychoactives misrepresented as LSD	2%
2C-B containing other drugs	n.p.
Other	n.p.

n.p. Not published due to small cell sizes (n≤5 but not 0). Examples of 'Other' not provided due to small numbers.

Note. Numbers do not sum to 100 as participants who had seen any alert were able to select multiple responses. Excludes missing and 'Don't know' responses. Data are not representative of all people who use drugs, and caution should be exercised when making interpretations.

3.3.3 How did people find out about the most recent alert?

More than half of participants reported that they had seen/heard about the most recent drug alert via social media or a public channel feed such as Instagram or Twitter (58%), while around 1 in 3 found out via media reports (32%) (Figure 13).

Figure 13. Proportion of participants by how they saw/heard about the most recent alert (n=409)
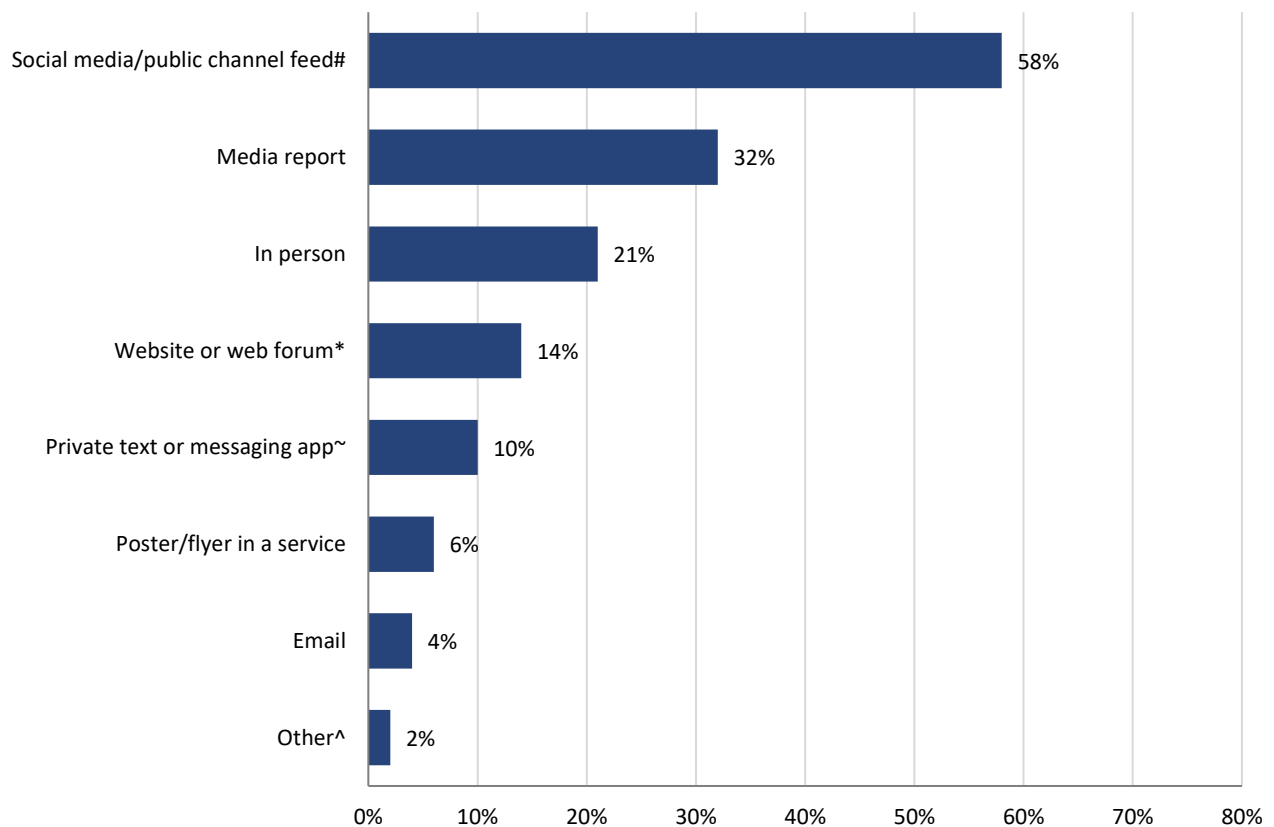
#Examples provided in the question included Facebook, Instagram. *Examples provided in the question included Bluelight, Reddit, Dread. ~Examples included in the question included WhatsApp, Telegram, Signal, Wickr, Facebook messenger. ^Responses included in the workplace or where the communication channel was unclear.

Note. Numbers do not sum to 100 as participants were able to select multiple responses. Excludes missing and 'Don't know' responses. Data are not representative of all people who use drugs, and caution should be exercised when making interpretations.
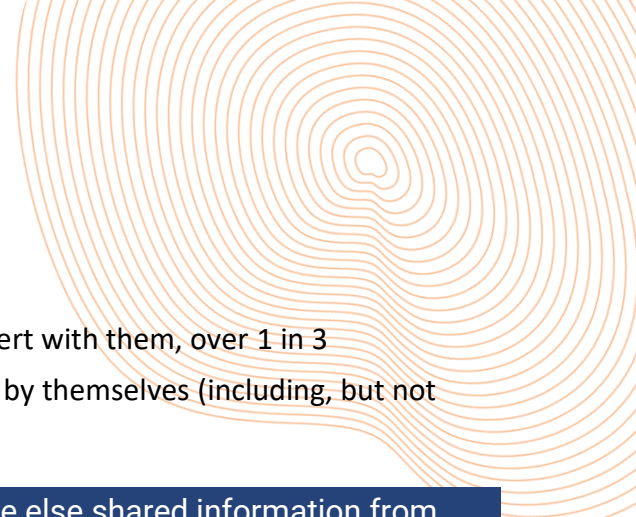
When asked who shared information from the most recent alert with them, over 1 in 3 participants reported that they had found out about the alert by themselves (including, but not limited to, on a website) (Figure 14).

Figure 14. Proportion of participants by whether someone else shared information from the most recent alert with them (n=394)
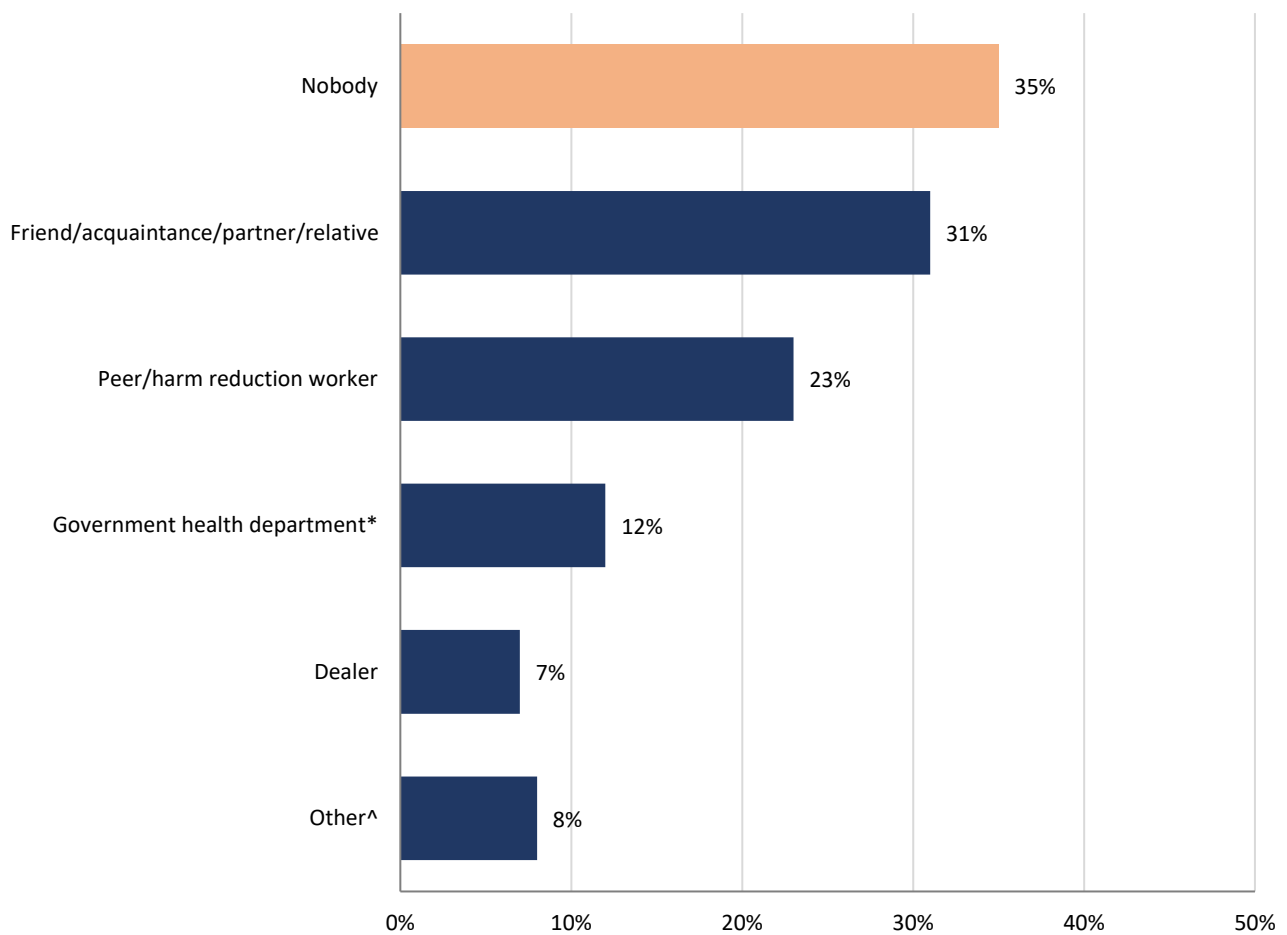
*The question specified that this includes via email. ^Responses included colleagues at work or via accounts on social media.

Note. Numbers do not sum to 100 as participants were able to select multiple responses. Excludes missing and 'Don't know' responses. Data are not representative of all people who use drugs, and caution should be exercised when making interpretations.

3.3.4 Which organisation originally issued the most recent alert?

Participants were asked to report the origin of the most recent alert they had seen/heard about, to the best of their knowledge. The most common alert sources were government health departments (36%) and harm reduction/peer organisations (34%) (Figure 15).

Figure 15. Original source of the most recent alert (n=318)

#Examples provided in the question included DanceWize, NSW Users and AIDS Association/NUAA and Harm Reduction Victoria/HRVic. *Examples provided in the question included CanTEST. ^Responses included law enforcement agencies and healthcare agencies.

Note. Numbers may not sum to 100 due to rounding. Excludes missing and 'Don't know' responses. Data are not representative of all people who use drugs, and caution should be exercised when making interpretations.

3.3.5 What information did the most recent alert include?

Around 1 in 10 did not recall any details from the most recent alert they had seen/heard about or didn't see the original alert (11%). Around half of participants recalled the alert containing information about the reason for the alert (such as a substance being misrepresented as another drug; 54%) and/or possible adverse effects related to drugs matching the alert (48%) (Figure 16).

Figure 16. Information recalled from the most recent alert (n=395)
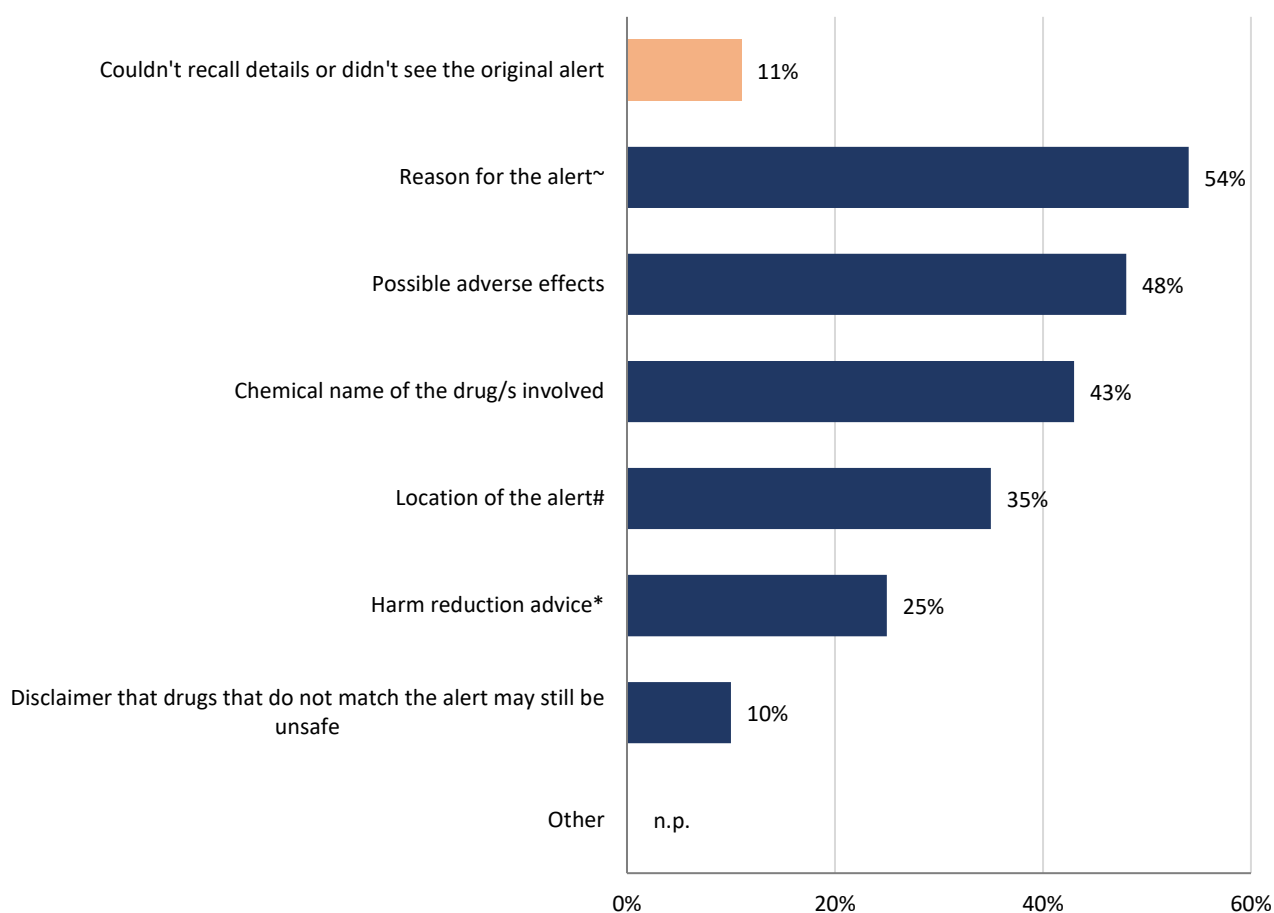
Category	%
Couldn't recall details or didn't see the original alert	11%
Reason for the alert~	54%
Possible adverse effects	48%
Chemical name of the drug/s involved	43%
Location of the alert#	35%
Harm reduction advice*	25%
Disclaimer that drugs that do not match the alert may still be unsafe	10%
Other	n.p.

n.p. Not published due to small cell sizes (n≤5 but not 0). Examples of 'Other' not provided due to small numbers.

~Examples provided in the question included a substance being misrepresented as another drug. #Examples provided in the question included city, region or state/territory. *Examples provided in the question included a reminder to carry naloxone or safer dosing advice.

Note. Numbers may not sum to 100 due to rounding. Excludes missing and 'Don't know' responses. Data are not representative of all people who use drugs, and caution should be exercised when making interpretations.
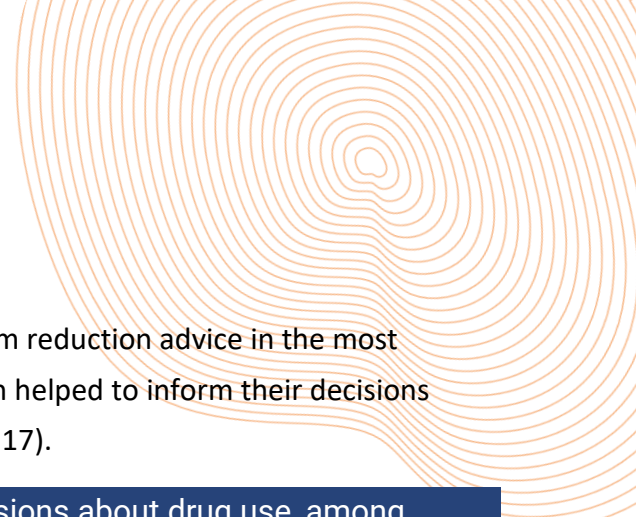
Among participants who recalled seeing or hearing about harm reduction advice in the most recent alert (n=95), almost 9 in 10 stated that this information helped to inform their decisions about using drugs matching the alert or more broadly (Figure 17).

Figure 17. Impact of harm reduction information on decisions about drug use, among participants who recalled seeing harm reduction information in most recent alert (n=95)
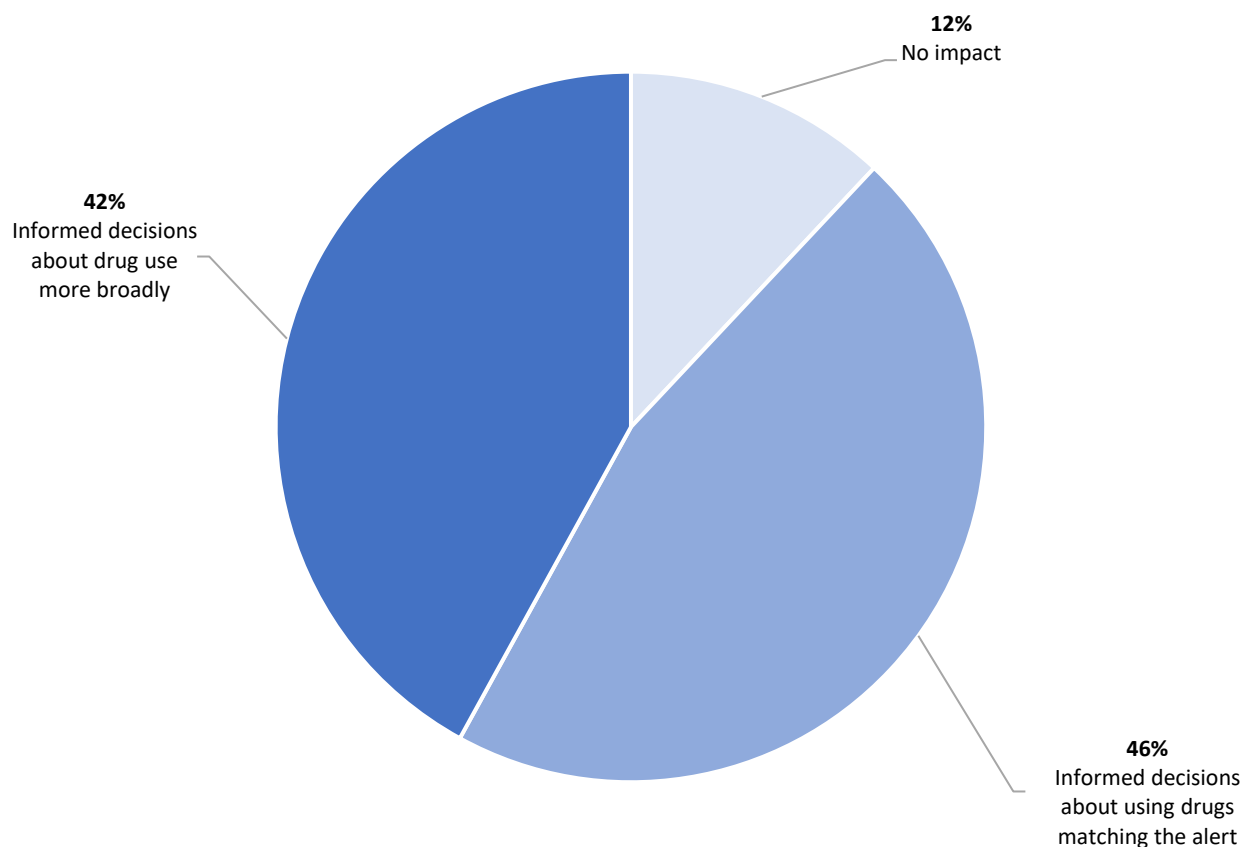
Note. Numbers may not sum to 100 due to rounding. Excludes missing and 'Don't know' responses. Data are not representative of all people who use drugs, and caution should be exercised when making interpretations.

3.3.6 What did people want to know after seeing the most recent alert?

When asked what (if any) further information they wanted to know after seeing or hearing about the alert, just under 1 in 3 participants reported that they wanted to know about harm reduction information (29%) and 1 in 5 wanted to know more about the drug type or whether drugs they had accessed or been offered matched drugs mentioned in the alert (24% each) (Figure 18).

Figure 18. Further information that participants wanted to know after seeing/hearing about the most recent alert (n=391)

#Examples provided in the question included how to access naloxone, reagent kits or fentanyl test strips. *Examples provided in the question included the location affected by the alert. ^Responses included images of the drugs mentioned in the alert and whether other substances may also be impacted (e.g., multiple drug types containing the same or similar adulterants).

Note. Numbers do not sum to 100 as participants were able to select multiple responses. Excludes missing and 'Don't know' responses. Data are not representative of all people who use drugs, and caution should be exercised when making interpretations.
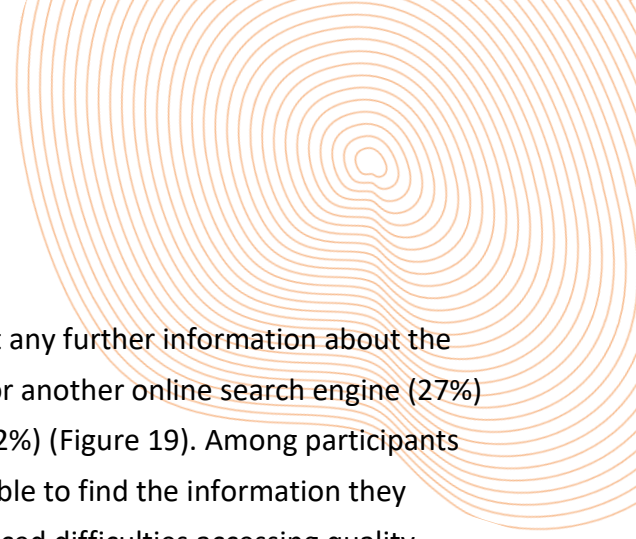
Around 1 in 3 participants reported that they did not seek out any further information about the most recent alert (33%) (Figure 19). Over 1 in 4 used Google or another online search engine (27%) and 1 in 5 asked a friend, acquaintance, partner or relative (22%) (Figure 19). Among participants who sought out further information (n=103), only half were able to find the information they needed easily/relatively easily (51%). The remainder experienced difficulties accessing quality information (36%), or were unable to find any information (13%).

Figure 19. Where participants sought further information about most recent alert (n=249)
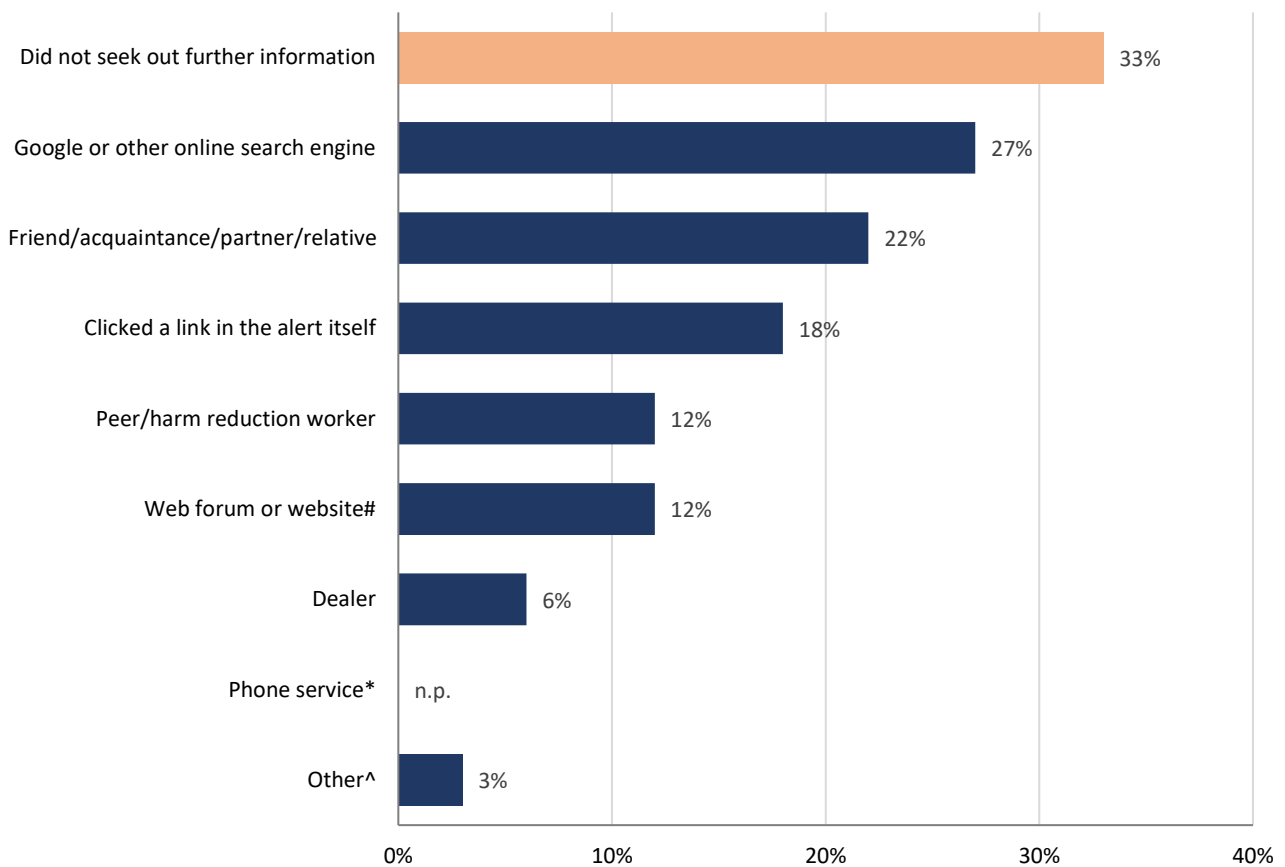
n.p. Not published due to small cell sizes (n≤5 but not 0).

#Examples provided in the question included Bluelight, Reddit, Dread or Erowid. *Examples provided in the question included the Poisons Information Centre. ^Responses included YouTube videos and health agencies.
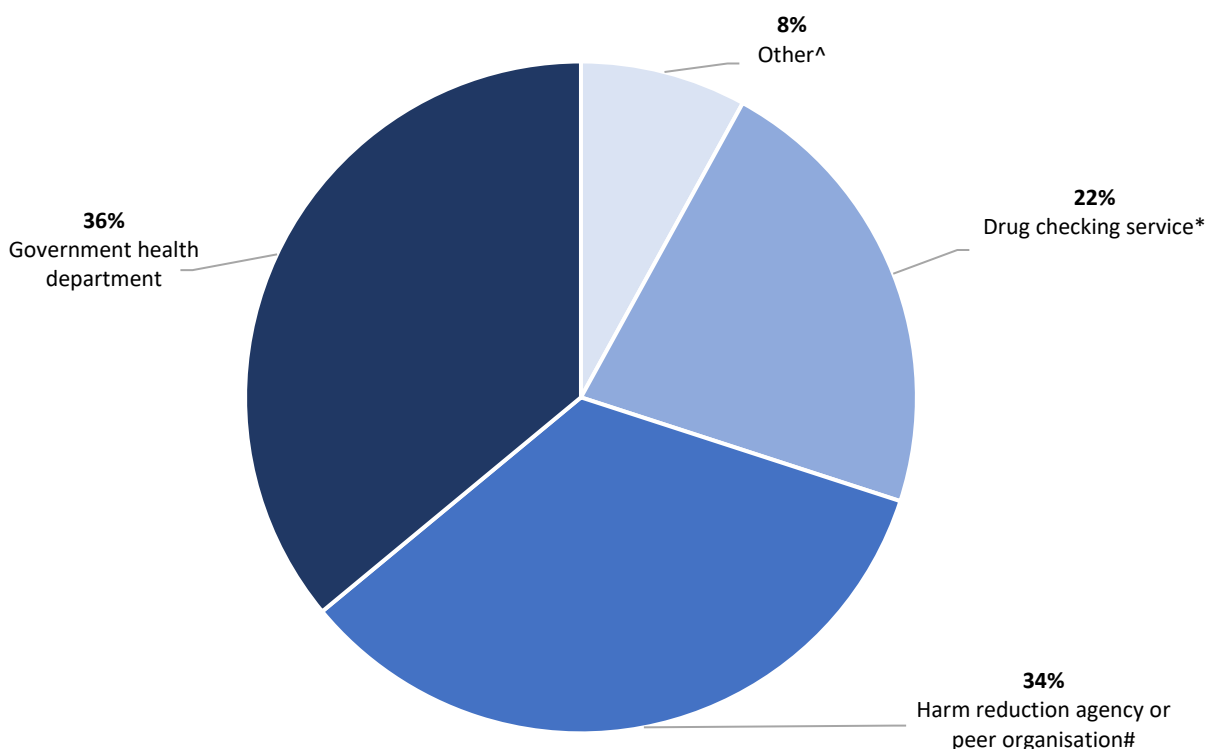
Note. Numbers do not sum to 100 as participants were able to select multiple responses. Excludes missing and 'Don't know' responses. Data are not representative of all people who use drugs, and caution should be exercised when making interpretations.

3.3.7 Did people share information from the most recent alert?

Almost 3 in 5 participants reported that they shared information from the most recent alert with a friend or group of friends, acquaintance, partner or relative (58%). Around 1 in 3 did not share information from the alert with anyone (32%) (Figure 20).

Figure 20. Proportion of participants who shared information from the most recent alert with (n=411)
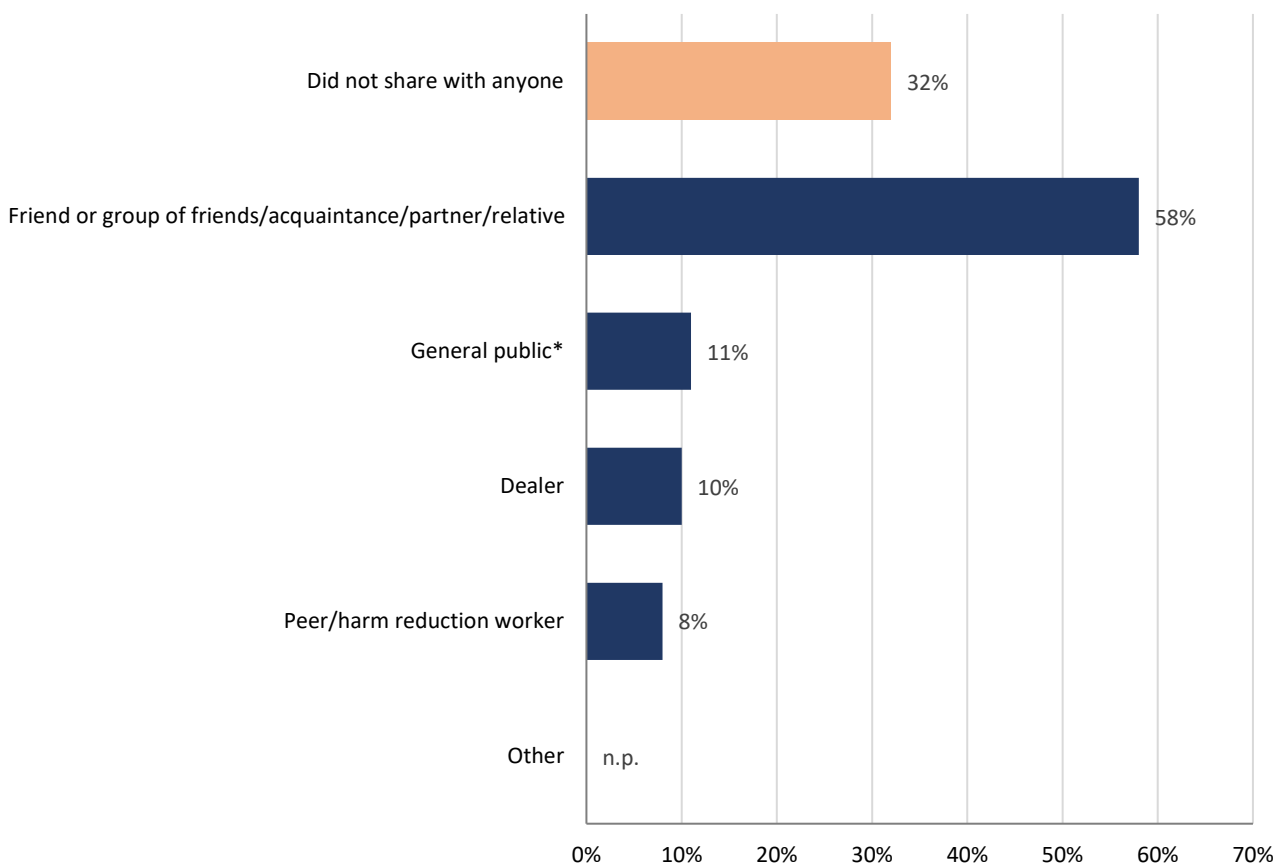
n.p. Not published due to small cell sizes (n≤5 but not 0). Examples of 'Other' not provided due to small numbers.

*Examples provided in the question included via a web forum. ^Example responses not provided due to n.p.

Note. Numbers do not sum to 100 as participants were able to select multiple responses. Excludes missing and 'Don't know' responses. Data are not representative of all people who use drugs, and caution should be exercised when making interpretations.

Among participants who shared information from the most recent alert with others (n=278), over 2 in 3 reported sharing information in person (65%) and 1 in 3 did so via social media or a public channel feed (such as Instagram or Twitter; 31%) (Figure 21).

Figure 21. How participants shared information from the most recent alert (n=278)
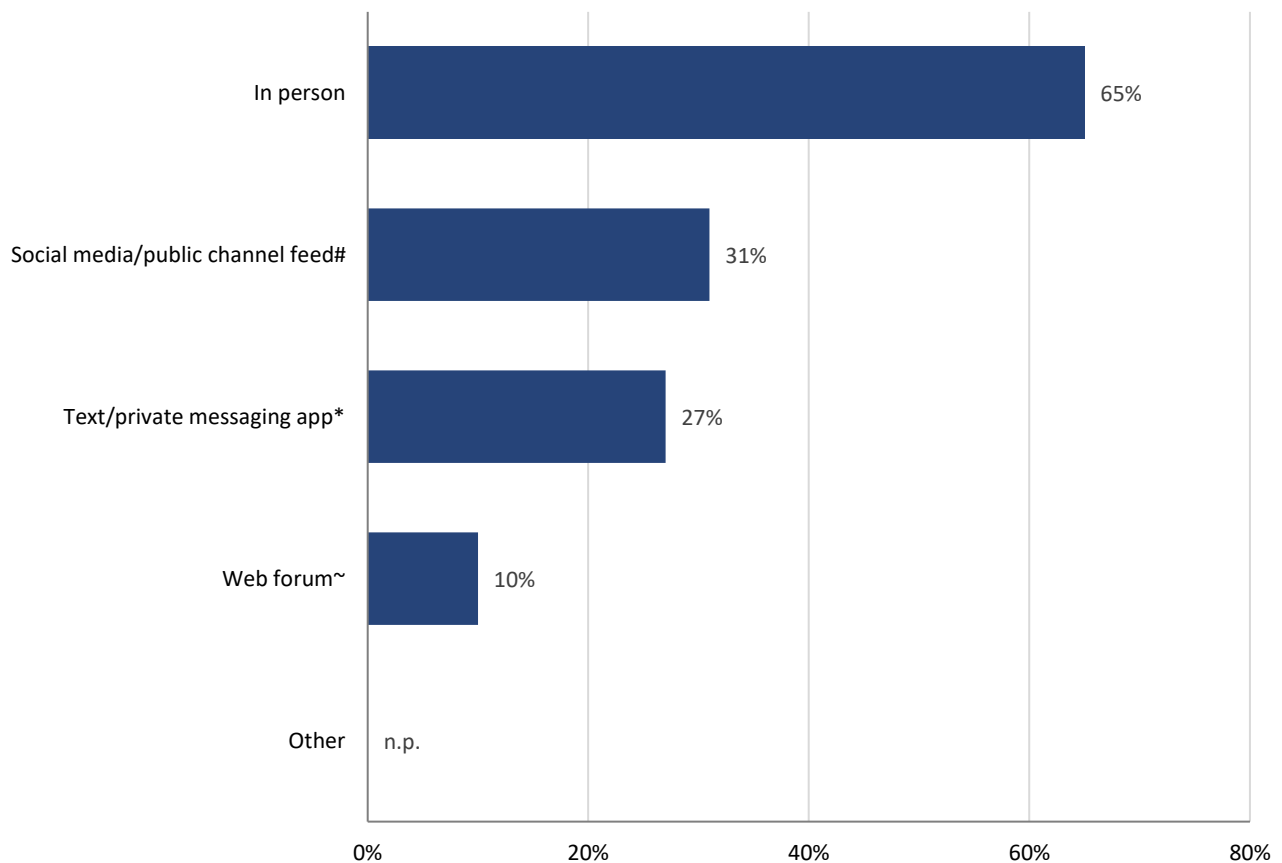
n.p. Not published due to small cell sizes (n≤5 but not 0). Examples of 'Other' not provided due to small numbers.

#Examples provided in the question included Facebook, Instagram. *Examples provided in the question included WhatsApp, Telegram, Signal, Wickr, Facebook messenger. ~Examples provided in the question included Bluelight, Reddit, Dread. ^Example responses not provided due to n.p.

Note. Numbers do not sum to 100 as participants were able to select multiple responses. Excludes missing and 'Don't know' responses. Data are not representative of all people who use drugs, and caution should be exercised when making interpretations.

3.4. Behavioural responses to the most recent drug alert

Participants who recalled the drug type mentioned in the most recent alert (n=328) were asked to describe how they responded to the most recent drug alert. Across all drug types, almost 1 in 2 people reported using the drug type after seeing or hearing about the alert (7% only after the alert and 39% both before and after the alert) (Figure 22).

Figure 22. Patterns of use for drug mentioned in most recent alert (n=328)

Legend: ■ Never used ■ Used before the alert ■ Used after the alert ■ Used both before and after the alert

Category	Never used	Used before the alert	Used after the alert	Used both before and after the alert
Total (n=328)	18	36	7	39
By drug type				
MDMA (n=100)*	9	35	8	48
Cocaine (n=46)		50		35
Methamphetamine (n=60)		25	10	57
Ketamine (n=36)		36		39
Heroin (n=34)	38	44		
Fake benzodiazepine…	55	21	0	24
Pharmaceutical opioids (n=8)				
LSD (n=8)				
2C-B (n≤5)				
Other drugs^ (n≤5)				

▨ Not published due to small cell sizes (n≤5 but not 0).

*This includes both high/variable dose MDMA and MDMA containing other drugs. ^Responses included GHB containing other drugs.
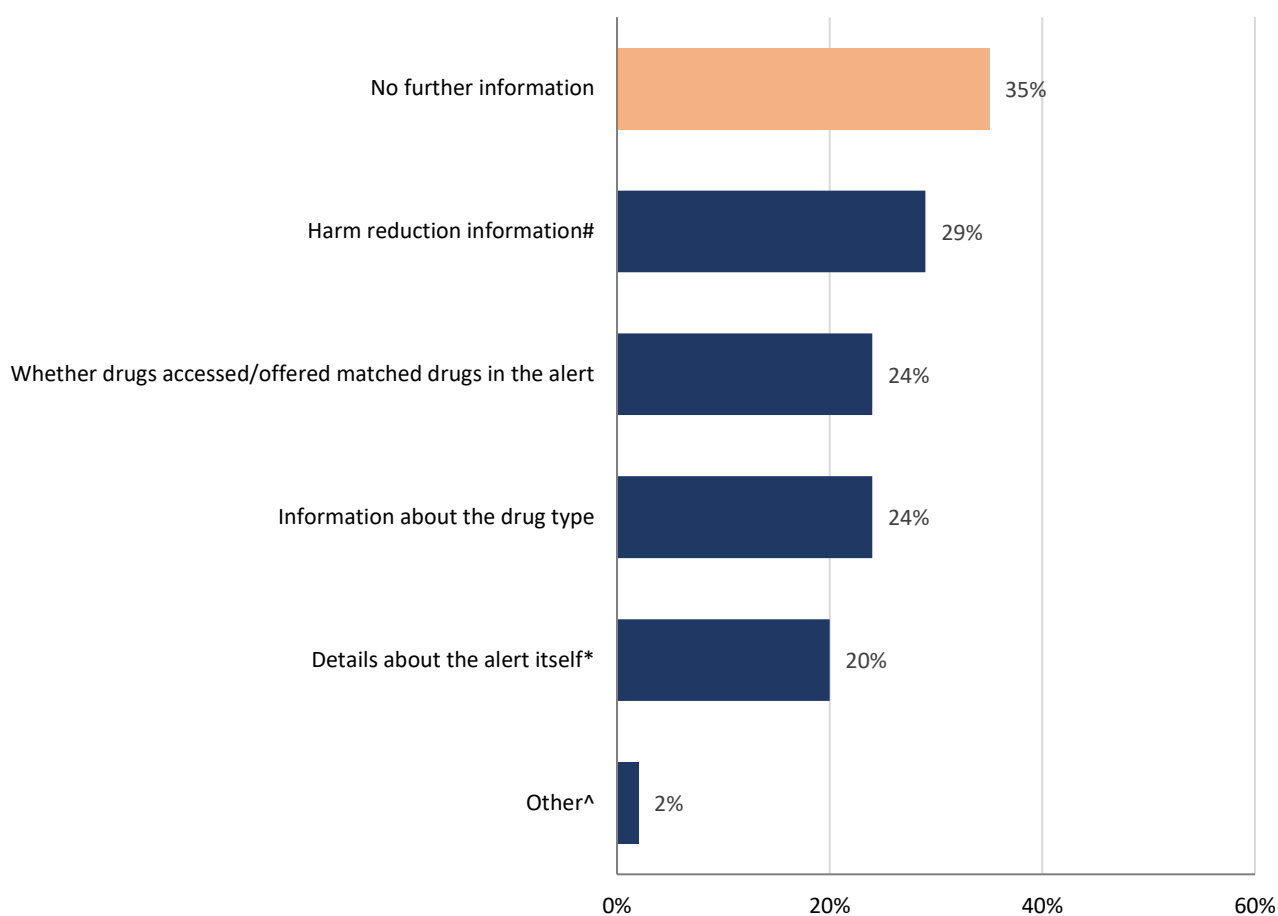
Note. Numbers may not sum to 100 due to rounding. Excludes missing and 'Don't know' responses. Data are not representative of all people who use drugs, and caution should be exercised when making interpretations.

3.4.1. Did people encounter or try to obtain drugs matching the alert?

When asked if they had personally encountered drugs matching the alert, almost 3 in 4 participants responded 'no' (71%) and the remainder responded 'yes' (29%). When asked if they had tried to obtain drugs matching the alert, 4 in 5 participants responded 'no' (Figure 23). This was similar for MDMA-type alerts compared with all other alerts.

Figure 23. Proportion of participants who tried to obtain drugs matching the alert
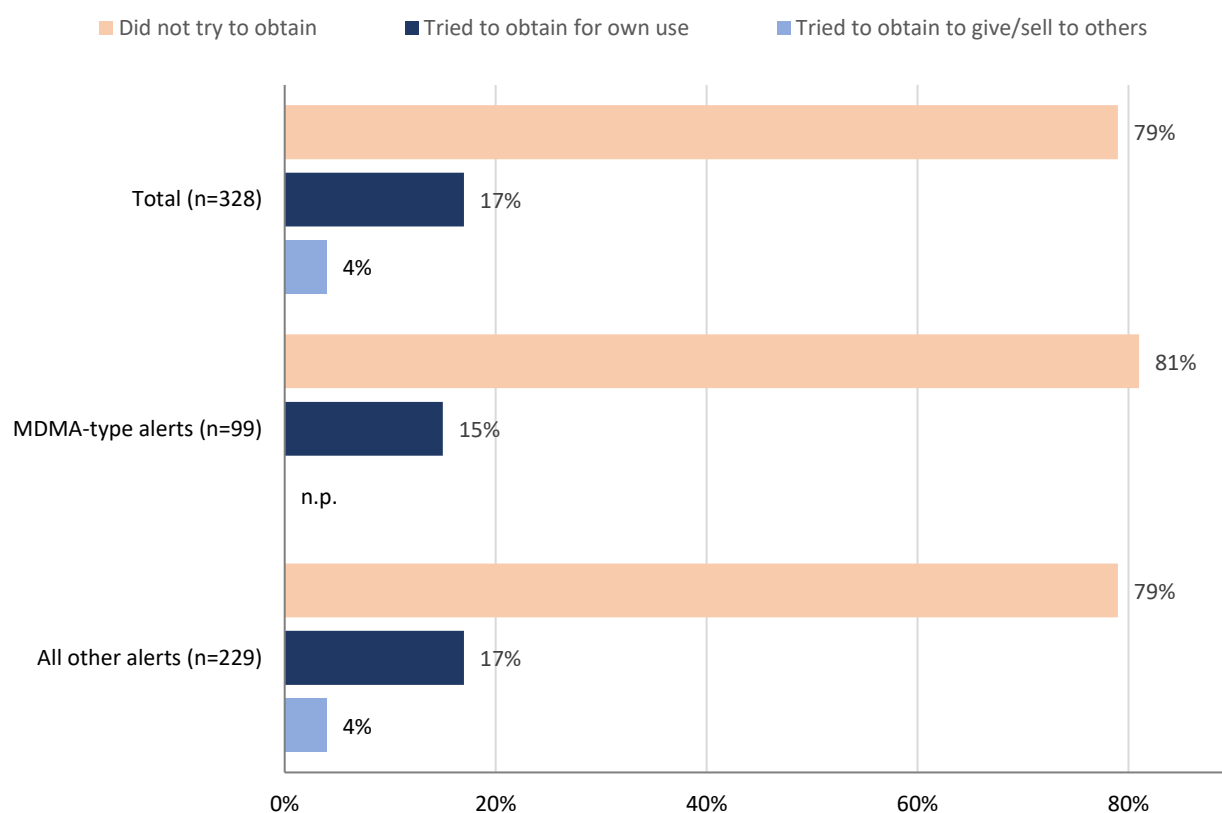
Note. Numbers do not sum to 100 as participants who responded that they tried to obtain drugs matching the alert could select multiple responses. Excludes missing and 'Don't know' responses. Data are not representative of all people who use drugs, and caution should be exercised when making interpretations.
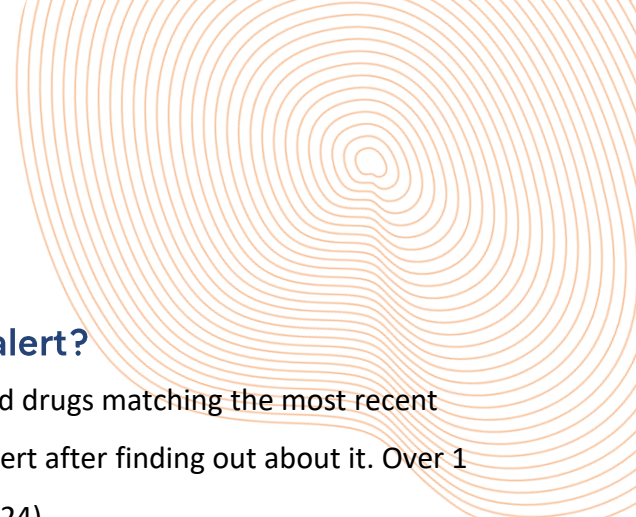
3.4.2. Did people use drugs matching the alert?

Among participants who said they had personally encountered drugs matching the most recent alert (n=89), over 2 in 5 (46%) had used drugs matching the alert after finding out about it. Over 1 in 10 did not use drugs matching the alert at all (13%) (Figure 24).

Figure 24. Proportion of participants who used drugs matching the alert, among people who had personally encountered drugs matching the alert (n=89)
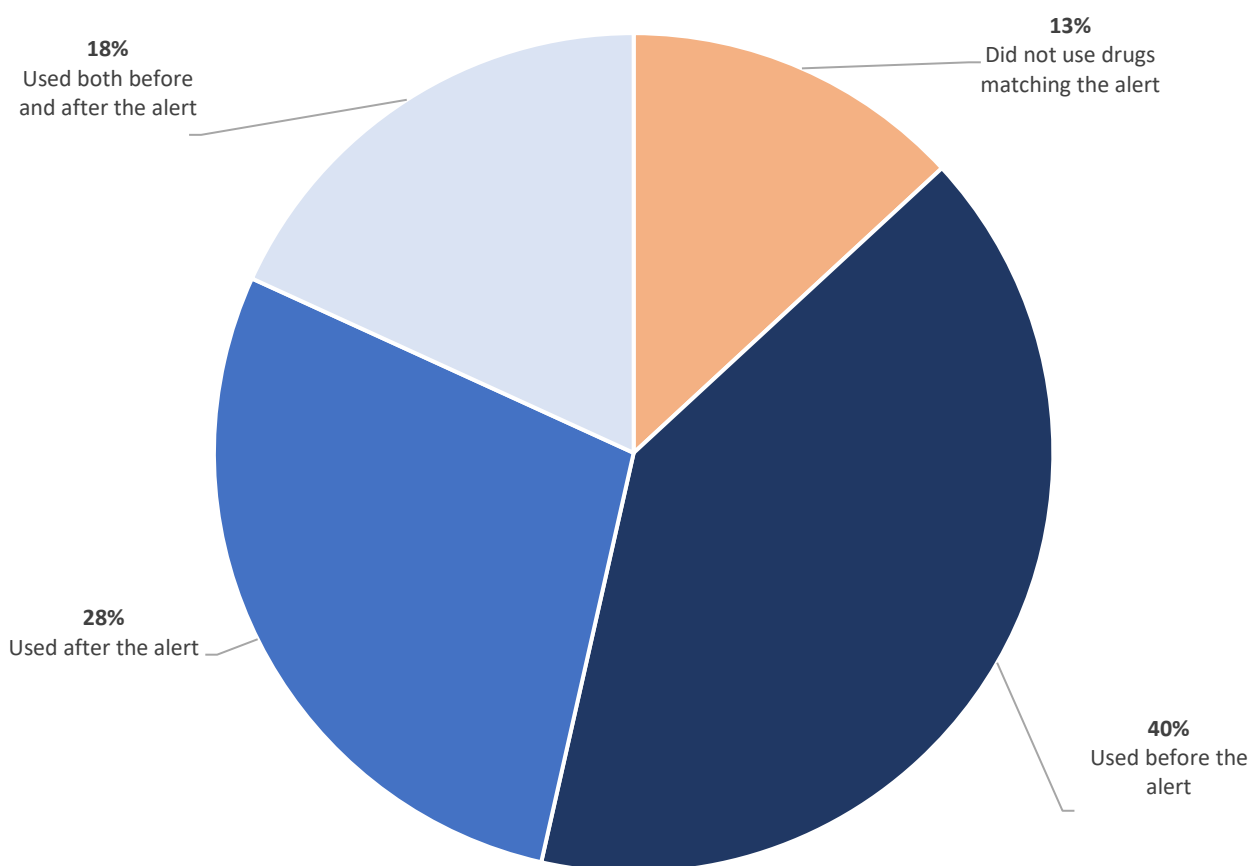
Note. Numbers may not sum to 100 due to rounding. Excludes missing and 'Don't know' responses. Data are not representative of all people who use drugs, and caution should be exercised when making interpretations.

3.4.3. How did people change their drug use after seeing the alert?

Among participants who reported that they had ever used the drug type mentioned in the alert (including before the alert; n=255), over half said they had changed the way they used drugs after the alert (including stopping or avoiding using drugs matching the alert) (Figure 25).

Figure 25. Change in behaviour after seeing/hearing about the most recent alert, among participants who reported ever using the drug type mentioned in the alert (n=255)

18%
Continued to use but changed use behaviours*

44%
No change (continued to use as usual)

20%
Stopped/avoided using drugs matching the alert

18%
Stopped using this drug entirely

*Example provided in the question was 'used less frequently'.

Note. Numbers may not sum to 100 due to rounding. Excludes missing and 'Don't know' responses. Data are not representative of all people who use drugs, and caution should be exercised when making interpretations.

Of those who said they continued to use the drug type mentioned in the alert but changed their use (n=40), around 1 in 3 said they changed the way they used drugs matching the alert only (35%) and the remainder said they changed the way they used this drug type more broadly (65%). The most common ways in which people reported changing their use included practicing safer dosing (50%), obtaining drugs from a trusted source (41%) and using the drug type in the alert less frequently (36%) (Figure 26).

Figure 26. How people changed their use of the drug type mentioned in the most recent alert, among people who reported changing their behaviour after the alert (n=44)
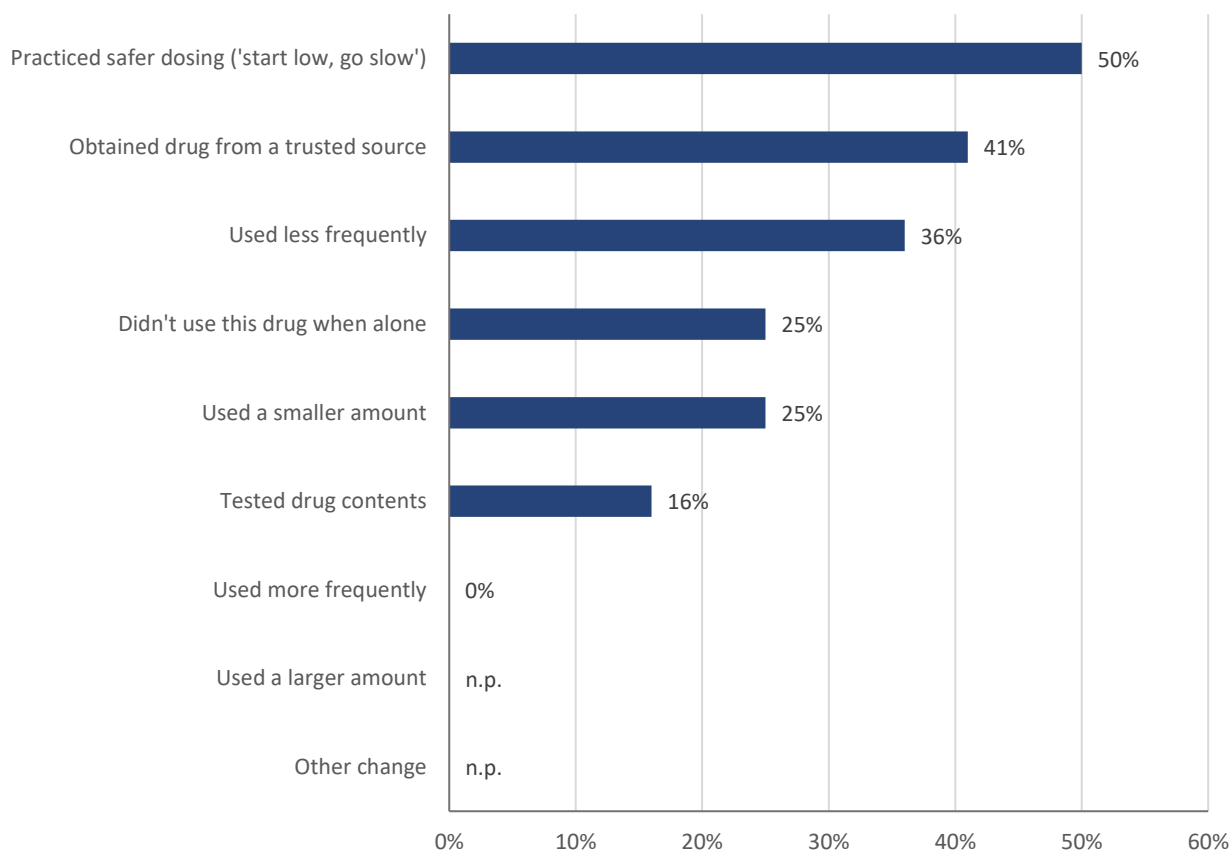
Response	Percentage
Practiced safer dosing ('start low, go slow')	50%
Obtained drug from a trusted source	41%
Used less frequently	36%
Didn't use this drug when alone	25%
Used a smaller amount	25%
Tested drug contents	16%
Used more frequently	0%
Used a larger amount	n.p.
Other change	n.p.

n.p. Not published due to small cell sizes (n≤5 but not 0). Examples of 'Other' not provided due to small numbers.

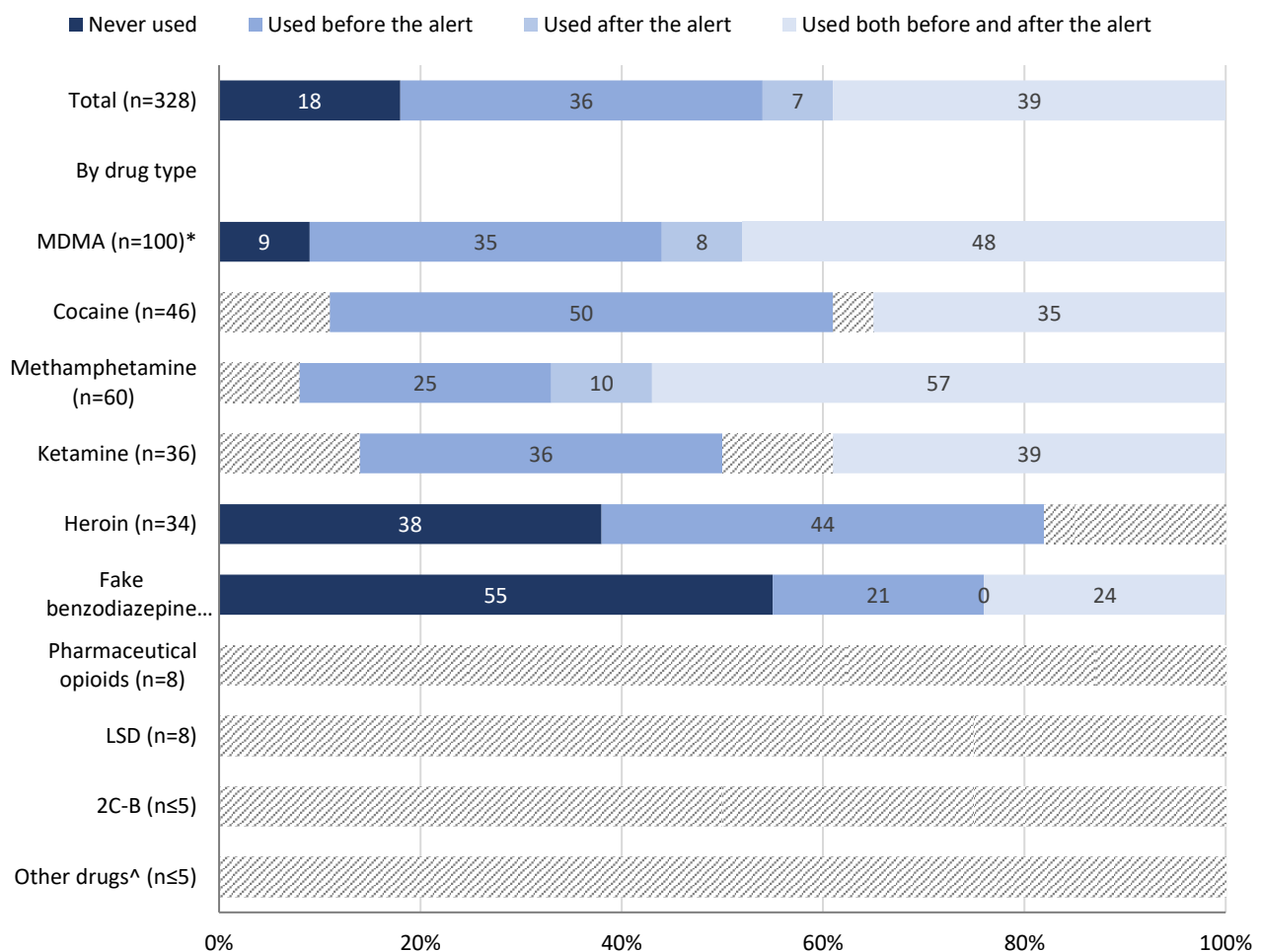Note. Numbers do not sum to 100 as participants could select multiple responses. Excludes missing and 'Don't know' responses. Data are not representative of all people who use drugs, and caution should be exercised when making interpretations.

3.4.4. Why did alerts not have an impact for some people?

Of participants who reported that they did not change the way they used the drug type mentioned in the most recent alert and responded (n=105), just over 1 in 2 said they did not change the way they used drugs because they already used harm reduction strategies prior to the alert (53%). Other common reasons for not changing behaviour included the alert did not mention a drug type that the participant used (25%) or was not relevant to the participant's location (18%) (Figure 27).

Figure 27. Reasons that the most recent alert did not have any impact, among participants who reported no behaviour change after seeing/hearing about the alert (n=105)
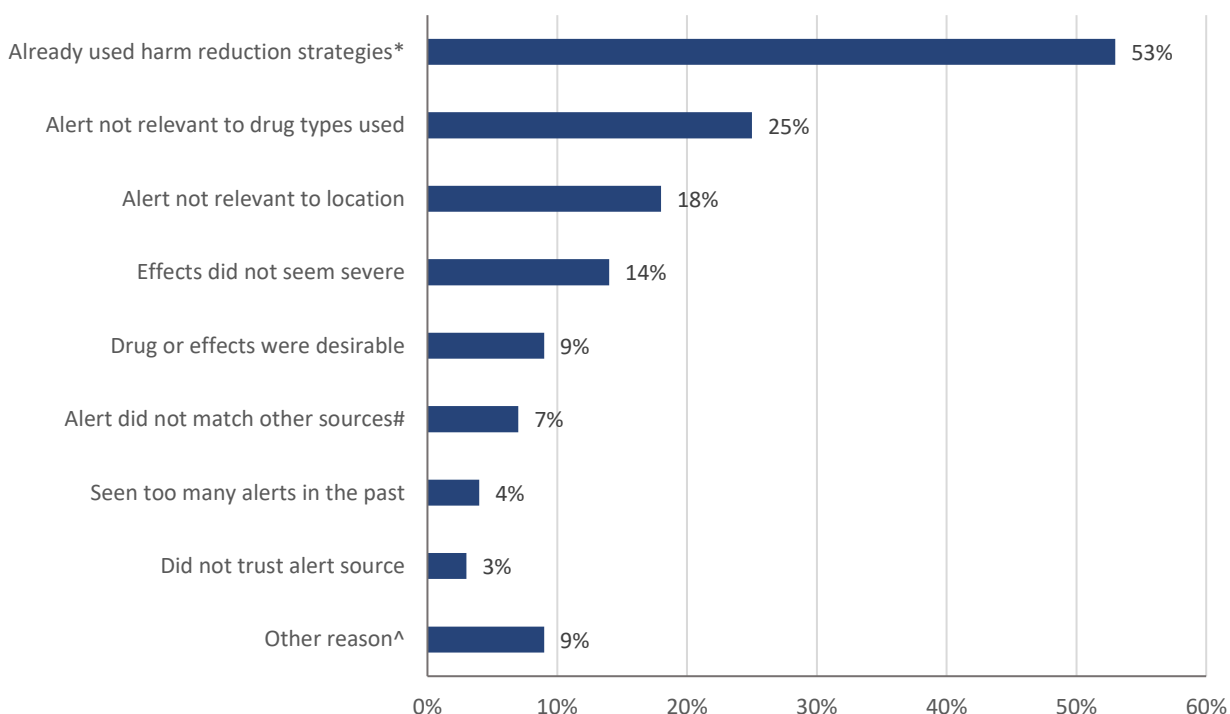
*Examples provided in the question included safer dosing ('start low, go slow') and testing drug contents. #The example provided in the question was peer reporting adverse effects. ^Responses included due to infrequent use, not using the drug type around the time of the alert, and not using drugs in the form specified in the alert (e.g. MDMA/ecstasy pills).

Note. Numbers do not sum to 100 as participants could select multiple responses. Excludes missing and 'Don't know' responses. Data are not representative of all people who use drugs, and caution should be exercised when making interpretations.

3.5. Preferences for future alerts

3.5.1. What events did participants think should trigger a drug alert?

We asked participants to indicate which of several events should trigger drug alerts in the future. Over 3 in 4 said a significant cluster of overdose events should trigger future alerts (77%), and 1 in 2 said peer reports of adverse events should trigger alerts (51%) (Figure 28).

Figure 28. Events that participants reported should trigger future drug alerts (n=537)
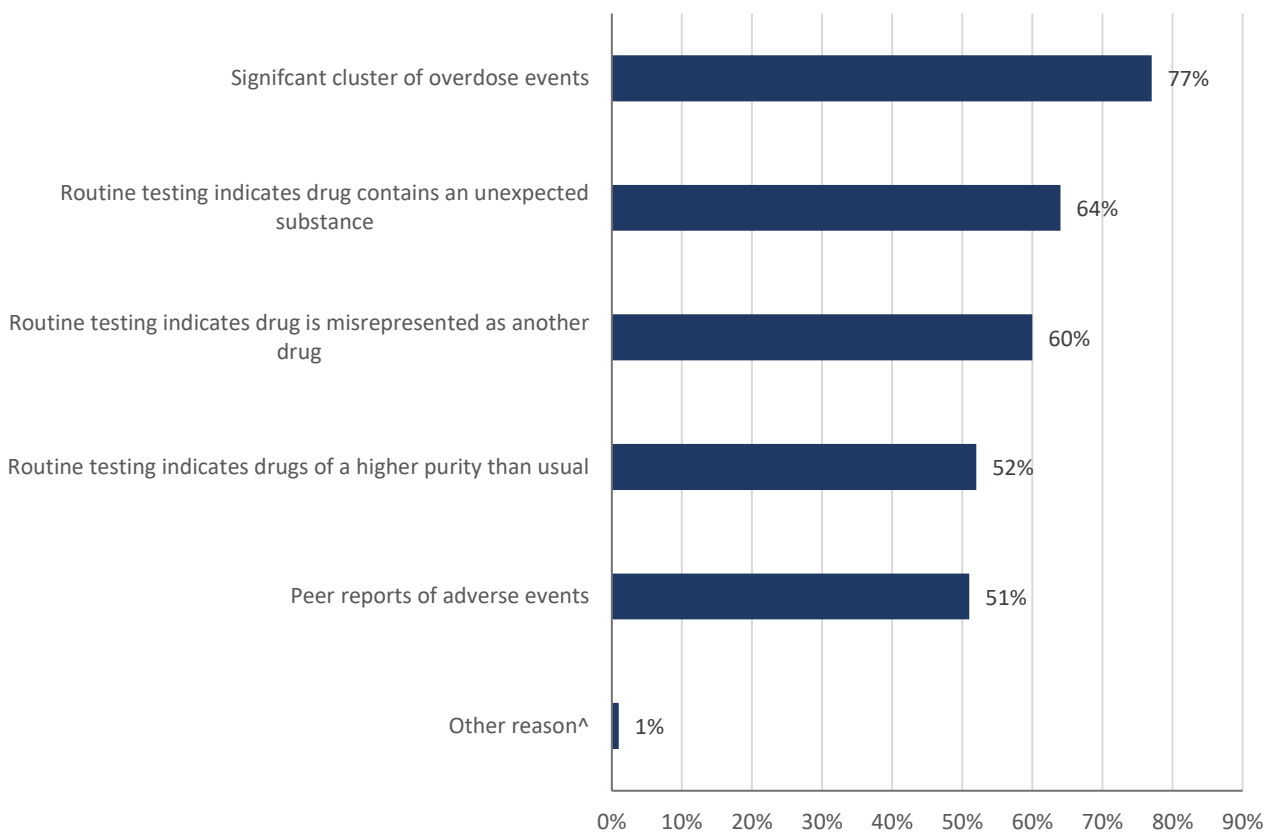
^Responses included alerts triggered by individual venues or events with an increase in reports of adverse events.

Note. Numbers do not sum to 100 as participants could select multiple responses. Excludes missing and 'Don't know' responses. Data are not representative of all people who use drugs, and caution should be exercised when making interpretations.

3.5.2. What information did participants think should be included in alerts?

We asked participants to rate the importance of including particular information in future drug alerts, from a scale of 1 ('Not at all important') to 5 ('Very important'). Participants rated 'adverse effects of the drug' and 'common name of the drug' as the most important information to include in alerts (Figure 29).

Figure 29. Importance of including particular information in future alerts
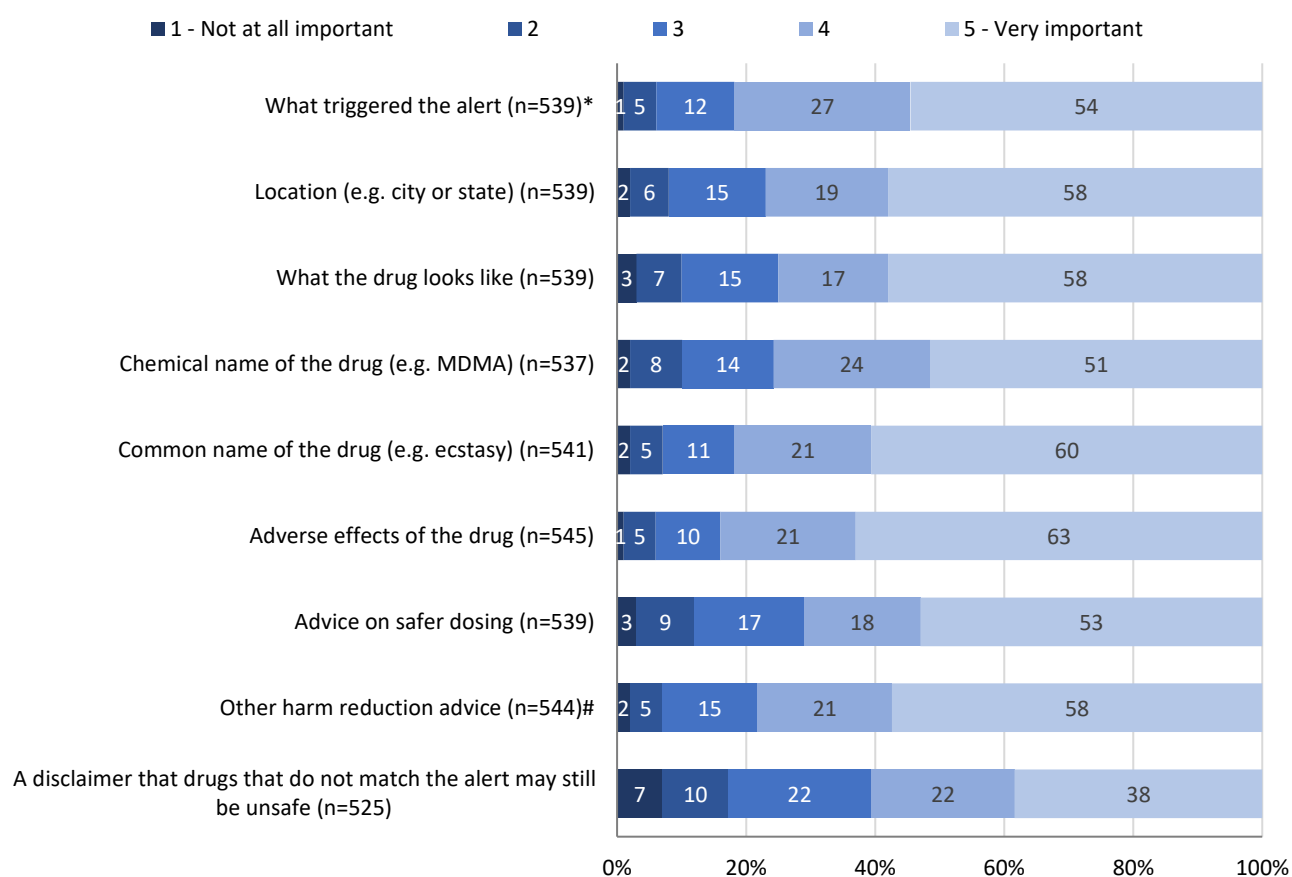
*Examples provided in the question included a cluster of overdoses or routine testing indicating a substance was misrepresented as another drug. #Examples provided in the question included carrying naloxone, how to access reagent kits or fentanyl test strips.
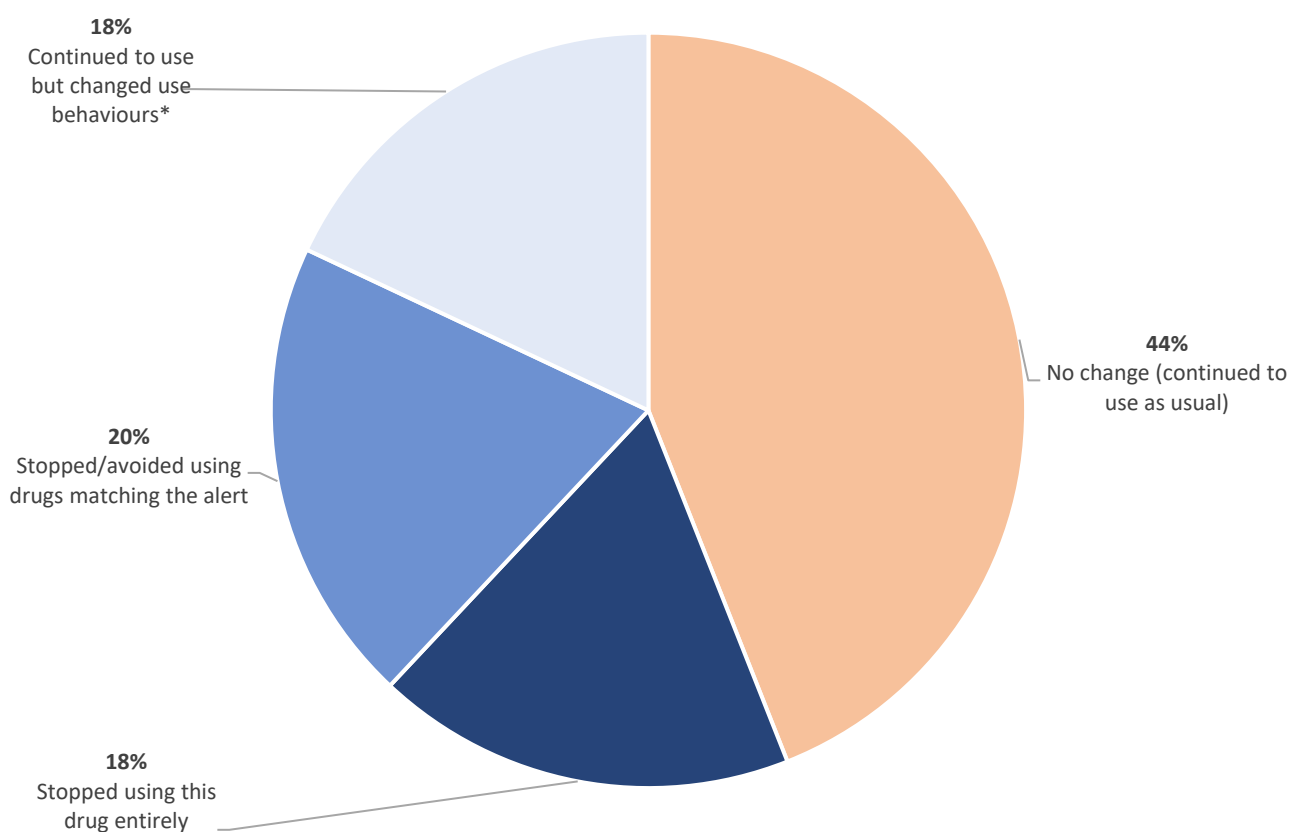
Note. Numbers may not sum to 100 due to rounding. Excludes missing and 'Don't know' responses. Data are not representative of all people who use drugs, and caution should be exercised when making interpretations.

3.5.3. What kind of alerts did participants want to know about?

We asked participants to indicate what kind of drug alerts it would be important for them to know about in future. Over half of all participants said they were interested in knowing about all future alerts, even if the location or drug type wasn't relevant to them (55%). Fewer than 1 in 10 said they did not want to receive any future alerts (6%) (Figure 30).

Figure 30. Preferences for receiving future alerts (n=559)

n.p. Not published due to small cell sizes (n≤5 but not 0). Examples of 'Other' not provided due to small numbers.

*The question specified that this is regardless of whether these relate to the participant's location or drugs they use.

Note. Numbers do not sum to 100 as participants could select multiple responses. Excludes missing and 'Don't know' responses. Data are not representative of all people who use drugs, and caution should be exercised when making interpretations.

We also asked participants what kind of drug alerts they wanted to know about in terms of the location of the alert. Most said they wanted to know about alerts relating to their local region (70%), and over half wanted to know about alerts for their state or territory (57%) (Figure 31).

Figure 31. Preferences for receiving future alerts in terms of the location the alert relates to (n=518)
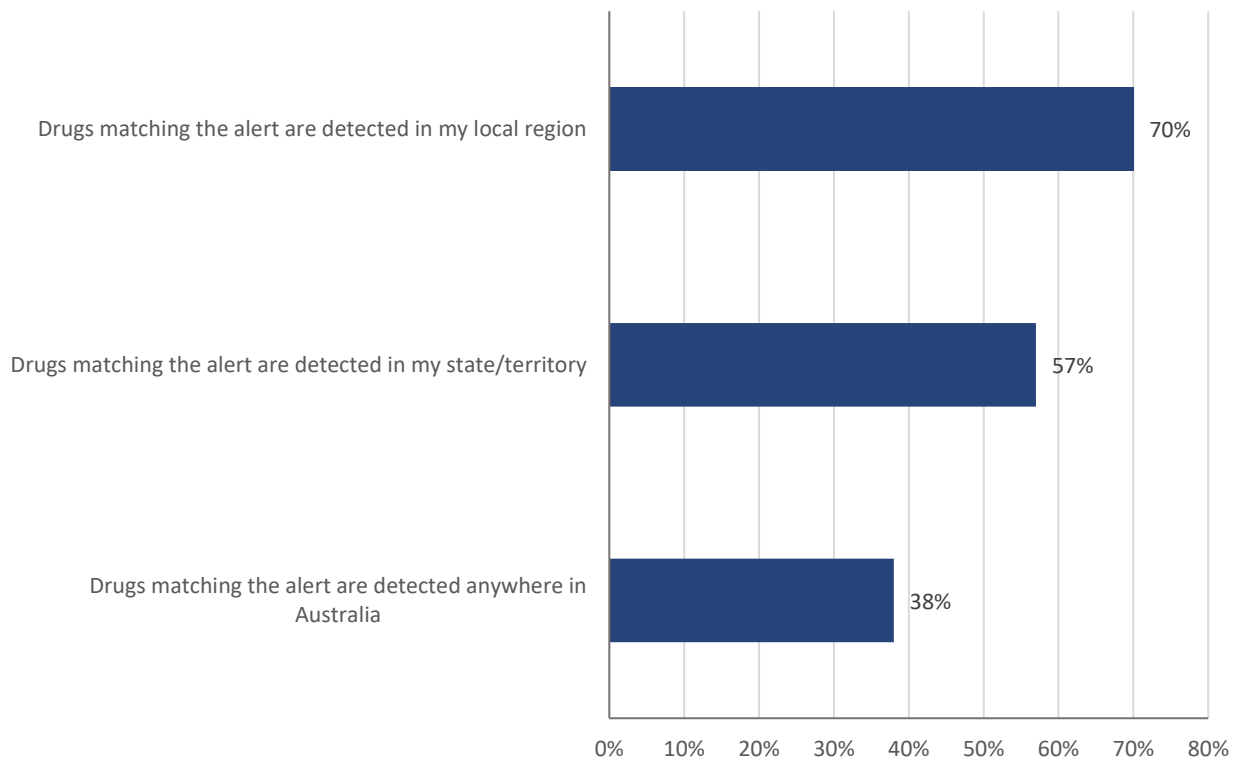
Note. Numbers do not sum to 100 as participants could select multiple responses. Excludes missing and 'Don't know' responses. Data are not representative of all people who use drugs, and caution should be exercised when making interpretations.

3.5.4. How did participants want to find out about future alerts?

We asked participants to report how they would like to find out about future drug alerts. Around 4 in 5 said they would like to find out about alerts via social media sites such as Facebook and Instagram (80%). Other popular options included text or messaging apps such as WhatsApp (48%) and via a dedicated phone app for alerts (37%) (Figure 32).

Figure 32. Preferences for mode of communication for future alerts (n=524)

*Examples provided in the question included Facebook, Instagram. #Examples provided in the question included WhatsApp, Telegram, Signal, Wickr, Facebook messenger. ~Examples provided in the question included Bluelight, Reddit, Dread. ^Responses included GPs and other healthcare professionals, media reports (e.g. radio, television news), and billboards/flyers in public places.

Note. Numbers do not sum to 100 as participants could select multiple responses. Excludes missing and 'Don't know' responses. Data are not representative of all people who use drugs, and caution should be exercised when making interpretations.

3.5.5. What kind of updates did participants want to receive about drugs in their area?

We asked participants to indicate what kind of updates they would like to receive about drugs in their area, including alternative formats for risk communication aside from alerts for specific higher risk drugs. Almost half said they wanted to receive a combination of drug alerts and regular updates on broader trends for drugs in their area (e.g. average monthly drug purity) (Figure 33).

Figure 33. Preferences for types of updates about drugs (n=540)
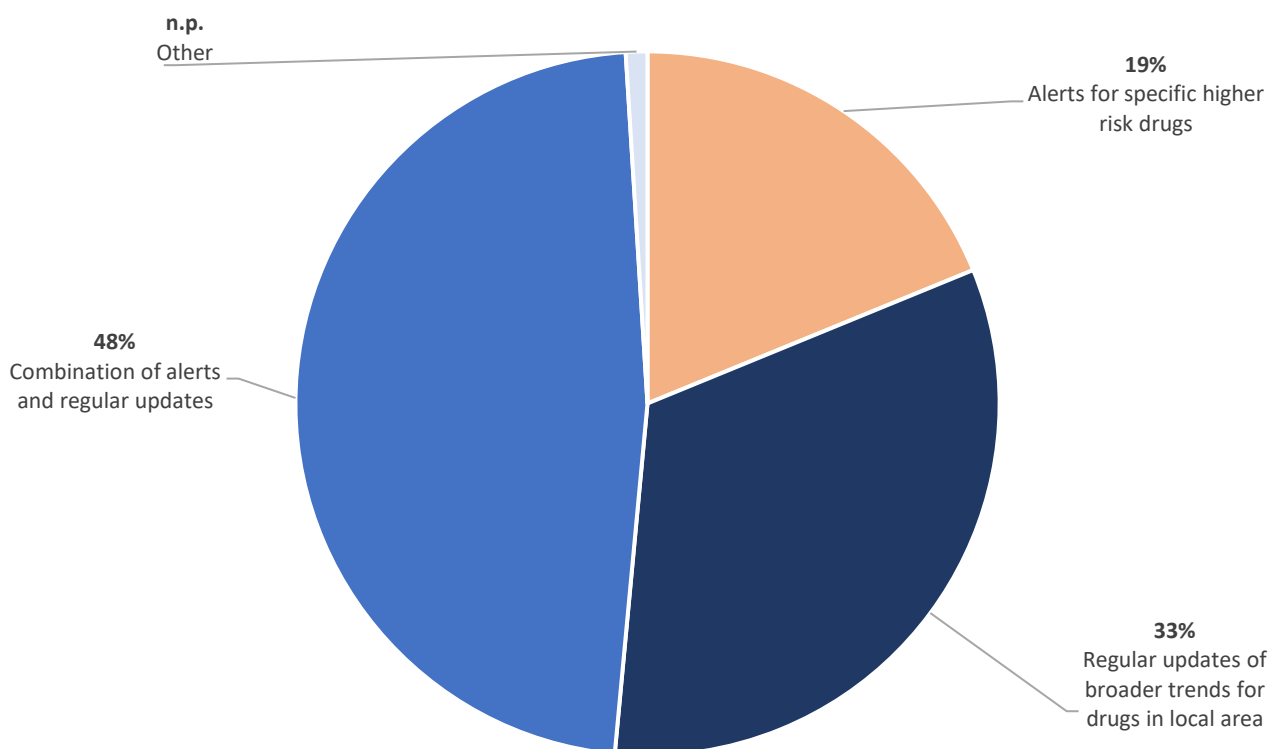
n.p. Not published due to small cell sizes (n≤5 but not 0). Examples of 'Other' not provided due to small numbers.

Note. Numbers may not sum to 100 due to rounding. Excludes missing and 'Don't know' responses. Data are not representative of all people who use drugs, and caution should be exercised when making interpretations.

3.5.6. How did people perceive organisations that release drug alerts?

We asked participants to report the extent to which they trust various organisations to issue credible drug alerts, on a scale from 1 ('Do not trust at all') to 5 ('Completely trust'). The most trusted sources to issue credible drug alerts were drug checking services (77% of people highly/completely trusted these services to issue credible alerts) and harm reduction or peer organisations (73% highly/completely trusted) (Figure 34). This was compared to 48% highly/completely trusted for government health agencies and 26% for law enforcement agencies.

Figure 34. Ratings of trust in organisations that issue drug alerts
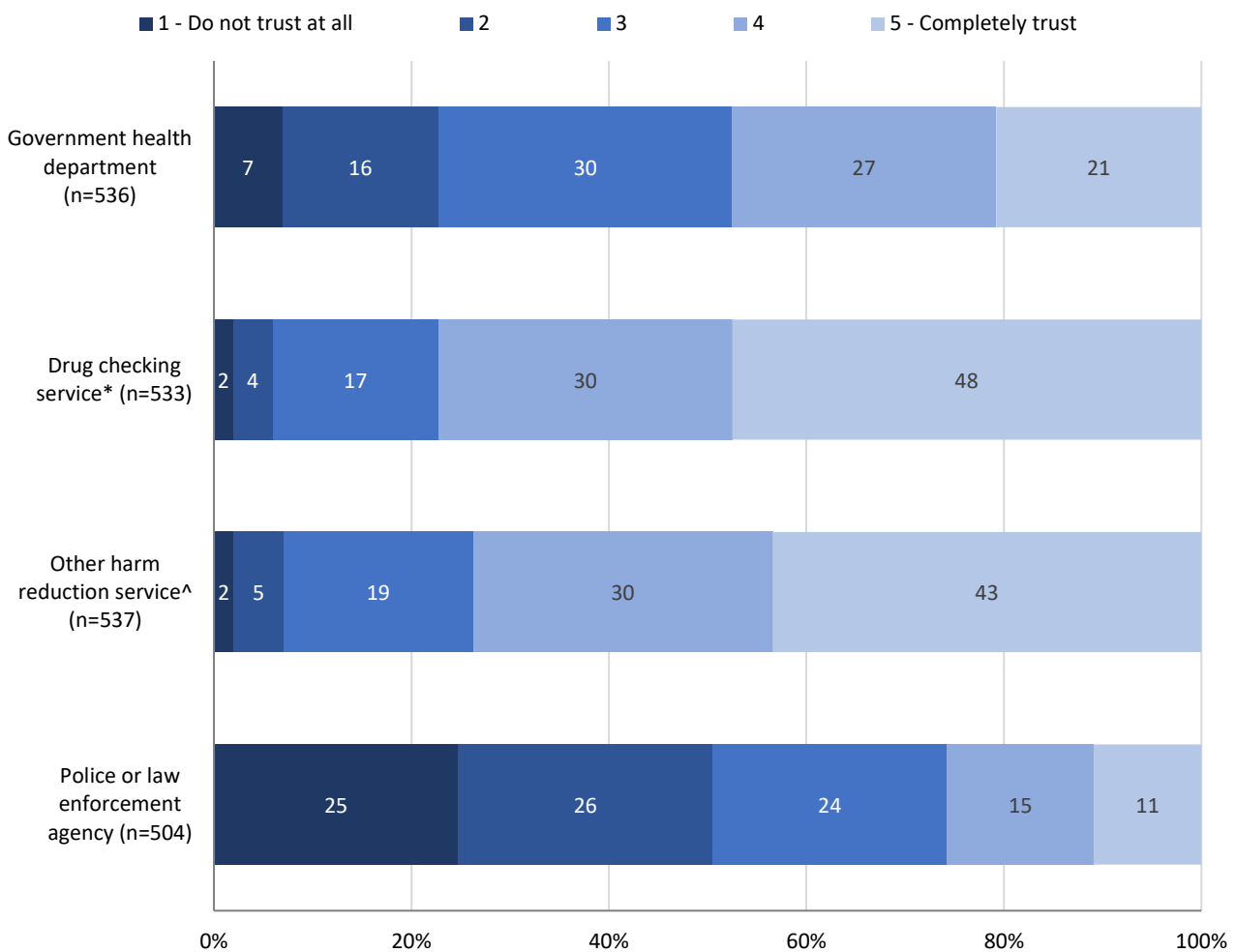
*Examples provided in the question included CanTEST. ^Examples provided in the question included peer organisations, such as DanceWize and NUAA.
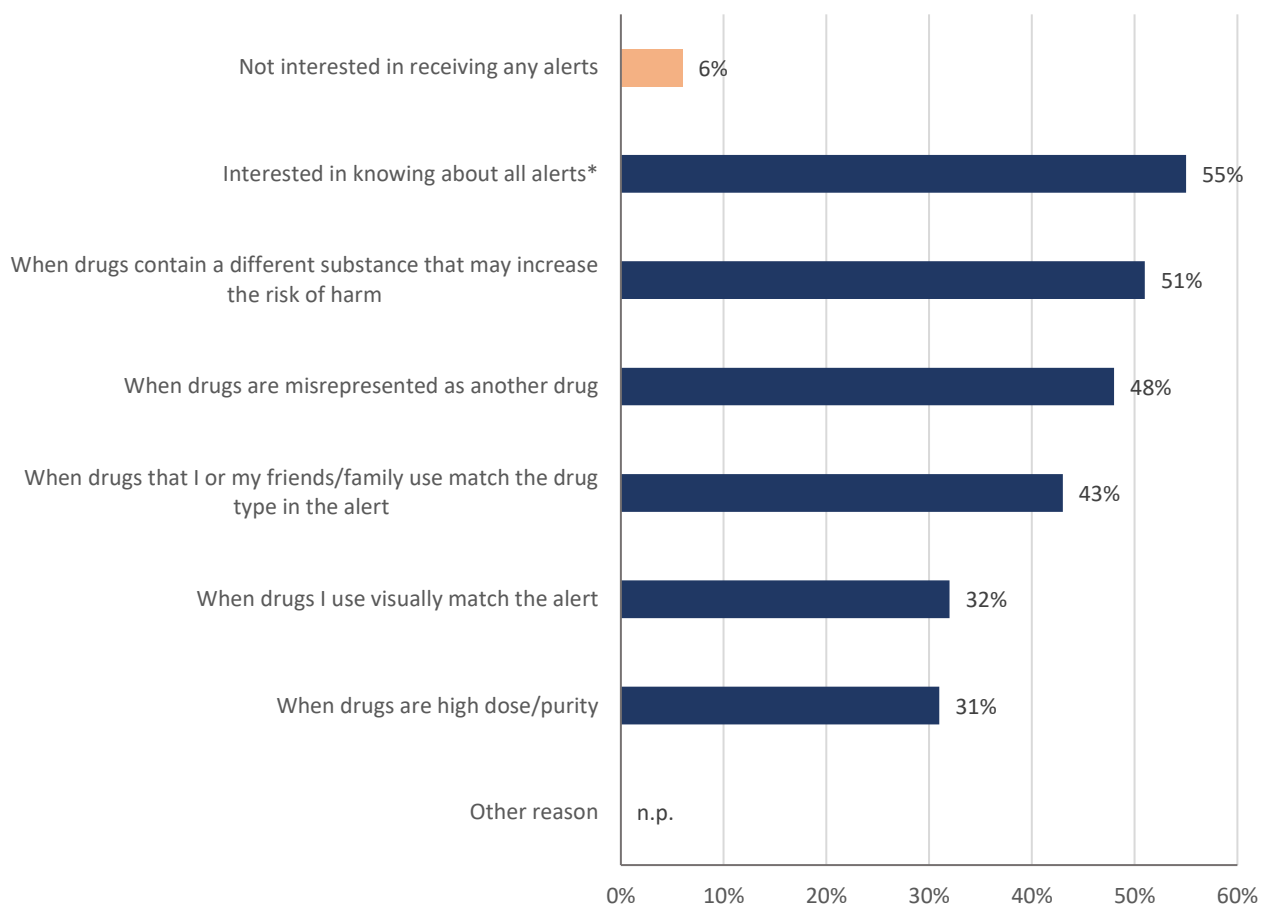
Note. Numbers may not sum to 100 due to rounding. Excludes missing and 'Don't know' responses. Data are not representative of all people who use drugs, and caution should be exercised when making interpretations.

We also asked participants if there were any factors that are likely to influence them to engage with alerts released by a particular organisation. Almost 3 in 5 said the organisation conducting a chemical analysis of the drug would influence them to engage with alerts from that organisation (58%) (Figure 35).

**Figure 35. Factors that influence people to engage with alerts from a particular organisation (n=535)**
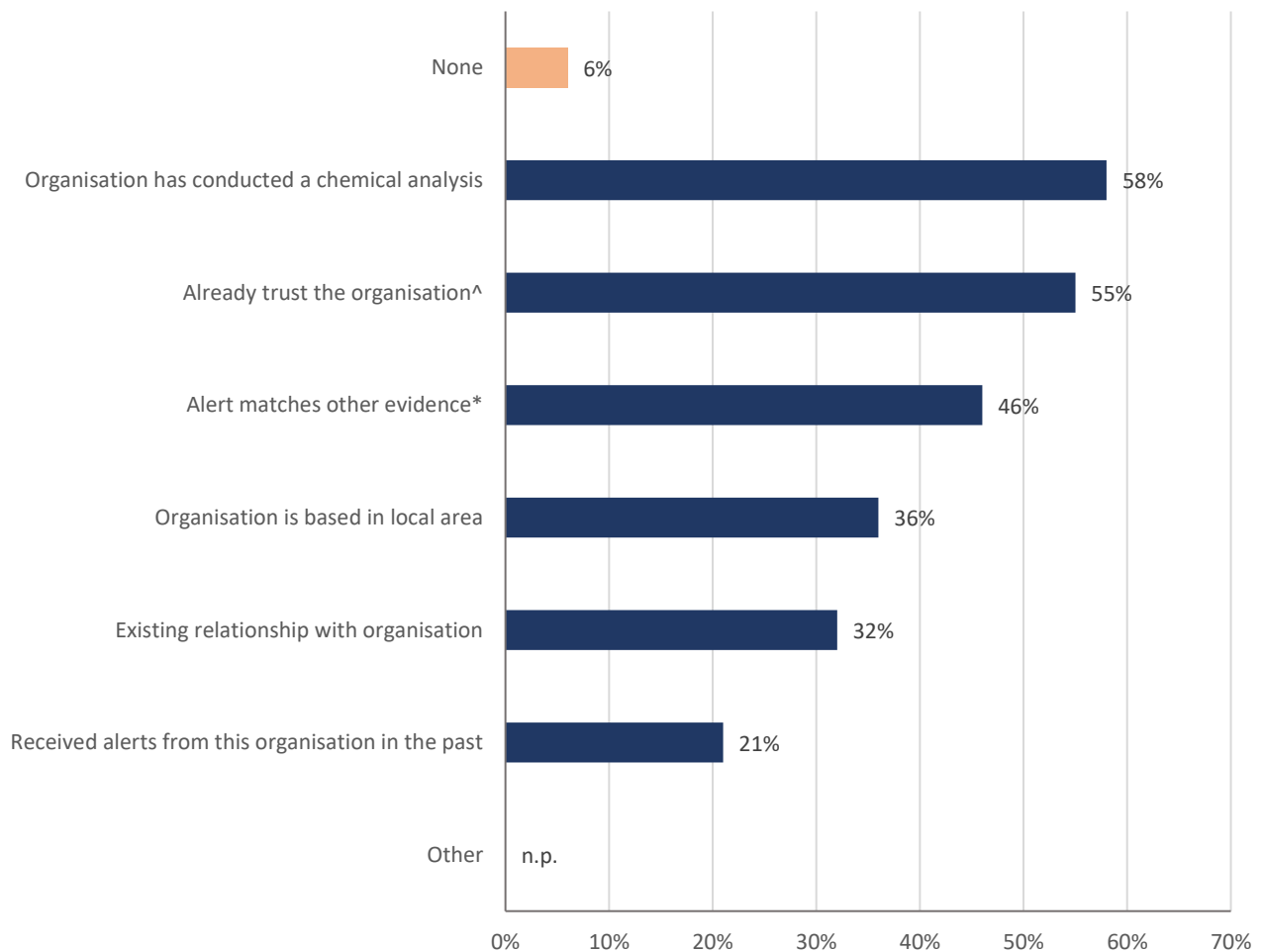
n.p. Not published due to small cell sizes (n≤5 but not 0). Examples of 'Other' not provided due to small numbers.

^Examples provided in the question included the participant uses resources from this organisation more broadly. *Examples provided in the question included peer reports.

Note. Numbers do not sum to 100 as participants could select multiple responses. Excludes missing and 'Don't know' responses. Data are not representative of all people who use drugs, and caution should be exercised when making interpretations.

3.5.7. Why did people think health agencies release drug alerts?

We asked people to report why they think health agencies currently release drug alerts. Over half indicated that they thought health agencies release alerts to encourage people to engage in harm reduction behaviours (59%) and/or empower people who use drugs to make informed decisions (56%) (Figure 36).

Figure 36. Perceived reasons that health agencies release drug alerts (n=558)

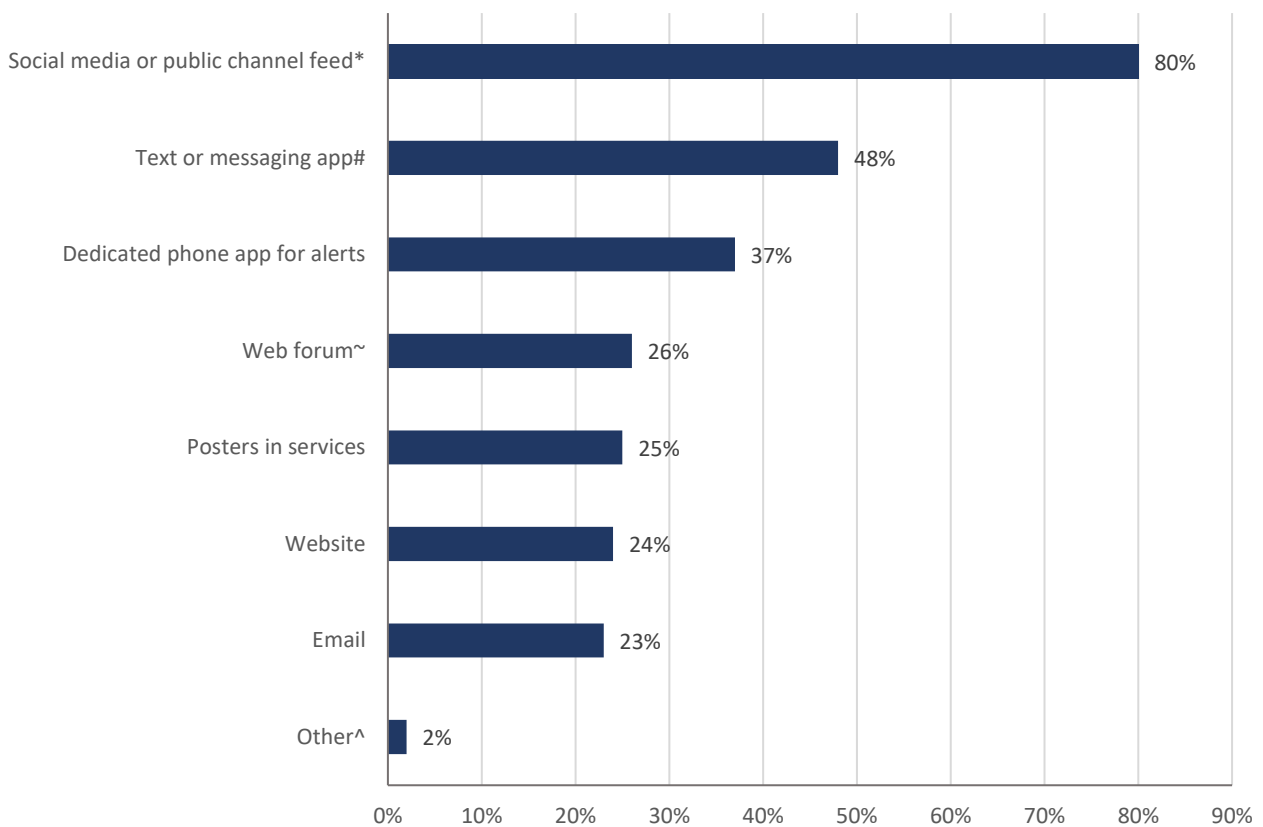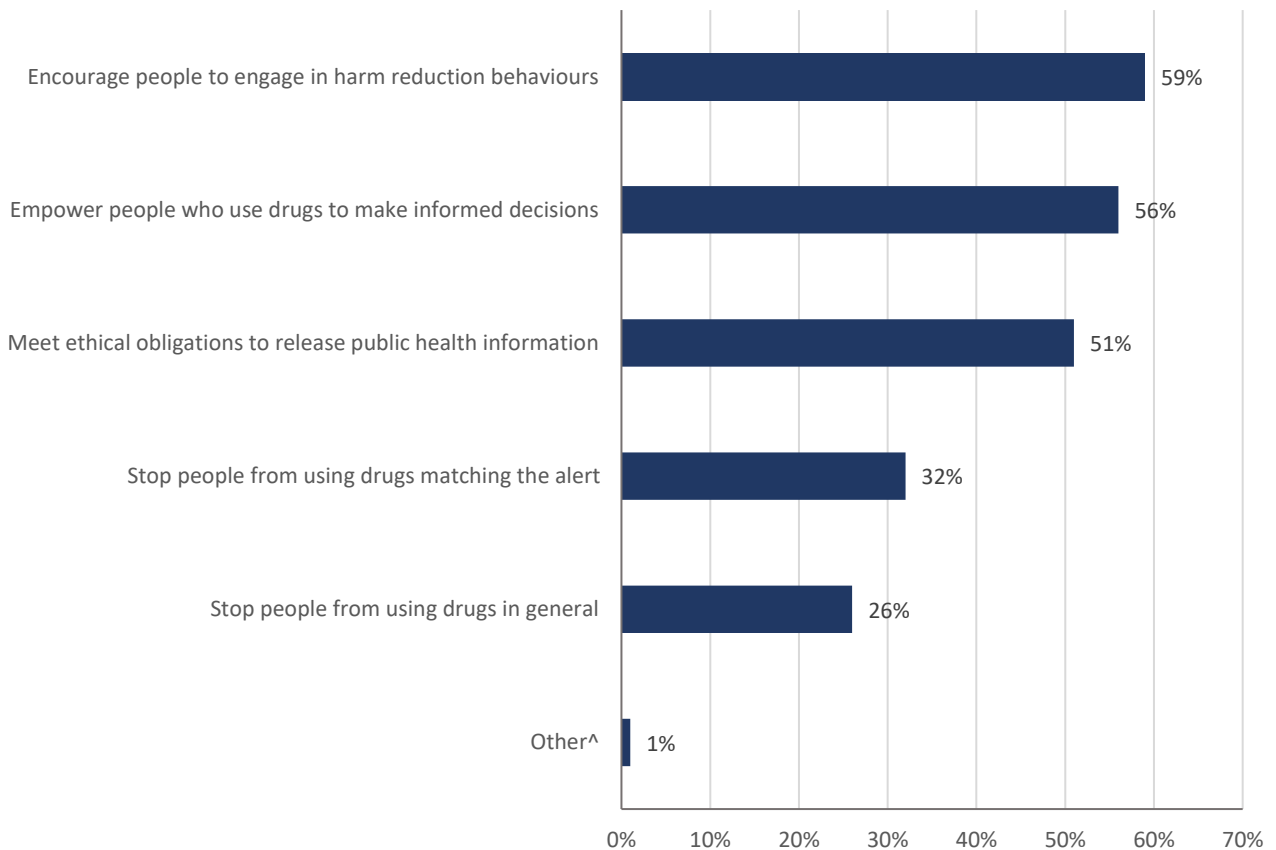^Responses included that the reason varies depending on the agency.

Note. Numbers do not sum to 100 as participants could select multiple responses. Excludes missing and 'Don't know' responses. Data are not representative of all people who use drugs, and caution should be exercised when making interpretations.

3.5.8. What did people say the purpose of alerts should be?

We asked people to report what they think the purpose of drug alerts should be. Almost 3 in 4 said alerts should empower people to make informed decisions (72%), and the majority thought alerts should encourage people to engage in harm reduction behaviours (69%) (Figure 37).

Figure 37. Perceptions of what the purpose of drug alerts should be (n=559)

Empower people who use drugs to make informed decisions — 72%
Encourage people to engage in harm reduction behaviours — 69%
Develop trust between people who use drugs and alert information sources — 55%
Encourage people to access drug treatment services — 41%
Stop people from using drugs matching the alert — 30%
Stop people from using drugs in general — 11%
Other^ — 1%
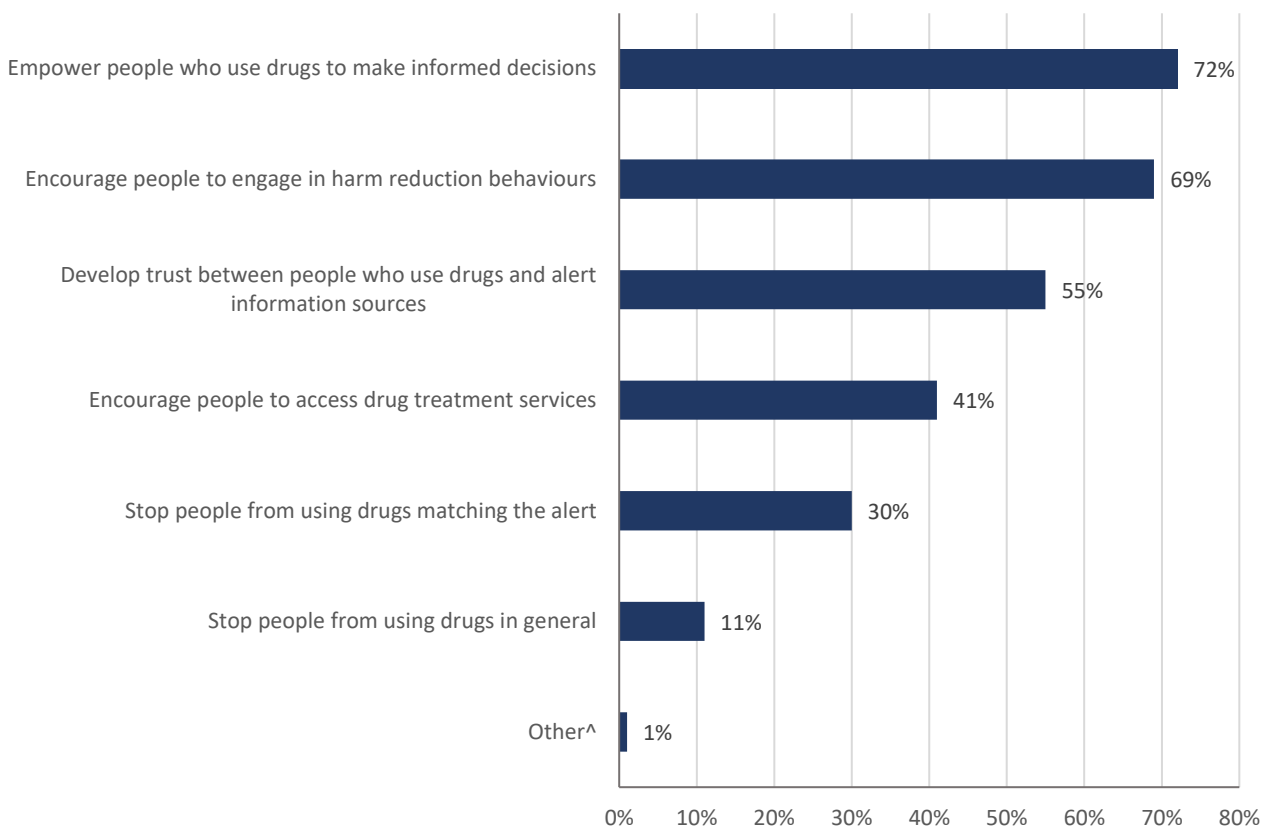
^Responses included to enable people to feel safe accessing care in the event of an overdose or other adverse event.

Note. Numbers do not sum to 100 as participants could select multiple responses. Excludes missing and 'Don't know' responses. Data are not representative of all people who use drugs, and caution should be exercised when making interpretations.

4. Conclusions

This study is an important step towards understanding how people engage with drug alerts 'in the wild'. Being a convenience sample, our findings are not representative of all people who use drugs: this study captures a relatively small group of people recruited over a short timeframe (approximately 8 weeks), mostly via social media sites such as Facebook and Instagram.

Participants were mostly in their 30s and 40s, with similar numbers of men and women taking part. Most lived in the eastern states of Australia, consistent with a similar survey of people who use drugs conducted during COVID-19 [15]. Almost half lived outside capital cities, representing a different population than that captured in routine sentinel surveys of drug use in Australian capital cities [15-17]. Our sample appeared to capture many different cohorts of people who use drugs (ranging from stimulants to opioids), including people with a range of different experiences regarding education, employment, residential area and frequency of drug use.

4.1. To what extent were people aware of drug alerts?

Around 3 in 4 participants reported having found out about an alert in Australia in the last 5 years, mostly in the last year. This may be an artefact of our sampling method, as we recruited participants primarily via platforms where alert information is also shared (i.e. social media) and mostly from populous states where alerts are routinely issued (e.g. Victoria). People with an existing awareness of alerts may also have been more likely to participate due to the phrasing of our advertisements, which invited people to 'share their thoughts' on drug alerts (Figure 1). The extent of alert awareness may reflect high participant engagement with harm reduction and AOD services. Most people typically used at least one harm reduction strategy when using drugs and almost 2 in 3 had recently accessed a service for AOD support. Our participants may therefore have been more likely to seek out or encounter alerts than people who are less engaged with AOD services. However, this cohort is also a key audience for alerts: people who are highly engaged with services are more likely to be heavily embedded in community, and may be motivated to share risk communications with those with lower self-efficacy for behaviour change [18].

Participants demonstrated a high degree of awareness of drug alerts issued in Australia in the past 5 years.

4.2. What information did people recall seeing in the most recent alert, and what else did they want to know?

In addition to being highly aware of alerts, most people said that they could recall important information from the most recent alert they had seen or heard about within the past 5 years. Around 9 in 10 said that they recalled the drug type mentioned in this most recent alert, and often cited this as MDMA/ecstasy, methamphetamine, or cocaine. These drug types broadly align with recent alerts issued by Australian health agencies across the eastern states (e.g. [14, 19, 20]). Similarly, almost 9 in 10 people said that they recalled information from the alert such as why it was issued and possible adverse drug effects. While it is difficult to gauge the accuracy and depth of recall based on a brief self-report survey, most people indicated that the most recent alert was issued within the last 12 months, meaning they were referring to relatively recent events.

Around 2 in 3 people reported that they wanted to know more after finding out about the most recent alert, commonly harm reduction advice or information about whether drugs they had been offered matched the alert. Most people who said they wanted to find out more information reported that they actively sought it out, but almost half of these said they had difficulties accessing the information they wanted or couldn't find it at all. This may indicate a need to ensure alerts are interactive (e.g. by allowing people to post comments and/or ensuring issuing agencies are responsive to private messages), describe the visual appearance of the drug in as much detail as possible, and include links to additional resources such as local harm reduction services.

> Most participants said they could recall important information from the most recent alert, and many reported seeking out additional information after finding out about the alert.
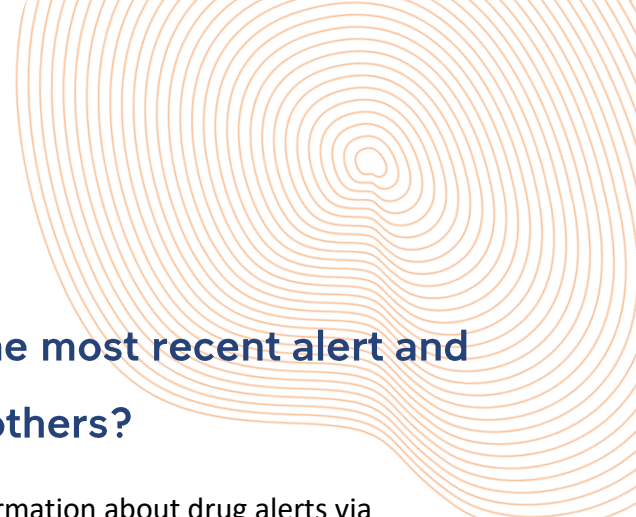
4.3. How did people find out about the most recent alert and did they share information with others?

Our findings suggest that people may discover and share information about drug alerts via complex communication networks. Many people reported finding out about the most recent alert via social media (e.g. Facebook, Instagram), but others found out via traditional news media (such as radio) or in person. Almost 1 in 3 participants said that they found out about the alert via multiple channels and over half said they shared information from the alert with someone else. Despite this, we found very little evidence of alert fatigue (that is, people disregarding information from alerts due to over-saturation). This may in part relate to relatively few alerts being issued in Australia over the past 5 years, but nonetheless reinforces previous calls from health workers for alerts to be released via multiple platforms [21]. This includes government health agencies continuing to disseminate alerts via social media and issuing media releases about alerts (e.g. [22]). This may be particularly important given the relatively high proportion of people who found out about alerts on their own (e.g. from a news report or account they follow on social media).

When asked which organisation had originally issued the most recent alert, most people said a government health department or peer-based drug user or harm reduction agency. This finding is unsurprising given that Australian drug alerts are predominantly issued by these types of agencies (e.g. [8]), and indicates that partnerships between government and peer-led organisations are key.

Drug alerts may have greater reach if they are released via multiple platforms by both government and peer-based organisations.

4.4. Did people change the way they used drugs after finding out about the alert?

We found little evidence for unintended behavioural responses to drug alerts. Most of our participants did not use or even personally encounter drugs matching the most recent alert they had seen or heard about. After encountering the alert, most people said they changed their behaviour in some way and this often extended to drugs that didn't match to the alert (i.e. the drug type more broadly). The most common behavioural change was to stop or avoid using drugs matching the alert or more broadly, or to engage in harm reduction behaviours such as safer dosing. Indeed, most people who recalled seeing harm reduction information in the most recent alert said it actively helped them to make more informed choices. Many people who did not change their behaviour said the alert wasn't impactful for them because it wasn't relevant to them or they were already using harm reduction strategies. Importantly, we found very low proportions of participants who said the alert did not have an impact because the drug effects seemed desirable or because they had seen too many alerts in the past (i.e. alert fatigue).

One oft-cited unintended consequence of alerts is people seeking out drugs matching the alert. This was not the case for most people in our study, though 1 in 5 said they did try to obtain drugs matching the most recent alert (mostly for their own use). In the context of high rates of harm reduction behaviours and information-seeking, it is important to remember that participants may have had differing motivations for this. Potentially, people may have felt they had sufficient knowledge to make an informed decision about using drugs matching the alert. It is also important to remember that our participants are not representative of all people who use drugs and were highly engaged with harm reduction strategies more broadly. Further research examining the reasons people may seek out drugs matching an alert is crucial to help inform practical responses (e.g. how best to communicate alerts to people who may feel they are not at risk of serious harm).

> **We found little evidence of unintended behavioural responses to drug alerts: by and large, alerts helped people to make informed decisions about their drug use and engage in harm reduction practices.**

4.5. What were people's preferences for future risk communications about drugs?

People's preferences for future communication of alerts broadly aligned with current practice in states where alerts are routinely released. For example, most people said that drug alerts should be triggered by a 'significant cluster of overdose events', with support for alerts to be triggered by unexpected results during routine testing of drugs (e.g. by law enforcement or drug checking service) and peer reports of adverse events. Information rated as the most important to include in alerts also broadly aligned with what is currently provided, such as the common name of the drug (as opposed to its chemical name; e.g. 'ecstasy'), its visual appearance and a description of adverse effects. Around 4 in 5 people indicated a preference to receive drug alert communications via social media, but there was also strong support for receiving alerts via messaging apps or a dedicated phone app specifically designed for drug alerts. When asked about their preferred format for future risk communication, many participants indicated a preference to receive routine updates about local drug market trends in addition to or instead of alerts for specific drugs.

Our findings highlight the potential for expansion of drug alert communications given a general hunger for more information. Over half of our participants indicated that they were always interested in knowing about future drug alerts, regardless of whether these were relevant to them; just 6% said they weren't interested in receiving any alerts at all. Interestingly, more than 1 in 3 wanted to know about alerts released anywhere in Australia. This echoes earlier calls from Australian clinicians regarding the importance of providing tailored alerts so that people can easily access sufficiently detailed information for their needs without being inundated with information (e.g. by disseminating alerts via a brief message with an option for viewers to access more details via a link, or by including filters by date and location on alert websites) [14, 21].

> **People's preferences for alert communications broadly aligned with current practice in terms of how alerts are triggered, what information they include and how they are disseminated, but highlighted a hunger for more information and areas for potential expansion.**

4.6. How important is trust when issuing drug alerts?

Our study findings highlight the importance of trust when it comes to alert dissemination, and the central role of peer-based organisations as trusted information sources. Over half of participants said that existing trust in an organisation would influence them to engage with alerts issued by that organisation, second only to the organisation having conducted chemical analysis of the drug before issuing an alert. Participants also rated drug checking services and other harm reduction agencies as by far the most trusted agencies in terms of issuing release credible drug alerts, substantially higher than either government health departments or law enforcement agencies.

The most common reasons that people reported for organisations to issue alerts were to empower people to make informed decisions, to encourage people to engage in harm reduction behaviours, and to develop trust between people who use drugs and agencies who issues alerts. Peer-based harm reduction organisations are well positioned to do all three and were already highly trusted by participants. This supports existing practices whereby peer reports of harm are circulated to community via harm reduction organisations, and in which peer-based organisations are actively involved in producing and disseminating alerts (e.g. existing collaborations between NSW Health and NUAA in disseminating drug alerts in New South Wales; [8]).

Participants had high levels of trust in harm reduction services; peer organisations should be central in producing and disseminating alerts.

4.7. Conclusions

In this cross-sectional survey, people who use drugs demonstrated high engagement with Australian drug alerts but often wanted to know more. Alerts could be expanded to include alternative formats, modes of communication and information sources. Many people viewed alerts as a means to empower people to make informed decisions about drug use, and most engaged in harm reduction practices. Harm reduction services and peer-based organisations were highly trusted sources of information and should be central in alert production and dissemination.
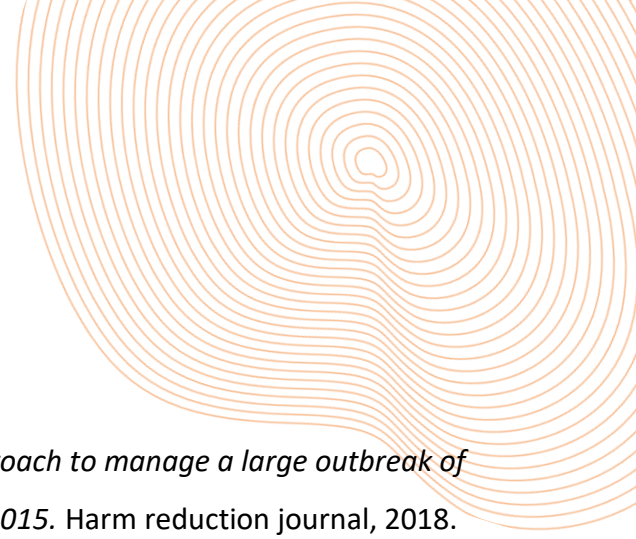
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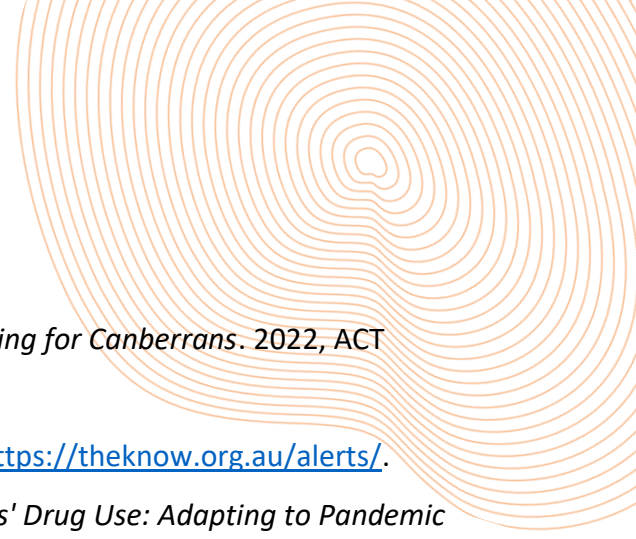
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Appendices

Appendix A. IDAA Questionnaire

1. Screening questions

Thanks for your interest in participating in our study! Please answer the questions below so we can determine if you're eligible to take part. All information you provide will be kept confidential and will be deleted upon completion of the study if you are not eligible.

---

scr_1 What is your current age in years? *Please type as a number (eg, 56)*

_____

---

scr_2 Have you lived in Australia for the past 6 months or longer?

○ No (0)

○ Yes (1)

---

scr_3 Have you used an illegal or non-prescribed drug in the past 12 months (excluding cannabis)? *This includes:*
• illegal drugs (excluding cannabis) such as MDMA/ecstasy, methamphetamine/ice, cocaine, LSD/acid, ketamine/special K, GHB/GBL, heroin and/or
• non-prescribed use of pharmaceutical drugs, such as opioids (eg, oxycodone, morphine) or benzodiazepines (eg, Xanax, Valium)

○ No (0)

○ Yes (1)

2. Survey questions

Thank you for taking the time to answer those questions! You are eligible to participate in this survey.

What do we mean by 'drug alerts'?

Before we get started, we'd like to explain what we mean by drug alerts. 'Drug alerts' (sometimes called 'drug warnings' or 'drug notices') are public notices issued by governments and health services (including organisations that represent people who use drugs) with urgent health information about drugs that carry
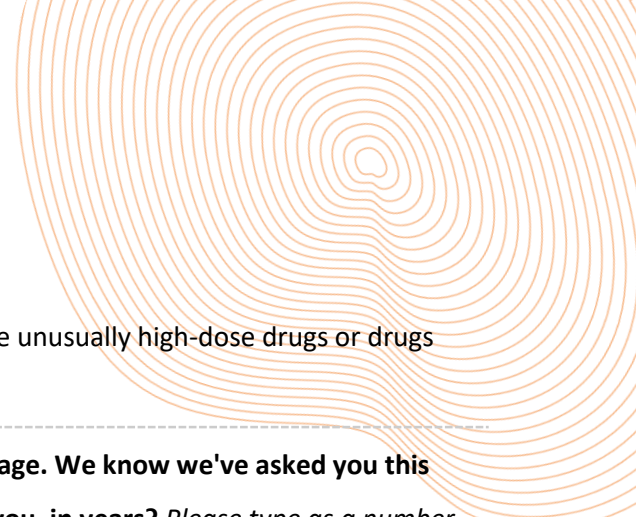
higher risk of overdose or other harms. For example, there might be unusually high-dose drugs or drugs being misrepresented as something else.

---

age_match1 Before we get started, we'd just like to confirm your age. We know we've asked you this already, but we want to make sure you're a human. How old are you, in years? *Please type as a number (eg, 28)*

_____

---

s1_1 Section 1: Awareness of and responses to past drug alerts
To begin, we'd like to ask you some questions about drug alerts that you may have seen recently. You can select 'Don't know' for any questions where you are unsure of the response or skip any questions that you would prefer not to answer.
Have you seen/heard about any of the following drug alerts in Australia in the last 5 years?
Note: This excludes alerts related to food products (eg, poppy seeds, spinach)

- ☐ ⊗None (0)
- ☐ ⊗I remember seeing/hearing about an alert but can't remember what it was (12)
- ☐ High/variable dose MDMA/ecstasy (1)
- ☐ MDMA containing other drugs (eg, pentylone, PMMA) (2)
- ☐ Cocaine containing other drugs (eg, fentanyl, lidocaine) (3)
- ☐ Methamphetamine containing other drugs (eg, fentanyl) (4)
- ☐ Ketamine/special K containing other drugs (eg, fentanyl, protonitazene) (5)
- ☐ Heroin containing other drugs (eg, fentanyl, nitazene) (6)
- ☐ Fake benzodiazepine tablets containing other drugs (eg, Xanax containing etizolam) (7)
- ☐ Pharmaceutical opioids containing other drugs (eg, oxycodone containing metonitazene) (8)
- ☐ Novel psychoactives (eg, 25B-NBOH) misrepresented as LSD/acid (9)
- ☐ 2C-B containing other drugs (eg, 4-FA) (10)
- ☐ Other (specify) (11)
- ☐ ⊗Don't know (97)
- ☐ ⊗Skip question (98)

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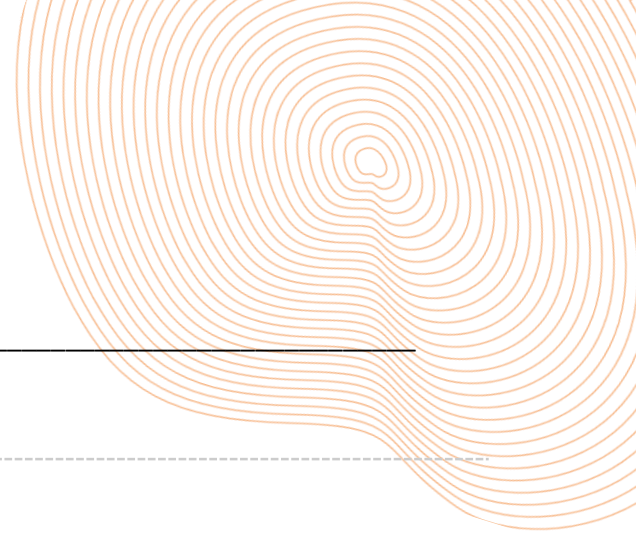
s1_1oth Please specify other _____

---

s1_2 What was the most recent drug alert you saw/heard about?

○ High/variable dose MDMA (1)

○ MDMA containing other drugs (2)

○ Cocaine containing other drugs (3)

○ Methamphetamine containing other drugs (4)

○ Ketamine containing other drugs (5)

○ Heroin containing other drugs (6)

○ Fake benzodiazepine tablets containing other drugs (7)

○ Pharmaceutical opioids containing other drugs (8)

○ Novel psychoactives misrepresented as LSD (9)

○ 2C-B containing other drugs (10)

○ Other (specify) (11)

○ Don't know (97)

○ Skip question (98)

---

s1_2oth Please specify other

_____

---

s1_3 When did you see/hear about this alert?

○ Within the last 12 months (1)

○ More than 12 months ago (2)

○ Don't know (97)

---

s1_4 How did you see/hear about this alert? Select all that apply.

- ☐ Talked in person with someone (eg, a friend) (1)
- ☐ Social media or public channel feed (eg, Facebook, Instagram) (2)
- ☐ Text or messaging app (private; eg, WhatsApp, Telegram, Signal, Wickr, Facebook messenger) (3)
- ☐ Web forum (eg, Bluelight, Reddit, Dread) (4)
- ☐ Poster/flyer (eg, in a service) (5)
- ☐ Media report (eg, print or online newspaper, radio, television) (6)
- ☐ Website (7)
- ☐ Email (8)
- ☐ Other (specify) (9)
- ☐ Don't know (97)

s1_4oth Please specify other

_____

s1_5 When you saw/heard about this alert, who was sharing this information with you? Select all that apply.

- ☐ ⊗Nobody, I found out about it myself (eg, on a website) (0)
- ☐ Friend/acquaintance/partner/relative (1)
- ☐ Dealer (2)
- ☐ Peer/outreach/harm reduction worker (eg, DanceWize, CanTEST) (3)
- ☐ Government health department (eg, via email) (4)
- ☐ Other (specify) (5)
- ☐ ⊗Don't know (97)

s1_5oth Please specify other

_____

s1_6 To the best of your knowledge, where did this alert originate from (eg, if a friend told you about the alert, which organisation released the original alert)?

- ○ Government health department (1)
- ○ Drug checking service (eg, CanTEST) (2)
- ○ Harm reduction service or peer organisation (eg, DanceWize, NUAA, HRVic) (3)
- ○ Other (specify) (4)
- ○ Don't know (97)

---

s1_6oth Please specify other

_____

---

s1_7 To the best of your knowledge, what information was included in this alert?

- ☒ I don't remember the details or didn't see the original alert (eg, a friend told me about it) (0)
- ☐ Reason for the alert (eg, substance misrepresented as another drug) (1)
- ☐ Chemical name of the drug/s involved (2)
- ☐ Location of the alert (eg, city or state) (4)
- ☐ Possible adverse effects (5)
- ☐ Harm reduction advice (eg, carrying naloxone, safer dosing) (6)
- ☐ Disclaimer that drugs that do not match the alert may still be unsafe (7)
- ☐ Other (specify) (8)
- ☐ Don't know (97)

---

s1_7oth Please specify other

_____

---

s1_8 What harm reduction information do you remember seeing/hearing about in this alert?

_____

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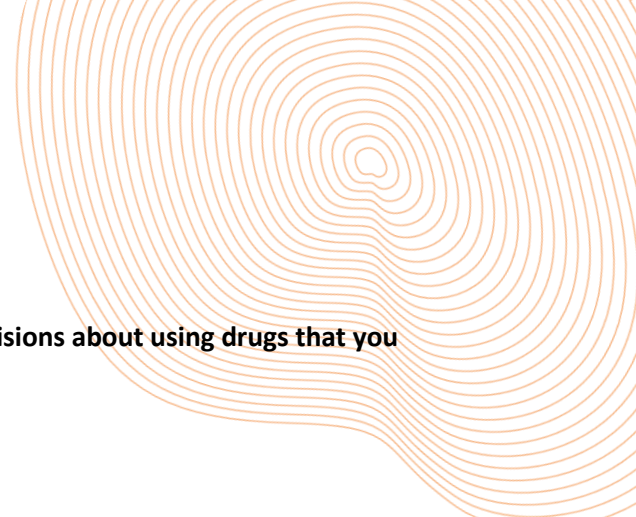
s1_9 Did this harm reduction information help to inform your decisions about using drugs that you thought might match the alert or more broadly?

- ○ No (0)
- ○ Yes, drugs matching the alert (1)
- ○ Yes, drugs more broadly (2)
- ○ Don't know (97)

---

s1_10 After seeing/hearing about this alert, what (if any) further information did you want to know? *For example, was there any information you would have liked to see in the alert that wasn't included?*

- ☒ No further information (0)
- ☐ Information about the alert itself (eg, location, who released the alert) (1)
- ☐ Whether drugs I had accessed/been offered matched the substance in the alert (2)
- ☐ Information about the drug type (3)
- ☐ Information about harm reduction behaviours (eg, how to access naloxone, reagent kits or fentanyl test strips) (4)
- ☐ Other (specify) (6)
- ☒ Don't know (97)

---

s1_10oth Please specify other

_____

---

s1_11 Where (if at all) did you seek further information?

- ☐ ⊗ Did not seek out further information (0)
- ☐ Friend/acquaintance/partner/relative (1)
- ☐ Dealer (2)
- ☐ Peer/outreach/harm reduction worker (3)
- ☐ Clicked a link contained in the alert itself (eg, link in social media post) (4)
- ☐ Google or other online search engine (5)
- ☐ Web forum or harm reduction website (eg, Bluelight, Reddit, Dread, Erowid) (6)
- ☐ Phone service (eg, Poisons Information Centre) (7)
- ☐ Other (specify) (8)
- ☐ ⊗ Don't know (97)

----

s1_11oth Please specify other

_____

----

s1_12 Were you able to find the information you needed?

- ○ No (0)
- ○ Yes, easily or relatively easily (1)
- ○ Yes, but with some difficulty or I wasn't certain how trustworthy the information was (2)
- ○ Don't know (97)

----

s1_13 Who (if anyone) did you share information from this alert with? *This includes talking about the alert with someone in person*

- ⊗ Didn't share with anyone (0)
- ☐ Friend or group of friends/acquaintance/partner/relative (1)
- ☐ Dealer (2)
- ☐ Peer/outreach/harm reduction worker (3)
- ☐ General public (eg, via a web forum) (4)
- ☐ Other (specify) (5)
- ⊗ Don't know (97)

----

s1_13oth Please specify other

_____

----

s1_14 How did you share information from this alert?

- ☐ In person (eg, talked verbally with a friend) (1)
- ☐ Social media or public channel feed (eg, Facebook, Instagram) (2)
- ☐ Text or messaging app (private chat; eg, WhatsApp, Telegram, Signal, Wickr, Facebook messenger) (3)
- ☐ Web forum (eg, Bluelight, Reddit, Dread) (5)
- ☐ Other (specify) (6)
- ⊗ Don't know (97)

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s1_14oth Please specify other

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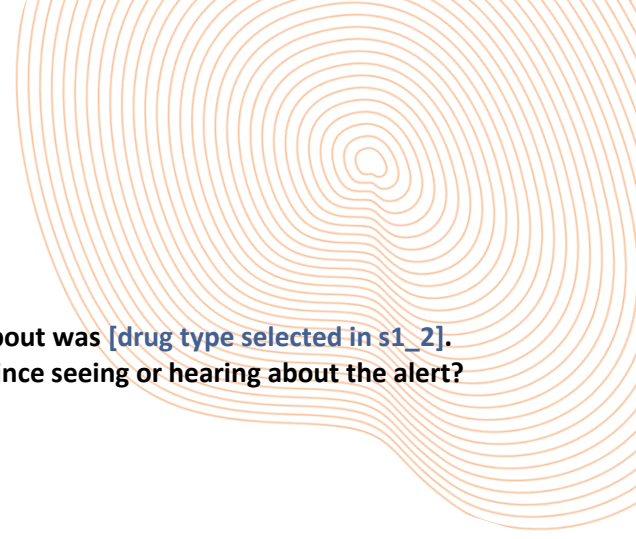
**s1_15a You said that the most recent drug alert you saw/heard about was [drug type selected in s1_2].
Is [drug type selected in s1_2] a drug you've used before and/or since seeing or hearing about the alert?**

○ No (0)

○ Yes, before the alert (1)

○ Yes, after the alert (2)

○ Yes, both before and after the alert (3)

○ Don't know (97)

---

s1_15b Did you personally encounter [drug type selected in s1_2] matching the drugs described in this alert?

○ No (0)

○ Yes (1)

○ Don't know (97)

---

s1_15c Did you try to obtain [drug type selected in s1_2] that you thought might match the drugs in this alert?

☐ ⊗No (0)

☐ Yes, to use myself (1)

☐ Yes, to give/sell to others (2)

☐ ⊗Don't know (97)

---

s1_15d Did you use [drug type selected in s1_2] matching the drugs in this alert?

○ No (0)

○ Yes, before seeing/hearing the alert (1)

○ Yes, after seeing/hearing the alert (2)

○ Yes, both before and after the alert (3)

○ Don't know (97)

s1_15e After seeing/hearing about this alert, did you change the way you used [drug type selected in s1_2]?

- ○ No, continued to use as I normally would have (0)
- ○ Yes, stopped using this drug entirely (1)
- ○ Yes, stopped/avoided using drugs matching the alert (2)
- ○ Yes, continued to use but changed the way I was using (eg, used less frequently) (3)
- ○ Don't know (97)

---

s1_15f Did you change the way you used [drug type selected in s1_2] only when using drugs you thought might match the alert, or more broadly (eg, even if you didn't think drugs you were using matched the alert)?

- ○ ⊗Drugs matching the alert (0)
- ○ Changed the way I used this drug more broadly (1)
- ○ ⊗Don't know (97)

---

s1_15g How did you change the way you used [drug type selected in s1_2]?

- ☐ Started with a small amount and spread doses out ('start low, go slow') (1)
- ☐ Tested drug contents (eg, used reagent kit or fentanyl test strip) (2)
- ☐ Made sure I didn't use the drug alone (3)
- ☐ Obtained the drug from a trusted source (4)
- ☐ Used less frequently (5)
- ☐ Used more frequently (6)
- ☐ Used a smaller amount (7)
- ☐ Used a larger amount (8)
- ☐ Other (specify) (9)
- ☐ ⊗Don't know (97)

---

s1_15goth Please specify other

_____

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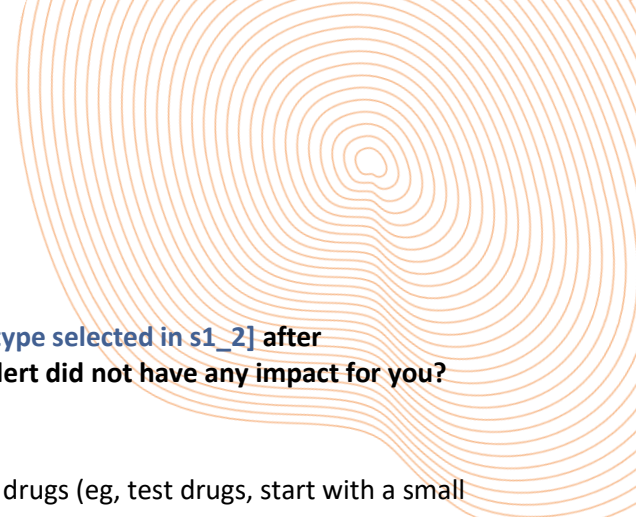
s1_15h You said that you did not change the way you used [drug type selected in s1_2] after seeing/hearing about the alert. What were the reasons that the alert did not have any impact for you?

☐ The alert did not match drugs that I use (1)

☐ I already employ strategies to keep myself safe when using drugs (eg, test drugs, start with a small amount) (2)

☐ The drugs or effects described in the alert were desirable to me (3)

☐ I didn't think I would experience harm or the effects did not seem severe (4)

☐ The alert was not relevant to my location (eg, different city or state) (5)

☐ I have seen too many alerts in the past (6)

☐ I didn't trust the source of the alert (7)

☐ The alert did not match other evidence (eg, peers reporting adverse effects) (8)

☐ Other (specify) (9)

☐ ⊗Don't know (97)

----

s1_15hoth Please specify other

_____

Section 2: Preferences for communication about higher risk drugs
These next questions are about how you would ideally like drug alerts to function in future.
 Remember, you can select 'Don't know' for any questions where you are unsure of the response, or skip any questions that you would prefer not to answer.

----

prf_1 Which of the following events do you think should trigger a drug alert?

☐ Peer reports of adverse events after using a drug (1)

☐ A significant cluster of overdose events (even if the drug/s involved aren't known) (2)

☐ Routine drug testing indicates a drug contains unexpected substances (eg, MDMA containing nitazenes) (3)

☐ Routine drug testing indicates a substance has been misrepresented as another drug (4)

☐ Routine testing detects drugs of a higher dose/purity than usual (5)

☐ Other (specify) (6)

☐ ⊗Don't know (7)

prf_1oth Please specify other

_____

prf_2 How important is it to include the following information in drug alerts, on a scale from 1 ('not at all important') to 5 ('very important')?

	Don't know				
	1	2	3	4	5
What triggered the alert (eg, cluster of overdoses, routine testing indicated a substance was misrepresented as a different drug) (1)					
Location (eg, city or state) (2)					
What the drug looks like (3)					
Chemical name of the drug (eg, MDMA) (4)					
Common name of the drug (eg, ecstasy) (5)					
Adverse effects of the drug (6)					
Advice on safer dosing (eg, start with a small amount) (7)					
Other harm reduction advice (eg, carrying naloxone, how to access reagent kits or fentanyl test strips) (8)					
A disclaimer that drugs that do not match the drugs in the alert may still be unsafe (9)					

prf_3 What kind of drug alerts is it important for you to know about?

- ☐ ⊗ I'm not interested in receiving drug alerts (0)
- ☐ I am always interested in knowing about all drug alerts (1)
- ☐ When drugs that I use visually match the alert (2)
- ☐ When drugs that I or my friends/family use match the drug type in the alert (3)
- ☐ When drugs are high dose/purity (4)
- ☐ When drugs contain a different substance that may increase the risk of harm (5)
- ☐ When drugs are misrepresented as another drug (6)
- ☐ Other (specify) (7)
- ☐ ⊗ Don't know (97)

----

prf_3oth Please specify other

_____

----

prf_4 When is it important for you to know about a particular drug alert in terms of the location that the alert relates to?

- ☐ When drugs matching the alert are detected in my local region (eg, city) (1)
- ☐ When drugs matching the alert are detected in my state or territory (2)
- ☐ When drugs matching the alert are detected anywhere in Australia (3)
- ☐ ⊗ Don't know (97)

----
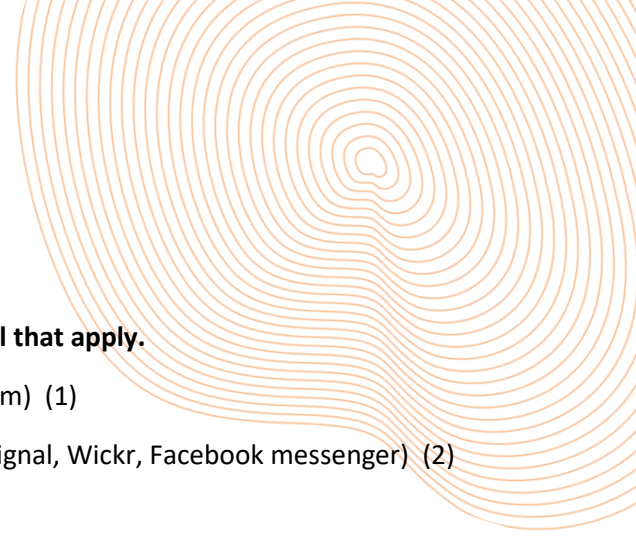
prf_5 How would you like to access drug alerts in future? Select all that apply.

☐ Social media or public channel feed (eg, Facebook, Instagram) (1)

☐ Text or messaging app (private; eg, WhatsApp, Telegram, Signal, Wickr, Facebook messenger) (2)

☐ Web forum (eg, Bluelight, Reddit, Dread) (3)

☐ Posters in services (4)

☐ Dedicated phone app for alerts (5)

☐ Website (6)

☐ Email (7)

☐ Other (specify) (8)

☐ ⊗Don't know (97)

---

prf_5oth Please specify other

_____

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prf_6 Thinking more broadly, what kind of updates would you like to receive about drugs in your area?
For example, recent detections of unusual/unexpected ingredients in drugs and what these look like.

○ Alerts for specific higher risk drugs only (1)

○ Regular update showing broader trends for drugs in my area (eg, routine update on substances detected in ketamine samples across that month) (2)

○ Combination of alerts for specific drugs and regular updates (3)

○ Other (specify) (4)

○ Don't know (97)

---

prf_6oth Please specify other

_____

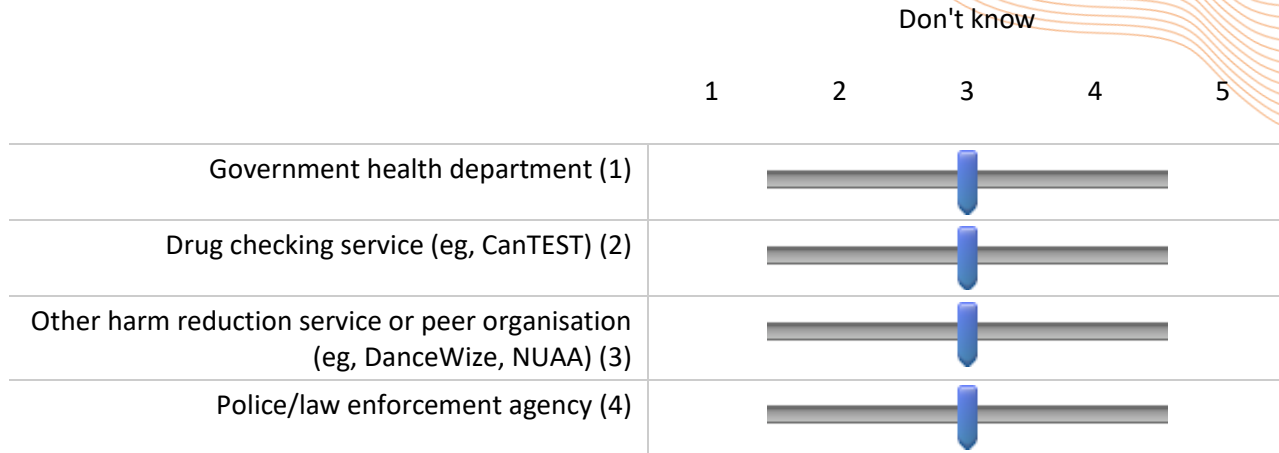Descriptive text These next few questions are about your attitudes towards organisations who issue drug alerts, for example government health departments or peer organisations.

---

prf_7 To what extent do you trust the following sources to issue credible drug alerts, on a scale of 1 ('do not trust at all') to 5 ('completely trust')? *For example, would you trust that source to provide accurate,*

reliable information about a potentially harmful drug?

	1	2	Don't know 3	4	5
Government health department (1)					
Drug checking service (eg, CanTEST) (2)					
Other harm reduction service or peer organisation (eg, DanceWize, NUAA) (3)					
Police/law enforcement agency (4)					

---

prf_8 What other organisations (if any) do you think could be a reliable source for drug alerts?

_____

---

prf_9 What factors (if any) are likely to influence you to engage with alerts released by a particular organisation?

☐ ⊗None (0)

☐ The organisation has conducted a chemical analysis of the drug (1)

☐ I trust the organisation (eg, I use resources from this organisation more broadly) (2)

☐ The organisation is based in the area where I live (3)

☐ I have an existing relationship with the organisation (eg, harm reduction service) (4)

☐ I have received alerts from this organisation in the past (5)

☐ The alert matches other evidence (eg, peer reports) (6)

☐ Other (specify) (7)

☐ ⊗Don't know (97)

---

prf_9oth Please specify other

_____

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prf_10 Why do you think health agencies release drug alerts?

☐ Stop people from using drugs in general (1)

☐ Stop people from using drugs that match the alert (2)

☐ Empower people who use drugs to make informed decisions (3)

☐ Encourage people to engage in harm reduction behaviours (eg, carrying naloxone, testing drugs) (4)

☐ To meet ethical obligations to release important public health information (eg, government alerts) (5)

☐ Other (specify) (6)

☐ ⊗ Don't know (97)

---

prf_10oth Please specify other

_____

---

prf_11 What do you think the purpose of drug alerts should be?

☐ Stop people from using drugs in general (1)

☐ Stop people from using drugs that match the alert (2)

☐ Empower people who use drugs to make informed decisions (3)

☐ Encourage people to engage in harm reduction behaviours (4)

☐ Develop trust between people who use drugs and drug alert information sources (5)

☐ Encourage people to access drug treatment services (6)

☐ Other (specify) (7)

☐ ⊗ Don't know (97)

---

prf_11oth Please specify other

_____

prf_12 Is there anything else you think would improve existing drug alerts? Is there anything you think existing drug alerts do well?

_____

Section 3: Drug use and related behaviour
These questions are about your recent drug use and related behaviours, such as use of drug checking

services. We are asking these questions because we want to know how these factors might relate to your past experiences and preferences for future alerts. *Remember, you can select 'Don't know' for any questions where you are unsure of the response, and you can skip any questions you would prefer not to answer.*

---

drg_1 On average, how often have you used illegal or non-prescribed drugs in the past 12 months?

○ Less than monthly (1)

○ Monthly (2)

○ Fortnightly (3)

○ Weekly (4)

○ More than weekly but not daily (7)

○ Daily or more than once a day (6)

○ Don't know (97)

---

drg_2 Which of the following drugs have you used in the past 12 months?

☐ MDMA/ecstasy (1)

☐ Cocaine (2)

☐ Methamphetamine/ice (3)

☐ Heroin (4)

☐ Benzodiazepines (eg, Xanax, Valium) that were not prescribed to me (5)

☐ Pharmaceutical opioids (eg, morphine, oxycodone) that were not prescribed to me (6)

☐ Ketamine/special K (7)

☐ LSD/acid (8)

☐ GHB/GBL/1,4-BD (9)

☐ Any other psychoactive substance not mentioned above (specify) (10)

☐ ⊗Don't know (97)

---

drg_2oth Please specify other

_____

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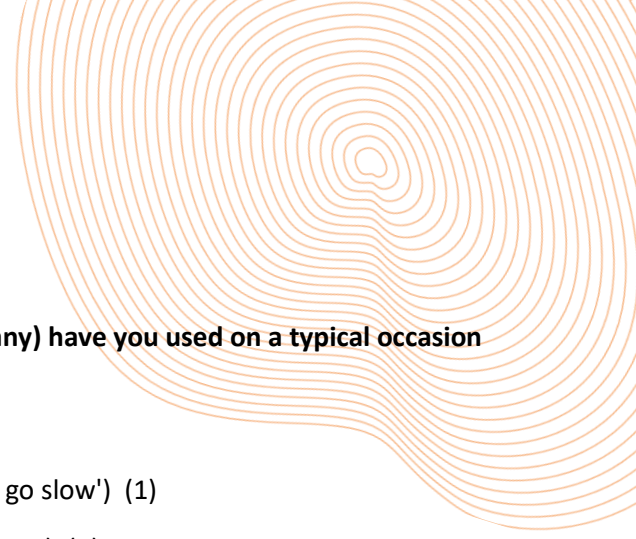
drg_3 In the past 12 months, which harm reduction strategies (if any) have you used on a typical occasion when using drugs?

- ☒ I don't usually use any harm reduction strategies (0)
- ☐ Start with a small amount and spread doses out ('start low, go slow') (1)
- ☐ Test drug contents (eg, using a reagent kit or fentanyl test strip) (2)
- ☐ Make sure I don't use drugs alone (3)
- ☐ Obtain drugs from a trusted source (4)
- ☐ Other (specify) (5)
- ☒ Don't know (97)

---

drg_3oth Please specify other

_____

---

drg_4 In the last 12 months, have you tested the contents of any illegal or non-prescribed drugs that you or someone you know intended to use? *This includes having drugs tested at a drug checking service (eg, festival testing service or fixed-site service such as CanTEST) or testing drugs yourself (eg, using a colorimetric reagent kit)*

- ☒ No (0)
- ☐ Yes, for myself (1)
- ☐ Yes, for someone else (2)
- ☐ Yes, for another reason (specify) (3)
- ☒ Don't know (97)

---

drg_4oth Please specify other

_____

---

drg_5 These next two questions are related to situations where you may have experienced symptoms outside of your normal drug experience, which caused concerns for your physical health and where you felt professional assistance would have been helpful. In this survey, we refer to this as 'overdose'.

---

drg_5_1 Have you ever experienced an overdose while using any drug?

○ No (0)

○ Yes, in the last 12 months (1)

○ Yes, more than 12 months ago (2)

○ Don't know (97)

---

drg_5_2 Have you ever witnessed an overdose experienced by a friend, partner or family member?

○ No (0)

○ Yes, in the last 12 months (1)

○ Yes, more than 12 months ago (2)

○ Don't know (97)

---

drg_6 Have you ever experienced any other adverse event when using any drug? *This includes any harmful or very unpleasant drug effect where you felt that your health and safety was at immediate risk*

○ No (0)

○ Yes, in the last 12 months (1)

○ Yes, more than 12 months ago (2)

○ Don't know (97)

---

drg_7 Have you ever been in any form of drug treatment (eg, counselling, rehabilitation, methadone treatment)?

○ No (0)

○ Yes, in the last 12 months (1)

○ Yes, more than 12 months ago (2)

○ Don't know (97)

---

drg_8 Which of the following health services (if any) have you accessed for alcohol and/or drug support in the last 12 months?

- ⊗None (0)
- GP (1)
- Ambulance attendance (2)
- Emergency department (3)
- Hospital admission (inpatient) (4)
- Hospital as outpatient (5)
- Medical tent at a festival/rave (6)
- Drug and alcohol counsellor (7)
- Psychiatrist/psychologist (8)
- Needle and syringe program (9)
- Harm reduction service or peer organisation (eg, DanceWize, Save-A-Mate, CanTEST) (10)
- Phone service (eg, Poisons Information Centre, Alcohol and Drug information Service/ADIS) (11)
- Other (specify) (12)
- ⊗Don't know (97)

----

drg_8oth Please specify other

_____

Section 4: Demographics

These questions ask for a bit more information about you, such as your gender. We are asking these questions as these factors might relate to how you engage with drug alerts and your preferences for how alerts are communicated. *Remember, you can select 'Don't know' for any questions where you are unsure of the response, and you can skip any questions you would prefer not to answer.*

----

dem_1 What state or territory do you currently live in?

○ New South Wales (1)

○ Australian Capital Territory (2)

○ Victoria (3)

○ Tasmania (4)

○ South Australia (5)

○ Western Australia (6)

○ Northern Territory (7)

○ Queensland (8)

○ Don't know (97)

---

dem_2 How would you describe the area in which you currently live?

○ Capital city (1)

○ Non-capital city area (eg, regional town, remote area) (2)

○ Don't know (97)

---

dem_3 How do you describe your gender?

○ Woman or female (1)

○ Man or male (2)

○ Non-binary (3)

○ I use a different term (specify) (4)

○ Don't know (97)

---

dem_3oth Please specify different term

_____

---

dem_4 How do you describe your sexual orientation?

○ Straight (heterosexual) (1)

○ Gay or lesbian (2)

○ Bisexual (3)

○ I use a different term (specify) (4)

○ Don't know (97)

---

dem_4oth Please specify different term

_____

---

dem_7 What is your current age in years? *Please type as a number (eg, 56). We know we've already asked you this, but we want to make sure you're a human. Thanks for your patience!*

_____

---

dem_5 What is the highest qualification you have completed?

○ Year 9 or below (1)

○ Year 10 (2)

○ Year 11 (3)

○ Year 12 (4)

○ Trade/technical qualification (5)

○ University/college (6)

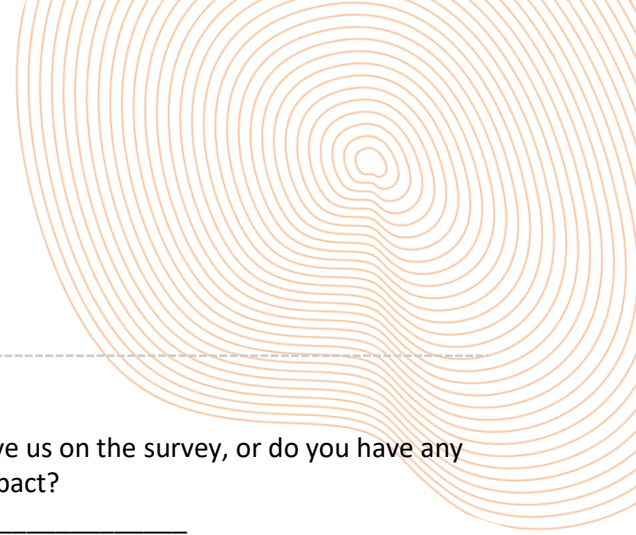○ Don't know (97)

---

dem_6 How are you currently employed?

○ Not employed (0)

○ Full time (1)

○ Part time/casual (2)

○ Self employed (3)

○ Other (specify) (4)

○ Don't know (97)

---

dem_6oth Please specify other

_____

Section 5: Feedback

We're nearly at the end now! Is there any feedback you'd like to give us on the survey, or do you have any suggestions as to how we can ensure the results have a positive impact?

_____

End message You've reached the end of the survey. Thank you for your participation!