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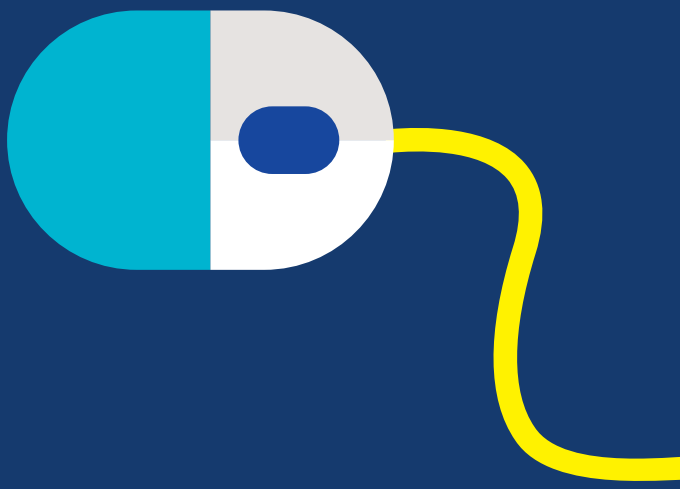
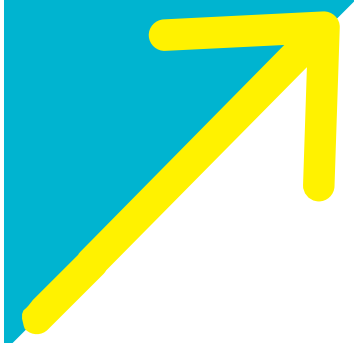
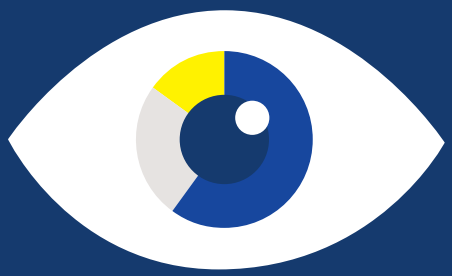


European Web Survey on Drugs 2021: Irish Results

Deirdre Mongan, Nicki Killeen, David Evans, Seán R. Millar, Eamon Keenan, and Brian Galvin





Research. Evidence. Action.

European Web Survey on Drugs 2021

Irish results

Deirdre Mongan, Nicki Killeen, David Evans, Seán R. Millar, Eamon Keenan, and Brian Galvin

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Copies of this report can be obtained from:
Health Research Board
Grattan House
67-72 Lower Mount St
Dublin 2

t + 353 1 234 5000
f + 353 1 661 1856
e hrb@hrb.ie
w www.hrb.ie

Health Research Board

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Health Research Board

The Health Research Board (HRB) is Ireland's lead funding agency supporting innovative health research and delivering data and evidence that improves people's health and patient care. We are committed to putting people first, and ensuring data and evidence are used in policy and practice to overcome health challenges, advance health systems, and benefit society and the economy.

The HRB National Drugs Library supports those working to develop the knowledge base around alcohol and other drug use in Ireland. We aim to enable evidence-informed decision-making by providing a comprehensive, timely and accessible information service. To access our research collection and other resources visit https://www.drugsandalcohol.ie/

Irish Results

Drug Use

The most commonly used drugs were:

Cannabis **Cocaine** **Ecstasy** **Ketamine**

In the last year

36% of respondents used **one** drug;
20% used **two** different drugs
44% used **3 or more**

18–24-year-olds

55% **males** **50%** **females**

used 3 or more drugs

Cannabis

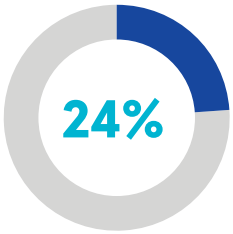
96%
used cannabis herb

47%
used cannabis edibles

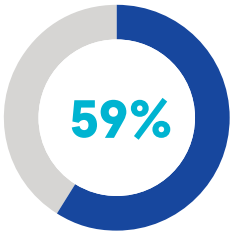
23%
used cannabis oil/extract

20%
used cannabis resin

Cannabis herb users



use it daily or almost daily



use it at least once a week

males
aged 18–24
most likely to use greater amounts of cannabis herb

Cocaine

8%
of respondents reported frequent or weekly use of cocaine

2x

Weekly users use **double** the amount of cocaine compared with those who use it less than monthly

Irish Results

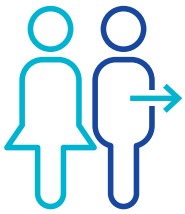
Ecstasy

use ecstasy **weekly**

use it **less than once** a month

Ketamine

Last year use reported by **24%** of respondents



and **36%** of **males aged 18–24**

Methods used to purchase drugs

Cannabis herb ■ | **Cocaine** ■

Direct contact with source/dealer

86% | **87%**

Social media

22% | **14%**

Darknet

9% | **3%**

Reasons for use

The main reasons for using

Cannabis ■ | **Cocaine** ■

To reduce stress/to relax

80%

To get high/for fun

76% | **88%**

To improve sleep

57%

To socialise

70%

Out of curiosity

11%

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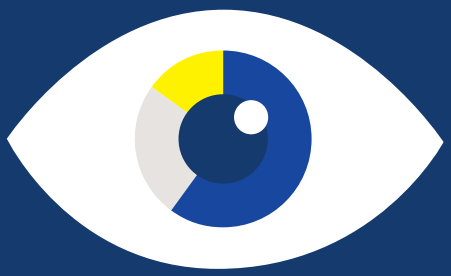
Introduction



An emerging stimulant and polydrug culture among new drug user groups is currently a major issue of concern in Ireland. Although it is known that young people use drugs in risky ways in nightlife environments, health officials in Ireland currently consider this group 'hard to reach' as they are unlikely to present to traditional addiction services, which are predominantly aimed at those experiencing dependency (particularly opioid dependency).

To date, information on patterns of drug use has been obtained from general population surveys or from treatment samples. The National Drug and Alcohol Survey (NDAS) has been conducted five times in Ireland [1]. Although the NDAS provides prevalence rates regarding drug use, it can only collect robust information on patterns of use for the more commonly used drugs, such as cannabis; it does not collect data from a sufficiently large sample of people who use drugs to provide reliable information on patterns of use for less frequently used drugs such as ecstasy, amphetamines, and new psychoactive substances. In addition, using treatment populations to ascertain patterns of drug use only provides information on those with risky or harmful drug use patterns and does not reflect the consumption patterns of the majority of people who may only use drugs occasionally.

Young people who use drugs in nightlife environments are often missed by general population drug surveys; tailored recruitment strategies are required in order to obtain information from these communities and monitor emerging drug trends across society. In order to quickly overcome barriers and knowledge gaps, healthcare providers can utilise new opportunities to engage with a range of drug-using populations through online communications and web surveys [2]. New media tools offer valuable mechanisms for healthcare professionals to target specific groups with drug use surveys. Through targeted recruitment strategies, populations can be reached based on their interests (such as dance music culture) in order to rapidly gather information on drug use patterns and trends [3, 4]. Various reviews highlight the utility of online data collection methods for quickly accessing user populations across diverse geographical and cultural settings that have traditionally been difficult to access [5, 2, 6]. Web surveys can offer Irish healthcare providers the opportunity to quickly improve understanding of new user groups and help develop knowledge on drug use patterns.

The European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) has developed the European Web Survey on Drugs (EWSD) to collect data from a wide range of people who use drugs, from those who are just experimenting or who are occasional users to those who use drugs in a more intensive way. The EWSD was first undertaken on a pilot basis in 2016 in six European countries: Croatia, Czechia, France, the Netherlands, Switzerland, and the United Kingdom. The surveys ran at different times in 2016. For the second round, in 2017 and 2018, 10 countries participated. The third round of the EWSD was conducted throughout Europe in 2021. Ireland participated in the EWSD for the first time in 2021 with the aim of capturing those who use drugs but may not experience dependency issues, as well as niche user groups such as those consuming psychedelic-type drugs. This report presents Ireland's main findings from the 2021 EWSD.

1.1 National Drugs Strategy

An Taoiseach Leo Varadkar launched *Reducing Harm, Supporting Recovery: A health-led response to drug and alcohol use in Ireland 2017-2025* [7] on 17 July 2017. The strategy was presented as a health-led (rather than criminal justice) approach to drug use and was the first strategy in Ireland to adopt an integrated public health approach to drug and alcohol use. The strategy defines substance misuse as "the harmful or hazardous use of psychoactive substances, including alcohol, illegal drugs and the abuse of prescription medicines"[7] p7. While the strategy complements the Public Health (Alcohol) Act 2018 and strengthens some of the key parts of the alcohol-focused *Steering Group Report On a National Substance Misuse Strategy* published in 2012 [8], illicit drug use is the primary focus of many of the actions of the new National Drugs Strategy. The strategy covers an 8-year period (2017–2025) and is accompanied by a shorter-term action plan (2017–2020). The strategy's vision is for "A healthier and safer Ireland, where public health and safety is protected and the harms caused to individuals, families and communities by substance misuse are reduced and every person affected by substance use is empowered to improve their health and wellbeing and quality of life"[7] p8. The Minister for Health continues to have overall ministerial responsibility for the National Drugs Strategy (previously, the Department of Health also had a Minister of State with responsibility for health promotion and the National Drugs Strategy). Implementation of the strategy is coordinated through a National Oversight Committee, comprising senior members of the various stakeholder groups. Following a mid-term review in 2021, six new strategic priorities were identified for the remainder of the strategy. A strategic implementation group is responsible for implementing each of these priorities; each group will reinforce cross-agency working and have an independent chair who will be a member of and report back to the National Oversight Committee. The review also established a research subcommittee. The Early Warning and Emerging Trends subcommittee remains in place.

One of the National Drugs Strategy's five strategic goals is to develop sound and comprehensive evidence-informed policies and actions. The Drugs Policy and Social Inclusion Unit in the Department of Health analyses the implications of research findings for policy and the design of initiatives to tackle the drug problem. It also advises on the commissioning of new research and the development of new data sources.

1.2 Role of the Health Research Board

The Health Research Board (HRB) manages the commissioning of research and monitoring projects on behalf of the Department of Health and as part of its role as the Irish National Focal Point to the EMCDDA. The EMCDDA provides factual, objective, reliable, and comparable information concerning drugs and drug addiction, and their consequences. The Centre monitors the drugs situation and responses to drug-related problems in Europe. The extent and pattern of drug use in the general population is one of the five key epidemiological indicators that the EMCDDA uses to assess the drugs situation in

Europe. This indicator utilises a number of approaches (including general population drug surveys and school population drug surveys), as well as innovative new approaches (such as wastewater-based drug epidemiology) and targeted surveys (including web surveys). This helps with understanding patterns of use, risk perceptions, and social and health correlates, as well as the consequences of the use of illicit drugs.

The National Drugs Strategy has designated the HRB as the main information hub for evidence on the drugs situation in Ireland and responses. Action 5.1.45 (strengthen Ireland's drug monitoring system) of this strategy gives the HRB responsibility for the EMCDDA indicators pertaining to prevalence and patterns of drug use among the general population.

1.3 Role of the Health Service Executive

The Health Service Executive (HSE) is responsible for implementing a number of the health based actions on drugs within the National Drugs Strategy, mainly through the National Social Inclusion Office. Through Strategic Action 1.3.11 (strengthen early harm reduction responses to current and emerging trends and patterns of drug use), the HSE aims to strengthen harm reduction responses through the development of novel initiatives aimed at new user populations. As part of the National Drugs Strategy, the HSE led the Working Group on 'Emerging Drug Trends and Drug Checking', which reviewed substance use trends specific to nightlife environments as well as the role of analytical techniques to inform tailored education and harm reduction responses. The Working Group identified knowledge and service gaps relating to people not presenting to addiction services and made a series of recommendations such as improving research and the development of tailored services. Further, the Working Group recommended the implementation of novel analytical approaches such as drug checking, and syringe and wastewater analysis to provide clarification on current drug market trends which can support service user feedback and epidemiological surveys.

In the absence of tailored services for non-dependent user groups, the HSE use the Drugs.ie website and affiliated social media channels to engage with recreational user groups to disseminate harm reduction information and coordinate a volunteer programme to provide education in nightlife settings.

1.4 About the 2021 EWSD

The 2021 EWSD was conducted simultaneously across Europe from March to May 2021 and thirty European countries participated in the survey. The objective of the 2021 EWSD was to determine patterns of drug use among a convenience sample of people aged 18 years and over who had used drugs in the last year. The rationale for Ireland's participation in the 2021 EWSD was to generate new data on patterns of drug use, as set out in Action 5.1.45 of Ireland's National Drugs Strategy.

The data collected provide information on:

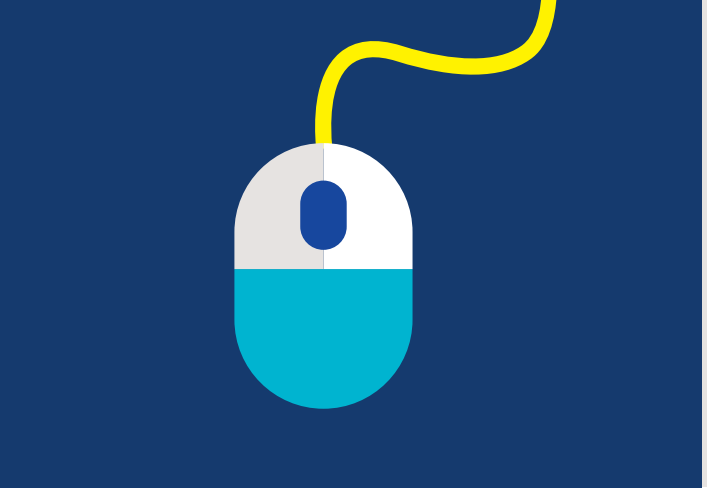
- The frequency of drug use by drug type, and the amount consumed on a typical day
- Drug use patterns according to sex and age
- The reasons why people use drugs, by drug type
- The main sources used to obtain drugs, and
- The impact of the COVID-19 pandemic on drug use.

The organisation of the EWSD in Ireland was a collaborative effort between the HRB and the HSE's National Social Inclusion Office. The HRB worked closely with the EMCDDA in editing the survey and was also responsible for managing the survey dataset, analysing the data, and preparing this report for publication.

The HSE National Social Inclusion Office was responsible for communications around the survey. It used the Drugs.ie website to promote the survey and was responsible for the social media strategy and campaign. Drugs.ie is managed by the HSE National Social Inclusion Office and is Ireland's national drug information and support website. It provides information on support services and engages visitors directly through interactive self-assessment and an online brief intervention resource. These interactive resources and its work in raising awareness around emerging trends and harm reduction initiatives enables Drugs.ie to reach those who may be using drugs as part of the night-time economy but might be unlikely to present to drug treatment services. The HSE also provided content for subculture magazines, national print and broadcast media, and student publications. The HSE used its own and Drugs.ie's social media accounts and placed paid advertisements on Facebook, Twitter, Instagram, and other relevant social media channels. This multifaceted communications strategy was implemented to increase the likelihood that potential participants would be aware of the survey and understand its scientific purpose.

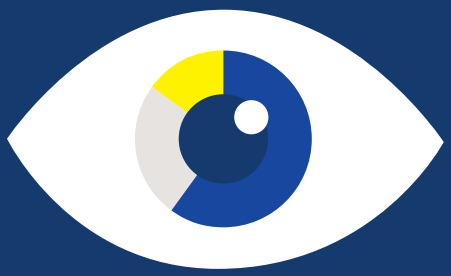
1.5 Report structure

This report outlines the results of the 2021 EWSD for Ireland. Following this introductory chapter, Chapter 2 describes the methodology employed for the survey. Chapter 3 presents the results of the EMCDDA survey modules, while Chapter 4 presents the results of the two Irish survey modules. Finally, Chapter 5 provides a discussion and conclusion of the results.



02

Methodology



This chapter outlines the methodology employed in order to undertake the 2021 EWSD. It describes the survey design, questionnaire development, recruitment of the sample, data collection, and data analysis.

2.1 Study design

The 2021 EWSD was an online, convenience, non-probability survey. The study population included people aged 18 years and over, who lived in Ireland, and who had used one of the following drugs in the previous 12 months: cannabis, cocaine, ecstasy, amphetamines, methamphetamine, heroin, or new psychoactive substances (NPS). As there is no appropriate sampling frame covering all people who use drugs in Ireland, participants were recruited by using opportunistic sampling covering Internet sites frequented by drug users; advertising on social media sites; advertising in online and print music magazines and on radio stations; and advertising at treatment and harm reduction services and in third-level educational settings.

2.2 Questionnaire development

The questionnaire for the EWSD was developed by the EMCDDA and comprised a core set of questions to be used across all participant countries. The EMCDDA questionnaire was organised into 10 question groups:

1. Age, sex, and country of residence
2. Prevalence questions and opinions
3. Cannabis module
4. Cocaine module
5. Ecstasy module
6. Amphetamine module
7. Methamphetamine module
8. Heroin module
9. NPS module
10. Sociodemographic questions

Individual countries had the option of including extra modules after the EMCDDA questions. It was decided that the Irish EWSD would include modules on nitrous oxide and magic mushrooms due to recent concerns regarding their use in Ireland. Modules 3–9 were

presented in a random order to respondents who reported having used the respective drug(s) in the last 12 months. The two Irish modules were always presented at the end of the survey. At the end of each drug-specific module, if they had used more than one drug, respondents were asked whether they wished to answer another drug module or finish the questionnaire. This procedure aimed to reduce the burden for users of multiple drugs and to reduce drop out due to time constraints and/or boredom. All questions were voluntary.

For each drug, respondents were asked about mode of consumption and the amount consumed on a typical day. For cannabis herb and cannabis resin, respondents were asked how they usually use the drug (in a joint, dry pipe or chillum, water pipe, food item, beverage, other), how many of each they use on a typical day, and how much herb or resin they usually put in. Visual aids were provided to assist respondents in determining the amount of cannabis herb or resin they typically used. Pictures displayed four different amounts of cannabis herb and resin (0.05 g, 0.1 g, 0.2 g, and 0.3 g) in both crumbled and non-crumbled form alongside a credit card and a ruler for scale. Cocaine users were asked directly asked how many grams they use on a typical day they use cocaine, while users of amphetamines, ecstasy, and NPS were asked whether they use the drug in the form of tablets or powder/crystal and, for each form, how many tablets/grams they use on a typical day they use the drug. No information on drug potency was collected.

Prior to data collection, the questionnaire was cognitively tested in Ireland by Ipsos MRBI, a market research company. Both recreational and more addiction service populations participated in the cognitive interviews in order to ensure the validity of the questionnaire. Minor changes were made to the questionnaire by the EMCDDA following feedback from the Irish and other countries' cognitive interviews.

2.3 Recruitment of the sample

Each participant country was responsible for determining and implementing their own recruitment strategy. The recruitment of the EWSD sample in Ireland was managed by the HSE. A communications strategy was developed by the HSE National Social Inclusion Office in collaboration with the HSE Communications Division to identify suitable strategies that would appeal to and engage with the identified target audience – in particular, respondents with music, nightlife, and subcultural interests.

Drugs.ie is a resource used to share relevant research, news, information, and harm reduction messages about drugs. Through social media strategies and outreach to third-level institutions and nightlife settings, the Drugs.ie team engages with different populations who use substances, with a particular focus on substance use trends in nightlife settings. The Drugs.ie website receives high levels of interaction annually, and at the time when the 2021 EWSD was being promoted, the Drugs.ie Twitter account had more than 10,000 followers and the Facebook account had more than 17,000 followers. For these reasons, the Drugs.ie resource was selected as the main promotional platform in Ireland for endorsing and sharing the survey.

Five key areas were prioritised in order to recruit EWSD participants in Ireland.

1. Relevant social media assets and content

A well-known Irish local illustrator developed novel imagery to help establish a rapport with the target audience. Based on previous experience, the HSE has found that utilising identifiable designs from well-known illustrators can help gain credibility among young populations who use drugs. Five images were commissioned specifically to promote the EWSD and these were used as the main promotional assets across different social channels and advertisements in online media. These designs ensured that the EWSD promotional imagery was tailored to the current Irish design landscape, which would be relatable to a young audience. Suitable messaging was agreed as part of the communication strategy, with a focus on inviting participants to share their drug experiences in order to help improve local knowledge on drug trends, to inform European drug policies, and to support Irish harm reduction developments.

2. Press release and ongoing media communication

A collaborative press release was issued by the HRB and HSE to national media channels with a focus on the benefits of conducting the EWSD in Ireland. Following this, a HSE nominee provided media interviews across different channels for the duration of the survey recruitment period. A short link was created for use in print media (Drugs.ie/drugsurvey) in order to bring readers to the Drugs.ie web page where the survey was located. More than 1,000 readers accessed this page during the recruitment period.

3. Online recruitment through social media networks

Facebook and Instagram were the two social media network channels used for paid advertisements from the Drugs.ie accounts, with frequent organic posts issued on Twitter. At the time of recruitment, the Drugs.ie Facebook page audience consisted of 37% men, 62% women, and 1% who identify as non-binary. Month-long advertisements were scheduled for March and April 2021, as well as a series of boosted posts. Advertisements were first applied to a wide range of audiences aged 18 years and over, and were then refined to different sub categories such as 18–35-year-olds and categories based on selected interests with an aim to engage with those most likely to use drugs. A number of different age demographics were targeted simultaneously throughout the recruitment period to increase uptake. Advertisements were selected to target those with interests in music genres, music artists and DJs, TV shows, music magazines, websites and fashion. A large range of interest areas were selected with an aim to increase participation and engage with hidden drug user groups. Young people who frequently attend nightlife settings and who are interested in electronic music genres have been found to engage in higher levels of use when compared with the general population [9, 10]. Dance music fans have also been documented as polydrug users [11, 12]. For these reasons, emphasis was placed on dance music genres with an aim to capture these user communities who are currently considered hidden in the context of Ireland. However, people who frequent nightlife and music fans cannot be easily placed into one category, so a number of different music genres were also included in the sampling process to ensure a balanced approach was applied.

4. Paid media partnerships

A media company was selected to support the HSE in managing communications across a number of media outlets, including online and print publications and radio stations. This strategy enabled official partnerships with music and subcultural magazines that promoted the survey online; in print and e-zine publications; and on their social media channels, including Twitter, Facebook, and Instagram. Targeted online advertisements were also utilised across media publications' social media channels.

5. Communication toolkit for stakeholders

A communication toolkit was developed to highlight the importance of implementing the survey in an Irish context and provided stakeholders with information about the survey modules, key promotional messages, and imagery. This toolkit was made available online through the Drugs.ie website and was also circulated to addiction services nationally, which were encouraged to support their service users to participate.

2.4 Data collection

Data collection commenced on 18 March 2021 and finished on 31 May 2021 and was managed centrally by the EMCDDA. Participants accessed the questionnaire on LimeSurvey software, which was hosted by LimeService. Prior to commencing the questionnaire, consent was obtained from all participants. In providing this consent, respondents were informed that their participation in the survey was voluntary, anonymous, and confidential, and that they were free to refuse to answer any question. The survey complied with General Data Protection Regulation (GDPR) requirements, was anonymous, and no personal or identifying data were collected. Internet Protocol (IP) addresses were not saved at any time during the survey and no incentive payment was offered to participate. A total of 27,001 web users clicked onto the Irish EWSD survey link and landed on the homepage of the survey; 8,104 web users agreed to participate in the survey, of whom 5,796 were eligible (i.e. they reported that they lived in Ireland and had used illicit drugs in the previous 12 months) and were included in the final dataset for analysis. As per the EMCDDA guidelines for the EWSD, respondents were not excluded from the final dataset for not finishing the survey. The median time to complete the survey was 9 minutes and 51 seconds.

Of the 5,796 respondents included in the final dataset, it was possible to identify the recruitment channel to the survey for 4,053. Facebook, a music magazine, and the Drugs.ie website yielded the greatest number of participants who completed the survey. The top recruitment channels based on the volume of participants who completed the survey were:

1. Facebook: 37.2% (n=1,506)
2. Music magazine: 19.1% (n=774)
3. Drugs.ie website: 16.5% (n=670)

4. Instagram: 12.8% (n=518)
5. Radio station websites: 4.6% (n=185)
6. Reddit forums: 2.9% (n=116), and
7. EMCDDA website: 1.7% (n=68).

Recruitment channels varied by sex and age group (Table 1). Females were more likely than males to have been recruited through a music magazine or a radio station while males were more likely to have been recruited through Drugs.ie, Instagram and Reddit. Those aged 18–24 years were most likely to be recruited through Instagram while those aged 25–34 were most likely to be recruited through Facebook. The likelihood of being recruited through Drugs.ie increased with increasing age group from 10% among 18–24-year-olds to 29% among those aged 35 years and over.

Table 1 Recruitment channels of EWSD participants by sex and age group (%)

	Males	Females	18–24 years	25–34 years	≥35 years
	n=2685	n=1312	n=1624	n=1630	n=795
Facebook	37.3	37.4	38.6	42.2	23.3
Music magazine	18.0	22.9	21.2	13.3	26.1
Drugs.ie website	17.9	13.8	9.5	17.4	29.2
Instagram	14.2	9.8	17.6	12.1	4.3
Radio station websites	2.7	8.8	5.3	4.8	2.3
Reddit forums	4.4	0.5	2.6	3.9	2.8
EMCDDA website	1.6	1.7	1.3	1.8	2.8
Other	4.0	5.1	3.9	4.6	9.3

2.5 Description of sample

Two-thirds (66%) of the final sample (n=3,815) were male and 33% (n=1,895) were female (Table 2). The mean age of respondents was 28 years, and the median age was 26 years. The sample had a high level of educational attainment – one half (51%) had completed third-level education while just 5% had not completed secondary level. Sixty-three per cent were employed, 26% were students, and just 7% were unemployed. Twenty-nine per cent had a monthly income of less than €1,000 after tax, while 16% had a monthly income of €3,000 or more. The most common living situation was living with parents (34%), followed by living with peers or in student accommodation (22%) and living as part of a couple without children (19%). Almost one-half (48%) lived in a city, 31% lived in a town, and 21% lived in a village or in the countryside. Just 4% of respondents had received treatment for drug use in the last year. Nine in ten respondents were Irish.

Table 2 Description of sample

	Number	%		Number	%
Sex	**n=5782**		**Monthly income (after tax)**	**n=4302**	
Male	3,815	66.0	Less than €1,000	1,254	29.2
Female	1,895	32.8	€1,000–1,999	1,227	28.5
Other	11	0.2	€2,000–2,999	1,143	26.6
Prefer not to say	61	1.1	€3,000 or more	678	15.8
Age group	**n=5790**		**Living situation**	**n=4318**	
18–24 years	2,569	44.4	One person living alone	377	8.7
25–34 years	2,166	37.4	A couple without children	856	19.3
35–44 years	726	12.5	A couple with child(ren)	451	10.4
≥45 years	329	5.7	One adult with child(ren)	98	2.0
Mean age	28.0		Living with parent(s)	1,485	33.8
Median age	26.0		Living with peers/in student accommodation	994	22.2
			Without a permanent residence	15	0.4
			Other	42	3.3
Education	**n=4325**		**Region of residence**	**n=4323**	
Primary attended	4	0.1	City	2,066	47.8
Primary completed	5	0.1	Town	1,358	31.4
Secondary attended	210	4.9	Village/countryside	899	20.8
Secondary completed	600	13.9			
Third level attended	1,317	30.5			
Third level completed	2,189	50.6			
Employment status	**n=4313**		**Ethnicity**	**n=4233**	
Employed	2,721	63.1	Irish	3,788	89.5
Student	1,135	26.3	Any other White background	329	7.8
Unemployed	283	6.6	Irish Traveller	11	0.3
Other	174	4.0	Mixed	64	1.5
			Other	41	1.0
Treatment status	**n=5781**				
Received treatment in last year	202	3.5			
Currently receiving treatment	97	1.7			

As previously mentioned, all questions were voluntary; therefore, respondents could skip over any questions if they wished. Incomplete questionnaires were included in the final dataset. The questions on sex, age, and treatment status were asked at the beginning of the survey, while the remaining sociodemographic questions were asked at the end. This likely explains why the number of respondents who answered the sex, age, and treatment questions is higher compared with the number who answered the other sociodemographic questions.

2.6 Data cleaning and data analysis

The data from all countries participating in the survey, including Ireland, were cleaned and validated by the EMCDDA. Data cleaning was undertaken by the HRB on the Irish modules on magic mushrooms and nitrous oxide. Descriptive analyses of the data were conducted in Stata, using means for continuous variables and percentages for categorical variables. No further statistical analyses were undertaken. The data were analysed by age and sex, and by age within sex. With regard to sex, we have presented our results by male and female; respondents could also select 'non-binary' as an option, but due to the low number of respondents who identified as non-binary we have not presented the results for this group separately. These respondents are included in the overall analysis but have been excluded from analysis undertaken by sex. For most modules, the sample was divided into three age groups: 18–24 years, 25–34 years, and 35 years and over. As a high number of older respondents answered the cannabis herb questions, we categorised those aged 35 years and over into two age groups: 35–44 years and 45 years and over.

In each module, frequency of use in the last month and last year were recorded; this was assessed by asking the number of days of use in each reference period. In this report we have concentrated on last year frequency of use. Three frequency categories were defined for each drug excluding cannabis:

1. Infrequent use was defined as use on less than 11 days in the last year, or 'less than once a month'
2. Occasional use was defined as use on 11–50 days, or 'less than once a week but at least once a month'
3. Frequent use was defined as use on at least 51 days in the last year, or 'once a week or more'

For cannabis, four categories of use were defined:

1. Infrequent use was defined as use on less than 11 days in the last year, or 'less than once a month'
2. Occasional use was defined as use on 11–50 days, or 'less than once a week but at least once a month'

3. Frequent use was defined as use on 51–250 days, or 'at least once a week, but not daily or almost daily'

4. Intensive use was defined as use on more than 250 days, or 'daily or almost daily'.

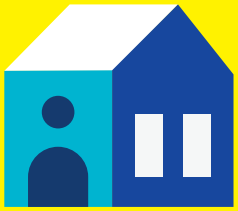
Outliers were identified for some variables; as per EMCDDA suggestion, a threshold of ±3 interquartile ranges (IQRs) from Q1 and Q3 was applied.

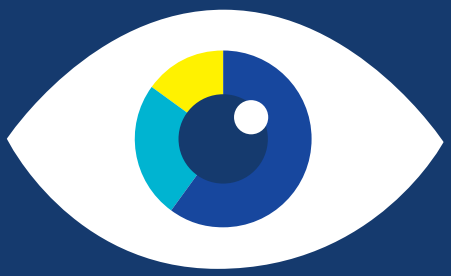
2.7 Ethical approval

Ethical approval for the survey was obtained from the Royal College of Physicians of Ireland.

03

Results: EMCDDA modules





This chapter presents the results from the EMCDDA section of the questionnaire. Due to the low number of respondents who completed the methamphetamine (n=65) and heroin (n=29) modules we have not undertaken any further analyses on these modules

3.1 Last year and last month drug use

Respondents' last year and last month use of each drug is presented in Table 3. Cannabis was the drug most commonly used in the last year (91%), followed by cocaine (49%) and ecstasy (31%). The proportion of respondents reporting last year ketamine use was also high (24%). For most drugs, the proportions of male and female respondents reporting use were similar; however, males were more likely than females to report last year and last month use of magic mushrooms and LSD. It should be noted that the data presented here do not provide population prevalence estimates, and given the recruitment strategy employed, we cannot assume they are representative of the drug using population in Ireland.

Table 3 Last year and last month drug use among respondents, by sex (%)

	Last year			Last month		
	All	Males	Females	All	Males	Females
	n=5796	n=3815	n=1895	n=5796	n=3815	n=1895
Cannabis	91.2	92.0	89.8	69.5	73.0	62.4
Cocaine	48.5	48.3	49.4	22.9	23.0	23.0
Ecstasy	30.8	30.7	31.4	6.2	6.3	6.0
Ketamine	23.8	24.9	22.0	7.1	7.4	6.4
Magic mushrooms	22.1	24.5	17.2	4.9	5.5	3.8
LSD	18.8	21.5	13.3	4.4	5.1	2.9
NPS*	14.3	14.4	14.2	5.8	5.4	6.6
Amphetamines	10.8	11.3	10.0	3.0	3.3	2.4
Methamphetamine	3.9	4.3	3.3	1.1	1.3	0.7
GHB*	2.1	2.6	1.0	0.7	0.8	0.3
Heroin	1.1	1.2	0.8	0.6	0.7	0.3

* NPS=New psychoactive substances; GHB= Gamma-hydroxybutyrate

For most drugs, last year and last month use varied by age group. While there was little difference in cannabis use between age groups, younger respondents were more likely than older respondents to report use of stimulants such as cocaine and ecstasy (Table 4). One-third (34%) of 18–24-year-olds reported last year ketamine use, compared to 20% of 25–34-year-olds, 9% of 35–44-year-olds, and 5% of those aged 45 years and over. Last year NPS use was twice as high (20%) among 18–24-year-olds as it was among older age groups. Conversely, use of methamphetamine, gamma-hydroxybutyrate (GHB), and heroin, while low, was more common among older respondents than among younger respondents.

Table 4 Last year and last month drug use among respondents, by age group (%)

	Last year				Last month			
	18–24 years	25–34 years	35–44 years	≥45 years	18–24 years	25–34 years	35–44 years	≥45 years
	n=2569	n=2166	n=726	n=329	n=2569	n=2166	n=726	n=329
Cannabis	94.7	89.0	87.1	88.2	72.1	67.4	68.0	67.5
Cocaine	51.3	50.6	42.2	27.7	24.4	23.7	20.1	12.2
Ecstasy	35.0	29.6	25.3	18.8	7.5	4.8	6.3	5.5
Ketamine	33.8	19.9	9.1	4.6	10.9	4.6	3.0	2.1
Magic mushrooms	22.2	24.0	19.4	15.2	4.1	5.5	5.7	5.8
LSD	24.9	16.1	10.7	7.3	6.0	2.9	3.9	2.4
NPS	20.4	10.1	8.7	7.6	8.4	3.6	4.3	3.7
Amphetamines	10.2	11.5	11.6	8.5	2.7	3.0	3.6	3.3
Methamphetamine	3.0	3.9	5.8	5.8	1.0	0.9	2.2	1.5
GHB	1.4	1.8	3.3	5.8	0.3	0.6	1.7	2.1
Heroin	0.6	1.0	2.6	2.1	0.2	0.5	1.7	2.1

The top three most commonly used drugs in the last year were the same for each age group; cannabis was the most commonly used drug followed by cocaine and ecstasy (Figure 1).

18–24 years	25–34 years	35–44 years	≥45 years
· Cannabis (95%)	· Cannabis (89%)	· Cannabis (87%)	· Cannabis (88%)
· Cocaine (51%)	· Cocaine (51%)	· Cocaine (42%)	· Cocaine (28%)
· Ecstasy (35%)	· Ecstasy (30%)	· Ecstasy (25%)	· Ecstasy (19%)
· Ketamine (34%)	· Magic mushrooms (24%)	· Magic mushrooms (19%)	· Magic mushrooms (15%)
· LSD (25%)	· Ketamine (20%)	· Amphetamines (12%)	· Amphetamines (9%)

Figure 1 Drugs most commonly used in the last year, by age group

There was little difference in last year drug use between males and females across age groups (Table 5). Among 18–24-year-olds, females were more likely than males to use cocaine (54% versus 50%); however, males were more likely than females to use magic mushrooms (26% versus 16%) and LSD (29% versus 17%).

Table 5 Last year drug use among respondents, sex by age group (%)

	Males				Females			
	18–24 years	25–34 years	35–44 years	≥45 years	18–24 years	25–34 years	35–44 years	≥45 years
	n=1621	n=1435	n=515	n=239	n=910	n=698	n=202	n=84
Cannabis	95.5	90.1	88.7	86.2	93.2	86.8	83.2	92.9
Cocaine	50.2	51.6	41.6	30.1	54.2	48.7	42.6	20.2
Ecstasy	35.3	29.5	24.5	20.9	35.2	29.9	28.2	10.7
Magic mushrooms	25.7	26.6	18.8	15.9	16.2	18.3	20.3	10.7
Ketamine	36.2	21.1	9.1	4.6	30.3	17.3	8.4	2.4
LSD	29.4	18.4	11.3	8.8	17.0	11.2	8.9	1.2
NPS	20.3	10.8	8.5	9.2	20.8	8.7	7.9	3.6
Amphetamines	10.3	12.3	12.4	9.6	10.6	10.0	9.4	4.8
Methamphetamine	2.7	4.4	7.0	7.5	3.9	3.0	2.5	1.2
GHB	1.7	2.2	3.9	7.5	1.0	1.0	1.5	0.0
Heroin	0.8	1.0	2.3	2.9	0.2	1.0	3.0	0.0

3.1.1 Number of drugs used

More than one-third (36%) of respondents reported use of one drug in the last year, while 44% reported using at least three different drugs in the last year. Males were more likely than females to have used three or more drugs in the last year (46% versus 41%), while those aged 18–24 years were most likely to have used three or more drugs in the last year (53%) (Table 6).

Table 6 Number of drugs used in the last year, by sex and age group (%)

	All	Males	Females	18–24 years	25–34 years	35–44 years	≥45 years
	n=5796	n=3815	n=1895	n=2569	n=2166	n=726	n=329
1 drug	35.8	34.1	39.1	28.4	37.7	45.7	59.3
2 drugs	19.8	19.7	19.5	19.0	20.6	20.9	17.6
≥3 drugs	44.4	46.2	41.4	52.6	41.7	33.3	23.1

Among males, those aged 18–24 years were most likely to have used at least three different drugs in the last year (55%), followed by those aged 25–34 years (44%) (Table 7). One-half (50%) of females aged 18–24 years used at least three drugs in the last year, but this decreased to 14% among females aged 45 years and over.

Table 7 Number of drugs used in the last year, sex by age group (%)

	Males				Females			
	18–24 years	25–34 years	35–44 years	≥45 years	18–24 years	25–34 years	35–44 years	≥45 years
	n=1621	n=1435	n=515	n=239	n=910	n=698	n=202	n=84
1 drug	26.5	35.3	44.7	55.7	31.2	42.6	48.5	71.4
2 drugs	18.8	20.4	21.6	18.8	19.1	20.8	19.3	14.3
≥3 drugs	54.7	44.4	33.8	25.5	49.7	36.7	32.2	14.3

3.2 Cannabis use

The cannabis module was completed by 4,067 respondents, corresponding to 96% of those who had used cannabis in the last year. This module contained questions on the types of cannabis used, use of CBD or low THC[1] cannabis products, and attitudes towards cannabis legalisation. It also contained a set of questions on cannabis herb and cannabis resin, which were answered by 3,864 and 759 respondents, respectively. Of those who completed the cannabis module, 64% were male and 36% were female; the mean age was 28 years and the median age was 26 years. One-half (50%) had completed third-level education; 66% were employed, 24% were students, and 7% were unemployed; and 25% had a monthly take-home income of less than €1,000, while 14% had a monthly income of at least €3,000. Fifty-two per cent lived in a city, 30% lived in a town, and 18% lived in the countryside or a village. Just 5% had received treatment in the last year for drug use.

3.2.1 Types of cannabis used

Of those who had used cannabis in the last year, 94% stated that they used illicit products, 23% had used licit products (CBD or low-THC products), and 0.5% had used cannabis that had been medically prescribed for them. Cannabis herb was the most commonly used cannabis type (96%), followed by cannabis edibles (47%), cannabis oil or extract (23%), and cannabis resin (20%). Use of cannabis herb did not vary by sex or age group. Males were more likely than females to use cannabis resin (23% versus 13%). Respondents aged 45 years and over (32%) were more likely than younger age groups to use cannabis resin. Younger respondents were more likely to report using cannabis edibles: 55% of 18–24-year-olds reported using them, compared with 28% of those aged 45 years and over (Table 8).

1 CBD = cannabidiol; THC = tetrahydrocannabinol

Table 8 Types of cannabis used, by sex and age group (%)

	All	Males	Females	18–24 years	25–34 years	35–44 years	≥45 years
	n=4066	n=2713	n=1299	n=1742	n=1535	n=535	n=250
Cannabis herb	95.6	96.3	94.2	95.9	95.8	94.4	94.8
Cannabis resin	19.5	22.7	12.8	15.5	20.0	25.1	32.0
Cannabis edibles	47.2	48.8	43.8	55.0	44.4	38.7	28.0
Cannabis oil/extract	23.0	24.0	20.9	20.7	24.4	27.3	21.2

Note: Respondents could select more than one option.

Across age groups, males were more likely to report cannabis resin use than females, and males aged 45 years and over were most likely to use cannabis resin (34%). Males aged 18–24 years were most likely to report use of cannabis edibles (58%) (Table 9).

Table 9 Types of cannabis used, sex by age group (%)

	Males				Females			
	18–24 years	25–34 years	35–44 years	≥45 years	18–24 years	25–34 years	35–44 years	≥45 years
	n=1113	n=1028	n=386	n=183	n=606	n=484	n=145	n=63
Cannabis herb	96.8	96.5	95.3	94.5	94.4	94.4	91.7	95.2
Cannabis resin	18.3	23.6	27.2	34.4	10.4	12.2	20.0	23.8
Cannabis edibles	57.7	45.9	41.2	27.3	50.3	41.1	31.7	30.2
Cannabis oil/extract	21.0	26.5	28.2	20.2	20.3	20.7	24.1	22.2

Note: Respondents could select more than one option.

3.2.2 Cannabis herb

Of those who reported use of cannabis herb, 14% stated that it was domestically produced, 13% stated that it was imported, 31% stated that it was both, and 41% did not know. Respondents were asked how they normally used cannabis herb; the majority used joints (78%), with females and younger respondents more likely to use cannabis in this manner (Table 10). Vaporisers were used by 9% of respondents; however, this increased to 19% among those aged 45 years and older over.

Table 10 How cannabis herb is normally used (%)

	All	Males	Females	18–24 years	25–34 years	35–44 years	≥45 years
	n=3865	n=2598	n=1216	n=1657	n=1463	n=505	n=237
Joint	77.8	75.6	83.0	82.9	76.9	70.3	63.3
Vaporiser	8.9	10.1	6.1	4.5	10.5	14.1	18.6
Water pipe/bong	5.3	6.0	3.5	5.8	5.0	4.2	5.5
Dry pipe/chillum	4.2	4.8	2.8	2.5	4.4	7.5	6.8
Food item	2.6	2.2	3.4	3.1	1.9	3.0	3.4
Beverage	0.2	0.1	0.3	0.2	0.1	0.0	0.8
Other	1.1	1.2	1.0	1.0	1.3	1.0	1.7

3.2.2.1 Patterns of cannabis herb use

Table 11 presents the frequency of last year cannabis herb use by sex and age group; 23% of all respondents reported infrequent use, 19% reported occasional use, 35% reported frequent use, and 24% reported intensive use. Females used cannabis herb less frequently than males, with 31% of females reporting infrequent use compared with 19% of males. The likelihood of being an intensive user increased with increasing age, from 17% among 18–24-year-olds to 36% among those aged 45 years and over.

Table 11 Last year frequency of cannabis herb use, by sex and age group (%)

	All	Males	Females	18–24 years	25–34 years	35–44 years	≥45 years
	n=3849	n=2588	n=1211	n=1651	n=1458	n=505	n=232
Infrequent use (<11 days)	22.6	19.1	30.7	25.4	21.1	20.2	16.8
Occasional use (12-50 days)	18.5	18.2	18.8	21.1	17.3	14.1	16.8
Frequent use (51–250 days)	35.3	38.6	28.1	36.9	35.2	32.9	30.6
Intensive use (≥251 days)	23.6	24.0	22.4	16.6	26.5	32.9	35.8

Females aged 18–24 years were most likely to use cannabis herb infrequently (34%). For each age group, except for those aged 45 years and over, females were more likely than males to report infrequent use. Females were just as likely as males to report intensive use, with females aged 45 years and over being the most likely to do so (46%), however, it should be noted that the number of respondents in this group was low (n=57) (Table 12).

Table 12 Last year frequency of cannabis herb use, sex by age group (%)

	Males				Females			
	18–24 years	25–34 years	35–44 years	≥45 years	18–24 years	25–34 years	35–44 years	≥45 years
	n=1063	n=984	n=368	n=171	n=567	n=453	n=133	n=57
Infrequent use	21.2	17.9	16.6	18.1	34.2	28.7	30.1	14.0
Occasional use	22.1	16.1	13.9	15.8	19.4	19.9	13.5	17.5
Frequent use	40.2	38.7	36.4	33.9	30.0	27.4	24.1	22.8
Intensive use	16.6	27.3	33.2	32.2	16.4	24.1	32.3	45.6

Respondents were asked how much cannabis herb they typically used in a joint, vaporiser, etc. Visual aids were provided to help respondents answer this question. Each of the four quantity options (<0.1 grams (g), 0.1–0.2 g, 0.2–0.3 g, and ≥0.3 g) was reported by approximately one-quarter of respondents (Table 13). Males were more than twice as likely as females to typically use at least 0.3 g (30% versus 14%). The proportion of respondents who typically used at least 0.3 g decreased with increasing age, from 32% among 18–24-year-olds to 10% among those aged 45 years and over. The mean number of joints used on a typical day when cannabis herb was used was 2.3. There was little difference in this between males and females (2.4 versus 2.2); however, the mean number of joints increased with increasing age, from 2.2 among 18–24-year-olds to 2.8 among those aged 45 years and over.

Table 13 Amount of cannabis herb used on a typical occasion of use, by sex and age group

	All	Males	Females	18–24 years	25–34 years	35–44 years	≥45 years
	n=3320	n=2208	n=1071	n=1486	n=1247	n=407	n=178
<0.1 g	27.1%	23.5%	34.3%	18.5%	29.0%	42.8%	49.4%
0.1–0.2 g	23.8%	22.2%	27.1%	21.3%	27.8%	20.9%	22.5%
0.2–0.3 g	24.5%	24.5%	24.5%	28.5%	22.0%	20.4%	18.0%
≥0.3 g	24.7%	29.9%	14.2%	31.6%	21.3%	16.0%	10.1%
Mean number of joints	2.3	2.4	2.2	2.2	2.3	2.6	2.8

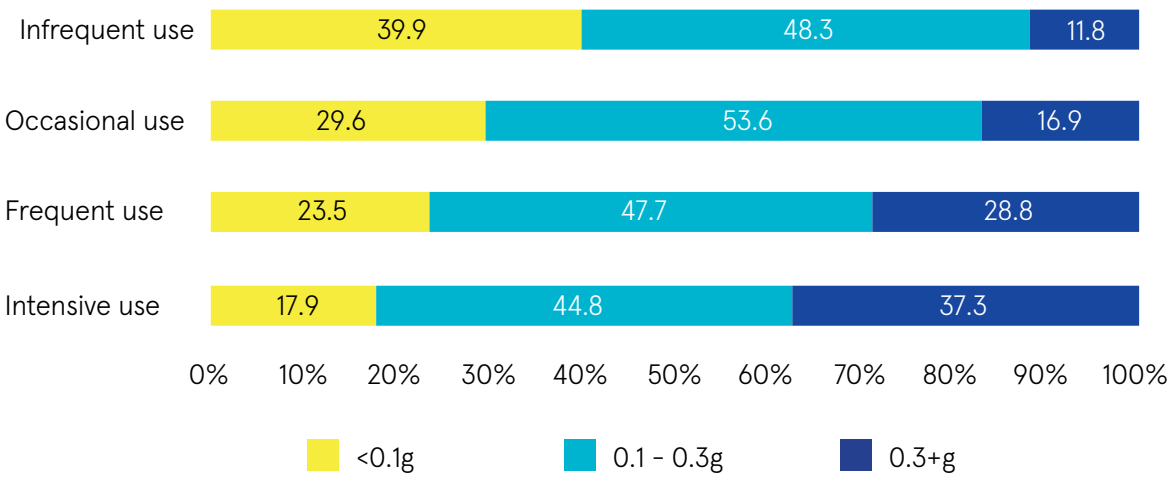
Young males aged 18–24 years were most likely to use 0.3 g or more of cannabis herb (40%). In comparison, just 17% of females aged 18–24 years typically used this amount. For each age group, females were more likely than males to typically use less than 0.1 g of cannabis herb (Table 14).

Table 14 Amount of cannabis herb used on a typical occasion of use, sex by age group

	Males				Females			
	18–24 years	25–34 years	35–44 years	≥45 years	18–24 years	25–34 years	35–44 years	≥45 years
	n=952	n=832	n=289	n=134	n=516	n=396	n=116	n=42
<0.1 g	15.3%	24.3%	37.0%	47.0%	24.2%	37.9%	56.9%	59.5%
0.1–0.2 g	17.8%	26.7%	23.2%	22.4%	27.7%	30.1%	15.5%	23.8%
0.2–0.3 g	27.3%	23.3%	22.2%	17.2%	31.0%	19.2%	16.4%	16.7%
≥0.3 g	39.6%	25.7%	17.7%	13.4%	17.1%	12.9%	11.2%	0.0%
Mean number of joints	2.2	2.4	2.7	2.9	2.1	2.2	2.5	2.7

Increased frequency of cannabis herb use was associated with an increase in the amount of cannabis herb typically used. Among intensive users of cannabis herb, 37% typically used at least 0.3 g, compared with 12% of infrequent users (Figure 2). Increased frequency of cannabis herb use was also associated with an increase in the number of joints typically used; the mean number of joints typically used was 1.3 for infrequent users, 1.7 for occasional users, 2.5 for frequent users, and 3.6 for intensive users.

Figure 2 Amount of cannabis herb used on a typical occasion of use, by frequency of use



3.2.2.2 Context of cannabis herb use

On the last occasion that respondents used cannabis herb, 32% did not share it with anyone, 42% shared it with one or two people, and 19% shared it with at least three people (Table 15). Males were more likely than females to have not shared cannabis herb (35% versus 26%) on the last occasion of use.

Table 15 Number of people cannabis herb was shared with on last occasion of use, by sex and age group (%)

	All	Males	Females	18–24 years	25–34 years	35–44 years	≥45 years
	n=3323	n=2208	n=1075	n=1485	n=1250	n=408	n=177
0	32.4	35.1	26.1	20.5	36.9	51.2	55.9
1–2	41.7	37.4	51.0	43.4	42.8	34.8	35.0
≥3	19.4	19.8	18.8	28.0	14.0	9.6	6.8
Don't know	6.7	7.7	4.2	8.0	6.3	4.4	2.3

Just 14% of infrequent users did not share cannabis herb on their last occasion of use; in comparison, 40% of frequent and 46% of intensive users did not share cannabis herb on their last occasion of use (Table 16).

Table 16 Number of people cannabis herb was shared with on last occasion of use, by frequency of use (%)

	Infrequent use	Occasional use	Frequent use	Intensive use
	n=773	n=594	n=1142	n=799
0	13.6	24.8	39.9	45.7
1–2	45.3	44.6	41.0	36.9
≥3	33.8	24.9	13.6	9.4
Don't know	7.4	5.7	5.5	8.0

3.2.2.3 Sourcing cannabis herb

More than three-quarters (77%) of respondents mostly bought cannabis herb, 17% got it for free, and 3% produced it themselves (Table 17). Females were twice as likely as males to mostly get cannabis herb for free (26% versus 13%). The likelihood of producing cannabis herb increased with increasing age, ranging from 0.7% of 18–24-year-olds to 14% of those aged 45 years and over.

Table 17 How cannabis herb is usually obtained, by sex and age group (%)

	All	Males	Females	18–24 years	25–34 years	35–44 years	≥45 years
	n=3843	n=2584	n=1208	n=1651	n=1454	n=501	n=234
Mostly I buy it	77.4	82.0	67.2	76.1	79.6	78.0	71.4
Mostly I get it for free	16.9	12.6	26.4	20.7	14.9	12.6	12.0
Mostly I produce it myself	3.2	3.6	2.4	0.7	3.0	7.0	13.7
Other	2.6	1.9	4.0	2.5	2.6	2.4	3.0

Infrequent users were most likely to usually get cannabis herb for free (46%); this compares with 2% for intensive users (Table 18). The likelihood of typically buying cannabis herb increased with increased frequency of use – just 46% of infrequent users mostly bought cannabis herb, compared with 90% of frequent users and 92% of intensive users. Intensive users were most likely to produce cannabis herb themselves (6%).

Table 18 How cannabis herb is usually obtained, by frequency of use (%)

	Infrequent use	Occasional use	Frequent use	Intensive use
	n=862	n=702	n=1351	n=906
Mostly I buy it	45.9	74.2	89.6	91.5
Mostly I get it for free	46.3	21.4	5.6	2.3
Mostly I produce it myself	0.9	2.6	3.4	5.5
Other	6.8	1.9	1.4	0.7

3.2.3 Cannabis resin

Respondents were asked how they normally used cannabis resin; the majority used joints (71%), with females being more likely than males to use cannabis resin in this manner (79% versus 69%) (Table 19). Vaporisers were used by 10% of respondents; this varied from 12% among males to 4% among females. Dry pipes or chillums were used by 5% of respondents, with those aged 35 years and over being most likely to use cannabis resin in this manner, at 10%.

Table 19 How cannabis resin is normally used, by sex and age group (%)

	All	Males	Females	18–24 years	25–34 years	≥35 years
	n=763	n=592	n=161	n=252	n=299	n=212
Joints	70.9	68.6	78.9	71.0	74.3	66.0
Vaporisers	9.8	11.5	3.7	9.1	10.4	10.4
Water pipes/bongs	6.8	7.4	5.0	7.1	6.4	7.1
Dry pipes/chillums	5.4	6.1	2.5	4.0	3.0	9.9
Food items	4.9	4.4	6.8	5.2	4.7	4.7
Beverages	0.5	0.3	1.2	0.8	0.3	0.5
Other	1.7	1.7	1.9	2.8	1.0	1.4

3.2.3.1 Patterns of cannabis resin use

Table 20 presents the frequency of use of cannabis resin by sex and age group. More than one-half of respondents (54%) used cannabis resin infrequently. Females used cannabis resin less frequently than males, with 63% reporting infrequent use compared with 51% of males. Those aged 18–24 years were least likely to report intensive use (3%).

Table 20 Last year frequency of cannabis resin use, by sex and age group (%)

	All	Males	Females	18–24 years	25–34 years	≥35 years
	n=759	n=591	n=158	n=248	n=298	n=213
Infrequent use	53.6	51.1	63.3	55.7	57.1	46.5
Occasional use	26.2	28.3	19.0	27.8	23.2	28.6
Frequent use	15.2	15.9	12.0	13.7	13.8	18.8
Intensive use	5.0	4.7	5.7	2.8	6.0	6.1

Across all age groups, females were more likely than males to use cannabis resin infrequently (Table 21). Males were more likely than females to report intensive use, except among those aged 35 years and over (4% among males compared with 12% among females).

Table 21 Last year frequency of cannabis resin use, sex by age group (%)

	Males			Females		
	18–24 years	25–34 years	≥35 years	18–24 years	25–34 years	≥35 years
	n=188	n=235	n=168	n=57	n=58	n=43
Infrequent use	54.8	54.5	42.3	59.7	67.2	62.8
Occasional use	29.3	25.1	31.6	22.8	15.5	18.6
Frequent use	12.8	14.0	22.0	15.8	12.1	7.0
Intensive use	3.2	6.4	4.2	1.8	5.2	11.6

Respondents were asked how much cannabis resin they typically used in a joint, vaporiser, etc.; 29% typically used less than 0.1 g and 29% used at least 0.3 g (Table 22). Females were more likely than males to typically use less than 0.1 g (34% versus 27%). The proportion of respondents who typically used at least 0.3 g decreased with increasing age, from 34% among 18–24-year-olds to 19% among those aged 35 years and over. The mean number of cannabis resin joints used on a typical day when cannabis resin was used was 2.8.

Table 22 Amount of cannabis resin used on a typical occasion of use, by sex and age group

	All	Males	Females	18–24 years	25–34 years	≥35 years
	n=621	n=475	n=137	n=202	n=245	n=174
<0.1 g	28.7%	26.7%	33.6%	24.8%	24.9%	38.5%
0.1–0.2 g	18.4%	18.3%	19.0%	16.8%	19.6%	18.4%
0.2–0.3 g	23.7%	24.4%	21.9%	24.3%	22.9%	24.1%
≥0.3 g	29.3%	30.5%	25.6%	34.2%	32.7%	19.0%
Mean number of joints	2.8	2.8	2.7	2.5	3.0	2.8

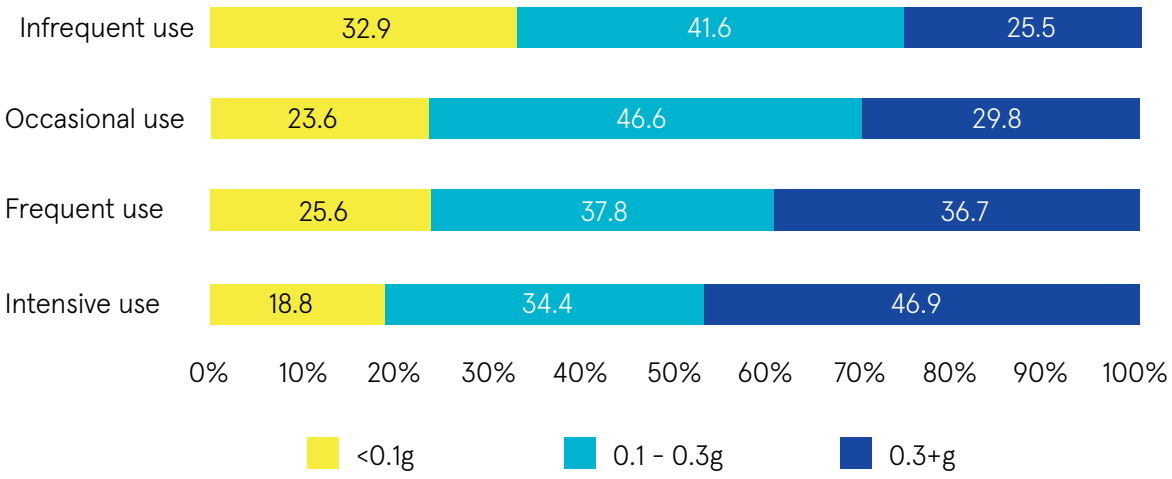
Young males aged 18–24 years and males aged 25–24 years were most likely to use 0.3 g or more of cannabis resin (35%). Across all age groups, females were more likely than males to typically use less than 0.1 g (Table 23).

Table 23 Amount of cannabis resin used on a typical occasion of use, sex by age group

	Males			Females		
	18–24 years	25–34 years	≥35 years	18–24 years	25–34 years	≥35 years
	n=150	n=188	n=137	n=49	n=52	n=36
<0.1 g	23.3%	21.3%	38.0%	28.6%	32.7%	41.7%
0.1–0.2 g	18.0%	18.1%	19.0%	14.3%	25.0%	16.7%
0.2–0.3 g	23.3%	26.1%	23.4%	26.5%	13.5%	27.8%
≥0.3 g	35.3%	34.6%	19.7%	30.6%	28.9%	13.9%
Mean number of joints	2.6	3.0	2.8	2.3	2.9	3.1

More frequent use of cannabis resin was associated with an increase in the amount of cannabis resin typically used. Among intensive users of cannabis resin, 47% typically used at least 0.3 g, compared with 26% of infrequent users (Figure 3). Increased frequency of cannabis resin use was also associated with an increase in the number of joints typically used; the mean number of joints typically used was 2.3 for infrequent users, 3.1 for occasional users, 3.3 for frequent users, and 4.6 for intensive users.

Figure 3 Amount of cannabis resin used on a typical occasion of use, by frequency of use



3.2.3.2 Context of cannabis resin use

On the last occasion that cannabis resin was used, almost one-third (32%) of respondents did not share it with anyone, 35% shared it with one or two people, and 15% shared it with at least three people (Table 24). Males were more likely than females not to have shared cannabis resin on their last occasion of use (34% versus 27%), and respondents aged 35 years and over were the age group most likely not to have shared cannabis resin on the last occasion of use (50%).

Table 24 Number of people cannabis resin was shared with on last occasion of use, by sex and age group (%)

	All	Males	Females	18–24 years	25–34 years	≥35 years
	n=621	n=476	n=136	n=199	n=247	n=175
0	32.2	33.6	26.5	17.1	31.6	50.3
1–2	35.4	31.7	48.5	31.2	39.3	34.9
≥3	15.1	16.8	9.6	26.1	11.7	7.4
Don't know	17.2	17.9	15.4	25.6	17.4	7.4

Infrequent users were more likely to share cannabis resin with one or more people (Table 25); only 28% of infrequent users did not share cannabis resin with anyone on the last occasion of use, compared with 34% of occasional users and 42% of frequent and intensive users.

Table 25 Number of people cannabis resin was shared with on last occasion of use, by frequency of use (%)

	Infrequent use	Occasional use	Frequent/intensive use
	n=332	n=163	n=112
0	28.0	34.4	41.8
1–2	38.0	36.2	27.1
≥3	16.6	12.9	14.8
Don't know	17.5	16.6	16.4

3.2.3.3 Sourcing cannabis resin

Almost three-quarters (73%) of respondents normally bought cannabis resin, 18% usually got it for free, and 6% usually produced it themselves (Table 26). Females were more likely than males to mostly get cannabis resin for free (27% versus 15%).

Table 26 How cannabis resin is usually obtained, by sex and age group (%)

	All	Males	Females	18–24 years	25–34 years	≥35 years
	n=760	n=590	n=160	n=250	n=299	n=211
Mostly I buy it	73.0	77.0	61.9	72.0	74.3	73.3
Mostly I get it for free	17.8	14.9	26.9	18.8	16.4	18.5
Mostly I produce it myself	5.9	5.3	7.5	4.0	6.7	7.1
Other	3.3	2.9	3.8	4.8	2.3	1.9

Infrequent users were most likely to state that they mostly got cannabis resin for free (25%). Frequent or intensive users were most likely to produce cannabis resin themselves (7%) (Table 27).

Table 27 How cannabis resin is usually obtained, by frequency of use (%)

	Infrequent use	Occasional use	Frequent/intensive use
	n=404	n=198	n=153
Mostly I buy it	65.4	84.3	79.7
Mostly I get it for free	25.0	8.6	10.5
Mostly I produce it myself	5.9	5.1	7.2
Other	3.7	2.0	2.6

3.2.4 Attitudes towards cannabis legalisation

All EWSD respondents were asked if they agreed or disagreed with the following statement: "Taking cannabis should be legal". The majority (93%) of respondents agreed with this statement, with just 5% disagreeing (Table 28). In comparison, according to the 2019–20 NDAS, just 26% of the general population in Ireland supported permitting recreational cannabis use [1].

Table 28 Attitudes towards legalising cannabis, by sex and age group (%)

	All	Males	Females	18–24 years	25–34 years	35–44 years	≥45 years
	n=5791	n=3811	n=1894	n=2566	n=2164	n=726	n=329
Strongly agree	80.3	83.7	73.2	78.3	81.1	84.6	81.5
Somewhat agree	13.0	10.7	17.9	13.9	12.9	10.6	13.1
Neither agree nor disagree	1.9	1.4	3.0	1.8	2.1	1.5	2.4
Somewhat disagree	1.6	1.1	2.6	2.0	1.3	1.5	1.2
Strongly disagree	3.1	3.0	3.3	4.0	2.6	1.8	1.8

3.3 Cocaine use

The cocaine module was completed by 1,889 respondents, corresponding to 90% of those who had used cocaine in the last year; 98% (n=1860) had used cocaine powder, 0.4% (n=8) had used crack cocaine, and 1% (n=21) had used both. Due to the low number of respondents reporting crack cocaine use, results presented here relate to cocaine powder only. Of those respondents who completed the cocaine module, 64% were male and 36% were female; the mean age was 27.8 years, and the median age was 26 years. One-half (50%) had completed third-level education; 66% were employed, 24% were students, and 7% were unemployed; and 25% had a monthly take-home income of less than €1,000, while 14% had a monthly take-home income of at least €3,000. Fifty-two per cent lived in a city, 30% lived in a town, and 18% lived in the countryside or a village. Just 5% had received treatment for drug use in the last year.

Almost all respondents (99%) used cocaine by nasal snorting, 13% used it by dissolving it into the mouth, 2% swallowed it, and 0.2% or less either injected it, smoked it in pipes, or used foil ('chasing the dragon').

3.3.1 Patterns of cocaine use

Two-thirds (67%) of those who reported last year cocaine use were infrequent users, while 25% were occasional users and 8% were frequent users (Table 29). Frequency of cocaine use was almost identical for males and females; however, those aged 35 years and over were almost twice as likely to report frequent use compared with those aged 18–24 years (12% versus 6%). The mean number of grams used on a typical day when cocaine was used was 0.8, and this was similar across sex and age groups.

Table 29 Last year frequency of cocaine use and amount typically used, by sex and age group

	All	Males	Females	18–24 years	25–34 years	≥35 years
	n=1870	n=1189	n=662	n=798	n=769	n=303
Infrequent use	66.8%	66.8%	66.6%	67.9%	65.5%	67.0%
Occasional use	24.9%	25.0%	24.9%	25.7%	25.4%	21.5%
Frequent use	8.3%	8.2%	8.5%	6.4%	9.1%	11.6%
Mean grams/day	0.8	0.8	0.8	0.8	0.8	0.9

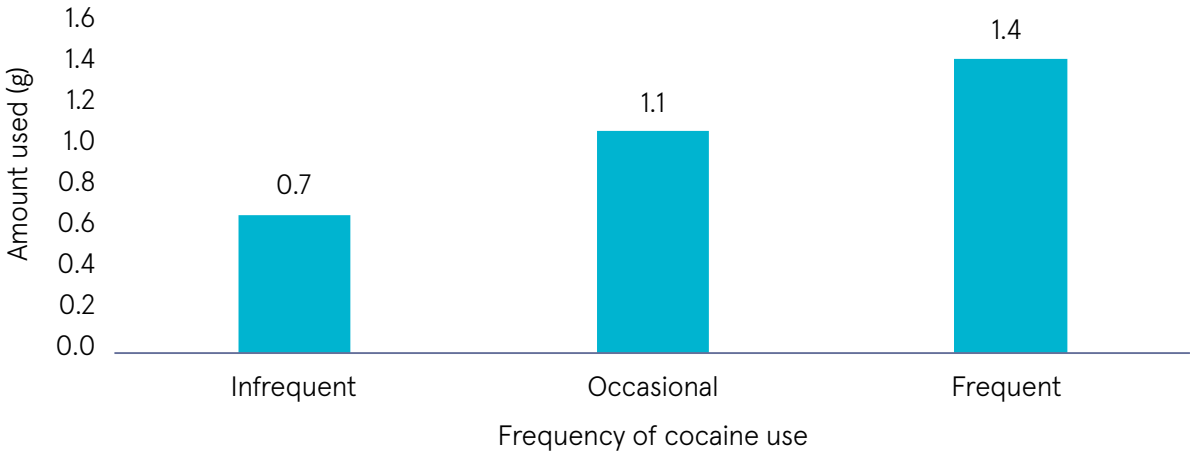
Among males, those aged 35 years and over were most likely to report frequent cocaine use (12%), while those aged 18–24 years were least likely (6%). Among females, those aged 25–34 years were most likely to be frequent users (11%) (Table 30).

Table 30 Last year frequency of cocaine use and amount typically used, sex by age group

	Males			Females		
	18–24 years	25–34 years	≥35 years	18–24 years	25–34 years	≥35 years
	n=473	n=501	n=215	n=321	n=256	n=85
Infrequent use	69.1%	64.7%	66.5%	66.0%	66.8%	68.2%
Occasional use	24.5%	27.0%	21.4%	27.4%	22.7%	22.4%
Frequent use	6.3%	8.4%	12.1%	6.5%	10.6%	9.4%
Mean grams/day	0.8	0.8	0.9	0.8	0.7	0.8

There were no sex or age group differences in the mean amount of cocaine used. However, frequent users reported using double the amount (1.4 g) of cocaine that infrequent users reported 0.7 g (Figure 4).

Figure 4 Mean amount of cocaine used on a typical day when cocaine was used, by frequency of use.



3.3.2 Context of cocaine use

On the last occasion that respondents used cocaine, 6% did not share it with anyone, 35% shared it with one or two people, and 48% shared it with at least three people. Males were more likely than females not to have shared cocaine on the last occasion of use (8% versus 3%). Older respondents were least likely to share cocaine with three or more people (37%) (Table 31).

Table 31 Number of people cocaine was shared with on last occasion of use, by sex and age group (%)

	All	Males	Females	18–24 years	25–34 years	≥35 years
	n=1857	n=1180	n=658	n=788	n=765	n=304
0	5.9	7.6	2.9	5.5	5.1	9.2
1–2	34.6	32.4	38.5	29.3	34.9	47.7
≥3	48.1	47.5	49.4	50.0	50.6	37.2
Don't know	11.3	12.5	9.3	15.2	9.4	5.9

Infrequent users were most likely to share cocaine with three or more people (52%), while frequent users were least likely (29%) (Table 32).

Table 32 Number of people cocaine was shared with on last occasion of use, by frequency of use (%)

	Infrequent use	Occasional use	Frequent use
	n=1237	n=459	n=153
0	3.8	8.1	17.0
1–2	34.0	36.8	33.3
≥3	52.4	42.9	28.8
Don't know	9.8	12.2	20.9

3.3.3 Sourcing cocaine

Sixty-three per cent of respondents stated that they mostly bought the cocaine they used, while 32% mostly got it for free. Females were more likely than males to mostly get cocaine for free (41% versus 27%), while the likelihood of mostly buying it increased with increasing age (Table 33).

Table 33 How cocaine is usually obtained, by sex and age group (%)

	All	Males	Females	18–24 years	25–34 years	≥35 years
	n=1866	n=1185	n=662	n=796	n=767	n=303
Mostly I buy it	63.2	68.6	53.8	57.9	66.0	70.3
Mostly I get it for free	32.3	27.3	40.9	37.6	28.6	27.7
Other	4.5	4.1	5.3	4.5	5.5	2.0

More than one-half (53%) of infrequent users mostly bought cocaine, compared with 86% of frequent users (Table 34). Infrequent users were also much more likely to get cocaine for free when compared with frequent users (41% versus 11%).

Table 34 How cocaine is usually obtained, by frequency of use (%)

	Infrequent use	Occasional use	Frequent use
	n=1240	n=464	n=154
Mostly I buy it	52.9	83.6	86.4
Mostly I get it for free	41.3	14.9	11.0
Other	5.8	1.5	2.6

3.4 Ecstasy use

The ecstasy module was completed by 1,148 respondents, corresponding to 86% of those who had used ecstasy in the last year, of whom 64% were male and 36% were female. The mean age was 27.6 years, and the median age was 25 years. One-half (53%) had completed third-level education; 61% were employed, 30% were students, and 7% were unemployed; 30% had a monthly take-home income of less than €1,000, while 15% had a monthly take-home income of at least €3,000. Fifty-nine per cent lived in a city, 26% lived in a town, and 16% lived in the countryside or a village. Just 4% had received treatment for drug use in the last year.

Twenty per cent of respondents normally used ecstasy in the form of tablets or pills, 39% used it in the form of powder or crystal, and 41% used it in both forms (Table 35). Older respondents were most likely to report that they normally used ecstasy tablets or pills, while 18–24-year-olds were most likely to report using powder or crystal ecstasy. Regarding method of use, 84% stated that they normally swallowed ecstasy, 44% used it by nasal snorting, 20% used it by dissolving it into the mouth, and 0.8% or less reported either smoking it in pipes, chasing the dragon (using foil), or injecting it.

Table 35 Form of ecstasy usually used, by sex and age group (%)

	All	Males	Females	18–24 years	25–34 years	≥35 years
	n=1141	n=718	n=413	n=519	n=434	n=187
Tablets/pills	19.5	20.2	18.2	12.9	18.4	40.6
Powder/crystal	39.3	38.6	40.4	47.0	37.8	20.9
Both	41.2	41.2	41.4	40.1	43.8	38.5

3.4.1 Patterns of ecstasy use

The majority of respondents (90%) used ecstasy infrequently, and there was little variation by sex or age group (Table 36); 1% reported frequent ecstasy use. The mean number of tablets typically used was 1.6, and the mean quantity of powder typically used was 0.6 g. Due to the low number of respondents who reported frequent use of ecstasy, we have not undertaken further analysis on frequency of ecstasy use.

Table 36 Last year frequency of ecstasy use and amount typically used, by sex and age group

	All	Males	Females	18–24 years	25–34 years	≥35 years
	n=1140	n=719	n=411	n=518	n=435	n=186
Infrequent use	90.2%	90.0%	90.8%	88.8%	92.6%	88.2%
Occasional use	8.9%	8.8%	8.8%	10.8%	6.4%	9.1%
Frequent use	1.0%	1.3%	0.5%	0.4%	0.9%	2.7%
Mean number of tablets	1.6	1.7	1.5	1.6	1.7	1.6
Mean grams of powder	0.6	0.6	0.6	0.6	0.6	0.6

There was little difference in the frequency of use or in the amount of ecstasy typically used when analysed by sex and age group (Table 37).

Table 37 Last year frequency of ecstasy use and amount typically used, sex by age group

	Males			Females		
	18–24 years	25–34 years	≥35 years	18–24 years	25–34 years	≥35 years
	n=307	n=276	n=135	n=210	n=151	n=50
Infrequent use	88.6%	93.1%	86.7%	89.1%	92.7%	92.0%
Occasional use	11.1%	5.8%	9.6%	10.5%	6.6%	8.0%
Frequent use	0.3%	1.1%	3.7%	0.5%	0.7%	0.0%
Mean number of tablets	1.6	1.7	1.7	1.5	1.5	1.5
Mean grams of powder	0.6	0.5	0.6	0.7	0.6	0.5

3.4.2 Context of ecstasy use

On the last occasion that respondents used ecstasy, 6% did not share it with anyone, 27% shared it with one or two people, and 52% shared it with at least three people. Males were more likely than females not to have shared ecstasy with other people on the last occasion of use (7% versus 5%) (Table 38).

Table 38 Number of people ecstasy was shared with on last occasion of use, by sex and age group (%)

	All	Males	Females	18–24 years	25–34 years	≥35 years
	n=1135	n=713	n=411	n=513	n=434	n=187
0	6.3	7.2	4.6	5.7	6.2	7.5
1–2	27.2	26.0	29.2	25.9	24.2	38.0
≥3	52.1	51.6	53.0	51.7	55.5	45.5
Don't know	14.5	15.3	13.1	16.8	14.1	9.1

3.4.3 Sourcing ecstasy

Seventy-four per cent of respondents mostly bought the ecstasy they used and 23% mostly got it for free (Table 39). Females were more likely than males to mostly get ecstasy for free (33% versus 18%).

Table 39 How ecstasy is usually obtained, by sex and age group (%)

	All	Males	Females	18–24 years	25–34 years	≥35 years
	n=1139	n=714	n=414	n=518	n=434	n=186
Mostly I buy it	73.8	79.3	63.8	72.8	74.4	74.7
Mostly I get it for free	23.4	17.9	33.1	25.1	22.1	21.5
Other	2.9	2.8	3.1	2.1	3.5	3.8

3.5 Amphetamine use

The amphetamine module was completed by 246 respondents, corresponding to 57% of those who reported amphetamine use in the last year; 70% were male and 29% were female. The mean age was 28.4 years, and the median age was 27 years. Forty per cent of respondents had completed third-level education; 60% were employed, 25% were students, and 11% were unemployed; and 31% had a monthly take-home income of less than €1,000, while 10% had a monthly take-home income of at least €3,000. Fifty-seven per cent lived in a city, 26% lived in a town, and 17% lived in the countryside or a village. Just 7% had received treatment for drug use in the last year.

Powder or crystal was the form of amphetamine most commonly used (80%), while 28% of respondents used amphetamine in the form of tablets or pills. There was little difference in the form of amphetamine used by sex or age group (Table 40).

Table 40 Form of amphetamine usually used, by sex and age group (%)

	All	Males	Females	18–24 years	25–34 years	≥35 years
	n=246	n=171	n=71	n=94	n=104	n=48
Tablets/pills	27.6	28.7	25.4	27.7	28.9	25.0
Powder/crystal	80.1	78.4	83.1	79.8	79.8	81.3

Note: Respondents could select both options.

3.5.1 Patterns of amphetamine use

Almost three-quarters (73%) of respondents used amphetamines infrequently, 18% were occasional users, and 9% were frequent users. Males were almost twice as likely as females to be frequent users (10% versus 6%) (Table 41). The mean number of tablets typically used was 1.5 and the mean quantity of powder used was 0.7 g. Due to the low number of respondents who reported frequent use of amphetamines, we have not undertaken further analysis on frequency of amphetamine use.

Table 41 Last year frequency of amphetamine use and amount typically used, by sex and age group

	All	Males	Females	18–24 years	25–34 years	≥35 years
	n=241	n=167	n=70	n=91	n=102	n=48
Infrequent use	73.4%	71.3%	78.6%	70.3%	73.5%	79.2%
Occasional use	17.8%	18.6%	15.7%	19.8%	19.6%	10.4%
Frequent use	8.7%	10.2%	5.7%	9.9%	6.9%	10.4%
Mean number of tablets	1.5	1.6	1.4	1.5	1.5	1.6
Mean grams of powder	0.7	0.7	0.6	0.6	0.7	0.8

3.5.2 Context of amphetamine use

On the last occasion that respondents used amphetamine, 22% did not share it with anyone, 30% shared it with one or two people, and 33% shared it with at least three people. Males were more likely than females not to have shared amphetamines on the last occasion of use (24% versus 19%) (Table 42).

Table 42 Number of people amphetamines were shared with on last occasion of use, by sex and age group (%)

	All	Males	Females	18–24 years	25–34 years	≥35 years
	n=239	n=166	n=70	n=92	n=99	n=48
0	22.2	23.5	18.6	21.7	24.2	18.8
1–2	29.7	31.3	27.1	29.4	26.3	37.5
≥3	33.1	28.3	42.9	30.4	32.3	39.6
Don't know	15.1	16.9	11.4	18.5	17.2	4.2

3.5.3 Sourcing amphetamines

Almost one-half (49%) of respondents mostly bought amphetamines, while 44% mostly got them for free (Table 43). Females were more likely than males to get amphetamines for free (54% versus 40%), as were younger respondents.

Table 43 How amphetamines are usually obtained, by sex and age group (%)

	All	Males	Females	18–24 years	25–34 years	≥35 years
	n=241	n=168	n=70	n=93	n=100	n=48
Mostly I buy them	49.4	51.8	42.9	41.9	53.0	56.3
Mostly I get them for free	44.0	39.9	54.3	52.7	41.0	33.3
Other	6.6	8.3	2.9	5.4	6.0	10.4

3.6 New psychoactive substance use

The new psychoactive substances (NPS) module was completed by 214 respondents, corresponding to 36% of those who had used NPS in the last year. The question on NPS use described them as *'new substances, that have sometimes similar effect as known illicit drugs... they are sometimes called new psychoactive substances, legal highs, or research chemicals and can come in different forms, for example, herbal mixtures, powders, crystals, or tablets'*. Seventy-eight per cent of NPS respondents were male and 22% were female. The mean age was 26.6 years and the median age was 24 years. Forty-two per cent of respondents had completed third-level education; 50% were employed, 39% were students, and 6% were unemployed; and 41% had a monthly take-home income of less than €1,000, while 13% had a monthly take-home income of at least €3,000. Fifty-five per cent lived in a city, 25% lived in a town, and 20% lived in the countryside or a village. Just 4% had received treatment for drug use in the last year.

The form of NPS most commonly used was powders, crystals, or tablets (62%), with approximately 15% of respondents reporting use of either herbal smoking mixtures, liquids, or blotters (Table 44).

Table 44 Form of NPS usually used, by sex and age group (%)

	All	Males	Females	18–24 years	25–34 years	≥35 years
	n=214	n=166	n=46	n=118	n=65	n=30
Powders, crystals, or tablets	61.7	63.9	52.2	55.9	73.9	56.7
Herbal smoking mixtures	15.9	13.3	23.9	16.1	12.3	23.3
Liquids with drug-like effects	15.4	14.5	19.6	17.0	13.9	13.3
Blotters with drug-like effects	15.0	17.5	6.5	13.6	18.5	13.3

Note: Respondents could select more than one option.

3.6.1 Patterns of NPS use

Seventy-five per cent of respondents used NPS infrequently, 17% reported occasional use, and 8% reported frequent use. Males were more likely than females to report frequent use (9% versus 4%). Older respondents were most likely to report frequent use (17%); however, it should be noted that this is based on a low number of respondents (Table 45). Due to the low number of respondents who reported frequent use of NPS, we have not undertaken further analysis on frequency of NPS use.

Table 45 Last year frequency of NPS use, by sex and age group (%)

	All	Males	Females	18–24 years	25–34 years	≥35 years
	n=212	n=165	n=45	n=116	n=65	n=30
Infrequent use	75.0	73.9	82.2	81.0	72.3	56.7
Occasional use	17.0	17.6	13.3	13.8	18.5	26.7
Frequent use	8.0	8.5	4.4	5.2	9.2	16.7

3.6.2 Context of NPS use

Twenty-two per cent of respondents did not share NPS on the last occasion of use, 33% shared with one or two people, and 29% shared with three or more people (Table 46). Those aged 18–24 years were most likely to share NPS with three or more people (34%).

Table 46 Number of people NPS were shared with on last occasion of use, by sex and age group (%)

Number of people	All	Males	Females	18–24 years	25–34 years	≥35 years
	n=206	n=158	n=46	n=113	n=62	n=30
0	21.8	22.8	19.6	11.5	30.7	40.0
1–2	33.0	33.5	30.4	33.6	35.5	26.7
≥3	29.1	30.4	23.9	33.6	25.8	20.0
Don't know	16.0	13.3	26.1	21.2	8.1	13.3

3.6.3 Sourcing NPS

Twenty-four per cent of respondents usually got NPS for free, while 71% usually bought them (Table 47). Similar proportions of males and females mostly got NPS for free, which is different than what was observed for other drugs; however, it should be noted that the number of females completing the NPS module was low.

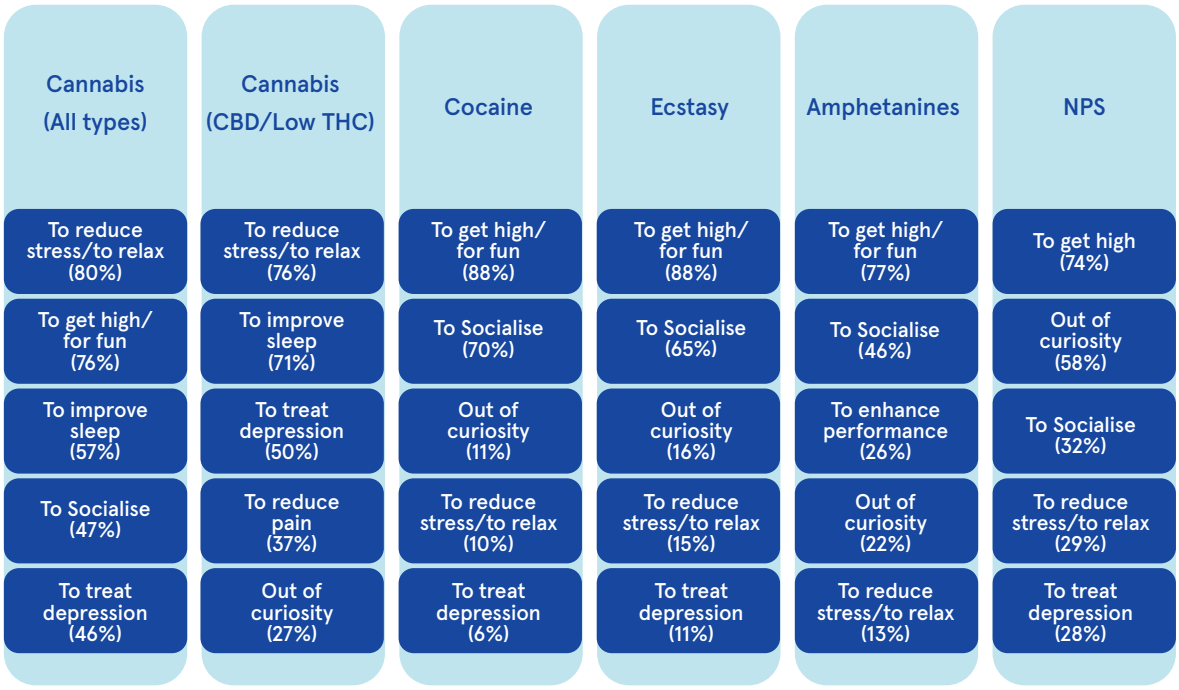
Table 47 How NPS are usually obtained, by sex and age group (%)

	All	Males	Females	18–24 years	25–34 years	≥35 years
	n=210	n=162	n=46	n=116	n=63	n=30
Mostly I buy them	71.0	71.0	69.6	70.7	68.3	76.7
Mostly I get them for free	24.3	24.1	26.1	25.9	27.0	13.3
Other	4.8	4.9	4.4	3.5	4.8	10.0

3.7 Reasons for using drugs

The main reasons respondents used drugs varied by drug type. The primary reason for using cannabis (all types) was to reduce stress (80%), while getting high was the primary reason for using cocaine, ecstasy, amphetamines, and NPS (Figure 5).

Figure 5 Main reasons for using drugs, by drug type



CBD = cannabidiol; THC = tetrahydrocannabinol

Table 48 presents the reasons for using each drug, by sex and age group. Males were more likely than females to use cannabis to get high (79% versus 69%) and to socialise (50% versus 41%). A sizeable proportion of cannabis users reported using cannabis to treat a number of physical and mental ailments: 46% used it to treat depression or anxiety and 32% used it to reduce pain. Older respondents (aged 35 years and over) were most likely to use cannabis to reduce pain (42%) and were least likely to use it in order to get high (67%), socialise (34%), or out of curiosity (3%). Amphetamines were the drug most commonly used to enhance performance, with 26% of respondents using them for this purpose. NPS users were much more likely than users of other drugs to cite curiosity as a reason for use (58%).

Table 48 Reasons for using each drug type, by sex and age group (%)

	All	Males	Females	18–24 years	25–34 years	≥35 years
Cannabis – all types	**n=4012**	**n=2713**	**n=1299**	**n=1742**	**n=1535**	**n=785**
To get high/for fun	75.9	79.3	69.0	80.7	74.7	67.3
To socialise	47.0	50.0	41.2	54.1	46.0	33.6
To reduce stress/to relax	79.5	80.5	77.1	76.0	83.2	80.3
To improve sleep	56.9	56.5	57.1	56.7	57.5	56.2
To treat depression/anxiety	45.9	43.7	49.8	46.6	48.1	40.3
To reduce pain/inflammation	31.5	30.3	33.3	25.6	32.7	42.4
Out of curiosity/to experiment	9.5	9.4	9.7	14.9	6.8	3.1
To enhance performance*	16.2	17.4	13.5	16.9	17.0	13.0
Cannabis – CBD/low THC~	**n=2062**	**n=1414**	**n=608**	**n=849**	**n=840**	**n=369**
To reduce stress/to relax	75.8	75.3	77.1	74.1	77.9	74.8
To improve sleep	60.5	60.2	61.7	60.4	61.6	58.3
To treat depression/anxiety	50.0	47.5	55.1	51.2	50.8	45.3
To reduce pain/inflammation	39.3	38.5	41.1	33.2	40.8	50.4
To avoid/reduce illegal cannabis use	17.6	17.4	17.3	15.9	18.8	19.0
Out of curiosity/to experiment	27.1	29.9	20.9	29.2	28.6	19.0
To get high/for fun	21.6	22.4	19.6	25.7	18.5	19.0
To socialise	15.0	16.2	12.0	17.0	14.5	11.4
To enhance performance	12.1	13.1	9.9	12.4	13.9	7.6
To treat cannabis withdrawal symptoms	6.6	6.9	5.8	7.1	7.4	3.8
Cocaine	**n=1881**	**n=1197**	**n=665**	**n=804**	**n=771**	**n=306**
To get high/for fun	88.0	89.0	86.3	88.6	88.1	86.3
To socialise	69.6	69.9	69.3	69.0	72.4	64.1
To reduce stress/to relax	9.5	9.0	10.2	7.6	10.4	12.1
To improve sleep	0.2	0.3	0.0	0.0	0.1	0.7
To treat depression/anxiety	6.4	6.5	6.3	6.0	6.2	8.2
To reduce pain/inflammation	0.5	0.4	0.6	0.4	0.7	0.3
Out of curiosity/to experiment	10.8	9.9	12.3	17.2	6.2	5.6
To enhance performance	6.0	5.8	6.5	6.0	5.3	7.8
Ecstasy	**n=1148**	**n=722**	**n=415**	**n=522**	**n=438**	**n=187**
To get high/for fun	94.5	94.3	94.7	95.6	93.4	94.1
To socialise	64.6	66.3	61.2	65.7	65.8	58.8
To reduce stress/to relax	14.7	14.5	14.9	14.4	13.2	19.3
To improve sleep	0.8	1.0	0.5	0.0	1.4	1.6
To treat depression/anxiety	10.7	11.1	10.1	10.3	10.3	12.3
To reduce pain/inflammation	0.4	0.3	0.7	0.2	0.7	0.5
Out of curiosity/to experiment	16.2	15.5	17.8	24.1	11.0	6.4
To enhance performance	0.8	1.1	0.2	0.4	1.1	1.1

	All	Males	Females	18–24 years	25–34 years	≥35 years
Amphetamines	**n=246**	**n=171**	**n=71**	**n=94**	**n=104**	**n=48**
To get high/for fun	76.8	76.0	77.5	76.6	78.9	72.9
To socialise	45.9	45.6	46.5	47.9	44.2	45.8
To reduce stress/to relax	13.0	14.0	11.3	16.0	9.6	14.6
To improve sleep	2.4	2.3	2.8	0.0	3.9	4.2
To treat depression/anxiety	8.9	9.4	8.5	9.6	7.7	10.4
To reduce pain/inflammation	2.0	0.6	5.6	0.0	2.9	4.2
Out of curiosity/to experiment	21.5	24.0	15.5	29.8	20.2	8.3
To enhance performance	26.0	28.7	19.7	29.8	23.1	25.0
NPS	**n=214**	**n=166**	**n=46**	**n=118**	**n=65**	**n=30**
To get high/for fun	74.3	76.5	67.4	72.9	78.5	70.0
To socialise	31.8	34.3	21.7	31.4	38.5	20.0
To reduce stress/to relax	28.5	26.5	34.8	25.4	29.2	40.0
To improve sleep	14.0	10.8	23.9	11.9	15.4	20.0
To treat depression/anxiety	28.0	28.9	23.9	21.2	36.9	33.3
To reduce pain/inflammation	4.2	2.4	8.7	4.2	3.1	6.7
Out of curiosity/to experiment	57.5	56.6	63.0	64.4	52.3	43.3
To enhance performance	9.4	10.2	6.5	7.6	10.8	10.0

Note: Respondents could select more than one reason for using drugs.

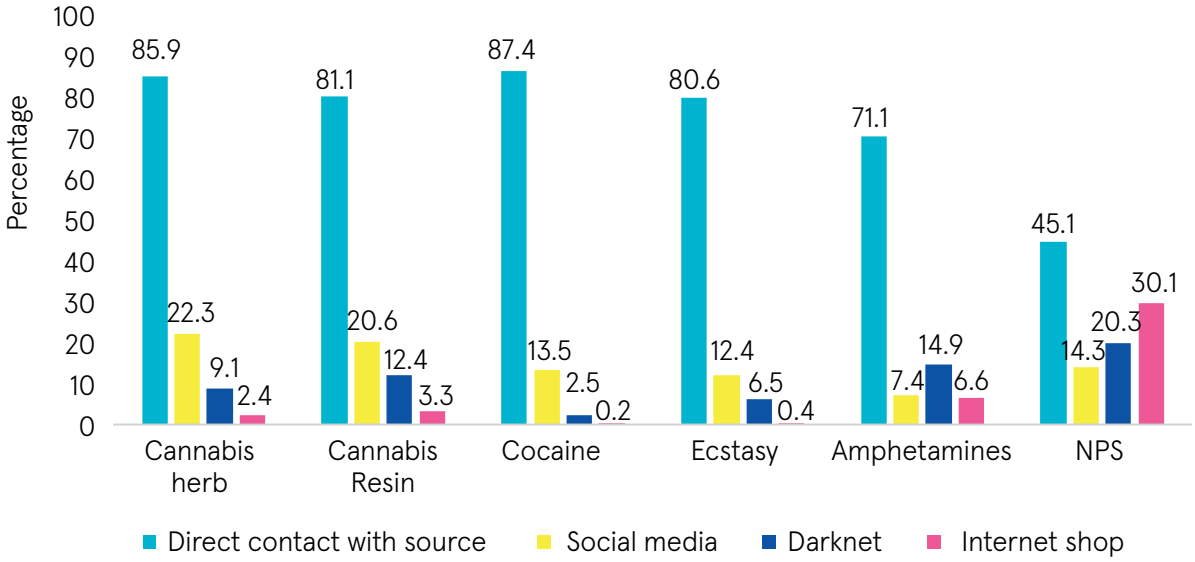
*Examples include school, work, and sport.

~CBD = cannabidiol; THC = tetrahydrocannabinol

3.8 How drugs are sourced

Those who had purchased drugs in the last year were asked what methods they usually used to do so. For each drug, with the exception of NPS, the majority of users typically obtained the drug through direct contact with their source (Figure 6). Social media was used by 22% of cannabis herb users; however, this decreased to 7% among amphetamine users. The darknet was most commonly used by those purchasing NPS (20%); in comparison, just 3% of cocaine users obtained cocaine using the darknet. Shops on the surface Internet were mainly used by NPS users (30%), and to a much lesser extent, amphetamine users (7%).

Figure 6 Methods used to buy drugs among those who bought drugs in the last year, by drug type



Note: Respondents could select more than one option.

For each drug type, males were more likely than females to use the darknet to obtain drugs (Table 49). For cannabis herb, 11% of males used the darknet compared with 3% of females. For each drug type, with the exception of amphetamine, the likelihood of using social media sources decreased with increasing age; among cocaine users, 20% of 18–24-year-olds used social media sources, compared with 11% of 25–34-year-olds and 4% of those aged 35 years and over.

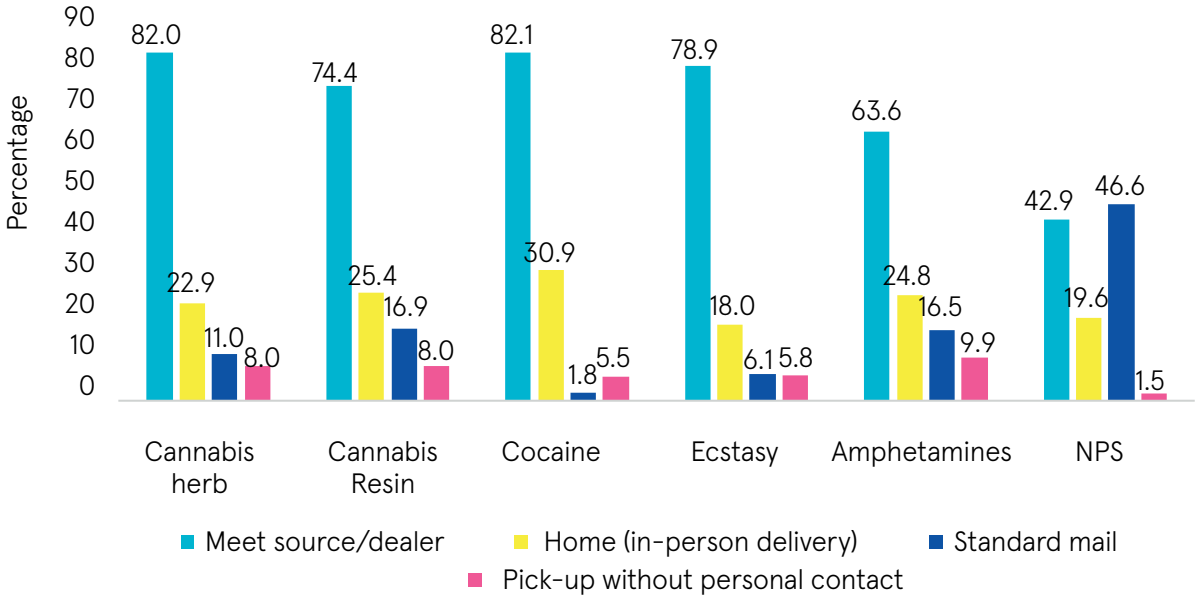
Table 49 Methods used to buy drugs among those who bought drugs in the last year, by sex and age group (%)

	All	Males	Females	18–24 years	25–34 years	≥35 years
Cannabis herb	**n=3042**	**n=2165**	**n=833**	**n=1301**	**n=1150**	**n=590**
I directly contact my source/dealer	85.9	85.8	86.7	83.1	88.2	87.8
I find the source on social media	22.3	23.7	18.4	31.4	19.0	8.6
On an encrypted Internet market/ darknet	9.1	11.3	3.2	8.0	10.6	8.8
In a shop on surface Internet	2.4	2.4	2.5	1.3	3.5	2.7
Cannabis resin	**n=461**	**n=385**	**n=73**	**n=146**	**n=178**	**n=137**
I directly contact my source/dealer	81.1	80.0	86.3	80.1	80.9	82.5
I find the source on social media	20.6	22.3	11.0	29.5	19.1	13.1
On an encrypted Internet market/ darknet	12.4	13.8	5.5	11.6	10.7	15.3
In a shop on surface Internet	3.3	3.9	0.0	1.4	3.4	5.1
Cocaine	**n=1254**	**n=854**	**n=390**	**n=499**	**n=538**	**n=217**
I directly contact my source/dealer	87.4	88.2	85.4	86.6	86.4	91.7
I find the source on social media	13.5	14.2	11.8	20.2	11.0	4.2
On an encrypted Internet market/ darknet	2.5	3.6	0.0	2.4	2.4	2.8
In a shop on surface Internet	0.2	0.1	0.5	0.4	0.0	0.5
Ecstasy	**n=711**	**n=483**	**n=219**	**n=340**	**n=257**	**n=113**
I directly contact my source/dealer	80.6	80.5	80.8	77.4	85.6	79.7
I find the source on social media	12.4	12.4	12.8	20.9	6.2	0.9
On an encrypted Internet market/ darknet	6.5	8.3	2.7	4.1	7.0	11.5
In a shop on surface Internet	0.4	0.4	0.5	0.6	0.0	0.9
Amphetamines	**n=121**	**n=92**	**n=27**	**n=48**	**n=48**	**n=25**
I directly contact my source/dealer	71.1	69.6	77.8	68.8	75.0	68.0
I find the source on social media	7.4	8.7	3.7	8.3	2.1	16.0
On an encrypted Internet market/ darknet	14.9	18.5	3.7	22.9	10.4	8.0
In a shop on surface Internet	6.6	7.6	3.7	6.3	4.2	12.0
NPS	**n=133**	**n=104**	**n=28**	**n=77**	**n=39**	**n=17**
I directly contact my source/dealer	45.1	40.4	60.7	46.8	43.6	41.2
I find the source on social media	14.3	14.4	14.3	19.5	10.3	0.0
On an encrypted Internet market/ darknet	20.3	26.0	0.0	20.8	20.5	17.7
In a shop on surface Internet	30.1	31.7	25.0	19.5	43.6	47.1

Note: Respondents could select more than one option.

For each drug type, with the exception of NPS, respondents were most likely to have their drugs delivered to them by meeting their source or dealer outside the home (Figure 7). This ranged from 74% to 82% for cannabis (herb and resin), cocaine, and ecstasy users. In comparison, 64% of amphetamine users and 43% of NPS users had these drugs delivered to them by meeting their source or dealer outside the home. Cocaine users were most likely to receive their drugs using home (in-person) delivery (31%). The most common mode of delivery of NPS was via standard mail, which was reported by 47% of NPS users; in comparison, just 2% of cocaine users had cocaine delivered via standard mail.

Figure 7 Methods used to deliver drugs to those who bought drugs in the last year, by drug type



For each drug type, females were more likely than males to have drugs delivered using home (in-person) delivery (Table 50). In general, 18–24-year-olds were most likely to pick up drugs from an arranged location without any personal contact, while those aged 35 years and over were more likely to have drugs home-delivered or to use standard postal services.

Table 50 Methods used to deliver drugs, by sex and age group (%)

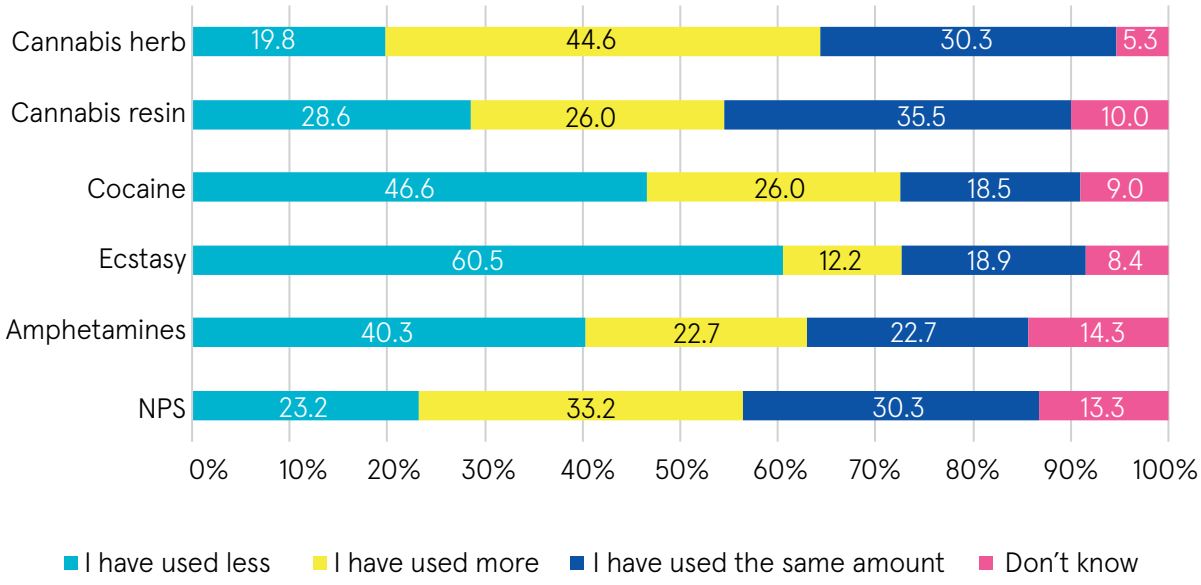
	All	Males	Females	18–24 years	25–34 years	≥35 years
Cannabis herb	**n=3042**	**n=2165**	**n=833**	**n=1301**	**n=1150**	**n=590**
I meet my source/dealer outside the home	82.0	83.5	78.8	85.6	81.0	75.9
Home (in-person) delivery	22.9	21.8	26.2	20.1	25.3	24.6
Standard postal service	11.0	12.6	6.4	9.2	12.8	11.5
I pick it up without any personal contact (from arranged location)	8.0	7.4	9.2	8.2	7.9	7.6
Cannabis resin	**n=461**	**n=385**	**n=73**	**n=146**	**n=178**	**n=137**
I meet my source/dealer outside the home	74.4	73.0	80.8	74.0	79.8	67.9
Home (in-person) delivery	25.4	23.9	31.5	23.3	22.5	31.4
Standard postal service	16.9	18.7	8.2	14.4	16.3	20.4
I pick it up without any personal contact (from arranged location)	8.0	8.3	6.9	11.0	9.0	3.7
Cocaine	**n=1254**	**n=854**	**n=390**	**n=499**	**n=538**	**n=217**
I meet my source/dealer outside the home	82.1	83.8	78.5	85.0	82.9	73.7
Home (in-person) delivery	30.9	30.0	33.3	25.9	32.7	38.3
Standard postal service	1.8	2.3	0.5	1.4	1.7	2.8
I pick it up without any personal contact (from arranged location)	5.5	5.7	5.1	7.4	4.3	4.2
Ecstasy	**n=711**	**n=483**	**n=219**	**n=340**	**n=257**	**n=113**
I meet my source/dealer outside the home	78.9	78.5	80.8	83.2	77.4	69.9
Home (in-person) delivery	18.0	17.6	19.2	14.4	22.2	19.5
Standard postal service	6.1	7.9	2.3	3.8	6.6	10.6
I pick it up without any personal contact (from arranged location)	5.8	4.8	7.3	6.5	5.8	3.5
Amphetamines	**n=121**	**n=92**	**n=27**	**n=48**	**n=48**	**n=25**
I meet my source/dealer outside the home	63.6	66.3	59.3	62.5	68.8	56.0
Home (in-person) delivery	24.8	22.8	33.3	20.8	25.0	32.0
Standard postal service	16.5	17.4	11.1	16.7	16.7	16.0
I pick it up without any personal contact (from arranged location)	9.9	10.9	7.4	10.4	6.3	16.0
NPS	**n=133**	**n=104**	**n=28**	**n=77**	**n=39**	**n=17**
I meet my source/dealer outside the home	42.9	40.4	50.0	46.8	43.6	23.5
Home (in-person) delivery	19.6	15.4	32.1	15.6	23.1	29.4
Standard postal service	46.6	52.9	25.0	39.0	53.9	64.7
I pick it up without any personal contact (from arranged location)	1.5	1.0	3.6	2.6	0.0	0.0

Note: Respondents could select more than one option.

3.9 Impact of the COVID-19 pandemic on drug use

In each of the EMCDDA drug modules, respondents were asked if their use of that drug had changed as a result of the COVID-19 pandemic. Results are presented for each drug by sex and age group in Table 51. Respondents reported mixed experiences. A high proportion of respondents reported using less ecstasy (61%), while 12% reported increased use. In comparison, just 20% of cannabis herb users reported reduced use, while 45% reported increased use. One-third (33%) of NPS users and one-quarter (26%) of cocaine users also reported increased use (Figure 8).

Figure 8 Change in drug use due to the COVID-19 pandemic, by drug type



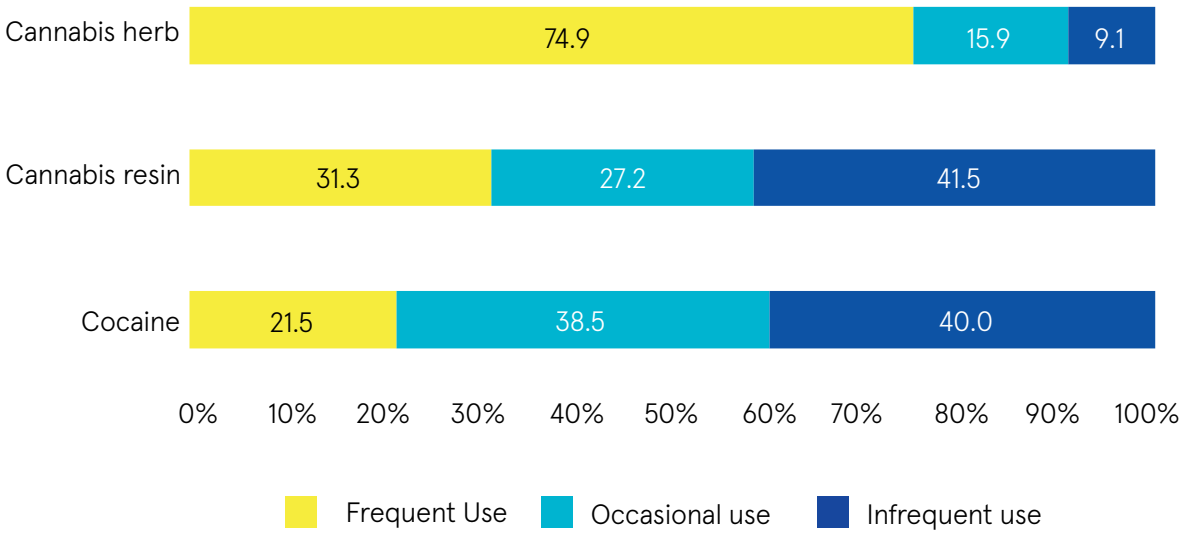
For each drug type, the impact of the COVID-19 pandemic was similar for males and females (Table 51). Those aged 18–24 years were more likely to report increased cannabis herb use (51%) than those aged 25–34 years (43%) and those aged 35 years and over (33%). A similar trend was observed for cannabis resin, cocaine, and ecstasy use. With the exception of NPS, 18–24-year-olds were most likely to report that they had used more of each drug as a result of the COVID-19 pandemic. Similarly, females were more likely than males to report that their usage of each drug had increased; however, the differences were small, ranging from 2 to 5 percentage points.

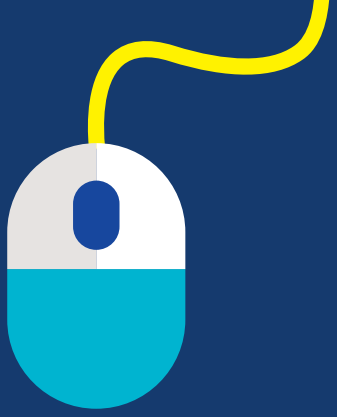
Table 51 The impact of the COVID-19 pandemic on drug use, by sex and age group (%)

	All	Males	Females	18–24 years	25–34 years	≥35 years
Cannabis herb	**n=3858**	**n=2592**	**n=1215**	**n=1655**	**n=1460**	**n=740**
I have used less	19.8	19.7	20.3	20.8	18.7	19.7
I have used more	44.6	43.4	46.7	51.1	43.0	33.2
I have used the same amount	30.3	32.3	26.3	22.5	33.1	42.6
Don't know	5.3	4.6	6.8	5.7	5.2	4.5
Cannabis resin	**n=753**	**n=585**	**n=158**	**n=245**	**n=296**	**n=212**
I have used less	28.6	29.1	27.2	26.5	27.7	32.1
I have used more	26.0	25.3	29.1	37.1	24.0	16.0
I have used the same amount	35.5	36.4	31.0	26.9	37.8	42.0
Don't know	10.0	9.2	12.7	9.4	10.5	9.9
Cocaine	**n=1860**	**n=1187**	**n=654**	**n=792**	**n=765**	**n=303**
I have used less	46.6	47.1	45.9	40.8	51.2	49.8
I have used more	26.0	24.9	28.1	30.2	22.4	24.1
I have used the same amount	18.5	19.0	17.4	17.3	19.0	20.5
Don't know	9.0	9.0	8.6	11.7	7.5	5.6
Ecstasy	**n=1141**	**n=716**	**n=414**	**n=517**	**n=437**	**n=186**
I have used less	60.5	62.0	58.0	57.8	64.3	58.6
I have used more	12.2	10.3	15.5	17.2	7.1	10.2
I have used the same amount	18.9	20.5	15.9	16.3	20.6	22.6
Don't know	8.4	7.1	10.6	8.7	8.0	8.6
Amphetamines	**n=238**	**n=166**	**n=70**	**n=91**	**n=100**	**n=47**
I have used less	40.3	39.2	41.4	31.9	43.0	51.1
I have used more	22.7	22.3	24.3	29.7	15.0	25.5
I have used the same amount	22.7	24.7	18.6	19.8	27.0	19.2
Don't know	14.3	13.9	15.7	18.7	15.0	4.3
NPS	**n=221**	**n=163**	**n=46**	**n=116**	**n=64**	**n=30**
I have used less	23.2	22.7	23.9	19.8	31.3	16.7
I have used more	33.2	31.9	37.0	32.8	31.3	40.0
I have used the same amount	30.3	31.3	28.3	29.3	29.7	36.7
Don't know	13.3	14.1	10.9	18.1	7.8	6.7

Figure 9 presents the frequency of cannabis herb, cannabis resin, and cocaine use among those who reported increased use of these drugs. This analysis was not possible for the other drugs due to the small numbers reporting frequent use. Three-quarters (75%) of those who reported increased use of cannabis herb were frequent users, compared with 16% of those who reported increased cocaine use.

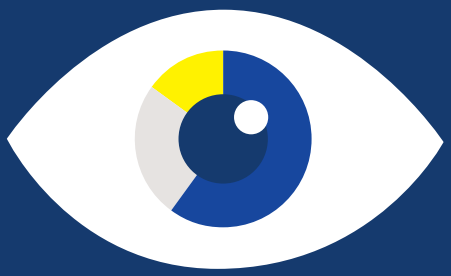
Figure 9 Frequency of use among respondents who reported increased use of cannabis or cocaine due to COVID-19 restrictions





04

Results: Irish modules



This section presents the results of the two Irish EWSD modules on nitrous oxide and magic mushrooms. These questions differ slightly from those included in the main EWSD modules.

4.1 Nitrous oxide

The question regarding most recent use of nitrous oxide was answered by 4,398 Irish EWSD respondents. The module on nitrous oxide was presented at the end of the questionnaire, which may explain why only 4,398 of the 5,796 respondents answered this question. The module on nitrous oxide was completed by 142 respondents, corresponding to 68% of those who reported last year use of nitrous oxide. Due to the low number of respondents aged 35 and over who completed the nitrous oxide module, analysis by age is confined to two age groups – 18–24-year olds and those aged 25 and over.

4.1.1 Patterns of nitrous oxide use

Table 52 presents the most recent use of nitrous oxide among EWSD respondents; of the 4,398 respondents who answered this question, 1% reported last month nitrous oxide use and a further 4% had used nitrous oxide in the last year. In total, 23% of respondents had ever used nitrous oxide. Respondents aged 18–24 years were most likely to have used nitrous oxide in the last year (7%).

Table 52 Most recent use of nitrous oxide among Irish EWSD respondents, by sex and age group (%)

	All	Males	Females	18–24 years	25–34 years	≥35 years
	n=4398	n=2909	n=1427	n=1788	n=1712	n=895
Last month	1.1	1.2	1.1	1.9	0.8	0.2
Last year (but not last month)	3.7	3.8	3.2	5.5	2.9	1.5
More than 12 months ago	18.5	20.2	15.1	12.5	23.0	22.1
Never	76.7	74.8	80.6	80.1	73.4	76.2

Thirty-nine per cent of respondents stated that they had first used nitrous oxide in the last year and 32% had first used it 1–2 years ago (Table 53).

Table 53 Length of time since first use of nitrous oxide, by sex and age group (%)

	All	Males	Females	18–24 years	≥25 years
	n=139	n=96	n=39	n=95	n=44
In the last year	38.9	36.5	43.6	42.1	31.8
1–2 years ago	31.7	32.3	33.3	35.8	22.7
≥3 years ago	29.5	31.3	23.1	22.1	45.5

Seventy-one percent of respondents first used nitrous oxide in Ireland, while 28% first used it as a tourist in Europe (Table 54). Those aged 25 years and over were more likely than 18–24-year-olds to first use nitrous oxide in Europe (37% versus 24%).

Table 54 Location of first use of nitrous oxide, by sex and age group (%)

	All	Males	Females	18–24 years	≥25 years
	n=132	n=94	n=34	n=91	n=41
In Ireland	71.2	72.3	67.7	75.8	61.0
As a tourist in Europe	28.0	27.7	29.4	24.2	36.6
As a tourist in Asia	0.8	0.0	2.9	0.0	2.4

In the last year, 90% of those who had used nitrous oxide reported infrequent use (1–11 days) while 10% reported occasional use (12–51 days); there were no sex or age group differences. Ninety-two per cent stated that they had used nitrous oxide by inhaling from a balloon, while 11% had inhaled it from a canister. On a typical day that nitrous oxide was used 21% used no more than 1 canister while 26% used at least 10 (Table 55).

Table 55 Number of canisters typically used on a day that nitrous oxide is used, by sex and age group (%)

	All	Males	Females	18–24 years	≥25 years
	n=133	n=96	n=33	n=90	n=43
≤1	21.1	16.7	27.3	18.9	25.6
2–3	25.6	26.0	27.3	24.4	27.9
4–5	18.1	19.8	15.2	18.9	16.3
6–9	9.0	10.4	3.0	8.9	9.3
≥10	26.3	27.1	27.3	28.9	20.9

4.1.2 Context of nitrous oxide use

The most common settings for using nitrous oxide were at a domestic party (63%) and at home (59%) (Table 56). The low proportion using nitrous oxide in a club or bar (14%) may be explained by the closure of these settings as a result of COVID-19 restrictions.

Table 56 Settings in which nitrous oxide has been used in the last year, by sex and age group (%)

	All	Males	Females	18–24 years	≥25 years
	n=142	n=98	n=40	n=95	n=47
Domestic party	62.7	66.3	55.0	64.2	59.6
At home	58.5	62.2	50.0	60.0	55.3
Public space (street, park, etc.)	16.2	19.4	10.0	19.0	10.6
Club or bar	14.1	16.3	10.0	15.8	10.6
Illegal rave	12.0	11.2	15.0	10.5	14.9

Note: Respondents could select more than one option.

Fifty-three per cent of respondents stated that people usually share nitrous oxide with them or give it to them for free (Table 57), while 30% usually buy it from a shop online.

Table 57 How nitrous oxide is usually sourced, by sex and age group (%)

	All	Males	Females	18–24 years	≥25 years
	n=131	n=91	n=36	n=90	n=41
People share it with me or give it to me for free	53.4	48.4	61.1	53.3	53.7
Buy it from a shop online	29.8	36.3	16.7	27.8	34.2
Buy it from a drug dealer	9.9	9.9	11.1	10.0	9.8
But it from a drug dealer on social media	6.1	4.4	11.1	7.8	2.4
Buy it from internet encrypted markets (darknet)	0.8	1.1	0.0	1.1	0.0

4.2 Magic mushrooms

The question regarding most recent use of magic mushrooms was answered by 4,401 Irish EWSD respondents (Table 58); 5% reported last month use and a further 17% had used magic mushrooms in the last year. In total, 52% of respondents had ever used magic mushrooms. Respondents aged 25–34 years were most likely to have used magic mushrooms in the last year (24%). Males were more likely than females to report last year use (23% versus 17%). The module on magic mushrooms was completed by 814 respondents, corresponding to 87% of those who had used magic mushrooms in the last year.

Table 58 Most recent use of magic mushrooms among Irish EWSD respondents, by sex and age group (%)

	All	Males	Females	18–24 years	25–34 years	≥35 years
	n=4401	n=2913	n=1426	n=1788	n=1711	n=899
Last month	4.8	5.4	3.4	3.6	5.4	5.8
Last year	16.5	17.9	13.6	17.0	18.4	12.2
More than 12 months ago	30.4	33.6	24.2	16.6	33.9	51.3
Never	48.3	43.1	58.8	62.8	42.4	30.7

4.2.1 Patterns of magic mushroom use

Thirty-eight per cent of respondents first used magic mushrooms in the last year, while 14% first used them 1–2 years ago, and 48% first used them at least 3 years ago (Table 59). Last year use was most commonly reported by 18–24-year-olds (56%).

Table 59 Length of time since first use of magic mushrooms, by sex and age group (%)

	All	Males	Females	18–24 years	25–34 years	≥35 years
	n=808	n=586	n=209	n=298	n=365	n=145
In the last year	38.4	37.2	42.1	56.0	29.3	24.8
1–2 years ago	14.0	14.0	14.8	22.5	11.8	2.1
≥3 years ago	47.7	48.8	43.1	21.5	58.9	73.1

Almost all respondents (93%) reported infrequent use of magic mushrooms (Table 60). Those aged 35 years and over were most likely to report either occasional (10%) or frequent (4%) use.

Table 60 Last year frequency of magic mushroom use, by sex and age group (%)

	All	Males	Females	18–24 years	25–34 years	≥35 years
	n=813	n=588	n=212	n=300	n=365	n=148
Infrequent use	92.6	91.8	94.3	93.3	94.8	85.8
Occasional use	5.7	6.5	3.8	5.0	4.4	10.1
Frequent use	1.7	1.7	1.9	1.7	0.8	4.1

The most commonly used magic mushrooms were liberty caps (62%), followed by fly agaric (30%), wavy caps (17%), and 'cubes' (16%) (Table 61).

Table 61 Types of magic mushrooms consumed in the last year, by sex and age group

	All	Males	Females	18–24 years	25–34 years	≥35 years
	n=814	n=589	n=212	n=301	n=365	n=148
Liberty cap (Psilocybe semilanceata)	62.2	65.5	52.8	62.8	61.1	63.5
Fly agaric (Amanita muscaria)	30.1	30.7	28.3	32.2	26.3	35.1
Wavy cap (Psilocybe cyanescens)	17.2	13.4	26.4	16.9	18.9	13.5
Cubes (Psilocybe cubensis)	16.1	18.9	9.0	15.0	15.1	21.0
Truffles (psilocybin or psilocin)	2.5	3.1	0.9	2.3	2.7	2.0
Unknown	6.0	5.9	6.6	6.6	5.5	6.1

Note: Respondents could select more than one option.

The most common means of consuming magic mushrooms was to eat them raw (69%), followed by consuming them as mushroom tea (39%) and eating them with food (24%) (Table 62).

Table 62 How magic mushrooms are consumed, by sex and age group (%)

	All	Males	Females	18–24 years	25–34 years	≥35 years
	n=814	n=589	n=212	n=301	n=365	n=148
Ate raw	68.7	70.3	63.7	65.8	70.4	70.3
Consumed as tea	38.5	37.7	40.1	40.2	37.5	37.2
Ate with food	24.1	22.9	28.8	23.3	26.9	18.9
Lemon tekking*	13.5	14.8	9.4	15.0	12.1	14.2
In capsules	5.2	5.8	3.3	3.0	4.9	10.1
Vaporiser	0.1	0.2	0.0	0.3	0.0	0.0

Note: Respondents could select more than one option.

* Lemon tekking is the process of soaking magic mushrooms in lemon or lime juice before consumption

4.2.2 Context of magic mushroom use

The most common setting for using magic mushrooms was at home (70%), followed by at a friend's home (39%) and in a public location (30%) (Table 63).

Table 63 Settings in which magic mushrooms were used in the last 12 months, by sex and age group (%)

	All	Males	Females	18–24 years	25–34 years	≥35 years
	n=814	n=589	n=212	n=301	n=365	n=148
At home	70.0	70.6	69.3	64.1	70.4	81.1
At a friend's home	39.1	39.6	38.2	41.5	39.7	32.4
Public location	29.9	33.1	20.3	31.2	31.0	24.3
A group or retreat	6.8	7.6	4.7	8.0	6.3	5.4

Note: Respondents could select more than one option.

Respondents most commonly used magic mushrooms in person with friends (83%) (Table 64). Although 31% used magic mushrooms alone, this was more common among males than females (34% versus 20%) and among those aged 35 years and over (45%).

Table 64 Who magic mushrooms were shared with in the last year, by sex and age group (%)

	All	Males	Females	18–24 years	25–34 years	≥35 years
	n=814	n=589	n=212	n=301	n=365	n=148
Nobody (used alone)	30.6	34.3	19.8	27.2	27.7	44.6
With friends (in person)	82.9	82.5	84.9	85.4	83.8	75.7
With friends (online or through chat)	3.0	3.1	2.8	4.0	2.2	2.7
A network, community, or retreat	0.5	0.3	0.9	0.3	0.3	1.4

Note: Respondents could select more than one option.

The most common place for accessing information on using magic mushrooms was via an online forum such as Reddit or Erowid (58%) (Table 65). Males were more likely than females to use online forums for information (65% versus 39%), whereas females were more likely to use their friend network for information (67% versus 53%).

Table 65 Where information was accessed on how to consume magic mushrooms, by sex and age group (%)

	All	Males	Females	18–24 years	25–34 years	≥35 years
	n=814	n=589	n=212	n=301	n=365	n=148
Online forum such as Reddit or Erowid	57.9	64.9	39.2	65.5	57.5	43.2
Friend network	56.4	53.1	66.5	55.5	57.5	55.4
Social media group	12.8	13.9	9.9	13.3	14.0	8.8
I didn't seek information	8.6	7.1	12.3	8.3	7.4	12.2

Note: Respondents could select more than one option.

Of those who used magic mushrooms, 58% practised harm reduction and 28% practised microdosing (Table 66). Males were more likely than females to practise harm reduction (61% versus 51%). Microdosing was most likely to be practised by those aged 35 years and over (44%), compared with 22% of 18–24-year-olds and 26% of 25–34-year-olds.

Table 66 Proportion of magic mushroom users who practised harm reduction or microdosing, by sex and age group (%)

	All	Males	Females	18–24 years	25–34 years	≥35 years
	n=813	n=589	n=211	n=301	n=365	n=147
Practised harm reduction	58.2	60.8	50.7	62.5	55.0	57.4
Practised microdosing	27.8	28.7	26.1	21.9	26.3	43.5

4.2.3 Sourcing magic mushrooms

The most common way in which magic mushrooms were sourced was by wild foraging (52%), followed by sharing them or getting them for free (31%), through a dealer (19%), and an online store (18%) (Table 67). Males were more likely than females to source magic mushrooms through wild foraging (55% versus 43%), while females were more likely than males to share them or get them for free (36% versus 29%). Older respondents were more likely than younger respondents to home-grow magic mushrooms or use online stores, while younger respondents were more likely to use a dealer or the darknet.

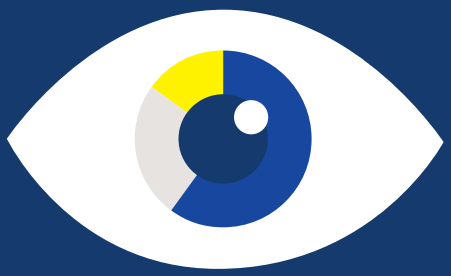
Table 67 How magic mushrooms were sourced, by sex and age group (%)

	All	Males	Females	18–24 years	25–34 years	≥35 years
	n=814	n=589	n=212	n=301	n=365	n=148
Wild foraging	51.8	55.2	43.4	48.5	54.5	52.0
People share with me or I get them for free	31.3	29.0	36.3	28.2	34.0	31.1
A dealer	19.4	19.9	17.9	27.2	19.5	3.4
An online store	17.9	18.7	16.5	14.6	17.5	25.7
Home-grown	13.4	14.9	9.9	7.6	15.3	20.3
Darknet marketplace	4.8	6.3	0.9	7.3	3.8	2.0
A dealer using social media	3.8	4.1	3.3	8.0	1.9	0.0
Televend App	0.0	0.0	0.0	0.0	0.0	0.0

Note: Respondents could select more than one option.

05

Discussion and policy implications



This is the first time that Ireland has participated in the EWSD and the results presented here provide a unique insight into drug use patterns in Ireland. When interpreting our results, it is important to be cognisant of the fact that the EWSD was a convenience survey whereby respondents were mainly recruited through social media and other online channels. Therefore, it is not possible for the EWSD to provide prevalence estimates of drug use. Among our sample, cannabis was the most commonly used drug, with more than 90% of respondents reporting its use in the last year. The 2021 European drug report found that cannabis was the drug with the highest prevalence in Europe [13], while the Irish 2019–20 NDAS reported similar findings, with 80% of drug users reporting last year use [1]. Almost all cannabis users (96%) reported use of cannabis herb in the last year; among last month cannabis users in the 2019–20 NDAS, herb was the most common type of cannabis used (80%), followed by resin (15%). Cannabis was the drug that was most frequently used by respondents – 35% reported frequent use, while 24% reported intensive or almost daily use. Frequent and intensive users were also more likely than less frequent users to use higher quantities of cannabis and to smoke more joints, which is consistent with previous research [14]. Young males aged 18–24 years were more likely than other users to use larger quantities of cannabis. A 2020 meta-analysis reported that the risk for cannabis use disorder among people reporting intensive use is 33% [15], while data from the United States of America indicate that cannabis use quantity and frequency predicts cannabis-related health problems [16]. Recent Irish findings also demonstrate relationships between patterns and frequency of cannabis use and recent use of stimulants such as cocaine and ecstasy, as well as an association between cannabis use disorder and stimulant use [17]. Given that almost one in four cannabis herb users use it intensively, thereby increasing their risk of developing cannabis use disorder, it will be important to continue to monitor trends in the prevalence of cannabis use disorder and cannabis-related harm in the general population.

Notwithstanding possible differences in sample characteristics, the last year prevalence of cocaine use among Irish EWSD respondents was 49%, compared with 34% among the entire European EWSD sample [18]. The high rate of cocaine use among Irish respondents mirrors what we have seen elsewhere – since 2015, the Irish NDAS has reported a statistically significant increase in cocaine use, and this has coincided with an increase in treatment presentations for cocaine use as well as an increase in cocaine-related deaths [19, 20, 1]. Females aged 18–24 years were the Irish EWSD respondents most likely to report last year cocaine use; this is similar to the NDAS results, which reported a high prevalence of cocaine use among young females. Twenty-five per cent of cocaine users reported occasional or monthly use, while 8% reported frequent or weekly use. Given that increased frequency of cocaine use is associated with increased odds of developing substance use and psychiatric disorders [21], it will be important to continue to monitor indicators pertaining to cocaine use. This is particularly pertinent for young females as both the EWSD and the 2019–20 NDAS indicate relatively high levels of cocaine use among this cohort. Further review is warranted on young females who use drugs in social settings, their experiences as young female drug consumers in nightlife spaces, and their potential vulnerabilities.

Our findings in relation to ecstasy show a clear preference among 18–24-year-olds for powders and crystal products. These findings indicate a significant cultural shift from the consumption of ecstasy pills which are more frequently used by older age profiles. This change in consumption pattern may be as a direct result of younger people's perceptions relating to powders and crystals being less adulterated compared to ecstasy pills which have

been subject to a series of European warnings throughout the past decade. The increased use of powders and crystals may present benefits and challenges for harm reduction providers. While snorting may yield a quicker effect and indication of the person's response to a substance, it may be easier to over consume powders compared to a pill which can be evenly divided. These findings show the need for new and tailored harm reduction approaches such as novel information and interventions to identify the composition and purity of drugs.

Twenty-four per cent of respondents had used ketamine in the last year, which is considerably higher than the overall proportion reported by the EMCDDA (13%) [18]. This increased to 34% among 18–24-year-olds, which is similar to the proportion reporting last year ecstasy use (35%). While there has been anecdotal evidence regarding increased ketamine use in Ireland, general population surveys to date have not captured its prevalence and there are very limited data on its use or harms. Given the emerging long term health harms associated with frequent use of ketamine, the results presented here indicate that it would be valuable to include questions on ketamine use in the Irish NDAS and to monitor trends in health harms due to ketamine. If the EWSD is repeated in Ireland, a dedicated ketamine module should be added.

When interpreting the Irish EWSD results, it is important to acknowledge that they are likely to have been influenced by the COVID-19 pandemic and the resultant restrictions on movement that arose from it. Many of the EWSD questions related to the previous 12 months. Given that the questionnaire was completed between 18 March and 31 May 2021, a time when nightlife settings were closed and events like music festivals were cancelled and had been for most of the previous year, this is likely to have had an impact on the number of respondents reporting use of stimulant drugs (such as ecstasy) that are associated with these settings. Sixty-one per cent of respondents reporting last year ecstasy use had used less as a result of the COVID-19 pandemic; the corresponding figure for cocaine was 47%. It will be important to repeat this survey when the night-time economy is fully open in order to determine the true extent of ecstasy and other stimulant use. In contrast, people who reported last year cannabis herb use were more likely to have increased their cannabis herb use since COVID-19 restrictions began; 45% of respondents had increased their use of cannabis herb, while 20% had used less. It is possible that respondents used cannabis herb to help cope with the restrictions.

There were differences in the motivations for using each drug. The predominant reason for using stimulant-type drugs was to get high or for fun. In comparison, respondents cited a wide range of reasons for using cannabis. While 76% used cannabis to get high, 80% used it to reduce stress, 57% used it to improve sleep, 46% used it to treat depression or anxiety, and 32% used it to reduce pain. These results seem to suggest that there may be extensive self-medication practices in using cannabis in Ireland and it is possible that cannabis is being used by some people for conditions for which there is little or no evidence of its efficacy. Very few respondents – 0.5% of those who used cannabis – had cannabis prescribed to them for medical reasons.

In general, most respondents obtained their drugs by purchasing them. Females were much more likely than males to get drugs for free, and this is consistent with results from previous waves of the EWSD, which Ireland did not participate in [22]. Direct contact with a source

or dealer was the main method used to buy drugs, and more than 80% of users of cannabis (herb and resin), cocaine, and ecstasy had used this method in the last year. Social media is becoming an important source, particularly among 18–24-year-olds, with 31% of respondents in this age group sourcing cannabis herb and 20% sourcing cocaine in this way. Darknet markets were most commonly used to source NPS and amphetamines – 15% of respondents purchased amphetamines from the darknet, as did 20% of NPS users. Our results indicate that online methods, particularly social media, have become a viable option for purchasing drugs in Ireland, especially among younger people. It is important that policy-makers consider the emerging influence of online markets on use patterns and supply when devising prevention, education, and harm reduction strategies for young people. Most respondents had their drugs delivered by meeting their source or dealer outside the home, with more than three quarters of users of cannabis (herb and resin), cocaine, and ecstasy using this method in the last year. Home (in-person) delivery was most commonly reported by users of cocaine (31%), cannabis resin (25%), and amphetamines (25%). The standard postal service was used by 47% of NPS users. It is possible that the restrictions on movement arising from the COVID-19 pandemic has reinforced these forms of drug delivery.

There has been increased media attention and significant concern in Ireland relating to nitrous oxide use in public spaces and drug-related litter in some areas as a result of young people congregating during COVID-19 lockdowns. As the perceived increased use of nitrous oxide is a recent phenomenon, there are limited data on its use or harms in Ireland. Although our results suggest that nitrous oxide use is not prevalent, it may be the case that nitrous oxide use is most prominent in those aged under 18 years, who were excluded from responding to the EWSD.

When interpreting the results presented in this report, it is important to consider them in the context of the survey's strengths and limitations. The Irish EWSD had a very comprehensive and effective recruitment campaign, which utilised many different online channels and achieved a large response, with 5,796 people who had used drugs in the last year completing the survey. This ensured that we had sufficient numbers to adequately analyse patterns of drug use, which has not been feasible in Ireland to date; in particular, we were able to undertake analysis on drugs that are less prevalent in Ireland, such as NPS and amphetamines. Our recruitment strategy ensured that recreational users, a group for whom there is a lack of Irish data, were reached. As the EWSD used web recruitment to target people who use drugs, we accessed a high number of younger respondents who are the most likely to have lived experiences of drug use but who have traditionally been difficult to capture in previous face-to-face household surveys in Ireland, such as the NDAS.

While web surveys such as the EWSD may be considered an effective tool for gathering information on patterns of drug use from a large number of people who use drugs, it should be recognised that they are also not without limitations [2]. As the EWSD sample is a non-probability one that excludes people who do not use drugs and who do not use the Internet, it cannot provide population drug use prevalence data; therefore, the results presented here are not generalisable to the general population. Non-response bias (where there are inherent differences between those who participate in a survey and those who do not) and volunteer bias (where people are more likely to respond to a survey if they are interested in the topic) may both have influenced the composition of the EWSD sample. Previous waves of the EWSD have found that the survey attracted a higher proportion of

participants reporting frequent drug use than is found in the general population, while very occasional users may be less likely to feel that a survey about patterns of drug use applies to them [2]. Given our recruitment strategy particularly focused on younger adults who have a specific interest in different music and who access social media, it is not clear either, how generalisable our results are to the drug using population in Ireland. The EWSD also excluded respondents under 18, and based on our school surveys, this is a population that also has a high prevalence of drug use.

Nevertheless, the experience of the Irish EWSD supports the assertion that online surveys may be a useful tool for collecting information on patterns of drug use from a large number of people both quickly and cost-effectively. Online surveys may complement other traditional data sources such as general population and school surveys and newer data sources including wastewater analysis and tailored drug or hair analysis, and can provide a detailed and timely picture of the nature of drug use and drug markets across Ireland and Europe. The Irish EWSD engaged with new profiles of substance users in Ireland who may need new types of interventions across third-level, nightlife, and online settings. The high volumes of drug use among younger cohorts demonstrates the importance of developing universal and targeted prevention programmes within and outside of school settings. The findings in this report will add to policy-makers', service providers', and the general public's understanding of drug use in Ireland. We hope that continued partnerships with the HSE and the EMCDDA will allow for regular monitoring using these methods. The overall goal is to inform public health planning and policy in order to improve and maintain optimal health at a population level.

06

References

References

1. Mongan D, Millar SR, Galvin B. The 2019-20 Irish National Drug and Alcohol Survey: Main findings. Dublin: Health Research Board; 2021.

2. Matias J, Kalamara E, Mathis F, Skarupova K, Noor A, Singleton N. The use of multi-national web surveys for comparative analysis: Lessons from the European Web Survey on Drugs. International Journal of Drug Policy. 2019;73:235-44.

3. Barratt MJ, Ferris JA, Zahnow R, Palamar JJ, Maier LJ, Winstock AR. Moving on from representativeness: testing the utility of the Global Drug Survey. Substance Abuse: Research and Treatment. 2017;11:1178221817716391.

4. Tomazic T, Jerkovic OS. Online interventions for the selective prevention of illicit drug use in young drug users: Exploratory study. Journal of Medical Internet Research. 2020;22(4):e17688.

5. Miller PG, Sønderlund AL. Using the internet to research hidden populations of illicit drug users: a review. Addiction. 2010;105(9):1557-67.

6. Waldron J, Grabski M, Freeman TP, Mokrysz C, Hindocha C, Measham F, et al. How do online and offline sampling compare in a multinational study of drug use and nightlife behaviour? International Journal of Drug Policy. 2020;82:102812.

7. Department of Health. Reducing Harm, Supporting Recovery. A health-led response to drug and alcohol use in Ireland 2017-2025. Dublin: Department of Health; 2017.

8. Department of Health. Steering Group Report on a National substance misuse strategy. Dublin: Department of Health; 2012.

9. Van Havere T, Vanderplasschen W, Lammertyn J, Broekaert E, Bellis M. Drug use and nightlife: more than just dance music. Substance abuse treatment, prevention, and policy. 2011;6(1):1-11.

10. European Monitoring Centre for Drugs and Drug Addiction. Monitoring drug use in recreational settings across Europe: conceptual challenges and methodological innovations, Technical report. Luxembourg: Publications Office of the European Union; 2018.

11. Measham F, Moore K. Repertoires of distinction: Exploring patterns of weekend polydrug use within local leisure scenes across the English night time economy. Criminology & Criminal Justice. 2009;9(4):437-64.

12. Fernández-Calderón F, Cleland CM, Palamar JJ. Polysubstance use profiles among electronic dance music party attendees in New York City and their relation to use of new psychoactive substances. Addictive behaviors. 2018;78:85-93.

13. European Monitoring Centre for Drugs and Drug Addiction. European Drug Report 2021: Trends and Developments. Luxembourg: Publications Office of the European Union; 2021.

14. van Laar M, Frijns T, Trautmann F, Lombi L. Sizing the cannabis market: a demand-side and user-specific approach in seven European countries. Current Drug Abuse Reviews. 2013;6(2):152-64.

15. Leung J, Chan GC, Hides L, Hall WD. What is the prevalence and risk of cannabis use disorders among people who use cannabis? A systematic review and meta-analysis. Addictive Behaviors. 2020;109:106479.

16. Callaghan RC, Sanches M, Kish SJ. Quantity and frequency of cannabis use in relation to cannabis-use disorder and cannabis-related problems. Drug and Alcohol Dependence. 2020;217:108271.

17. Millar SR, Mongan D, O'Dwyer C, Smyth BP, Perry IJ, Galvin B. Relationships between patterns of cannabis use, abuse and dependence and recent stimulant use: Evidence from two national surveys in Ireland. PLoS one. 2021;16(8):e0255745.

18. European Monitoring Centre for Drugs and Drug Addiction. European Web Survey on Drugs 2021: top level findings, 21 EU countries and Switzerland. Luxembourg: Publications Office of the European Union; 2022.

19. Health Research Board. National Drug-Related Deaths Index 2008 to 2017 data. Dublin: Health Research Board; 2019.

20. O'Neill D, Carew AM, Lyons S. National Drug Treatment Reporting System 2013–2019 drug data. Dublin: Health Research Board. 2020.

21. Aharonovich E, Scodes J, Wall MM, Hasin DS. The relationship of frequency of cocaine use to substance and psychiatric disorders in the US general population. Drug and Alcohol Dependence. 2021;227:108933.

22. Vuolo M, Matias J. Sources of drug acquisition among females and males in the European Web Survey on Drugs. International Journal of Drug Policy. 2020;81:102777.