GDS 2021 Global Report

Embargoed till 9pm GMT Dec 1st

Data from 32,022 people from 22 countries were used in the preparation of this report


Global Drug Survey (GDS), established in 2012, is an independent research organisation based in London. We run the world’s largest drug survey. We use an encrypted online platform to collect anonymous drug use data from across the world. Our mission is to promote honest conversations about drug use and help people use drugs more safely regardless of the legal status of the drug. To date over 900,000 people have taken part in GDS research, and we have published over 65 academic papers. With the launch of GDS2022 in November 2021, we hope to reach 1 million participants by the end of 2021. GDS2021 was presented in 11 languages: Danish, Dutch, English, Finnish, French, German, Hungarian, Italian, Portuguese, and Romanian.

GDS is not a prevalence study. GDS data are from a non-probability sample and thus our findings are not representative of the wider population. The rates of drug use in this sample are significantly higher when compared to the general population. The data can be used to describe use patterns and identify new drug trends. The majority of our participants tend to be young, experienced with the use of illicit drugs, and employed or in education. We have included questions that are relevant to marginalized and vulnerable groups of people who use drugs, yet these groups are largely underrepresented online.

Because we ask the same questions in the same way across different regions, our data can be used to highlight local variations and to explore how different populations use drugs. In this report, we highlight the most noteworthy findings that followed the completion of GDS2021. If you would like to access further analysis or use our data, please contact us at adam@globaldrugsurvey.com.

The GDS2021 survey received research ethics approval from University College London, The University of Queensland and RMIT University.

GDS2022 launches in November 2021 and runs til the middle of January 2022. Please share the link (https://www.globaldrugsurvey.com/gds-2022/) and take 20 minutes to share your opinion on how drug laws have impacted on your decision to use drugs, not use drugs or stop using drugs and reflect on your last 12 months of drinking and taking other drugs and life under COVID-19.

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Introduction (Demographics & Drug Use By Country)

GDS2021 launched at the end of an unusual year. Participation was lower than in previous years, reflective perhaps of a general global malaise, too many surveys having been run (including our own GDS Special Edition on COVID-19 in May - June 2020) and people just wanting to see the back of 2020. As a result, we are keeping our highlights report brief this year. We wanted to focus on how COVID-19 changed people’s drug using behaviours especially with regard to alcohol, cannabis and cocaine, how people balance reducing harm and maximizing pleasure when using drugs, and whether microdosing has moved beyond those seeking to improve creativity and work performance to self-treatment for mental health issues. Finally, we revisit the growth of digital drug markets with the first report of the use of Televend: a hybrid darknet and app digital market.
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Introduction (Demographics & Drug Use By Country)

**Ethnicity**

- Aboriginal/Maori: 0.5%
- Asian: 0.8%
- Black/African American: 0.5%
- Hispanic/Latino: 2.3%
- Mixed: 3.5%
- Native American: 0.1%
- White: 85.9%
- Other - Please specify: 6.5%

**Highest Qualification Obtained**

- No formal schooling: 0.4%
- Primary school: 1.9%
- Lower secondary school/School certificate/Intermediate Certificate: 5.8%
- Technical or trade certificate: 8.5%
- Higher secondary school/HSC/VCE/Leaving Certificate: 15.9%
- College certificate/diploma: 19.7%
- Undergraduate degree: 33.9%
- Postgraduate degree: 13.0%
- Don’t know: 1.0%

**Currently In Paid Employment**

- Yes (full time): 50.9%
- Yes (part time ie < 35 hours/week): 19.2%
- No (A non-working student): 15.8%
- No (Looking for work): 7.4%
- No (Retired): 3.0%
- No (Permanently ill or unable to work): 2.0%
- No (Undertaking home duties): 1.7%

**Lifetime Diagnosis With A Mental Health or Developmental Condition**

- Any mental health or developmental condition: 40.5%
- Depression: 28.2%
- Anxiety, panic attacks or phobias: 21.6%
- ADHD/ADD: 7.2%
- Post traumatic stress disorder (PTSD): 5.7%
- Bipolar disorder: 2.6%
- Autism, Aspergers or Autism Spectrum Disorder (ASD): 2.4%
- Obsessive-compulsive disorder: 2.3%
- Psychotic illness/Schizophrenia: 1.1%
- Other mental health or developmental condition: 4.2%
While GDS data should not be used to estimate the prevalence of drug use in wider populations, in order to describe our samples, we have presented lifetime and last year drug use patterns for Global alongside the global sample.

<table>
<thead>
<tr>
<th>Category (group)</th>
<th>Ever</th>
<th>Last year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcohol</td>
<td>98.1%</td>
<td>92.8%</td>
</tr>
<tr>
<td>Cannabis THC</td>
<td>74.5%</td>
<td>57.4%</td>
</tr>
<tr>
<td>Tobacco cigarettes</td>
<td>71.1%</td>
<td>51.0%</td>
</tr>
<tr>
<td>MDMA</td>
<td>44.9%</td>
<td>26.3%</td>
</tr>
<tr>
<td>Cocaine</td>
<td>39.7%</td>
<td>23.5%</td>
</tr>
<tr>
<td>Cannabis CBD</td>
<td>36.5%</td>
<td>28.9%</td>
</tr>
<tr>
<td>Amphetamine</td>
<td>36.1%</td>
<td>20.1%</td>
</tr>
<tr>
<td>Magic mushrooms</td>
<td>33.4%</td>
<td>16.4%</td>
</tr>
<tr>
<td>LSD</td>
<td>32.3%</td>
<td>20.1%</td>
</tr>
<tr>
<td>E-cigarettes</td>
<td>31.5%</td>
<td>14.9%</td>
</tr>
<tr>
<td>Benzodiazepines</td>
<td>24.8%</td>
<td>13.0%</td>
</tr>
<tr>
<td>Prescription opioids</td>
<td>23.4%</td>
<td>9.7%</td>
</tr>
<tr>
<td>Nitrous Oxide</td>
<td>22.5%</td>
<td>13.7%</td>
</tr>
<tr>
<td>Ketamine</td>
<td>21.7%</td>
<td>5.8%</td>
</tr>
<tr>
<td>Poppers</td>
<td>15.8%</td>
<td>6.4%</td>
</tr>
<tr>
<td>Tramadol</td>
<td>14.6%</td>
<td>5.3%</td>
</tr>
<tr>
<td>2C-B</td>
<td>11.9%</td>
<td>4.3%</td>
</tr>
<tr>
<td>DMT</td>
<td>8.9%</td>
<td>3.4%</td>
</tr>
<tr>
<td>Methamphetamine</td>
<td>8.2%</td>
<td>2.7%</td>
</tr>
<tr>
<td>GHB &amp; GHB/GBL</td>
<td>6.9%</td>
<td>3.5%</td>
</tr>
<tr>
<td>Kratom</td>
<td>6.3%</td>
<td>2.5%</td>
</tr>
<tr>
<td>Methylphenidate</td>
<td>5.7%</td>
<td>3.1%</td>
</tr>
<tr>
<td>1P-LSD</td>
<td>5.2%</td>
<td></td>
</tr>
</tbody>
</table>
Here we have compared our global 2020 sample (collected before the pandemic) with our global 2021 sample. Our 2021 sample was more likely to report only using legal drugs in the past 12 months - aligned with this finding were notably fewer reports of recent cannabis and MDMA use.

Cannabis is included in the illegal category despite being legal in some parts of the world. Other substances with unclear legality, including prescription medication which can be used illegally and novel psychoactive substances or NPS, were not included in these categories.

Top 15 drugs used in the last 12 months GDS2020 vs GDS2021
2020 was an unprecedented year for many people. So, we started GDS2021 with a simple question. After translating responses into English and only retaining the most common responses, the main theme was a negative sentiment towards 2020, as well as a focus on how life had changed or had been boring, interesting, or different during the pandemic.

* At least 100 respondents used this term
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Ratings of pleasure, harm, and enjoyment by drug type

GDS has always been interested in how people balance/prioritize the desire for intoxication-related pleasure when they use drugs with the pragmatic desire of avoiding harm. And given that most drug use for most people is a social activity we wanted to know how important enhancing the pleasure of the company of others was. To help us start thinking about this we asked people to think about the different drugs they had used in the last 12 months and to tell us overall using a scale of 1 – 10 (10 = very important).

*How important is maximising the pleasure you get?*
*How important is avoiding harm associated with your use?*
*How important is the amount of fun you have with other people?*

GDS encourages harm reduction practices for drug use. While we think that reducing the risk of harm is important to people, we assume that maximising pleasure and the fun from being with others when using drugs is more important to most people. And this was certainly true for most drugs we assessed, with pleasure maximisation trumping harm avoidance for cannabis, MDMA, cocaine, heroin, crystal meth, ketamine and nitrous oxide. In fact, harm avoidance was only rated as more important than pleasure for alcohol, GHB, and Synthetic Cannabinoid Receptor Agonists (SCRAs). In the short term for SCRAs and GHB which carry particularly high risk of harm including hospitalisation such wariness is warranted. For LSD and magic mushrooms, it is the importance of dose that no doubt influenced these differential ratings. For alcohol – despite many of those people who respond to GDS drinking at higher risk it suggests that reducing harm remains an important issue. And oddly pleasure as a driver for alcohol use was pretty low, particularly among people who drink less frequently.

The other striking finding was just how important enhancing fun with others was for MDMA and cocaine. Now this is not surprising for pro-social drugs but it reminds us that a pre-requisite for having fun is not getting so intoxicated that you fall sick, get aggressive, seriously annoying or need paramedics, which ruins the night for your mates. Since the risk of harm increases with dose, people who enjoy taking MDMA are reminded larger doses are not more fun either. Sometimes moderation ain’t so bad!

The other finding that did not surprise us was that heroin was a drug that is used with limited consideration of others. Of all drugs it is perhaps the one that offers the most ‘selfish’ of highs, as one patient said to me (Adam Winstock) ‘using heroin is like being wrapped in emotional cotton wool, no-one else matters’.

Clearly this is just a first pass on our analysis but the takeaway message is clear. People who use alcohol and other drugs are concerned about their health and seek to balance pleasure, the risk of harm and social enhancement. Better drug policy, smarter public health education and greater respect for pleasure as driver for many of the things we do could help people achieve the opti..
Ratings of pleasure, harm and enjoyment by alcohol & cannabis

Avoiding harm
- Alcohol:
  - Daily: 6.7
  - Weekly to <daily: 7.2
  - Monthly to <weekly: 7.5
  - <Monthly: 7.8
- Cannabis:
  - Daily: 6.9
  - Weekly to <daily: 6.8
  - Monthly to <weekly: 6.9
  - <Monthly: 7.2

Fun with others
- Alcohol:
  - Daily: 6.0
  - Weekly to <daily: 7.5
  - Monthly to <weekly: 7.7
  - <Monthly: 6.9
- Cannabis:
  - Daily: 6.0
  - Weekly to <daily: 6.5
  - Monthly to <weekly: 6.9
  - <Monthly: 7.2

Maximising pleasure
- Alcohol:
  - Daily: 6.4
  - Weekly to <daily: 6.6
  - Monthly to <weekly: 5.9
  - <Monthly: 5.2
- Cannabis:
  - Daily: 8.0
  - Weekly to <daily: 7.7
  - Monthly to <weekly: 7.3
  - <Monthly: 6.5
**The adoption of COVID-safe practices - for cannabis**

Not only are cannabis and cocaine two of the most commonly used drugs in the world but they are probably the drugs that bring people into the closest (even intimate) contact when sharing and consuming drugs (injecting aside). Over the last 2 years the simple act of sharing a joint or passing a line of cocaine which in the past would be regarded as a way of expressing friendship, community and generosity has necessarily become viewed by some as a transmission route for COVID and hence something to be avoided.

People who used cannabis in the last 12 months were asked how often (on a 5-point scale from never to always) they practiced 10 items relating to COVID-safe practices: (1) in the 6 months before the pandemic, and (2) in the 9 months after the pandemic (up until the time of survey). To prepare data for analysis, reverse coded items were recoded such that always = more risk, never = less risk. Difference scores were created by subtracting the current practice from the pre-pandemic practice: if negative, they had increased risk during the pandemic, if zero no change, if positive, they had decreased risk during the pandemic. A total change score was create across all items.

The data show that the most common change in behaviour from before to during the pandemic was to share a joint/vape/pipe/bong less often with other people (42%). Further decreases in risk from COVID were reported by 25% of the sample who shared their loose cannabis with other people less often, and 24% who were more likely to use joints/pipes/bongs only prepared by themselves. An increase in social distancing while using cannabis was reported by 20% of the sample. Over half of the sample reported some increases in COVID-safe cannabis practices during the time period.

<table>
<thead>
<tr>
<th>The adoption of COVID-safe practices for cannabis</th>
<th>Increased risk</th>
<th>No change</th>
<th>Decreased risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asked another person if you could use their cannabis to make a joint/bong etc</td>
<td>9.3%</td>
<td>76.2%</td>
<td>14.6%</td>
</tr>
<tr>
<td>Be at least 1 metre away from other people you used cannabis with</td>
<td>7.8%</td>
<td>72.2%</td>
<td>19.9%</td>
</tr>
<tr>
<td>Made sure windows were open if using inside with other people</td>
<td>9.0%</td>
<td>79.2%</td>
<td>11.8%</td>
</tr>
<tr>
<td>Only used cannabis joints/pipes/bongs prepared by yourself</td>
<td>12.4%</td>
<td>63.5%</td>
<td>24.1%</td>
</tr>
<tr>
<td>Refused to share a joint someone offered you</td>
<td>10.6%</td>
<td>68.0%</td>
<td>21.4%</td>
</tr>
<tr>
<td>Shared a joint/vape/pipe or bong with at least 2 other people</td>
<td>8.7%</td>
<td>49.5%</td>
<td>41.9%</td>
</tr>
<tr>
<td>Shared your cannabis with another person so they could roll a joint/use in other ways</td>
<td>9.3%</td>
<td>65.7%</td>
<td>25.0%</td>
</tr>
<tr>
<td>Used a joint holder/or another device so you would not have to touch a joint/bong</td>
<td>1.1%</td>
<td>93.4%</td>
<td>4.5%</td>
</tr>
<tr>
<td>Washed your hands after sharing a joint/bong/pipe</td>
<td>1.6%</td>
<td>80.0%</td>
<td>14.4%</td>
</tr>
<tr>
<td>Wear a mask when sharing cannabis with others when inside</td>
<td>0.8%</td>
<td>94.8%</td>
<td>4.5%</td>
</tr>
<tr>
<td>Total difference score change</td>
<td>21.6%</td>
<td>23.7%</td>
<td>54.7%</td>
</tr>
</tbody>
</table>

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The adoption of COVID-safe practices - for cannabis

Some country differences were observed in the adoption of COVID-safe cannabis practices. Over two thirds of our respondents from Brazil reported increases in one or more COVID-safe cannabis use practices, and around 60% reported safety improvements in Canada, Germany, Ireland, Italy, Mexico, Spain, UK, and US. An unusually high proportion of the Romanian sample reported increased risk when using cannabis (40%).
The adoption of COVID-safe practices - for cocaine

People who used cocaine in the last 12 months were asked how often (on a 5-point scale from never to always) they practiced 8 items relating to COVID-safe practices: (1) in the 6 months before the pandemic, and (2) in the 9 months after the pandemic (up until the time of survey).

The one message that was pretty consistent and repeated endlessly during COVID was keep your distance (1-2 metres) from others. Social distancing if adhered to would pretty much rule out sharing drugs with another person. But using most drugs for most people is a sociable activity. For many, preparing and sharing drugs is an intimate and almost essential part of the drug use experience. Sometimes novice users need to rely on others to roll a joint or chop a line and many people who don’t buy drugs themselves are pretty reliant upon others for supply. So COVID was bound to impact the way people used drugs. What GDS was interested in was whether COVID led to changes in the physical environment and nature of interpersonal interactions when people used cannabis and cocaine.

Our findings suggest that while many people did not adjust their behaviours, where they did it was overwhelmingly in the direction of reducing risk, with bigger changes seen among those using cannabis than cocaine. The most commonly adopted behaviour changes were the easy and obvious ones, not sharing, using your own drug supply and using drugs prepared by yourself. Whether sharing joints or straws will fade into history or return once COVID becomes less prominent in our lives we just don’t know.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Increased risk</th>
<th>No change</th>
<th>Decreased risk</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wear a mask when using cocaine with others when inside</td>
<td>0.9%</td>
<td>94.9%</td>
<td>4.2%</td>
</tr>
<tr>
<td>Be at least 1 metre way from other people they used cocaine with</td>
<td>7.0%</td>
<td>81.1%</td>
<td>11.8%</td>
</tr>
<tr>
<td>Refuse to accept the offer of cocaine from another person</td>
<td>12.1%</td>
<td>75.5%</td>
<td>12.4%</td>
</tr>
<tr>
<td>Rubbed/touched your nose/lips after snorting a line</td>
<td>8.9%</td>
<td>71.4%</td>
<td>19.7%</td>
</tr>
<tr>
<td>Offered to share your bag/wrap of cocaine with another person</td>
<td>11.1%</td>
<td>71.0%</td>
<td>18.0%</td>
</tr>
<tr>
<td>Take a wrap or bag of cocaine handed to you from another person</td>
<td>16.5%</td>
<td>68.2%</td>
<td>15.2%</td>
</tr>
<tr>
<td>Snort a line racked up by another person for you</td>
<td>14.6%</td>
<td>65.6%</td>
<td>19.8%</td>
</tr>
<tr>
<td>Share a straw/snorter with another person</td>
<td>9.7%</td>
<td>63.4%</td>
<td>26.9%</td>
</tr>
<tr>
<td>Total difference score change</td>
<td>28.5%</td>
<td>29.5%</td>
<td>42.1%</td>
</tr>
</tbody>
</table>

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We found that overall, people who used cannabis were more likely to report safer use practices (55%) after the onset of the pandemic than people who used cocaine (42%). Considering country differences in cocaine safer-use practices, the countries with highest rates of increased frequency of COVID-safe practices were Brazil (59%) and Sweden (58%); while countries reporting the greatest increases in risky cocaine behaviours included Poland (50%) and Romania (44%).
Cannabis Based Medicines (CBM) are among one of the most rapidly expanding group of medicines in the world. With doctors wary about the associations with cannabis use, learning from the prescription opioid crisis, it’s vital that we have a process by which we can recognise abuse-potential early. While factors such as individual history, the problem being treated and product being used (concentrates v edibles v flower) will exert significant influence on the risk of over use / dependence the signs of loss of control are the same. The question GDS wanted to answer was “how worried should we be about dependence among those who report using Cannabis Based Medicine (CBM)”.

This is not simple since we cannot apply the same criteria for people who use it for pleasure only. So we teamed up with friends at University College London (UCL) (Professor Val Curran) and have piloted what we think is the first tool to assess dependence in those reporting use of CBM.

Of the 14,163 respondents who completed the cannabis section of GDS only (11.1%) had used medicinal cannabis products in the last 12 months. Below are some of the key results exploring parameters used to assess dependence for those who use it medically.

About half report experiencing a time of not being able to access their CBM. A large majority thought stopping use would not be a problem which suggests that dependency is not an issue for them. Use for relaxing is common. This may reflect use for anxiety: a major reason why people use cannabis medically.

- **How often have you had difficulty thinking clearly and/or memory problems that you think is because of using your CBM?**
  - 72.1% never
  - 15.5% once a week
  - 6.4% most days
  - 4.8% everyday
  - 1.2% everyday

- **How often have you used your CBM to help you relax?**
  - 28.7% never
  - 16.6% 1-2 days in the last 4 weeks
  - 12.0% once a week
  - 25.3% most days
  - 17.5% everyday

- **How often have you worried that you would not be able to stop using your CBM even if you wanted to?**
  - 85.4% never
  - 7.1% 1-2 days in the last 4 weeks
  - 3.5% once a week
  - 3.0% most days
  - 1.1% everyday
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Alcohol

GDS uses the Alcohol Use Disorders Identification Test (AUDIT), a World Health Organization (WHO) questionnaire, to ascertain a score for harmful drinking levels and possible dependence. AUDIT scores of 7 and under reflect low risk drinking behaviours; scores ranging from 8-15 represent risky use causing some problems whereas scores of 16 and above represent harmful use causing lots of problems. AUDIT scores of 20 or above warrant further diagnostic evaluation for alcohol use disorder. We also explore the rates of people seeking emergency medical treatment after drinking alcohol and compare countries. Overall, 97.1% of GDS respondents say they have used alcohol in their lifetime and 91.9% have used alcohol in the last year. The alcohol section of the report is based on the 27056 respondents who have a valid AUDIT score, from countries with at least 100 respondents. The majority of respondents are categorised as low risk drinkers (scoring 1-7 on AUDIT).

The results of the GDS have been used to inform the development of the free online and smartphone app, the Drinks Meter www.drinksmeter.com and www.onetoomany.co. In this section, we also explore how many days our respondents consumed alcohol in the last year, how people rate their drive for pleasure, minimisation of harm and maximisation of fun when they are drinking. We then look at how many days people said they got drunk, what proportion of those days they regretted it and explore the main reasons people gave for getting drunk and regretting it.

AUDIT score by Gender

- Global
  - Cis man: 52% (1), 35% (2), 7% (3), 6% (4)
  - Cis woman: 62% (1), 29% (2), 5% (3), 4% (4)
  - Trans-nonbinary or intersex: 56% (1), 29% (2), 8% (3), 8% (4)

% of Respondents

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We asked respondents to tell us approximately how many days in the last year they drank alcohol. On average, people drank about twice a week.

Mean number of days that alcohol was consumed within the last 12 months (n > 1000 respondents)
People drink alcohol for lots of different reasons, many of these are social. This year, GDS was interested to find out about fun, harm and pleasure. We asked people when they drink alcohol how important the amount of fun they had with other people was, how important it was for them to avoid harm from their use of alcohol, and how important it was to maximize the pleasure they got from drinking. People rated all three questions from 1 (not important) to 10 (very important). The average ratings suggest that all three things are quite important. Interestingly, low risk drinkers rated pleasure as less important than respondents in other AUDIT categories. Possibly dependent drinkers rated avoiding harm as less important than those in other AUDIT categories. Those from Brazil, Mexico and Spain rated avoiding harm as more important than those from other countries. The Netherlands was top for pleasure, and Finland top for fun.

How important is the amount of fun you have with other people? How important is avoiding harm associated with your use? How important is maximising the pleasure you get?

Australia: 7.8, 7.3, 6.5
Austria: 7.8, 7.3, 6.4
Belgium: 7.8, 7.3, 6.3
Brazil: 7.2, 8.3, 5.8
Canada: 7.0, 7.1, 6.3
Denmark: 8.6, 7.2, 6.6
Finland: 8.0, 7.4, 6.6
France: 7.7, 5.9, 6.5
Germany: 7.4, 7.4, 6.3
Global: 7.4, 7.4, 6.2
Hungary: 7.8, 7.2, 6.2
Ireland: 7.3, 7.4, 6.1
Italy: 7.4, 7.2, 6.3
Mexico: 6.9, 8.6, 5.3
Netherlands: 8.0, 6.7, 6.8
New Zealand: 6.4, 7.7, 5.4
Poland: 7.5, 7.4, 5.9
Romania: 8.2, 7.8, 6.1
Spain: 7.1, 8.0, 6.1
Sweden: 7.6, 7.2, 6.6
Switzerland: 7.4, 7.3, 6.1
United Kingdom: 7.3, 7.0, 6.5
United States: 7.0, 7.7, 6.3
We continued our interest in drinking and regret in 2021, building on this topic covered in GDS2019 and GDS2020. We defined drunk as ‘having drunk so much that your physical and mental faculties are impaired to the point where your balance/speech was affected, you were unable to focus clearly on things and that your conversation and behaviours were very obviously different to people who know you’. On average respondents said they got drunk 14.6 times a year, so a bit more than once a month. Australian respondents got drunk about twice a month, whereas those from Mexico reported 8.9 times in the last 12 months. Although there were only small numbers, in some countries trans, non-binary and intersex respondents reported that they got drunk on more occasions than their cis counterparts.
When we asked people to consider if they regretted getting drunk, we defined regret as “wishing you had drunk less or not drunk at all”. We did this with the aim of providing people with practical tips on how to minimise the likelihood of getting drunk and regretting it. On average, respondents from Ireland felt the most regret this year, regretting it about a quarter of the time. Those from Denmark had the fewest regrets. Cis men regretted getting drunk the least.
This year, we continued to explore why people got so drunk that they regretted it. We asked people to think back over the occasions they have regretted getting drunk and select their top three reasons for why this happened.

Previous GDS research (Davies et al Int J Drug Policy 2020) suggests that when getting drunk most people are likely to be consuming almost their entire weekly low risk drinking amount in one sitting, exposing them to acute harms such as accidents, trauma and suppression of their immune system. If you are getting drunk and regretting it then clearly you are not having a good time. But the good news is, that this is all completely avoidable. Drinking too much too quickly, mixing your drinks and drinking with people who drink a lot were the top three reasons people said they regretted getting drunk.

The first graph shows how many people rated each reason in their top three. The second graph shows which reasons were most commonly picked in the top three for respondents from different countries.
Rates of Emergency Medical Treatment (EMT) in GDS2020 & GDS2021

Every year GDS asked everyone who took a substance in the last 12 months whether they had sought Emergency Medical Treatment (EMT) following the use of that drug during that time. The below figure compares GDS EMT rates from 2020 (pre-pandemic) with 2021.

Notably almost all rates fell. For example, 1.2% of the whole sample reported EMT following alcohol, compared with 2.0% pre-pandemic. MDMA rates fell by 50%, from 1.0% to 0.5%. Cocaine EMT rates were stable, whereas for methamphetamine and new/novel drugs, EMT rates increased from GDS2020 to GDS2021.

It is worth noting that EMT rates are not affected by prevalence - that is, while there were less people using MDMA in the 2021 data, the rate fell among those who reported last 12 month use across most drug types. The context of use over the pandemic was quite different, with private settings dominating. For heroin and methamphetamine, we see persistently high rates of EMT through the pandemic period. We know that using alone, in isolation at home, is a risk factor for overdose, and may have contributed to these elevated rates for some drug types.
Seeking emergency medical treatment is a serious consequence of drinking, with a cost to the health service as well as the individual. On average 1.2% of respondents had sought emergency care in the last 12 months.
**GDS 2021 Global Report**

**Seeking Emergency Medical Treatment (EMT)**

Among those respondents who did seek Emergency Medical Treatment (EMT) following any substance type, we asked them about their mood, the location of use, and what kind of social context they were in during this episode. As would be expected during the pandemic, most EMT episodes occurred in private settings. While the majority occurred when the person was with well-known friends, a quarter of episodes occurred when the individual was alone. Around a third of the episodes occurred when the person reported being in a bad or not great mindset.

It’s unfortunate that for many people intoxication becomes more attractive when they are feeling miserable or distressed. It’s natural to want a quick way to remove or numb those feelings, and some drugs (usually depressant drugs) are better at doing that than others. But the reality is that most drugs (even depressants like alcohol) will tend to exacerbate the mood you are in (and can often leave you feeling more anxious and stressed the next day). Thus, the phrase ‘drown your sorrows’ is lousy advice. The best times we have in our lives are often with other people. The use of any substance should enhance this social connectedness not detract from it. And if you’re having a crap day, breathe, call a friend, go for a walk, have a healthy meal, have a bath or go to bed.

**Where were you using most of this drug before you sought EMT?**

<table>
<thead>
<tr>
<th>Location</th>
<th>% of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>My own home / a friend’s house or other familiar location</td>
<td>76.7%</td>
</tr>
<tr>
<td>Outdoor public space</td>
<td>9.6%</td>
</tr>
<tr>
<td>Underground rave</td>
<td>1.8%</td>
</tr>
<tr>
<td>Other</td>
<td>2.7%</td>
</tr>
<tr>
<td>Bar / club</td>
<td>2.7%</td>
</tr>
<tr>
<td>Festival</td>
<td>2.7%</td>
</tr>
<tr>
<td>House party</td>
<td>3.7%</td>
</tr>
</tbody>
</table>

**Which of the following would best describe your relationship with the people you spent most of the time with while using this drug, before you sought EMT?**

<table>
<thead>
<tr>
<th>Relationship</th>
<th>% of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>I knew most of them very well</td>
<td>58.0%</td>
</tr>
<tr>
<td>I knew some of them a bit</td>
<td>11.0%</td>
</tr>
<tr>
<td>I did not really know anyone well</td>
<td>3.2%</td>
</tr>
<tr>
<td>Most were total strangers</td>
<td>3.7%</td>
</tr>
<tr>
<td>I was on my own</td>
<td>24.2%</td>
</tr>
</tbody>
</table>

**How would you describe your overall mood and mind set before you started using this drug on the day you sought EMT?**

<table>
<thead>
<tr>
<th>Mood</th>
<th>% of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bad</td>
<td>20.2%</td>
</tr>
<tr>
<td>Not great / bit off</td>
<td>14.2%</td>
</tr>
<tr>
<td>OK...</td>
<td>19.7%</td>
</tr>
<tr>
<td>Fine - no worries</td>
<td>28.9%</td>
</tr>
<tr>
<td>Great, really good</td>
<td>17.0%</td>
</tr>
</tbody>
</table>
This year we discovered that in our sample, the majority of people who report microdosing with either LSD or psilocybin also report taking normal or large doses of that same substance in the last 12 months. Conversely, most people who report normal/large doses do not also microdose. We also discovered that among those who microdose with LSD and/or psilocybin, around a third have also experimented with microdosing an array of other substances, most commonly MDMA, ketamine, 1P-LSD, and DMT. Around a quarter of people microdosing reported any undesired or adverse effects in the last 12 months.

GDS has been exploring the practice, function, and perceived benefits of microdosing psychedelics for the last 4 years. Our findings suggest that the practice may be on the increase among those who use psychedelics with 1 in 4 reporting this practice in the last months with LSD / psilocybin. But our findings also reveal that people are microdosing with a far wider range of psychedelics albeit at lower levels than LSD / psilocybin, with almost one third of those who had used other psychedelics reporting having microdosed with MDMA, ketamine, DMT, and 1P-LSD. Regardless of the psychedelic used, they appear to be remarkably well tolerated by the vast majority though approximately 10% reported unwanted physical / psychological effects. The most common reasons given for experiencing unwanted effects were related to dose and frequency or timing of dosing - all of which are potentially negated by tweaking the pattern of use. For 20-40% however these unwanted / negative effects led to them stopping the practice altogether so contrary to the overwhelmingly positive media spin - microdosing is not tolerated or accepted by all. Of note tolerance to desired physical / psychological effects was reported by less than 5% of participants reflecting both the low doses and sporadic dosing practices adopted by most.

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An update on psychedelic microdosing

Have you ever microdosed with any hallucinogenic or psychedelic substance other than LSD or psilocybin?

- No, has not microdosed with any other substance: 68.4%
- 1P-LSD: 7.8%
- Other LSD analogues: 3.9%
- DMT: 7.4%
- 4-AcO-DMT: 2.5%
- S-MeO-DMT: 1.4%
- Ayahuasca: 2.0%
- Mescaline / San Pedro: 3.4%
- 2C-B: 5.0%
- Other 2C series (e.g. 2C-I, 2C-C, etc.): 1.7%
- NBOMe series (e.g. 25I-NBOMe): 1.1%
- MDMA: 15.7%
- Ketamine: 12.2%
- Blue lotus: 2.6%
- Lists at least one substance above: 31.6%
- Other not listed above (specify): 4.2%
GDS 2021 Global Report

An update on psychedelic microdosing

During the last 12 months, how have you used LSD?

- Only normal/large doses: 78.3%
- Only microdosing: 9.4%
- Both normal/large and micro: 12.3%

During the last 12 months, how have you used Magic mushrooms (psilocybin)?)

- Only normal/large doses: 77.3%
- Only microdosing: 9.9%
- Both normal/large and micro: 12.9%

Which undesired or adverse effects did you experience while microdosing [INSERT DRUG] in the last 12 months?

- LSD
  - None: 70.0%
  - Mental: 12.7%
  - Physical: 7.8%
  - Tolerance to the desired mental effects: 4.5%
  - Tolerance to the desired physical effects: 2.9%
  - Other undesired effects: 2.2%
- Mushrooms
  - None: 77.6%
  - Mental: 8.3%
  - Physical: 6.5%
  - Tolerance to the desired mental effects: 3.4%
  - Tolerance to the desired physical effects: 1.5%
  - Other undesired effects: 2.7%
- Other psychedelics
  - None: 76.4%
  - Mental: 10.2%
  - Physical: 11.2%
  - Tolerance to the desired mental effects: 4.3%
  - Tolerance to the desired physical effects: 4.8%
  - Other undesired effects: 2.8%
An update on psychedelic microdosing

It was interesting to see that the most common reason for reported undesired effects from microdosing appeared to be that the dose was too high, indicating difficulty achieving the correct sub-threshold dosage. This is unsurprising given that most people will be relying on an unregulated market to obtain the psychedelics used for microdosing.

Given the wide range of potential benefits of low dose psychedelics alluded to in the grey and scientific literature GDS was interested in how microdosing might impact use of other medications they might be taking to improve their mental health and wellbeing. Although the majority reported not taking prescribed medications about half of those in receipt of prescribed medications for their mental health, reported that microdosing had led to them stopping / reducing these other medications. It can be risky to stop medications suddenly without medical supervision, especially antidepressants. Our data suggest that doctors need to encourage patients to disclose other approaches to improving their mental health so prescribers can advise accordingly. GDS suspects microdosing may ultimately be easier to incorporate into mainstream psychiatric practice and more acceptable to patients than high dose assisted therapy that would require long periods under supervision and more training for staff. We will explore this issue next year.

Why do you think you experience these undesired effects?

- The dose was too high
- I took it too often, e.g., daily or more times per day
- The time of day was wrong (too early in the morning/too late in the evening)
- Possible issue with substance (e.g., was sold an analogue, etc.)
- Other reasons

Did you stop microdosing after experiencing these undesired effects?

- No, I didn't stop
- Yes, I stopped microdosing temporarily
- Yes, I stopped microdosing altogether

Do you consider microdosing to be a replacement for prescribed medications for mental health conditions?

- No: I still take my prescription medication as prescribed, and I regard microdosing as a useful complementary intervention.
- Yes, somewhat: I still take prescription medication but due to microdosing I have reduced the dose or the frequency of use.
- Yes, fully: Since I started microdosing I no longer take my previously prescribed medication.
- Not applicable: I have not taken prescription medication to manage a mental health condition.
Where did people source their drugs?

This year we asked people who used illegal drugs to report all the ways in which they obtained those substances in the last 12 months. We see that in-person exchange is still by far the most common way to get drugs, even though, for many, COVID-19 restrictions may have limited in-real life engagement. But where in-person exchange occurs, social supply through friends was the most common. Digital sources were important for around 1 in 10 respondents - with darknet markets more commonly reported for drugs other than cannabis, while apps were more commonly reported to access cannabis.

2021 was the first year we asked about Televend: a hybrid darknet and app digital market. A more detailed analysis of Televend can be found here (preprint article currently undergoing peer reviewed): https://osf.io/preprints/socarxiv/gsvyf/

* These categories were only asked of people who sourced cannabis
Can’t find what you’re looking for?

Want more data on your own country or substance of interest?

* We have data on hundreds of thousands of people who use drugs from all over the world and a network of highly skilled researchers who are experts in their field. From in-depth questions on patterns of use, harms, motivations and cost to source of purchase, policing, harm reductions strategies and much more.

* We have data on almost every drug you can think of. We are always interested in collaborating with academics, governments, non-for profits and other groups, especially those involved with public policy, health promotion and harm reduction. We are able to provide bespoke data reports to help you craft optimal policy and harm reduction strategies in your country.

Are you interested in a tailored analysis suited to your specific jurisdiction? We provide competitively-priced bespoke reports created from global data of over 900,000 people who used psychoactive substances.

Global Drug Survey (GDS) is an independent research organisation. Everything is self-funded so we are free to research what we think is important to promote honest conversations about drug use and to help people stay safe.

Sharing our findings with people everywhere

To ensure our findings are accessible and useful to people who use drugs we offer a range of free harm reduction resources such as:

The GDS Highway Code: www.globaldrugsurvey.com/brand/the-highway-code/

The Safer Use Limits: www.saferuselimits.co/

Digital health apps to deliver brief screening and intervention: www.drinksmeter.com and www.onetoomany.co

Harm reduction and drug education videos available on our YouTube channel: www.youtube.com/user/GlobalDrugSurvey