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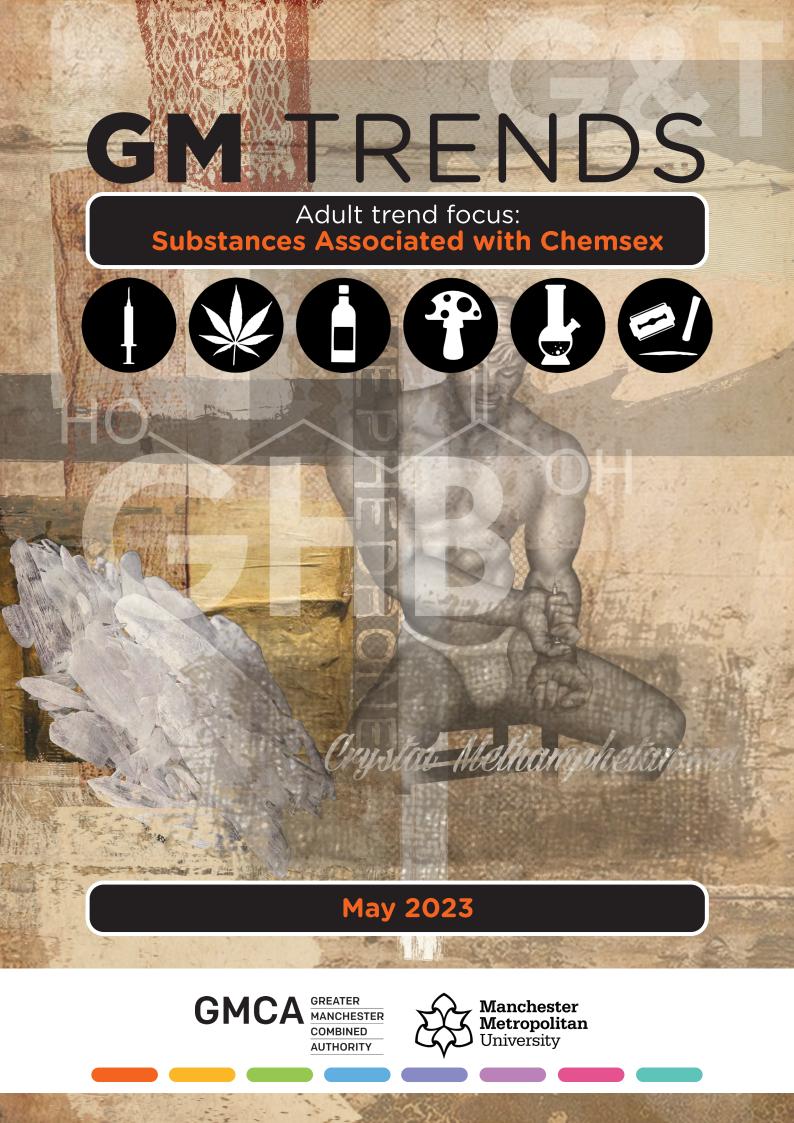
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GM TRENDS O O O O O O O

Adult trend focus: Substances Associated with Chemsex

Content

1. Introduction
2. The local chemsex scene3
A growing scene4
The impact of the pandemic4
3. Mephedrone5
Reduction in the use of mephedrone6
The mephedrone market6
4. Crystal Methamphetamine8
Changes in market supply8
Increased availability8
Price decrease9
Quality increase10
Production and Supply Routes13
A lucrative unexposed crystal meth market in Manchester14
Changes in market demand: increased use of crystal meth14
Changing demographics of crystal meth users15
Crystal meth: The case for monitoring, awareness raising and training17
Misuse of drugs available on prescription19

5. GHB and related substances (GHBRS)	21
Reclassification of GHB and and the impact on the market	21
Growing prevalence of 'G' use	22
Market supply factors	.22
Increased price	.22
Variation in the strength and effects of 'G'	23
Harms associated with 'G'	.24
'G' and (the underreporting of) sexual assault	24
'G'dependency	24
'G' Harm Reduction: desire for awareness raising among people who use 'G'	26
Hospitalisation	27
'G' and the risk of overdose	28
The case for awareness raising over 'G' overdose to reduce drug-related deaths	.29
6. Summary: The need to build harm reduction approaches	.31
7. Recomendations	.32
References	.34

1. Introduction

"I think G is gonna be a big issue for a long time, I don't think that's going to go away, and I think [crystal] meth is just going to get worse." (GMADT6)

This year's Adult Trend Focus is centred on the main substances used in the local **chemsex** scene – *crystal* **methamphetamine**, **GHB** (*Gamma-Hydroxybutyric Acid*) and related substances, and **mephedrone**. '*Chemsex'* refers to combining the use of specific substances ('chemicals') with sex to facilitate and/or enhance both experiences. The term chemsex is predominantly associated with *men-who-have-sex-with-men* (MSM), although it is increasingly acknowledged that chemsex does not exclusively involve MSM. Some UK academics studying sexualised drug use beyond MSM have coined the term '*Pharmacosex*' to describe the ways in which wider populations experiment with a range of illicit drugs that modify and enhance their sex lives (*Moyle et al., 2020*). These authors argue that chemsex is just one specific type of pharmacosex. We note that other terms are also commonly used such as '*party and play*' (this term has more traditionally been used in the USA and Australia rather than 'chemsex') and '*hot and horny*'. These terms, often abbreviated to '*P&P*' and '*H&H*' are particularly used on '*hook-up*' Apps such as *Grindr*. However, 'chemsex' is the most established and used term in the UK by a range of stakeholders and hence the term that we use here.

A wide range of substances were reported to be used in a chemsex session (including chillout sessions). These include alcohol, *benzodiazepines* (e.g., 'Xanax'/alprazolam and 'Valium'/diazepam), cannabis, *powder* cocaine, *crack* cocaine, ketamine, Viagra and Zopiclone. However, the three main substances associated with chemsex are: *crystal* methamphetamine (aka 'crystal meth', 'tina' or 'T'), mephedrone (*methylmethcathinone*, aka 'M-Cat' or 'meow-meow'), and GHB (full name gammahydroxybutyrate) or GBL¹ (full name, gamma-butyrolactone). GHB and GBL are both most commonly and generically referred to as 'G' or 'Gina'. Crystal methamphetamine and mephedrone are stimulants whereas GHB and GBL are depressants. Popular definitions of chemsex refer to the use of at least one of these three substances as they are associated with inducing euphoria and disinhibition, enhancing sexual arousal, and increasing sexual performance. Hence, the focus of this 2022 Adult Trend Focus is primarily on the changes to the availability, price, and use of these three substances most closely associated with chemsex in the Greater Manchester region.

2. The local chemsex scene

Manchester is perhaps most commonly associated with having a chemsex scene (*Schmidt* et al., 2016), including its well-established *LGBTQ+* night-time economy ('the village') and dedicated chemsex support services. However, many respondents were keen to point out that the chemsex scene was not limited to the city centre of Manchester.

"People associate it with the village and Manchester, but you go on a hook-up app like Grindr, and you'll find people 'H & H', 'Hot & Horny' all over – Oldham, Stockport, Salford, you name it, it's everywhere now." (GMADT27)

Outside of Manchester, Salford was often mentioned as having a growing chemsex scene.

¹GBL (and 1,4-BD) are chemicals that are closely related to GHB.

"I think it's a lot more common than people might think. ... I think it's quite prolific in Salford, Salford Quays. In all the rich areas - like New Islington, Salford Quays - where all the rich people live.... It's very expensive. Cocaine and crystal meth are very expensive." (GMADT7)

A growing scene

It is difficult to confidently estimate the scale of chemsex in the region or indeed, nationally (*Edmundson et al., 2018; GOV.UK, 2021*). However, there was a widespread perception from respondents that the chemsex scene had increased in the latter stages of lockdown and over the past year.

"Manchester wasn't a patch on London, wasn't a patch on Brighton, so they were bigger chemsex scenes. London is still huge because of the amount of people there. But, then, when you're coming back into Manchester, certainly in the last 12 months, Manchester is certainly becoming on a par with them. I think Manchester now has probably got a bigger chemsex scene than Brighton. . . . But Manchester, I can't believe how much its exploded." (GMADT9)

"... before lockdown, when we spoke about chemsex use, I remember saying, 'There's about 20 odd parties around', I bet if you went online now there'd probably be about 30-40 parties on and it's a Tuesday night. [...] but if you've worked weekends or you work in the hospitality industry, you'd be off Monday, Tuesday, so you'd be partying now." (GMADT26)

"It's growing [the local chemsex scene], I have to say, yeah, it's absolutely growing. As well as the apps as well as the parties. Yes, it's bad, really.... its growth is through the growing number of people using those types of drugs that gives that potent, horny feeling that leads to that type of party." (GMADT20)

In addition to the reported increased number of parties, the number of people respondents knew who were specifically using *crystal meth* and 'G' was often reported to have increased.

"When I came back [to Manchester] I noticed there's a lot of people using crystal meth and G. I think mephedrone has always been on the scene as much as I remember. But those two drugs were something I felt, "Oh, that's new". (GMADT3)

"If you go on Grindr, it's 'H n H', high and horny. 'T & G' [crystal meth and GHB]. People advertising on there to come round and have chemsex parties. And that's more and more common. You look on there and every weekend, every night. People advertising on there that they've got drugs, 'Come round, let's have fun'. In my opinion it's getting worse. There's people that are taking it [crystal meth] that I never would have thought would have." (GMADT6)

The impact of the pandemic

Mirroring international survey evidence (*Bendau et al., 2022*), respondents to this Greater Manchester research attributed the lockdown periods to contributing to the growth in the chemsex scene.

"[In lockdown] people were so fed up without any human contact, the number of people who went on to the apps like Grindr, started to increase again. And although people weren't going out clubbing for quite a while, they weren't going out to the pubs, they were meeting up at home." (GMADT4) "It's doubled [during the pandemic]. That's fact. It's doubled. People working at home, that means you can have chemsex on the Monday night, and still work at home on the Tuesday. You can do that without sleep on the Monday. That happens, you never used to be able to do that because you'd have to get to work on a Monday at 7, 8, 9, 10 o'clock. Now you don't have to do that." (GMADT5)

In addition to the role of the pandemic in the growth in the local chemsex scene, several respondents also highlighted how the pandemic had impacted on their own increased use of chemsex substances such as crystal methamphetamine and 'G'.

"I controlled my drug usage and stuff like that, managed to get it back down to a more manageable level. Got myself back on track, and then, COVID came. ... So, I end up like, ... being locked down and stuff, I ended up back using again. And then it's just gone like, ... not necessarily out of control but actually, it's got to the point now where I need it [crystal meth] to function." (GMADT9)

The following sections (sections 3 to 5) focus on the reported changes to the availability and use of the three main substances associated with chemsex – **mephedrone**, *crystal* **methamphetamine** and **GHB/GBL**.

3. Mephedrone

A combination of the reduced availability of **MDMA** culminating in poor quality ecstasy pills, the low purity of **cocaine** and the rise in online and high street shops selling 'legal highs' at the end of the 2000s, led to mephedrone rapidly becoming the fourth most popular drug used by clubbers by 2010 (Winstock et al., 2011). It was sold for £10 a gram, or less if purchased in larger quantities, and was typically sold as a powder in packets labelled as 'plant food' and 'not for human consumption' - circumventing the Medicines Act², consumer standards and the Misuse of Drugs Act. It was subsequently brought under the control of the Misuse of Drugs Act as a class B substance in April 2010. However, a survey conducted in July 2010 in two 'gay friendly clubs' in London reported that it was the most popular illegal drug, with over two-fifths (41%) having taken it in the past month and over a quarter (27%) having either taken and/or planning to take it on the night (Measham et al., 2011). Although it was still available on the street market, after its legal status moved from a 'legal high' to a Class B substance, the price reportedly doubled to £20 a gram (Daly, 2012) and purity levels dropped. Subsequently, by 2014, the MixMag survey of UK clubbers found that it had fallen down the bottom end of the top 20 most used drugs (Winstock, 2014). Since the mid-2010s its use as a 'club drug' has continued to decline and it has been mostly associated with MSM and the chemsex scene.

The desired effects of **mephedrone** use are to make people feel alert, aroused, confident and euphoric. However, **mephedrone** can lead to nausea, headaches, hallucinations, insomnia, reduced appetite, dizziness, and excessive sweating. Users report a fast build-up of tolerance, making it easy to develop dependency. While it was most commonly snorted when used as a 'club drug', **mephedrone** can also be swallowed, smoked and injected. It is more commonly reported to be injected ('*slammed*') in a chemsex context.

²The Medicines Act has subsequently been abolished and replaced in 2012 by The Human Medicines Regulations.

Reduction in the use of mephedrone

"But there just don't seem to be as much M-Cat use you know; I've not noticed people even asking like on Grindr or things like that . . . you know if they mention 'high & horny' or anything like that. It's not mentioned M-Cat all the time now." (GMADT15)

It was unanimously reported by respondents that the popularity of **mephedrone** had declined in recent years with those who had previously used **mephedrone** switching to *crystal meth* as their stimulant drug of choice. The most frequently discussed reasons given were the change in perception of **mephedrone** which was often described as a 'cheap', 'dirty' or 'nasty' drug. Its distinct smell was often likened to 'cat piss' and it was widely discussed as currently having much less social capital than *crystal meth*.

"People seem to think that mephedrone makes you smell. They'd rather take crystal meth because it's glorified." (GMADT6)

"It's only in the past two or three years that I've been introduced to crystal meth – it used to be M-Cat, ketamine etc. M-Cat in Manchester is not really around as much anymore. Everyone is on T and G. Mephedrone, what it was doing, was making people paranoid in the chill out. Or in a sex party, people weren't able to get hard. And then, everyone had already chewed the Viagra but then sniffed the M-Cat. So, then there'd all be sat there smelling like cat wee, sweating their backs out, jaws going. You're not getting an erection when you look at someone going like that! And, it was just dirty. So, people seem to think like, G and T is cleaner." (GMADT8)

"I think M-Cat is not used as much anymore, 'cause some people, some of my friends are like, 'Who takes that anymore?' It's all about Tina. So, I think the main thing is the Tina." (GMADT6)

The mephedrone market

The quality of **mephedrone** was often compared less favourably to *crystal meth*, with respondents noting that although it was much cheaper to purchase than *crystal meth*, you would have to reuse it more often, whereas a gram of *crystal meth* could last two or three days. In particular, those who *'slammed'* their drugs reported that one of the advantages of *crystal meth* was not having to inject as often as they did with **mephedrone**. Hence although it was more expensive per gram, it lasted much longer.

"But I think the use of T, perhaps it's become more popular, because its effects are longer lasting. Maybe from a monetary point of view, it actually works out to be more economical, because then you use less as well." (GMADT11)

A commonly reported benefit of using *crystal meth* was the reduction in *'slamming'*. Some respondents noted they had much longer gaps between injecting 'T' compared to **mephedrone**, whilst others stated it was so much stronger, they stopped 'slamming' altogether and just smoked 'T'.

"... it [mephedrone] was huge. But then the whole supply issue and in terms of quality it was very up and down. And that was at that point where people found they were injecting more and more mephedrone to get a high and to maintain the high. And that's when a lot of people unfortunately made the move from mephedrone into doing crystal meth. Because the supply side of crystal meth improved. And it was really expensive, but a quarter gram of crystal meth could last you for three days. Where in that time you could probably have gone through five to 10 grams of mephedrone. And the value and cost are virtually the same. [...] To put it into context, I personally was injecting [mephedrone] five grams a night, on my own. I was buying it in quite large bulk. It was actually relatively cheap. But the number of so called chemsex parties I used to go to, people were injecting [mephedrone] every 20 minutes. [...] Unfortunately, then crystal has got bigger and bigger in Manchester." (GMADT4)

"My friend was addicted to M-Cat, injecting it. I was with him one day, and he threw his pins away in the bin. I said, 'Why've you done that?' He said, 'When you're smoking crystal meth, you don't need to inject. Smoking Crystal Meth gets you higher than anything. You don't need to inject if you smoke that.' And that's coming from someone that was slamming about 30 times a day, every day. So it just shows the potency of it. I think it's overtook M-Cat quite a lot." (GMADT6)

Others noted that smoking *crystal meth* was much quicker and easier than *slamming* **mephedrone**, and it also gave a better and more instant high.

"I think it's [mephedrone] becoming less common because It's easier to put a bit of Tina in a pipe [...] yeah, its quicker, it is easier, and you get a better high off it. It's easy to just smoke it." (GMADT15)

In addition to these reported benefits of *crystal meth* over mephedrone, one respondent stated that a recent police operation had impacted on the availability of **mephedrone**.

"About two months [ago] the police in Manchester caught about 18 drug dealers and since then, all the M-Cat dealers have gone!" (GMADT13)

Yet a couple of respondents did state that good quality **mephedrone** was still in circulation and that it remained good value for money compared to *crystal meth*.

"I had M-Cat about six or seven weeks ago. I think I paid £25, and I got two grams of it. And it was really, really, strong. It was in line with the crystal meth it was that strong." (GMADT6)

"There are two types of M-Cat's on the market. One is like Coca Cola, brown colour and it's more stronger than the other. Similar for like the same effect for crystal meth but much cheaper, three grams for 60 quid. But the other one is like poison." (GMADT12)

The report above that there were two types of **mephedrone** on the market with one better for *snorting* and the other better for *slamming* was repeated by five respondents.

"All I know is that there's two kinds of M-Cat and one is for snorting and the other is for slamming." (GMADT15)

"There are two types, I can't remember which way round it is, but one is white and the other more yellow coloured. One is used for snorting, the other slamming." (GMADT19)

We did not receive any **mephedrone** for testing this year through MANDRAKE, so these reports of different quality and coloured **mephedrone** have not been verified through forensic chemical analysis.

As the following section highlights, another significant factor in the decreased use of **mephedrone** is the changing local *crystal meth* market.

4. Crystal Methamphetamine

Crystal methamphetamine can be swallowed, snorted, injected, smoked or *'booty bumped'*. The onset, intensity and duration of effect depend on the dose and method of use. Our research found that most people reported smoking it in a pipe with *'slamming'* (injecting) and *'booty bumping'* (typically dissolved in water and deposited in the anus via a syringe with no needle) also frequently reported. Desired effects are to make users feel alert and aroused, but it can also make people feel agitated and paranoid and respondents often reported staying awake for three days or more. This sometimes leads to drug induced psychosis (*Moreno-Gámez et al., 2022*). There is evidence of long-term mental health problems (*Lappin et al., 2016; Schecke et al., 2019*). As a stimulant, *crystal* methamphetamine raises the heart rate and blood pressure which can lead to heart problems (*Ben-Yehuda and Siecke, 2018; Schwarzbach et al., 2020*). People can overdose on it, and it can lead to psychological dependence (*Brooks et al., 2022; Fairbairn et al., 2008; McKetin et al., 2006; Quinn et al, 2021*).

Changes in market supply

A recent report into **methamphetamine** markets in the EU by the *European Monitoring Centre for Drugs and Drug Addiction* (EMCDDA) refers to *crystal* **methamphetamine** as 'an *unwelcome addition to the EU drug market*' going on to state that: 'the potential spread of the smokable crystal form of methamphetamine, due to increased amounts present in the EU, is a concern in terms of health consequences including acute toxicity, psychotic episodes, polydrug use and death. In the longer term, there is the potential for an additional burden to be placed on hospitals and specialised treatment services. In addition to the harms to individuals, there are risks to public safety including criminality, violence, or dangerous behaviours such as driving while under the influence of drugs' (EU Drug Market: *Methamphetamine, 2022:7*). As we stated in last year's report, the availability and use of this substance is something that should be closely monitored.

Increased availability

"I think it's [crystal meth] a lot more available, more easily available today definitely." (GMADT7)

In a UK context, *crystal meth* has previously been more available and used in London. For example, drawing on a national sample of UK MSM recruited in late 2014 as part of the *Gay Men's Sex Survey* (GMSS), Melendez-Torres et al. *(2016)* reported on demographic and sociosexual risk factors for *crystal meth* use in the UK. This research paper supported earlier quantitative findings (*Bonell et al., 2010*) that *crystal meth* use was much more common in London than elsewhere in the UK. It reported that MSM living in the London region were over five times (11.1%) more likely to have used *crystal meth* in the past year than MSM living in the North of England (2.1%) (*Melendez-Torres et al., 2016*). Our respondents often supported this finding, stating that *crystal meth* use in Manchester was much less common five years ago than it was in London, and that when it was available, it was often brought up from London.

"Four or five years ago, you didn't see much of it around. You might know somebody in London who would bring some up. But now, it's everywhere, it is getting on a par with London now." (GMADT19)

However, a common narrative to emerge from our interviews was that crystal meth was now easier to access locally. Respondents discussed how *crystal meth* had started to become more available locally around 2015/2016.

"2016 was the changing point, 2015/2016. It was much bigger in London, and a lot of people here were getting it from London. At that point, the suppliers in Manchester started to take over and it started to become more available." (GMADT4)

While some respondents stated that access and use of *crystal meth* had begun to increase since 2016, most reported that it had become much more widely available in the region in the last 12 to 18 months – with a noticeable spike in the number of dealers.

"... from personal experience, being involved in that scene in Manchester, I can certainly say that in the last 12-18 months, there's been an explosion of use of crystal meth around Manchester. I've been around that scene for a long time, but say before, two to three years ago, there's probably only two to three people supplying it in the area. I currently have on my phone, 23 crystal meth dealers in Manchester. It's like, its unheard of. There's probably more, springing up all over the place. Each one is like, not regularly, but when I've bought stuff from other places, each one is saying how busy they are. A lot of them have moved into it from other stuff because the other stuff [mephedrone] isn't being bought anymore." (GMADT9)

"I moved away from Manchester over four years ago. Back then when I left [Manchester] Tina was around but it wasn't that easy to get hold of, and it was expensive, so most people were using M-Cat. One thing I noticed when I came back this year is how much Tina is around and how many people are using it up here compared to when I left." (GMADT23)

"I mean, it's really, really, really, really, easy to get hold of now. I know when I first tried it [in] 2017, we could rarely get hold of it. Now every dealer that I know of in Manchester that I use has access to that. And most do offers. I would think that especially with dealers who are homosexual, the main things that they sell is M-Cat, Tina and G, and they do a LOT of offers on the Tina. Yeah, certainly a lot more people do T nowadays." (GMADT18)

As we highlight below, in addition to reports of offers involving *crystal meth*, there was widespread reports of a significant change to the price.

Price decrease

"I know someone and I think they got three grams [of mephedrone] for £70, so it's probably about £25 per gram . . . so again, you know like years ago you would get M-Cat for like a tenner a gram and Tina was 100 [pounds]. So yeah, I think there's obviously demand [for M-Cat] is going down. Prices are going up and also T demand that is going up so the prices come down to, you know 'cause they can buy in bulk." (GMADT15)

As noted above, part of the attraction of **mephedrone** was its widespread availability and cheaper price when compared to *crystal meth*. Almost all respondents discussed a significant drop in the price of *crystal meth* as dealers compete for their share of the market. Respondents consistently reported to us that alongside *crystal meth* becoming much more available, and more dealers selling it, the price had dropped to approximately half what it was two years ago³, making it more affordable. At the same time, the cost of **mephedrone** has increased. So, while previously, crystal meth was as much as 10 times more expensive

³EMCDDA (2022) statistical bulletin data set shows UK methamphetamine prices of between 80 and 170 euros (£70-150) per gram in 2019.

than **mephedrone** per gram, the current prices mean that *crystal meth* is now as little as twice as expensive than **mephedrone** and as we highlighted above, users report using smaller amounts and less frequently.

As outlined below, several respondents attributed this drop in price to a more competitive market, with more dealers resulting in a reduction in price and the offering of special deals, including 'sex party' deals that comprise 'G' and prescription drugs such as *Viagra* and **Zopiclone**.

"It's getting cheaper now you know. When I first started it was like, £60 for a half [a gram] or 2 [halves a gram] for £100. But now it's like, £40 for a gram. But then they're doing deals, they sell G with it. So instead of buying them separately, you buy them together in a sex party deal." (GMADT8)

"There's a lot more dealers now. There were two or three main dealers in Manchester who sold it [crystal meth] a few years ago, now there's like 10. The numbers are going up in the dealers. The price is going down. It's going cheaper, I'd say. There's a lot of competition for the old school dealers who've been selling it since the start. There's people my age who started dealing it, and putting their own price on it. It's always been an expensive drug, Tina. You know, £200 a gram back then. Even in London you can pay £150 a gram. It's dropped down to £60, some people [sell it] at £80." (GMADT14)

"I think with the potency of crystal meth, I think we in general need to really concentrate on the crystal meth aspect. There's a few things that worry me about crystal meth. It's shot up 100%. I can tell by the amount of dealers, and by how cheap it's going. They're trying to knock the price down each time to beat each other. I used to take crystal meth seven years ago and it was double the price it is now. It's come down from £50 for half a gram, to £60 a gram, it keeps on getting cheaper and cheaper." (GMADT6)

"The price has plummeted as well. [. . .] Some places, you'll get a gram for 40 quid". (GMADT9)

"It's £40 [a gram]. So yeah, the prices have come down." (GMADT23)

In summary, almost all respondents reported a significant drop in price with a gram now available for as little as £40. Nevertheless, several respondents still reported paying £100 or more. This price variation may be linked to quality: as we detail below, it was reported that there is a wide range of *crystal meth* being sold locally.

Quality increase

In contrast to **mephedrone** where quality was sometimes reported to have decreased, some respondents commented that the quality of *crystal meth* had recently increased⁴.

"It's going more towards Tina more than anything at the moment, plus I've had a lot of T, and the strength is getting stronger." (GMADT15)

"I would say the quality is also really good at the moment. So you don't need a lot. You can go hours and hours before using again, it's that strong." (GMADT21)

⁴EMCDDA (2022) data set shows potency to have been 12-87% purity in 2019.

There appears to be a wide variety of different types of *crystal meth* in circulation with significant variation in both the quality and price. The types of 'T' discussed by respondents ranged from a variety of different colours, countries of origin and strengths.

"I know, there's bits that have come imported from Ireland. And lots of it is manufactured in Liverpool. So now, you can get, there's so many different types, there's champagne, pink crystal meth, yaba, there's all different varieties, different strengths, different variations." (GMADT9)

"I'm an escort and I see for crystal every style and everything I see . . . I have used. So, you know, they are calling Tina 'Pink Tina', 'Green Tina' and 'Normal Crystal' so there is all these different crystal meths knocking about now." (GMADT12)

"In the Manchester market, I know of four or five different types [of crystal meth] . . . It goes [from] £60 to £140." (GMADT13)

When discussing the different types and the quality of crystal meth, the alleged country of origin was often referred to, with '*English T*' usually referenced as the standard quality, cheaper priced 'T', with the better-quality **crystal meth** typically prefaced to different countries such as China, Hong Kong, and Germany.

"I've noticed a difference between the English T and the Hong Kong T. There's a definite difference, the Hong Kong feels better quality. It's not as drying in the mouth. It's got a particular taste. I do notice a difference between them too. I think it's £60 for the English T per gram and £70 for the Hong Kong T." (GMADT13)

"There's five different varieties of T at the moment, . . . they have different strengths and variants. [. . .] English, Chinese, Hong Kong and Champagne Rose those are the different types. Interviewer: And are they known to be like better quality, and you pay higher prices? Yeah, the better quality, so the English one I think this is known as a cheaper one and then you know, Hong Kong's a little bit better, then you go the champagne and it's basically purer. Interviewer: So, is there much difference in the prices? Yeah, yeah, it can go from like 50 to 80 [pounds per gram]." (GMADT15)

While the *'Pink Champagne'* or *'Champagne Rose'* version was often reported to be sold as premium quality and higher prices, three respondents suggested this was a marketing strategy and that it was average or actually poor quality.

"So sometimes, there's some dealers who are making crap crystal meth and putting pink food dye in it and selling it." (GMADT9)

"The pink one, it can make you too high . . . It's a little bit scary. It's like some paranoia, like something is not quite right, but you are still high. You still feel nice." (GMADT11)

"The price ranges from £60 to about £80 to £100 for a gram, depending on the quality. There's like English T, Hong Kong T, Pink T, Champagne T, as well. These are the ones I've heard of. The 'Pink T' is seen to be the most expensive. Interviewer: What is your experience with the Pink T? I tried it and I didn't feel like it was much stronger than any other, but I think it had a particular flavour to it, but I didn't feel it was stronger than the others to be honest." (GMADT13) As the following respondent notes, the more expensive *crystal meth* can be cost effective as the amount of time people reported going between redosing can be much longer.

"People who use the English one say that it is fun in really heavy sessions. Honestly, I say this too, because it is really strong and you do not feel your body, you do not feel any pain in your body. And I speak from experience from a lot of sex parties and nasty sex parties. People using English [T] and slamming, slamming. [...] The German one is the best, high quality and best but [the] most expensive on the market. It's making me too high, but it keeps me settled. I am slamming my first dose then my second dose after five or six hours. Yeah, I would never use more, it keeps me with a really good feeling, really still working under my body and not make me nasty, ... puts me in a good mood. Honestly, the German one, that's why it's so expensive. Before [buying the German version] my monthly usage was about 12 grams, but now I go for 2 gram per month. I've made massive cuts yeah, on what I use but it is because I use the right stuff, that's why." (GMADT11)

Regardless of the country of origin, some experienced users of *crystal meth* discussed how they could tell by the look of the crystals if it was good quality. They would often talk about the colour, with the clearer, translucent crystals viewed as a sign of high purity.

"So, I have a lot of experience of crystal so when I see it, I understand straight away that it is working for me or not. Yeah, I never use it if it is like a Shadowy Crystal, I use the bright crystal, made always hard and the best price one, German one is a high quality. Green Meth - it looks really good, looks like pure diamonds, yeah, beautiful colour. Pink, pink is looking absolutely amazing but uh, I say again, I don't know how they make it this one. But they are all working, but a different high and different people enjoy . . . prefer different types but it's all fun, yeah? German is best, Hong Kong is good. I wonder if it's coming from Hong Kong first? . . . but German is best." (GMADT11)

However, the same respondent raised concerns about the content of what was sold as 'English T'.

"The English one is the cheapest, they are mixing things together and making it from ketamine and Tina mixed together. That's why it's a terrible and that's why it's too strong and has killed people. They mix it, the English one, I know, I tried it all and I've used for 20 years, I know the markets." (GMADT11)

A couple of respondents also stated that lines on the crystals was a sign that it had been reheated and would put them off buying it.

"You can see this one here [pointing to a crystal], you can see how it has some fine brown lines on it there and just there. That to me is a sign that it has been reheated. I'd expect that if you test it to not be great quality." (GMADT27)

The reported variation in quality and the concerns raised regarding the content of *crystal meth* has prompted a focus on *crystal meth* as part of this year's MANDRAKE testing allocation. Two samples were provided by a current Manchester based user with one further sample obtained through a police custody drug store in Tameside.

The analysis of the crystals discussed above (see fig 1 below) were found to contain 71% *crystal* methamphetamine. In contrast, another sample (see fig 2 below) was obtained from

the same source that was reported to be better quality and the respondent paid a premium price of £120 for a gram. On analysis, this was found to be high purity – 94%. This was higher than the top end (87%) of the purity range reported in Europe (*EMCDDA, 2022*). As the image below demonstrates, the crystals were more glass like which experienced users of crystal meth stated was a visible indicator of quality.



In contrast to this high purity *crystal meth*, the **methamphetamine** content of the sample obtained from Tameside police custody property store was much lower (22%), demonstrating the wide variation of purity (22% to 94%) alongside the significant variation in reported prices paid.

Production and Supply Routes

The purported different countries of origin discussed above are of interest. Following on from the 2019 EMCDDA Europol joint threat assessment which concluded that the threat posed by methamphetamine appeared to be increasing, in May 2002 the EMCDDA published a report on 'Methamphetamine and the EU Drug Market'. The 2022 report noted that despite the unprecedented disruption caused by the COVID-19 pandemic, the methamphetamine situation in the European Union (EU) had continued to evolve. It stated that Europe is now both a destination and transit zone for methamphetamine produced in other production hubs, citing Iran, Nigeria, and Mexico. The EMCDDA report also documents recent Mexican involvement in methamphetamine trafficking to Europe, highlighting that on several occasions, multi-tonne quantities of methamphetamine originating in Mexico have been seized in the EU. This implies a level of distribution and logistics collaboration between European and Mexican criminal networks. While these volumes appeared to be destined for export to other global markets, the report notes the risk that demand may be driven by increased levels of accessibility in some EU Member States. Furthermore, it was reported that smaller amounts of methamphetamine are regularly intercepted in postal packages sent from Mexico, some of which may be linked to online supply.

The report also noted a new threat to the EU: the development of **methamphetamine** production capacity in Afghanistan, the main source of Europe's heroin supply with longestablished trafficking routes for Afghan opioids (*EU Drug Market: Methamphetamine,* 2022). Recent increases in **methamphetamine** use and seizures in Turkey (also of **methamphetamine** in liquid form) are highlighted as potential early indicators of activity on the Balkan route.

Alongside these transit routes, the report highlights what it refers to as 'industrial-scale production in Europe', with seizures in the EU significantly increasing in the last few years, both in terms of the number of reported seizures and the amounts seized. Since 2019, the

production facilities detected in the Netherlands and Belgium were noted to have increased in size, sophistication and output. It states that, 'Dutch and Mexican collaboration and shared expertise are driving large-scale methamphetamine production in Europe due to increased profitability of methamphetamine in comparison to amphetamine and MDMA' (EU Drug Market: Methamphetamine, 2022:6). Detailing how laboratories in the Netherlands and to a lesser extent Belgium, have added **methamphetamine** production to the **amphetamine** and **MDMA** that are already produced there - as the knowledge, chemicals and equipment required for the three drugs considerably overlap.

Collectively, these developments lead the EMCDDA to note that, *'It will be important to be prepared, both operationally and strategically, for a supply-side push from this direction'*. (*EU Drug Market: Methamphetamine, 2022: 8*). Indeed, given that we know that there are well established drug trafficking routes into the UK from the Netherlands, Balkans, Turkey, and Afghanistan for other popular drugs such as **MDMA**/*ecstasy*, *cocaine*, and *heroin*, it appears highly plausible and likely that these drugs will make their way into the UK. Yet interestingly, the countries mentioned locally in this Trend Focus as the marketed country of origin – China, Hong Kong, and Germany – were not mentioned in this EU report.

 A lucrative unexposed crystal meth market in Manchester The increase in the number of dealers led some respondents to discuss this market as a new, attractive market to be involved in that was low-risk and delivered high profits compared to other drug markets.

> "But the police do not touch the crystal meth dealers. I don't know why. This is strange as well. I know two guys and [they sell] crystal meth in the home I visit every day. Just people the police never touch. I ask them 'How many times do you get trouble?' He says, 'Never'." (GMADT13)

> "One of the biggest changes [is] the straight drug dealing gangs have now moved in. They've realised it's easy. And you know what, the police don't do anything in terms of the gay drugs scene. They're not really on it, they're not on it in the scene. There still chasing after heroin and cocaine and weed. From a dealer's perspective, there's no gangs involved. You've got no territory wars. The police aren't actively looking for you because they're looking for crack and weed [dealers]." (GMADT9)

The same respondent went on to discuss that despite the lower prices being charged, the mark-up was still high.

"It only costs £7 to make a gram." (GMADT9)

Changes in market demand: increased use of crystal meth

"When crystal meth started coming out on the gay scene, everyone was like, 'That's so desperate'. Now, all those people are now injecting and smoking it, or smoking just to get through the day." (GMADT18)

There was a consistent narrative throughout the interviews, that attitudes towards **crystal meth** use had changed in recent times – and that at least in relation to smoking it, it was much more acceptable than it used to be.

"If someone had gave me crystal meth a few years ago, I'd have been like: 'Fuck off! It's like heroin'. And then all of a sudden, 'BOOM!' And now, even straight people are getting

on it. And it makes you do different stuff. I've seen people who just have normal sex with their partner, get tied up, the lot. Whipped. And then I'm like, 'What are you doing? That ain't you'. But I think that's why people do it. It makes you do some terrible, different stuff." (GMADT8)

"I would say more and more that Tina was definitely involved in chemsex. I think it's become quite widespread, certainly in Manchester. You know, I know when I first tried it, a lot of my friends were like, quite dismissive of me taking it, even though I'd only tried it. Now I know that all those friends now use T regularly as well." (GMADT18)

For some respondents, its use was so common that they referred to it as 'normal' or 'normalised'.

"And it's becoming more normalised because more people are doing it, very quickly. Crystal Meth used to be - if you Googled 'crystal meth' you saw a photo of some woman, spots all over the place. You know. I would be horrified to have taken that, looking back. But everything now is just 'Tina, Tina, Tina!'" (GMADT20)

"A lot of my mates, village mates, we started off when we'd go to the club, we'd just drink. I don't know if it's a generational thing, but everyone has gone on to crystal meth. There isn't [sic] many people, apart from maybe a couple, that have managed to divert away and do really well. The problem is, it's definitely getting worse. It's not getting better." (GMADT6)

Respondents often specifically referred to Manchester's 'village' and how common it was to see people smoking *crystal meth* or *crystal meth* related paraphernalia - such as glass pipes and jet lighters - in shops.

"You go to the village now and it's everywhere. You go in the toilets in the bars and people are just openly smoking it, big puffs of smoke, Tina everywhere, it's so blatant now, they just don't care! It is like it's just normal." (GMADT26)

"You know what, you see it [crystal meth use] everywhere in the village now. You go to the toilets in the bars and people are openly smoking a pipe!" (GMADT29)

"Literally, if you went to every single newsagent's now, its glass pipes and jet lighters.... So why does the newsagents in the village sell glass pipes and jet lighters? They're selling it for one particular reason isn't it? So yeah, it's [crystal meth use] big." (GMADT9)

However, some respondents discussed a hierarchy of drug use and noted that the *slamming* of *crystal meth* was stigmatised and looked down on with some people objecting to *slamming* in chillouts and chemsex parties leading to poor *slamming* practices and a reluctance to openly discuss *slamming* with friends, partners, and professionals.

Changing demographics of crystal meth users

"I mean, when I was a party kid when I was 15, 16, 17 years old, you know, I used to be considered, like hardcore, being able to do rather large lines of ketamine. There's kids as young as 18, 17, coming to these parties, getting slammed with crystal meth by older men." (GMADT17)

Another common narrative to emerge from respondents was the changing demographics of

crystal meth users. Several people made similar comments that a few years ago it tended to be older men who were using it. However, more recently, it had become very noticeable that a younger age group were using it. Moreover, concerns were raised that this younger age group were 'slamming' crystal meth as opposed to smoking it.

"So, I've been slamming for like, 5, 6 years on and off. And again, the demographics and the age has changed. I went, the last time, I was there, 18, 19-year-old lads were slamming. Now like, I've got quite a high tolerance, 'cause I've done it for years. If I'm making a slam, I might go for .4, .5 a slam, sometimes I've done a full syringe, like nearly half a gram. Then these young 18-year-old lads, I keep thinking, 'Fucking hell, how strong are they?' like. Not necessarily, don't mean it in a horrible way, the consumption, of it, is, 'phwoar!' Cause also, at the same time, I was chatting to someone, it's moreish, crystal meth is moreish. That's like the addiction of it, so you want it, you're craving it you want more of it. So, when you're having it, you want to consume as much of it as possible. So, if you introduce that to the younger ones - I always felt like, as the older one, you have this, not necessarily level headedness, but you say like, 'No, I've got work tomorrow'. You say like, 'I've gotta leave this chill out now'. But the younger ones are just party, party, party! If you would have said to an 18, 19-year-old kid, 'Come to the chill out, we're all smoking crystal meth.' They'd go, 'No, dirty junkie bastard!' But now, they're the ones having the parties. It's changed yeah." (GMADT9)

"I'll say it's [crystal meth use] definitely gotten bigger. The people who are starting to get into it are starting to be a lot younger. I've seen about 18-year-olds, who've only just left school. You know, I mean, it's like they're getting into it now. You know? Yeah, there's a lot more, like the younger gay community getting into it, I find. An 18-year-old was actually slamming at a party I was at a few months ago. I couldn't believe that an 18-year-old was slamming. It's not something I was seeing in the past. Like older guys were slamming, you know, on the older side. Older men, you know?" (GMADT14)

The reduced price of *crystal meth* highlighted above was suggested by some respondents as one potential explanation for why they had noticed this change in the demographics of those who were using it.

"Honestly, even the people that are using it, the age demographic has dropped as well. Before it was like, more mature guys that were doing it. One that probably had a little bit more money, because it was expensive. But now, there's young kids that have come out and are seeing it, 18-19." (GMADT9)

In addition to these reports of a younger age group using *crystal meth* within the MSM chemsex scene, there were a few reports of *crystal meth* use beyond MSM.

"It's like, a lot of women that would go on a straight scene and party. Then they'd come back to the after party. They wouldn't want to do it at first, but then do it, then they like it, then they do it again and again and again. So, these are people that mainly like to go clubbing, then after clubbing go back, and have crystal meth, G, coke, M-Cat."(GMADT6)

"On a personal level, I've been involved in the drug scene since I was like 13 years old . . . so I've always moved in the circles of that underworld since the age of 13. So, when I say I've seen it and how quickly it's coming onto the market, it's absolutely strange. It's even touched, in some cases, on the straight scene. I know straight people that are sniffing it when they go raving now. Cause when you sniff it, it seems to get more of a psychedelic

effect off it. They're sniffing it as opposed to actually doing MD[MA]. But then also, if you get pulled over by the police and do a roadside swab, Crystal Meth and G doesn't show up on it. So doing that when getting pulled by the police, you might look wired, but they can't prove it." (GMADT9)

In a section titled 'Anticipating future threats' the 2022 EU report warns of the further spread in Europe to a diverse user group, noting that **methamphetamine** is a drug that appeals to many different people (*EU Report: Methamphetamine, 2022:7*). Although only mentioned by a small number of respondents, the reports of **crystal meth** use by women and clubbers illustrates the potential for it to move beyond the confines of the MSM chemsex scene. The suggestion that both **crystal meth** and 'G' are not detectable in roadside drug swab testing is interesting given the government's recent White Paper – 'Swift, Certain, Tough: New Consequences for Drug Possession' (August 2022) that has proposed expanding current drug testing to a wider range of offences and substances. Part of the appeal of the use of a range of new psychoactive substances such as synthetic cathinone's and synthetic cannabinoids has been their non-detectability in drug tests, for example: 'Spice' use in prisons and 'Gocaine' in approved premises (*Ralphs et al., 2016; Ralphs et al., 2017*).

Crystal meth:

The case for monitoring, awareness raising and training

'While the crystal form of the drug and the route of its administration is not commonly reported by surveys of users in Europe, it is important that practitioners and policymakers actively monitor this phenomenon as it can be linked to important health and social consequences' (EU Drug Market: Methamphetamine, 2022:5).

The reported increased availability, reduced price and changing demographics of users are significant findings and highlight the need to continue to closely monitor the availability and use of this substance in *GMTRENDS 2023*. Operationally, there is a need for frontline medical and treatment services to be prepared and trained in how to respond to its use. We need to monitor the use of *crystal meth* both within and beyond MSM/chemsex parties. This should include collecting local treatment data and monitoring admissions to A & E and mental health inpatients for drug induced psychosis.

Particular concerns that were repeatedly raised in interviews centred on the links between *crystal meth* use and mental health – with psychotic episodes and paranoia often discussed.

"They were injecting less often but the psychoses were on the increase – psychosis and hospitalisations, because of the lack of sleep." (GMADT4)

Indeed, it was common for respondents to discuss that *crystal meth* had kept them awake for three or four days or more, with many users reporting psychotic episodes resulting in hospitalisation and sedation.

"... and I found myself naked in [area]. I'm completely naked at the shopping centre and I'm fighting the people inside the shopping centre, I lost it completely. (GMADT11) So I'll start with T, I immediately knew this was different from other drugs, because I was able to stay awake for like, three days at a time when I started doing it. And I thought, 'this is really strange'. Like, I feel like I've had the best sleep ever. And I'd been up for three days. And no drug has ever done that to me before. So that was how powerful it was." (GMADT19) **Crystal meth** and 'G' are often used in combination (referred to as 'G & T') to manage the respective stimulatory and sedative effects. Combining stimulants and sedatives meant that people could easily slip into using substances repeatedly without taking a break. But as this respondent pointed out, people need to be encouraged to question this pattern of use and understand how crucial it is to have time not using substances in order to avoid dependence and the mental health difficulties associated with insufficient sleep:

"But if you're taking T and G every day, there's some kind of psychological issue going on. You shouldn't need to do that. So, I would probably say that G & T should be prioritised in the community and the inpatient facilities. [. . .] So, with the T, and the G, when they're combined together. One that sends you up through the roof. And the other one, if you took it on its own, you would be asleep. So, them two together, kind of like, one brings you up, one brings you down. The crystal meth takes you up, then the G makes you horny. People tend then, which is also dangerous, to use Viagra whilst they're on the session, they use Viagra again." (GMADT6)

While all respondents we spoke to who had used **crystal meth** reported being awake for at least three days, the longest was over two weeks. All of the interviewees we spoke to recalled either personal experiences or experiences of friends who had ended up having a paranoid or psychotic episode as a consequence of spending several days using **crystal meth** and 'G' with no sleep.

"I had like, a psychotic episode. [. . .] I went on a massive bender, I was awake for like, 15 days. And I consumed a whole variety of different drugs. So basically, I'd gone from Brighton Pride, via London back up to Manchester, Manchester Pride. So just partying for the whole month of August. I had a psychotic episode where I was hallucinating, had a couple of near-death experiences. Couple of things where I passed out, saw the light like that, walking towards the light." (GMADT9)

"The drug dealers, one of them at Pride, was up for like, 16 days selling it. I told him, "Go and get to my flat and get in bed". He gets here and he's thinking: "There's people in the cupboards". 16 days! He lost his car, didn't know where he'd parked his car. Went paranoid. He didn't eat, didn't drink water." (GMADT8)

"... because if you take crystal meth, ... when I first started, I was up for four days without sleeping. And I didn't know anything about that. [...] obviously the drug keeps you awake. But then because you can't sleep, that puts more stress on you, because you're trying to sleep. And you can't sleep, then you go, 'I'm not going to sleep. I've got work tomorrow, I've got this tomorrow'. And that's how it starts out. Because most people think that they can control it, that you're in control. Once you take the drug, you're not in control.... Smoking is not as bad as slamming. Slamming is really intense.. ... For me, it was the case of I've used: 'Oh my God, that's brilliant, I'm gonna feel great'. 24 hours later, I'm like, 'What the fuck have I done? It's built up again, I'm not going to sleep', and because you've repeated the cycle, over time and after you've used so many times, you're stuck in a rut, your rut is, I'm going to use and then feel crap for four days, and you're worried then because, you know that you're not going to sleep for three days, you know that you're not going to be able to get up at 7am in the morning because your body will shut down when it wants, not when you want it to. [...] You have to de-stress, but if you are concealing things from people, like I was, like so I was hiding it, or you know, you didn't want your friends to know, or you just wanted that escapism, it just builds up and builds up because you suddenly realised, I've still got my problems. They

haven't gone away, I just hidden them. My family are about to find out, my partner's about to find out, I'm gonna go into work and you become paranoid that people will come and say, 'Oh, have you just used crystal meth?' You know, and I used to say I'll have a sign on me saying 'I'm gay, HIV and on crystal meth.' And I don't know if that will cure my paranoia, because then at least everybody knows. But the point of it being is that, that's how it alters your brain. And it alters your thinking. And the reason I started to understand that was because when I was using, I came down and my sister thought I was normal, and then she clicked. Because it wasn't necessarily how I looked, it was how I acted. And she says, 'You've used?' I said 'Yeah I have, how did you know?' And then she says, 'Because you're paranoid, I can tell.' (CDOSURR16)

As this mental health practitioner notes, it is perhaps unsurprising that many talked about drug induced psychotic episodes and paranoia as result of being awake and taking *crystal meth* and other drugs for several days, often without sleep or food.

"... after several days of meth use a psychosis is expected [...] and the stuff that goes on there and if it's over 3 or 4 days they will have been slipping in and out of consciousness and just the trauma of not knowing what happened to you can be enough. What did they do and the uncertainty around all of that." (Mental Health Practitioner)

The mental health impact of using *crystal meth* prompted some interviewees to suggest that the public health messages around the potential harms associated with the use of *crystal meth* need to focus more on the mental health impact rather than the physical health implications of use.

"The messages around crystal meth historically have been the physical impact of use on the body. Physical things, all the time . . . It's never what goes on inside. So that makes you believe, 'Oh, I look fine'. 'Okay, my nails are fine now. Okay, with my teeth look okay, now, my hair's finally not thin anymore. I'm okay'. Those effects I think are the smallest effects about it. The worst ones are what goes on inside, it just messes with you in several ways. The paranoia plays a massive one, Tina's paranoia is like 20 times worse than weed's . . . Both of them together, which a lot of people do - do both of them together, because they're trying to use the weed to combat the staying awake. They're trying to smoke a few spliffs, eat something. So they finally fall asleep because six days [of being awake] is a long time. Both of those together amplify the paranoia more, but only the physical side's shown. The mental side which is the problem." (GMADT10)

Misuse of drugs available on prescription

Many respondents reported the routine use of a range of prescription drugs to counteract the effects of *crystal meth* use, such as enabling sleep and reducing anxiety. The most frequently reported prescription drugs used to help people come down from *crystal meth* and deal with the comedown (including anxiety), were *zopiclone*, *diazepam* and *pregabalin*. *Viagra* was also commonly reported to be used to facilitate sex for prolonged periods of time. Indeed, it was regularly reported that many dealers offer 'party packs' than included prescription drugs alongside *crystal meth* and 'G', often in deals that included the prescription drugs for free.

"A lot of dealers who sell T, also sell diazepam. To come down off the T. . . . a lot of them sell Viagra as well. You usually get a blister [pack] of 10 for £10. I've bought them before. Yeah, a lot of gay guys buy Viagra and T together. . . . Diazepam to come down." (GMADT7) "And the other thing is that because if you take crystal meth, a lot of people don't know this [about crystal meth] when I first started, I was up for four days without sleeping. An' I didn't know anything about that.... The doctors aren't going to give you more drugs, but you can buy sleeping pills off your dealer. I just think it's crazy. You know, and then you can knock yourself out." (GMADT16)

In addition to purchasing 'prescription' drugs from drug dealers, some respondents reported purchasing 'prescription' drugs online, whilst several reported buying them from Bury New Road.

"Or Pregabalin. Them people are buying dodgy Pregabalin from Bury New Road. . . . I used to go there and get mine. And like, Diazepams, they'll go there [Bury New Road]." (GMADT8)

Last year's Adult Trend Focus (see GMTRENDS, 2021) highlighted the Bury New Road prescription drug market and focused on the use of **diazepam** and **pregabalin** by **heroin** and **crack cocaine** users and homeless and street-based substance users. These findings illustrate that people from other demographic groups and substance using populations are also accessing 'prescription' drugs from this area of Manchester.

Two respondents raised concerns that the use of 'prescription' drugs combined with 'G' increased the risk of overdose and death.

"They don't even know the dangers of it. . . . The G's making you feel all nice . . . You feel fabulous. People don't know the actual 'Do you know this could happen? Do you know if you're on G, and you take Zopiclone at home to go to sleep, you could die?' [. . .] I said to my partner one night, there was a guy, he used to take G, but he'd have sleepers. And I turned round to him and said, 'Never do that in your life. That's death tackle'. The morning after we woke up, the guy was all over Facebook dead. I've always said, 'death tackle!' Simple. Zopiclone and G together. Nobody even knows about it. And most of the people that died. If you could even access it, with the police, and actually looked at the reports. You'd probably see, it's the G and Zopi's." (GMADT8)

As this respondent illustrates, there is a need to raise awareness about the dangers of polysubstance use and in particular, the risks of taking *G* alongside *benzodiazepines* and *Z*-drugs (**Zopiclone** and **Zolpidem**) which have the capacity to depress the respiratory system.

In summary, these findings suggest that more awareness raising of the mental health effects of 'G' and **crystal meth** use are needed. We also need to develop better understanding and continued monitoring of the local **crystal meth** market. The 2022 EU report highlights in its threat assessment, the increased risks of serious violence due to the high profitability in this market and how that can lead to intense competition and rivalries between criminal groups. It warns of the potential for the 'expansion of organised crime, corruption and money laundering' linked to the growth of large-scale production of **methamphetamine** in Europe. We need to understand where the local supply of **crystal meth** is originating from at the manufacturing and import levels and who is selling it at dealer level. There is a need to monitor the use of **crystal meth** both within and beyond the chemsex/MSM scene. This should include collecting local treatment data and monitoring admissions to A & E and mental health inpatients for drug induced psychosis.

5. GHB and related substances (GHBRS)

"I think if you're going to have Chemsex, G's always involved. I mean, I have participated in Chemsex, where G hasn't been involved, but I would generally say nine times out of 10, when I've had chemsex G is always involved." (GMADT18)

Alongside the frequently reported increased use of *crystal meth*, use of what was referred to simply as '**G**' was commonly reported to be on the increase - often used in combination with *crystal meth* (referred to as 'G & T'). '**G**' was the ubiquitous shortened term used by all respondents when discussing *Gamma-Hydroxybutyric Acid* (**GHB**). However, '**G**' can also be *Gamma-Butyrolactone* (**GBL**) which rapidly (within one minute) converts in the body to **GHB** (*Drasbek et al., 2006; Bursado and Jones, 2015*). The 2020 ACMD review of '*GHB and closely related compounds*' included **GHB**, **GBL**, alongside **1,4-BD**, *gamma-hydroxyvaleric acid* (**GHV**) and *gamma-valerolactone* (**GVL**), and highlighted evidence of **GHB** users switching from using **GHB** to **GBL** and **1,4-BD** (*Wood et al., 2008; Anderson et al., 2011; Corkery et al., 2015; van Amsterdam et al., 2015; Busardò et al., 2018*)⁵.

GHB, GBL and 1,4-BD⁶ are most commonly purchased as clear, odourless, oily liquids that taste slightly salty (Corkery et al., 2015). Users often swallow them mixed with water or other soft drinks (EMCDDA, 2002). They are popular in a chemsex context as they make people feel euphoric and less inhibited (Corkery et al., 2015). When intended for illicit use, GHB, GBL and 1,4-BD are sold in small bottles or capsules. However, they have legitimate use as solvents with GBL and 1,4-BD found in some paint strippers, alloy wheel cleaners and stain removers - and can be obtained in large amounts as a bulk purchase (ACMD, 2007; Jones et al., 2014). A previous ACMD review of these substances noted that both GBL and 1,4-BD are used in large quantities by the chemical industry, as precursors for the synthesis of plastics and industrial solvents. In this report, the UK Chemical Business Association reported that 1,000 tons of GBL and 5,000 tons of 1,4-BD were used annually in Britain (ACMD, 2007). A GHB-based medicine (Xyrem) is also used in the treatment of narcolepsy and prescribed at low levels in the UK (ACMD, 2020; Busardò and Jones, 2015). Hence, as we discuss in the Young Person Trend Focus in relation to Nitrous Oxide cannisters that have legitimate manufacture and purchase for catering purposes, the legitimate uses of these chemicals pose challenges for the restriction of their sale and availability.

Moreover, the range of potential substances that may be sold under the generic name of 'G' means that the assumption that what people are using is GHB, may be misplaced. Upon ingestion, GBL and 1,4-BD are converted in the body to GHB, so that all three produce very similar psychoactive effects – and are considered synonymous by users. Indeed, in their 2020 report, the ACMD stated that 'evidence of GHB harm can be assumed to be equivalent to GBL and 1,4-BD harm unless otherwise stated' (ACMD, 2020: 6). Unlike GBL and 1,4-BD, GVL is not metabolised to GHB in the body but is instead metabolised to GHV. Because of its activation of the gamma-aminobutyric acid system, GHV produces similar effects to GHB, but is less potent – therefore, for the purposes of the ACMD report, evidence of GHV or GVL harms were not considered to be equivalent to that of GHB harms (ACMD, 2020:6).

Reclassification of GHB and related substances (GHBRS) and the impact on the market

In 2003 the UK classified **GHB** under the 1971 *Misuse of Drugs Act*, due to deaths associated with its use and the potential for it to be used for *drug-facilitated sexual assault* (DFSA). **GBL** and *1,4-Butanediol* (**1,4-BD**) remained uncontrolled until an ACMD report was prompted in

⁵See also Tay et al. (2022) for a recent review of the research literature regarding the pharmacology of the different G substances. ⁶GBL and 1,4-BD are chemicals that are closely related to GHB.

2007 by concerns that users of **GHB** may have switched to using **GBL** and **1,4-BD** (since they rapidly convert in the body to the intoxicant **GHB**) (*ACMD*, 2020; Wood et al., 2008). More recently, on advice within the ACMD's review of the harms of these substances, **GHB**, **GBL** and **1,4-BD** were reclassified from Class C to Class B in April 2022, following a change to the *Misuse of Drugs Act 1971*.

Growing prevalence of 'G' use

The recent reclassification of **GHB** and closely related substances from class C to class B substances appears to have had little impact on its popularity - with many respondents reporting that the use of 'G' was on the increase.

"But in terms of popularity, people are always asking "Have you got G? Do you have G?". It's becoming more one of them, where they want to know if you've got it, and if you've got it, they'll come round." (GMADT6)

"'G', 'G & T', its everywhere now. I think it's increased massively . . . both of them, yeah. For chems, to chill out, it's everywhere, G. And the Tina, that's really taken off as well – A lot!" (GMADT29)

"[The use of G has increased] Massively. G never used to be around. But the way people use is riskier. And it's becoming more normalised because more people are doing it, very quickly." (GMADT20)

While the focus was primarily on chemsex and MSM, it was noted that 'G' is also used beyond the MSM chemsex scene:

"There are friends I know that are women that take it [G]. They're not doing it for chemsex. I know people that are straight, they're not doing it for chemsex. I think a lot of drugs start in the gay scene and then they get wider and wider into the community. I think we're now getting into – I hope we don't – but I think we're getting to a point now where it's going past chemsex and it's going now into the straight scene. With the people that are selling it. GBL, crystal meth. I think it's getting wider and wider. And there's much more dealers." (GMADT6)

"I know straight friends – male and female – that take G now as part of an after club chill out session." (GMADT30)

As we noted in the previous section on *crystal* methamphetamine, it is important that we monitor other subpopulations such as clubbers for the use of **GHB** and related substances.

Market supply factors

Increased price

While the change in legislation hasn't stopped people using 'G', it may be related to the reported increase in price:

"G has doubled in price. So, since I was taking it 2-3 years ago, its doubled. It used to be 50p per ml. It's now a £1 per ml. You'd buy it in a 30ml bottle, or 20ml, 50ml, 100ml. Or if you know where to get it online, a litre. If you buy a 100ml bottle, you're paying £100. It's gone up a lot. Sometimes they might do you a deal, 100ml for £60. But you're not getting it cheaper than that." (GMADT6)

Interviewer: "What would you pay for it [G] now? I think it's normally 50ml for about £30, £40." (GMADT20)

Interviewer: "So how much is G then? How much would you pay for a bottle? It's 100 mil in a bottle so, like £100 for a bottle. I think about 3 years ago it was like 7p a ml but now it's like a pound [a mil] so it's gone up a lot. Yeah, or you know it depends though 'cause you know they will be watered down a bit now. And it depends on what you got because a lot of dealers will offer packages. Like 1g of Tina and 50ml [of G], 2 Viagra and a bottle of poppers so that will reduce the price but it's still £250 and that's a lot for a night." (GMADT15)

"Because, when I first come on the scene, I sold G. And it was £10 for 20mls. Now, for 20mls, it's like £30. It's like a £1 a ml." (GMADT8)

"I think that's [G] stronger now but there's three different [types] I think there's blue, red and green. And the price for one can be as low as a pound a ml. It used to be absolute pence." (GMADT15)

"G's more expensive than it used to be. I think that's just to do with availability. Interviewer: So what sort of prices would you pay now for G? For G, I sometimes get a 100mls for 60 pound. That was actually of street dealers, but generally, of those that sell within the gay community it is generally 50ml is £40 quid, 100ml is £70, 150ml would be a £110. Interviewer: How does that compare to a couple of years ago? You used to be able to get 50 mils for £30, it's not gone up massively. But it has gone up yeah, a lot of people just put that down to the legislation around how people can actually buy G in its pure form. But certainly, the prices have gone up, it's not ever made any difference to me and my use. I mean, I ended up becoming addicted to GBL. That was that was through Chemsex." (GMADT18)

In summary, although prices vary from dealer-to-dealer and are dependent on the amount purchased, with the rice per mil reducing with the amount purchased, the general consensus was that the price of 'G' has increased from 50p or less a mil to around £1 a mil in the past year or two.

Variation in the strength and effects of 'G'

"G has gotten a lot weaker. Like you get it in a plastic bottle now that they order online. It comes off a company sort of. I don't know what, but they don't actually make it themselves anymore. You know what I mean? . . . they actually get it in a bottle now. It's already pre-done for them. And that's just shite stuff really. It's just like, alloy cleaner. I've not seen any of the homemade stuff in years and that was like the strongest stuff." (GMADT14)

As illustrated above, despite a widely reported increase in price per mil, the substances sold as '**G**' were sometimes viewed to be poorer quality than in the past. The assumption that any substance sold as '**G**' is **GHB** may be misplaced. An individual may not know whether they are taking **GHB** or **GBL**, which is problematic given that **GBL** can be between two and three times stronger than **GHB**. This significantly increases the probability of users overdosing and going into a coma. For this reason, we have sought to obtain samples of '**G**' for testing in this year's MANDRAKE testing. Eight samples of '**G**' were analysed by MANDRAKE. All eight samples contained **GHB** at high purity levels (between 98.2 to 99.5%).

Harms associated with 'G'

"G's fun, but you hear a lot of stories. The stories of going under on G. The bad stories about G for me are more prominent than the bad stories about meth or things like that. So that's I guess what put me off it more than anything. Then actually going under myself at one point. Which, it's so trippy, just to wake up. Someone tells you you've been out for five hours." (GMADT10)

'G' and (the underreporting of) sexual assault

Chemsex is associated with relatively high levels of non-consensual sex among men who have sex with men (*Druckler et al., 2021*)⁷. Interviews with respondents for this research indicated how rare it was for reports of sexual assault to be either disclosed to friends or made officially:

"It's just come out, not long ago, that he was actually raped under, on G, recently. Someone's took advantage he's been told." (GMADT26)

Interviewer: "So the assault, you mentioned, on your partner. Has that been reported to the police or anywhere else? No because obviously, that scene, is bitchy. Then you'll get called a grass, then you'll get called this and that. But . . . he still thinks they're his friends. 'Nah mate, do friends do that?' Sorry, my friends definitely don't do that. They don't wait for me to go to sleep and jump in me mouth. [. . .] as soon as you have a pipe and a few mils [of G], you're theirs. They think it's alright to stand in a crowd and take turns when someone's under. That is horrendous." (GMADT8)

Interviewer: "So you think there's a lot of underreporting then? A lot. I've just been told, this person who's done it to him, has got a reputation of doing it. Like waiting for them to go under. Gets the young 'uns there, gives them drugs, waits for them to go under, happy days! Some of them just want more drugs, so they'll let them do it, just to get free drugs. And then they don't want to report it. Because they think, if they're addicted to G, if they're addicted to Tina, where are they gonna get it from? People are battling addiction." (GMADT8)

This would suggest an underreporting of 'G' facilitated sexual assault.

The physical dependency referred to above was commonly discussed throughout the research and is discussed in the following section.

'G' dependency

"When I was doing it, it was 2ml every hour." (GMADT6)

Regular use of **GHB/GBL** can lead to dependency and withdrawal symptoms (*EMCDDA*, 2002; *Galloway et al.*, 1997; van Noorden et al., 2014). These symptoms can be extremely unpleasant and include confusion, insomnia, hallucinations, psychosis, and anxiety (*Corkery et al.*, 2015). Many interviewees reported its initial appeal in reducing their anxiety, particularly in the hours and days following a chemsex session. However, they often went on to recount how prolonged use led to extreme anxiety that they attributed to their dependency and withdrawal from '**G**'.

⁷Druckler et al. (2021) conducted a dating app questionnaire with Dutch residents which revealed that 161 out of 891 MSM (18.1%) reported at least one non-consensual sexual experience in the previous 5 years (p273).

"So, you know, today, I'm scared about being on my own because I find it really hard to settle and once your anxiety kicks in and you think about how bad it was when you were withdrawing. And then your mind goes back to taking G again, because, you know, it gave you that quick fix. Once it kicked in, you felt a bit subdued, so you calm down. [...] The people that I've spoken too, you know, it's stopped being about [taking G] to take the edge off coke, and it makes you a bit horny. Before you know it, your brain is loving the fact that it's not having these anxious thoughts, it feels relaxed." (GMADT18)

As these accounts illustrate, a consistent narrative emerged of '**G**' use starting off as being used to enhance sex but then being used to chillout and self-medicate anxiety and comedowns.

"... staying up for days, having sex with my friend. And then to manage the comedown, I just heavily abused G because you get addicted to that. You know, the tiredness, the anxiety, and the feeling shit, ... the GBL is very, very good at making you feel dozy, lethargic. So as much as it has its attributes towards, the heightened sex drive or lower inhibitions, for me, it could solve my anxiety problems, just like that. And, you know, for me with the G, I was taking it every day. And I wasn't leaving the house or wasn't bathing properly, wasn't eating properly, and I was taking it to pass out - to fall sleep. You know, 1ml would be enough, then I'd take another ml, then I take another ml, then I wake up with a broken nose. And, you know, even at that point, you know, you're so locked within that addiction, you don't actually realise you're an addict. It's such a weird thing. And it was only when my flatmate was like, 'You need to fucking sort yourself out!' And I was like, 'Right, so I'm going to not have any today'. And the withdrawal! I didn't even know that it was physically dependent, you know. And the withdrawals that came on was just horrendous!" (GMADT18)

Likewise, reports of a rapid increase in use and subsequent dependency were frequently recounted. These narratives were often accompanied with discussions of severe anxiety brought on through withdrawal.

"I think no one really discussed withdrawing. About five years ago, I was physically dependent on G. The withdrawing of it was bad. Anxiety, heart rate is pounding, sweating." (GMADT20)

"I remember one day that I'd run out of G, and I remember I would start to feel this overwhelming anxiety that I've never felt before. I couldn't sleep. I couldn't eat, just this feeling. All I knew was that I needed to buy more to make me feel better. But I didn't really understand physical dependency at the time. And yeah, this escalated, and I was going through, I don't know, it was like 500mls, no, about a litre a month. Because we're doing it every hour of every day, even trying to go to sleep, I would sleep for an hour or so. And then my body would wake itself up and it would say, 'Right, it's time for the shot now', because the withdrawal symptoms are so severe. It's very dangerous to just suddenly stop taking G because that in itself can kill you. . . . But yeah, being physically dependent on G. And just how strong that had a hold of me and how mentally addictive the Tina was. That is what separates it from all the other party drugs I've tried before. All the other stuff I've had experience with – I can pick it up and I can put it down. With these two things, I could not do that." (GMADT17) "And to stop the withdrawals from escalating, so a lot of these withdrawals, the anxiety is, I don't even know if 'anxiety' is the right word for it because I have daily anxiety. This is on a whole different level. This is literally laying in the foetal position, shaking so badly, hearing things, hot, your heart coming up your chest. I'm getting chills just talking about it now. G withdrawals, for me were definitely one of the absolute worst aspects of my addiction. For sure. It was absolutely awful. And I've withdrawn from a few things: Tina, I've withdrawn from Xanax, this is on a different level, for sure." (GMADT17)

The lack of knowledge and understanding regarding the physical withdrawals further highlights the need for better awareness about the effects of '**G**' use. These accounts of '**G**' related anxiety are consistent with the medical literature that states that prolonged regular use of **GHB** can lead to the development of tolerance and dependence with cessation of use, particularly when abrupt, causing unpleasant and dangerous withdrawal symptoms (*Busardò and Jones, 2015*).

In addition to a lack of knowledge about dependency and withdrawal, there was a lack of knowledge of how to access detox support with self-detox often reported. Although Tay et al., (2022) provide advice on tapering withdrawal, there is no evidence-based protocol available to deal with GHB withdrawal - apart from administering benzodiazepines (*Busardò and Jones, 2015*). We came across several people who were turning to non-prescribed *benzodiazepines* online or from Bury New Road to self-manage their own '**G**' detox. Besides the lack of medical supervision, the variable content of non-prescribed *benzodiazepines* available online or locally (see *GMTRENDS 2021* and this year's *MANDRAKE* results) adds a further layer of jeopardy to self-detox.

"How anyone detoxes off G on their own has got to be. pure strength. I was abusing and self-harming with it. I didn't even realise it just mentally completely takes over you. For me personally it has such a grip." (GMADT18)

In addition to self-harming linked to 'G' use, interviewees who used G described experience of psychotic episodes that they directly linked to their own use of 'G'. Similar experiences following use of 'G' by friends were also often recounted.

"... people use GHB, and they turn psychotic, and they have no recollection of it." (GMADT2)

"... the psychosis I got from G, ... I mean, I have like sleep psychosis, from when I have been awake for days or a week where you're seeing things. Whereas, when I was in my psychosis from the G withdrawal, it wasn't like I was seeing things, I was somewhere else. So, I was in a hospital somewhere else in the world. To me, like I was locked in everything that I'm seeing in my head. ... You know, it was like I was dreaming. I was awake at the same time. [...] And when I was in hospital, when I stopped taking [G] for about 15-16 hours when I was in hospital, I kind of had coherent psychosis then, because I knew I was in the hospital. But I started to imagine things like water dripping from the ceiling on me, the paranoia kicked in. And that was from withdrawing that was." (GMADT18)

G Harm Reduction:
desire for awareness raising among people who use 'G'
Respondents commonly described how little was known about the side effects of chronic 'G'
use – not only in terms of health, but also upon relationships and personal finances.

"I think the paranoid side of it all needs to be talked about. The damage it does inside, the way Tina rots your brain, the way G can literally mess up your stomach on the inside and things like that. Damage to your mouth, like my tongue still has G damage all these years later. I've not done G for a long time, and I still have the damage from it just by going, just sucking up the teeth and the tongue it's almost jagged but not like that intense. But the damages are there. It's the same thing as STIs. When I was growing up, they were not talked about at all. I think we had one meeting in high school in year eight when none of us were sexually active. So, what's the point? ... But also, the other long-term effects. Like my memory is gone. I have a rubbish memory now. And that's not going to come back. My family drifted apart, things like that. The money wise, I think all those ones should be highlighted as well, not just the damage that does to your body." (GMADT10)

The costs incurred from dependent use can be substantial, leading to debt-related anxiety. For example, it was common for users of 'G' to discuss using 1 or 2 ml every one to two hours. At current prices of approximately £1 a ml, weekly drug bills can soon rack up in excess of £100 for 'G' alone with many respondents reporting the additional use of *crystal meth* and a range of other substances.

Hospitalisation

Research conducted by the *EMCDDA* across 26 sentinel hospitals in 18 countries in Europe, revealed that **GHB** and related substances accounted for 10% of drug related admissions (EMCDDA, 2019; p71). Although the sample for this research was relatively small, reports of hospitalisation due to either withdrawal or psychosis were made by several participants:

"... it got to the point where I would only call ambulance because I knew that I wouldn't stand a chance if I just walked in. It was important for me for them to know. I mean, to be honest, I don't think I would have been able to, or been in a position, to walk or drive. And yeah, so if I'm at home withdrawing and scared for my life, I'd call an ambulance, or somebody would call it for me." (GMADT17)

All of the people we interviewed who had experience of seeking emergency medical support at A & E discussed the lack of medical awareness of 'G' withdrawal which led to what was often perceived to be an inadequate treatment response.

"I feel on my own sometimes with it. You mention it to Doctor's, and they don't know what it is or the effects so there's like they don't have the knowledge of it." (GMADT15)

"When not one doctor, knew about me having GBL and when I went in the other week, and so they weren't giving me anything for it. I can feel myself [getting psychotic] because the last time I was admitted, I was waking up four weeks later, after being in psychosis for three weeks, and then they had to put me into a coma to get me out of it. And when I was in hospital at that time, the things that I remembered when I was in my psychosis, I had to literally beg one of the nurses to help me. And luckily, the nurse who it was, he was gay himself, so he knew a little bit about it." (GMADT18)

"I have issues with this aspect of it mainly, purely from my own experience, all those times I went to A&E, didn't get anywhere, and would have to discharge myself and find a way, magically, to get money so I could buy some more and then self-detox at home. That was the most stressful thing that I've ever been through, I think. Yeah, it's awful. There's so many people now that are in this thing. They don't know how to get out of it." (GMADT17) These accounts highlight the need for awareness raising about '**G**' withdrawal and its association with severe anxiety among medical professionals, as part of their CPD training.

'G' and the risk of overdose

People can overdose on **GHB** – sometimes fatally (*Darke et al., 2020; Hockehull et al., 2017*). The recreational dose of **GHB** is not easy to estimate and as with other substances can vary from person-to-person. Variability in the method of ingestion and preparation (e.g., if the dose is not measured out accurately using a pipette, or somebody takes a drink that they did not personally prepare), means it can be difficult for a person to know how much of the drug they are taking, particularly in a group situation like a chemsex party or chillout, and use can easily lead to overdose. There is a very small margin between an optimal dose and overdose (*Ingels et al., 2014*). 1.5 to 1.8ml is viewed as an optimal dose while 2ml can lead to unconsciousness and in some cases fatal overdose – especially if mixed with other central nervous system depressants (*Thai et al., 2006*). Busardò and Jones (*2015*) state that a concentration in plasma of ~100 mg/L produces euphoria and disinhibition, whereas 500 mg/L might cause death from cardiorespiratory depression. As they also note, effective antidotes to reverse the sedative and intoxicating effects of **GHB** do not exist.

Of significant concern is that non-fatal overdose may be seen as a normal/accepted part of dependent GHB use. Beurmanjer et al. (2019) conducted semi structured interviews with 20 people classified as having *Gamma Hydroxybutyrate* (**GHB**) Use Disorder, some of whom described perceived benefits of 'passing out' in that they could sleep for a while. Fatal overdose was often recounted by respondents to this research who typically discussed multiple deaths of friends from '*G*'.

"I suppose another one is around the dangers of these drugs, especially G, I've lost a number of friends to G overdoses. Some of them were kind of during sex with a partner or with someone that they'd hooked up with, and then others were just kind of at parties." (GMADT1)

"Out of that [friendship] group, maybe 20 have died through G overdose. Interviewer: Do you know if they have been recorded as a G overdose? No, because it leaves the system so quickly, which is a problem. [...] Out of my friends, the ones that have been injecting have generally died. Because they've been injecting [crystal meth] and then they've took loads of G to try and bring them down a bit because they're rushing so much, and then the G's killed them". (GMADT6)

"I've lost six people in the last year to G, all friends. . . . three died on their own vomit from G, it's tragic." (GMADT19)

These reports point to a much higher '**G**' drug related deaths rate across Greater Manchester than official data suggests. For example, only two deaths have been attributed to **GHB** in Greater Manchester in the last eight years where data is available. There are several reasons for this. Firstly, the presence of these substances is not routinely tested for in toxicology. Secondly, **GHB** is quickly eliminated from plasma, with an estimated half-life of between 30 to 50 minutes. Thirdly, only approximately one to five percent of the dose of **GHB** is recoverable in urine, with a short window of detection of three to 10 hours (*Busardò and Jones, 2015*). Therefore, it is highly plausible that many '**G**' related deaths are going undetected.

"Yeah, it's very, very dangerous. But yes, I've had a tonne of friends that died from it as well. It's very common, but I don't think anyone would even know the actual number of people that have died from it. Because I don't think they do test for it, because it does leave your body so suddenly, it would be difficult to know. You can test for it. But like I know, people that have died, and it showed up. It's not something that they would look out for. If they walked past a dead body on the street, they're not going to take that body to hospital, test and see if they've got any G in their system." (GMADT17)

It is concerning that the harms associated with increased use of 'G' as reported in our study are therefore likely to be higher than official data indicates. Indeed, Hockehull et al. (2017) warn about the possibility of increased **G**-related deaths in London linked to the growth in chemsex.

Under-recording of the extent to which deaths are related to '**G**' arises not only for overdoses, but also for accidental deaths and suicide.

Interviewer: "So, in your view, there's a massive underreporting of deaths then? It goes reported, but I think it goes reported as a suicide. They killed themselves because they were having a bad time with their mental health. But really, it was an accident. And then, they don't want to report it because the drug dealer will get done. "Where am I going to get my drug from? We can't let him get done. It was their fault, they did it...". (GMADT8)

"I know 20 people who have died [from 'G'] and as well as drug overdose, also quite a lot of suicide as well." (GMADT15)

"I'd say about 20 close friends. 15, 20 close friends who have died, some of them died off minor amounts. Some of them couldn't handle the rattle and killed themselves. Interviewer: Which substances are you talking about? G, a lot!" (GMADT8)

The case for awareness raising over 'G' overdose to reduce drug-related deaths

This research suggests a need to reframe the focus on 'G' related harms. The key focus to date, which has been a driver for legislative change, has been 'G's use to facilitate sexual assault. Although we found evidence of this, the much more common issues we came across were the harms caused by a lack of awareness regarding tolerance, withdrawal, and mental health impacts - as well as the high number of (unrecorded) deaths due to overdose or suicide. Related concerns arise from the lack of knowledge among people involved in chemsex about what to do if somebody did overdose. Greater awareness is needed about how to put people in the recovery position and help avoid them dying on their own vomit. Serious health problems can be caused by 'G', so people need to be made aware of first aid measures as well as how to manage withdrawal when they want to stop using:

"I was in a nine-day coma from G, so I think the safety of it is paramount. It should be bullet posted as to what to do at certain points as someone's going under. People go under all the time, but how do you know if that person's drunk 50ml or 2ml? You don't know, do you? So you should be looking at signs on the lips, on the hands, for blue. Then starting CPR. I know other people that have said, people have gone to sleep, and never woke up at the party. So, I think there should be something on there about damage limitation. How to reduce down safely, by taking it point by point. Very much like London friends already have, but just Manchester, because we are in Manchester." (GMADT6) "Having some support on what to do and some information on how to deal with someone. But yeah, it's just call the ambulance if someone's OD'd on G. I've had to get my stomach pumped before in London because of it." (GMADT14)

As we illustrate below, many people are fearful of the legal consequences of calling an ambulance and potential police involvement – and so clarity over this (as well as the consequences of not calling an ambulance) would be welcome.

"I've been with a guy who has passed out, and I didn't know what to do and it's a very scary situation, not knowing what to do. Thinking, 'if I phone an ambulance, will I get into trouble because this person has been using drugs?' So, I guess the legalities of drug use and your relationship with the emergency services, I think that needs to be cleared up as well. Because for me, there was a fear that, well, 'I've just been involved with somebody who's been illegally using drugs, what can I do? Will I get into trouble?', those kinds of things could be clearer." (GMADT11)

"Four or five years ago, we had a sex party with my partner in our home and the one guy, he's going to overdose, he's dropped to the floor, and I say it to my partner. 'Come on what are you doing now? We need to do something, he's dying.' And he said to me as well, 'Don't call the police. Don't call the ambulance - the police are coming straight away.' Because in the home there are drugs everywhere. And this is something I'm ashamed of myself: I just watched him for 3 hours. He survived, he stayed alive, but he's got really, really ill and I just watched this one. That's why I stopped the G exactly because really, I was ashamed that I and they just watched. So G and crystal meth together working perfect, making nice high, but if you lose the control you die. And if you call the ambulance for your partner or your friends, the government need to know this is fine as well. You need to call an ambulance because you saved somebody's life. But people are scared, they think they will get in trouble. So, people are dying for sure through fear." (GMADT13)

"I think there also needs to be [information on] what would happen if you got caught? Because some people forget crystal meth is a class A that can be up to 10 years in prison. Interviewer: So, a legal perspective as well? Yeah, I mean, if somebody overdoses, you know, I had a guy pass out on us and we just watched it. We didn't call an ambulance. We should have done, but luckily, he woke up five minutes later, he took G. We watched him, he literally took the G and then whatever. I don't know what happened in his body, but he just collapsed onto me like, and he had just come to the party. And we were like, 'What the fuck is he . . .?''' (GMADT23)

"Yeah, 'cause I haven't got a clue. So, if it was me, it would be a case of take them outside and wait for the ambulance and very much 'I don't know this guy, I've just found him like this.'" (GMADT15)

Sometimes the fallout from taking the decision to call an ambulance did have negative implications – but for the person experiencing the health problem rather than the person making the phone call.

"Yeah, I have one thing with like a teacher. I had to call the ambulance for him because he was just going crazy. Started smashing his house up. And he's on the floor with his eyes in the back of his head. So, I rang the ambulance for him. But then, because all the police have come, he started going mad at me, like the day after saying that he can never get a teaching job again. So basically, because I phoned the ambulance and the police arrived. He can never teach again because of that, so yeah. People are scared about that, yeah. Normal people, like couples and they take G and T. And yeah, and basically, they just want to keep it all discrete because of their job and stuff." (GMADT14)

6. Summary: The need to build harm reduction approaches

"...'because I really wish I had some information like that when I was younger, I knew nothing about drugs. I didn't know Tina was crystal meth for a long time, I was smoking it for four years, I had no freaking clue. And about 22 was the first time I was slammed. And then that's when I found out what it was. And I was like, 'Wait this whole time it's been that?' I had no idea what it was. And then by that point, once I realised what it was, I thought I've done it before, I probably was too far gone, and I no longer cared. And I was like, 'Well, I've done it before I can do it again. It's a minor. It's not a big deal.' Yeah, I wish I had something like that as a kid, even just the website or something so I could look up." (GMADT10)

Given the low levels of awareness of the health harms associated with chronic, daily use of chemsex substances, there is an urgent need to educate people about harm reduction approaches. This translates into slightly different information gathering/sharing priorities according to the substance under consideration:

Crystal meth: Better understanding and continued monitoring of the local **crystal meth** market - both within and beyond the chemsex/MSM scene - is needed. This includes where local supplies originate from, import routes and who is selling it, as well as collecting local treatment data and monitoring admissions to A & E and mental health inpatient care for drug induced psychosis. Reported increases in availability, reduced price and changing demographics of crystal meth users highlight the need for frontline medical and treatment services to be prepared and trained in how to respond to its use. Information on safer 'slamming' is also needed.

'G': Greater awareness of the physical and psychological side-effects of 'G' and how to manage them is needed: particularly how to respond to people overdosing or having a psychotic episode (including the official response / legal consequences of alerting 'bluelight' services). Harm reduction information that combines substance and sexual health messages would be useful. This needs to alert users to the potential development of tolerance and/or dependence through prolonged regular 'G' use, as well as highlighting that cessation of use, particularly when abrupt, can cause unpleasant and dangerous withdrawal symptoms and how best to manage that. Awareness of treatment pathways and detox options is needed for both professionals and people who use 'G'.

Polysubstance Use (G & T and the use of drugs available on prescription): Greater
awareness of the risk of falling into daily use and dependence through combining stimulatory
and depressant substances is needed. This relates not only to chemsex substances, but also
the range of drugs available on prescription that may be bought to counteract the effects of
crystal meth, help people come down and/or to deal with anxiety (i.e., Zopiclone, Diazepam
and Pregabalin). Awareness of the side effects of using *Viagra* in combination with stimulant
substances to facilitate sex for prolonged periods of time also needs sharing.

7. Recommendations

Recommendations arising out of this research are grouped around professional and service development, harm reduction and monitoring:

Professional and Service Development

1. Professional learning and development training is recommended for a range of key professionals - including emergency services, as well as those working in medical, mental health and substance use treatment services. This training should focus on awareness raising and developing competency in working with *crystal meth* and **GHB** users. For medical professions, this needs to include a particular focus on how to identify and manage '*G*' withdrawal and related symptoms such as severe anxiety and psychosis. Ideally this would be accompanied by an evidence-based protocol to deal with **GHB** withdrawal.

2. For the substance use sector, we recommend a review of existing staff competency in working with these substances. This should include where necessary, the recruitment of staff with the skills, knowledge and competencies required to be able to work with the complexities that we have identified in this report.

3. We recommend that clear referral routes and knowledge of the local support offer be established so that GPs, A & E, and hospital ward medical staff know how to access care for people reporting chemsex use. For example, detox for '**G**', and **crystal meth** support groups, alongside dedicated sexual health, mental health, substance use and *LGBTQ+* support.

Harm Reduction

4. We recommend reducing the harms associated with chemsex substances through the development of an awareness raising information campaign of the effects of *crystal meth* and '**G**', targeted at potential users. This should highlight: **i)** the potential risks, including developing physical and psychological dependency, sleep deprivation, hallucinations, psychosis, paranoia, and anxiety (the latter is particularly important for people who may initially be attracted to '**G**' due to its effect on relieving anxiety); **ii)** the potentially life-threatening acute withdrawal symptoms associated with '**G**' cessation without medically supported detox.

5. We recommend a 'G' overdose prevention initiative. This should include awareness raising of the differences between GHB and GBL and implications for overdose/coma. Information about the very small margin between an optimal recreational dose and overdose (and the variability from person-to-person, and according to the method of preparation/ ingestion - as well as the absence of effective antidotes to reverse overdose) is crucial to minimise deaths from cardiorespiratory depression. Access to information about how to prevent an overdose becoming a death through: i) first aid advice on how to put unconscious people into the recovery position, how to monitor them, when to call for an ambulance and ii) clarity on exactly what the legal consequences are for them of: calling an ambulance, or not responding to an overdose and having someone die.

6. Given concerns that the use of prescription drugs combined with 'G' substantially increase the risk of overdose and death, we recommend awareness raising about the dangers of polysubstance use - in particular, the risks of taking 'G' alongside benzodiazepines and Z-drugs (**Zopiclone** and **Zolpidem**) which also have the capacity to depress the respiratory system.

Monitoring

7. Given the strong likelihood that many 'G' related deaths are currently going undetected, and that consequently, official data substantially underreport mortality rates, there needs to be much closer monitoring of 'G' related deaths. We recommend that the GM drug related deaths panel should consider a focus on GHB and related substances to examine whether there is any potential for improving recording in toxicology reports. Currently, detection is extremely unlikely as: (1) the presence of these substances is not routinely tested for in toxicology; and (2) GHB is quickly eliminated from plasma and has only a short detection window in urine. The links between suicide and GHB use should also be investigated.

8. We recommend the monitoring of the local market including regular testing of *crystal meth* and liquids sold as '*G*'. This monitoring should also include monitoring the *crystal meth* market for organised crime networks, including international networks.

9. We also recommend the monitoring of the use of *crystal meth* and **GHB** both within and beyond the *MSM* and the chemsex scene. This should include collecting local treatment data and monitoring admissions to A & E and mental health inpatients for drug induced psychosis.

References

Advisory Council on the Misuse of Drugs (ACMD) (2007) GBL & 1, 4-BD: Assessment of risk to the individual and communities in the UK. Home Office, London. www.gov.uk/government/uploads/system/uploads/attachment_data/ file/119047/report-on-gbl1.pdf

ACMD, 2020 An assessment of the harms of gamma-hydroxybutyric acid (GHB), gamma-butyrolactone (GBL), and closely related compounds. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/ attachment data/file/936953/Final GHBRS report 20 November 2020.pdf

Anderson H., Aydin B.E., Mueller A., Iwersen-Bergmann S. (2011) An overview of gamma-hydroxybutyric acid: pharmacodynamics, pharmacokinetics, toxic effects, addiction, analytical methods, and interpretation of results. *Drug Testing and Analysis* 3(9):560-568. https://doi-org.mmu.idm.oclc.org/10.1002/dta.254

Bendau, A., Viohl, L., Petzold, M. B., Helbig, J., Reiche, S., Marek, R., Romanello, A., Moon, D. U., et al. (2022) 'No party, no drugs? Use of stimulants, dissociative drugs, and GHB/GBL during the early COVID-19 pandemic.' *International Journal of Drug Policy*, 102, 2022/04/01/, p. 103582. https://doi.org/10.1016/j.drugpo.2022.103582

Ben-Yehuda, O. and Siecke, N. (2018) Crystal methamphetamine: a drug and cardiovascular epidemic. *JACC: heart failure*, 6(3), pp.219-221.

Beurmanjer, H., Asperslag, E. M., Oliemeulen, L., Goudriaan, A. E., De Jong, C. A. J., Schellekens, A. S. A. and Dijkstra, B. A. G. (2019) 'A Qualitative Approach in Understanding Illness Perception and Treatment Needs in Patients with Gamma Hydroxybutyrate Use Disorder.' *European Addiction Research*, 25(5) pp. 248-255. www.jstor.org/ stable/26792497

Bonell C, Hickson F, Weatherburn P and Reid D (2010) Methamphetamine use among gay men across the UK. *International Journal of Drug Policy*, 21(3), 244-246.

Brooks, O., Bach, P., Dong, H., Milloy, M.J., Fairbairn, N., Kerr, T. and Hayashi, K. (2022) Crystal methamphetamine use subgroups and associated addiction care access and overdose risk in a Canadian urban setting. *Drug and alcohol dependence*, 232, p.109274.

Busardò, F., & W Jones, A. (2015) GHB pharmacology and toxicology: acute intoxication, concentrations in blood and urine in forensic cases and treatment of the withdrawal syndrome. *Current neuropharmacology*, 13(1), 47-70.

Corkery, J.M., Loi, B., Claridge, H., Goodair, C., Corazza, O., Elliott, S. and Schifano, F. (2015) Gamma hydroxybutyrate (GHB), gamma butyrolactone (GBL) and 1, 4-butanediol (1, 4-BD; BDO): a literature review with a focus on UK fatalities related to non-medical use. *Neuroscience & Biobehavioral Reviews*, 53, pp.52-78.

Darke, S., Peacock, A., Duflou, J., Farrell, M. and Lappin, J. (2020) 'Characteristics and circumstances of death related to gamma hydroxybutyrate (GHB).' *Clinical Toxicology*, 58(11), 2020/11/01, pp. 1028-1033. www.tandfonline.com/ doi/full/10.1080/15563650.2020.1726378

Drasbek, K., Christensen, J., & Jensen, K. (2006) Gamma-hydroxybutyrate-a drug of abuse. Acta neurologica scandinavica, 114(3), 145-156.

Drückler, S., Speulman, J., van Rooijen, M. and De Vries, H. J. C. (2021) 'Sexual consent and chemsex: a quantitative study on sexualised drug use and non-consensual sex among men who have sex with men in Amsterdam, the Netherlands.' *Sexually Transmitted Infections*, 97(4) pp. 268-275. https://sti.bmj.com/content/97/4/268

Daly, M. (2012) Street Drug Trend Survey 2012. Druglink, 27(6), November 2012, pp.8-11. Drugscope: London. Edmundson C.Heinsbroek E., Glass R., Hope V., Mohammed H., White M. and Desai M.(2018) Sexualised drug use in the United Kingdom (UK): *A review of the literature. International Journal of Drug Policy*. 55; 131-148.

EMCDDA (2002) Report on the Risk Assessment of GHB in the Framework of the Joint Action on New Synthetic Drugs. European Monitoring Centre for Drugs and Drug Addiction, Lisbon. Available at: www.emcdda.europa.eu/attachements.cfm/att_33346_EN_Risk4.pdf

EMCDDA and Europol (2019), Methamphetamine in Europe, EMCDDA-Europol Threat Assessment, *Publications Office of the European Union*, Luxembourg.

EMCDDA (2019) *G Hospital admissions* www.emcdda.europa.eu/system/files/publications/11364/20191724_TDAT19001ENN_PDF.pdf

EMCDDA, (2022) *Statistical Bulletin 2022 — price, purity and potency*. www.emcdda.europa.eu/system/files/ publications/14541/EU-Drug-Market-Methamphetamine-2022-FINAL.pdf Online dataset: www.emcdda.europa.eu/ data/stats2022/ppp_en

Fairbairn, N., Wood, E., Stoltz, J.A., Li, K., Montaner, J. and Kerr, T. (2008) Crystal methamphetamine use associated with non-fatal overdose among a cohort of injection drug users in Vancouver. *Public health*, 122(1), pp.70-78.

Galloway, G.P., Frederick, S.L., Staggers, F.E., JR, Gonzales, M., Stalcup, S.A. and Smith, D.E. (1997), Gammahydroxybutyrate: an emerging drug of abuse that causes physical dependence. *Addiction*, 92: 89-96. https://doi. org/10.1111/j.1360-0443.1997.tb03640.x

GOV.UK (2021) United Kingdom drug situation 2019: *Focal Point annual report*. https://www.gov.uk/government/publications/united-kingdom-drug-situation-focal-point-annual-report/united-kingdom-drug-situation-focal-point-annual-report-2019#overview-of-illicit-drug-use-in-the-united-kingdom

GMTRENDS (2021) Greater Manchester: Testing and Research on Emergent and New Drugs. 2021 Monitoring Cycle. https://gmtrends.mmu.ac.uk/wp-content/uploads/2021/12/GM_TRENDS_2021_Main_Report_1.0.pdf HM Government White Paper (August 2022) – 'Swift, Certain, Tough: New Consequences for Drug Possession' https://www.gov.uk/government/consultations/swift-certain-tough-new-consequences-for-drug-possession-white-paper/swift-certain-tough-new-consequences-for-drug-possession-accessible-version

Hockenhull, J., Murphy, K. G. and Paterson, S. (2017) 'An observed rise in γ-hydroxybutyrate-associated deaths in London: Evidence to suggest a possible link with concomitant rise in chemsex.' *Forensic Science International*, 270, 2017/01/01/, pp. 93-97 www.sciencedirect.com/science/article/pii/S0379073816305254

Ingels, A.S.M., Wille, S.M., Samyn, N., Lambert, W.E. and Stove, C.P. (2014) Screening and confirmation methods for GHB determination in biological fluids. *Analytical and Bioanalytical Chemistry*, 406, pp.3553-3577.

Jones, A.W., Musshoff, F., Kraemer, T., Schwaninger, A.E., Gerostamoulos, D., Drummer, O.H., Drasch, G., A. Balíková, M., Beyer, J., Teixeira, H. and Thevis, M., 2014. Toxicology of specific substances. *Handbook of forensic medicine*, pp.900-993.

Lappin, J.M., Roxburgh, A., Kaye, S., Chalmers, J., Sara, G., Dobbins, T., Burns, L. and Farrell, M. (2016) Increased prevalence of self-reported psychotic illness predicted by crystal methamphetamine use: evidence from a high-risk population. *International Journal of Drug Policy*, 38, pp.16-20.

McKetin, R., Kelly, E. and McLaren, J. (2006) The relationship between crystalline methamphetamine use and methamphetamine dependence. *Drug and alcohol dependence*, 85(3), pp.198-204.

Melendez-Torres GJ, Bonell C, Hickson F, Bourne A, Reid D, Weatherburn P (2016). Predictors of crystal methamphetamine use in a community-based sample of UK men who have sex with men. International Journal of Drug Policy, 36, 43-46.

Moreno-Gámez, L., Hernández-Huerta, D. and Lahera, G. (2022) 'Chemsex and Psychosis: A Systematic Review.' *Behavioral Sciences*, 12(12) p. 516. https://doi.org/10.3390/bs12120516

Moyle L, Dymock A, Aldridge A, Mechen B. (2020) Pharmacosex: Reimagining sex, drugs and enhancement. Int J Drug Policy. 24; 86: 102943. doi: 10.1016/j.drugpo.2020.102943.

Quinn, B., Ward, B., Agius, P.A., Jenkinson, R., Hickman, M., Sutton, K., Hall, C., McKetin, R., Farrell, M., Cossar, R. and Dietze, P.M. (2021) A prospective cohort of people who use methamphetamine in Melbourne and non-metropolitan Victoria, Australia: Baseline characteristics and correlates of methamphetamine dependence. *Drug and Alcohol Review*, 40(7), pp.1239-1248.

Ralphs, R., Gray, P., and Norton, A. (2016) 'New psychoactive substance use in Manchester: Prevalence, nature, challenges and responses.' https://core.ac.uk/download/pdf/161891836.pdf

Ralphs, R. Williams, L., Askew, R. and Ykhlef, A. (2016) 'Adding Spice to the Porridge': The development of a synthetic cannabinoid market in an English prison. *International Journal of Drug Policy*. Special Issue on Emerging Drug Trends. 40: 57-69. doi: 10.1016/j.drugpo.2016.10.003.

Schwarzbach V., Lenk K. and Laufs U. (2020) Methamphetamine-related cardiovascular diseases. *ESC Heart Failure*. 7(2):407-414. DOI: 10.1002/ehf2.12572

Schecke, H., Lea, T., Bohn, A., Köhler, T., Sander, D., Scherbaum, N. and Deimel, D. (2019) Crystal methamphetamine use in sexual settings among German men who have sex with men. *Frontiers in Psychiatry*, 10, p.886.

Schmidt, A. J., Bourne, A., Weatherburn, P., Reid, D., Marcus, U. and Hickson, F. (2016) 'Illicit drug use among gay and bisexual men in 44 cities: Findings from the European MSM Internet Survey (EMIS).' *International Journal of Drug Policy*, 38, 2016/12/01/, pp. 4-12 https://doi.org/10.1016/j.drugpo.2016.09.007

Tay, E., Lo, W. K. W. and Murnion, B. (2022) 'Current Insights on the Impact of Gamma-Hydroxybutyrate (GHB) Abuse.' *Substance Abuse and Rehabilitation*, 13, 2022/12/31, pp. 13-23. www.tandfonline.com/doi/full/10.2147/ SAR.S315720

Thai, D., Dyer, J. E., Benowitz, N. L., & Haller, C. A. (2006). GHB and ethanol effects and interactions in humans. *Journal of Clinical Psychopharmacology*, 26(5), 524.

van Amsterdam, J.G., van Laar, M., Brunt, T.M. and van den Brink, W. (2012) Risk assessment of gammahydroxybutyric acid (GHB) in the Netherlands. *Regulatory Toxicology and Pharmacology*, 63(1), pp.55-63.

van Amsterdam, J., Brunt, T., Pennings, E. and van den Brink, W. (2015) 'Risk assessment of GBL as a substitute for the illicit drug GHB in the Netherlands. A comparison of the risks of GBL versus GHB' *Regular Toxicology and Pharmacology*, 2014 Nov, 70(2), pp. 507-13.

van Noorden, M.S., Kamal, R.M., Dijkstra, B.A., Mauritz, R. and de Jong, C.A. (2015) A case series of pharmaceutical gamma-hydroxybutyrate in 3 patients with severe benzodiazepine-resistant gamma-hydroxybutyrate withdrawal in the hospital. *Psychosomatics*, 56(4), pp.404-409.

Winstock, A.R., Mitcheson, L.R., Deluca, P., Davey, Z., Corazza, O. and Schifano, F. (2011) Mephedrone, new kid for the chop? *Addiction*, 106(1), pp.154-161.

Winstock A. (2014) MixMag/Global Drugs Survey 2014. MixMag 276; 86-9.

Wood, D. M., Warren-Gash, C., Ashraf, T., Greene, S. L., Shather, Z., Trivedy, C., Clarke, S., Ramsey, J., Holt, D.W., Dargan, P., I. (2008) Medical and legal confusion surrounding gamma-hydroxybutyrate (GHB) and its precursors gamma-butyrolactone (GBL) and 1,4-butanediol (1,4BD). *QJM* 2008; 101: 23–29.

Wood, D.M., Brailsford, A.D. and Dargan, P.I. (2011) Acute toxicity and withdrawal syndromes related to gammahydroxybutyrate (GHB) and its analogues gamma-butyrolactone (GBL) and 1, 4-butanediol (1, 4-BD). *Drug Testing and Analysis*, 3(7-8), pp.417-425.

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