Birmingham Substance Use Needs Assessment

December 2021

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Birmingham City Council

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1 Introduction

Drug and alcohol misuse is a major public health concern and socioeconomic burden, responsible for considerable healthcare expenditure in the United Kingdom (UK) [1]. The annual estimated cost to the NHS of treating drug misuse is approximately £500m [2], whilst the healthcare cost of alcohol misuse is estimated to be as much as £3.5bn per year [3]. The adverse impact on health is equally large, with 4,561 deaths (79.5 deaths per million) related to drug poisoning recorded in England and Wales in 2020 [4]. The impact also appears to be greater in the UK compared to other counties. In Europe, the UK ranked 11th highest for the number of years lost due to ill-health, disability or early death due to a substance use disorder and has the highest rate of people living with disability due to substance misuse.

With the effects of substance abuse pervading society, the challenges posed are increasingly great at the individual, societal and clinical levels [5]. Substance abuse impacts on physical and mental health, emotional well-being, familial and other relationships, education and career prospects, financial status, and criminal involvement.

The causes and consequences of substance misuse behaviours are complex and interrelated to such a large extent that they are almost impossible to separate. However, it is important to note that institutionalised and cultural norms predispose marginalised groups to higher rates of substance abuse, poorer health outcomes and social stigma [6–9]. The bidirectional nature of the impact of substance abuse further complicates the issue. The consequences of substance misuse may be exacerbated by socioeconomic inequalities whilst psychosocial and environmental consequences may increase vulnerability to inequalities in social determinants of health [10].

Given the complexity of drug and alcohol addiction and the increasing need to combat endemic substance misuse in Birmingham and indeed nationally, this needs assessment provides a necessary update to the 2013/14 publication [11].

1.1 Aims and Objectives

The aim of this needs assessment is to establish an evidence base to support the 2021/22 treatment planning process, including identifying the level of need in the population, and gaps and barriers in service provision prior to re-commissioning substance misuse treatment services. In order to achieve the aims, the specific objectives were to:

1) use epidemiological approaches and a broad range of quantitative and qualitative data sources to comprehensively and comparatively assess the needs of the population of Birmingham in relation to alcohol and drug use
2) Identify gaps in service provision and areas of unmet need and inequalities, and
3) Make recommendations to address the needs of Birmingham in future service commissioning.

1.2 Drug type descriptions and impact on health

1.2.1 Club drugs

Club drugs refer to Methylenedioxymethamphetamine (MDMA also known as ecstasy), Methamphetamine, Lysergic Acid Diethylamide (LSD), Ketamine, Gamma-hydroxybutyrate (GHB) and Flunitrazepam.

These substances, primarily used in recreational settings such as night clubs, have diverse psychotropic effects with varying levels of toxicity, dependence and adverse health outcomes [12]. Whilst these substances are collectively known as "club drugs", their pharmacological classifications vary giving rise to their distinct pharmacokinetic and pharmacodynamic properties [13–15]. Broadly these drugs can be categorised as having hallucinogenic properties (e.g. ketamine, LSD and GHB), stimulant properties (e.g. methamphetamine) or both (e.g. ecstasy). Previous research suggests that the stimulant and hallucinogenic effects enhance the "rave" experience by increasing sensory perceptions and the ability to dance all night [13]. Drugs such as GHB, Rohypnol® and ketamine also have anaesthetic properties in high doses [16], which can lead to loss of consciousness and short-term memory loss [17]. The sedative properties of these substances make them dangerous "date rape" drugs.

Despite the risk of severe adverse health outcomes and even death, individuals continue to use club drugs due to social and cultural factors and poses a considerable public health problem. Club drugs are relatively inexpensive and accessible, and their ability to enhance the rave experience together with their social acceptability and perceived benign nature appear to be the key reasons for their continued popularity [18–20].

1.2.2 Cannabis

Since the mid-1990s, cannabis has been the most commonly used illicit drug in England and Wales [21]. Whilst the evidence for cannabis offering a range of medical benefits is growing [22], it is still seen as a particularly dangerous drug [23] due to its harmful characteristics, risks of abuse and limited therapeutic value [24].

Cannabis is rapidly absorbed, typically through inhalation, and its acute toxicity brings about mood changes from anxiety and arousal to calmness, detachment and diminished levels of consciousness and motivation. Psychotic symptoms are also common, such as irrational panic, fear of dying, and paranoia [25,26]. The dangers of cannabis are made worse through inhalation as the constituents of cannabis smoke carry cardiovascular and respiratory health risks similar to those of tobacco smoke [27]. Cannabis can also be ingested, although absorption may be erratic which can delay the onset and prolong the effects of its main psychoactive ingredient, tetrahydrocannabinol (THC). Overwhelming evidence now shows that prolonged and long-term use leads to both physical and behavioural cannabis dependence in 7-10% of users [28]. Given that early onset of use is a strong predictor of future dependence [28], it is a major public health concern that cannabis use amongst adolescents and younger adults continues to increase [21].

1.2.3 Cocaine

Cocaine has a long history of being used as an anaesthetic in medicine [29]. However, its use as a recreational stimulant predisposes users to serious heart conditions and blood disorders as 'street cocaine' may be contaminated with other local anaesthetic agents [30]. Its addictive properties also makes it the second most abused drug in England and Wales [21].

Recreational doses of cocaine lead to temporary increases in noradrenaline and dopamine with levels then dropping below normal concentration values. Initially, users experience euphoria after taking cocaine before entering a state of depression. These mood states are related to the rise and subsequent decline in neurotransmitters [31].

The consequences of cocaine use are not confined to mood states. Cocaine adversely affects several biological systems, including the sympathetic nervous system, cardiovascular system, endocrine system and triggers neurological episodes such as anxiety, paranoia and psychosis [30,32].

Cocaine is consumed mainly in one of two forms. The powder form is inhaled through the nose “snorted” or injected and is absorbed slowly producing prolonged effects. Crack cocaine, a more potent crystalline form of cocaine, is typically smoked allowing it to be absorbed more rapidly resulting in intense yet transient highs [31]. Whilst the use of crack cocaine appears to be negligible, powder cocaine continues to be a commonly used drug in England and Wales [21], likely due to its relative low cost and reputation as a fashionable social drug.

1.2.4 Opioids

Opioids are a broad class of pain-relieving drugs that include the illegal drug heroin, synthetic opioids such as fentanyl, and legally available prescription pain relievers such as oxycodone. When opioids travel through your blood and attach to opioid receptors in your brain cells, users experience muffled perceptions of pain and elevated levels of pleasure [33]. However, these effects that make opioids effective medications for treating pain also make them dangerous when used recreationally. At lower doses, opioids have a profound sedative effect and cause nausea, vomiting and constipation, and at higher doses they can inhibit respiratory structures and induce respiratory depression leading to potentially fatal breathing complications [34,35].

Heroin, the most popular illicit opioid, can be administered in several ways (e.g. injected, snorted, smoked and consumed orally). It is an extremely addictive substance that is synthesized from the opium poppy plant. Recent research has indicated that heroin abuse has increased at an alarming rate due to its accessibility and more permissive societal views as an initiating opioid (i.e. heroin used as the first opioid). This increase amongst inexperienced opioid users could lead to increased rates and risks of overdose [36].

Consequently, opioid abuse, including the abuse of prescription opioids and illicit substances like heroin, presents a major public health challenge and substantial economic burden in the UK and Europe [1].

1.2.5 Anabolic steroids

Developed initially as a performance-enhancing drug for athletes, anabolic steroids have become increasingly popular in the general population. There has been greater interest, availability and usage of performance-enhancing drugs over the past twenty years due to advancements in technology and pharmacology as well as the expansion of the internet [37,38]. Anabolic steroids are used illicitly to enhance muscle growth and strength, physical activity and sport performance, and for aesthetic purposes [39].

However, there are adverse health impacts of anabolic steroid use ranging from cosmetic (e.g. acne, striae, gynaecomastia) to life-threatening (e.g. organ failure) [40]. Expert statements have recently highlighted the harmful effects of anabolic steroids on various

organs and biological systems [41], however, the greatest health impacts appear to be on the cardiovascular system [42]. Given that anabolic steroids are typically administered through injection, users also have an additional risk of contracting blood borne viruses, although the risk of transmission amongst steroid injectors is low due to hygienic practices and low levels of sharing [43].

The causes and drivers of illicit anabolic steroid use in the UK are complex and not fully understood, resulting in a growing issue for public health departments [44].

1.2.6 New Psychoactive Substances

New psychoactive substances (NPS) are newly available synthetic substances that mimic the effects of existing drugs [45]. As a means to circumvent the law, they were originally known as “legal highs” but their supply, production and import have since been made illegal under the Psychoactive Substances Act 2016.

The full extent of bodily damage caused by NPSs is still to be determined as many of these drugs have unknown effects in addition to their intended effect. The risk to users is therefore unpredictable and extremely dangerous [46].

Synthetic cannabinoids (Spice/Mamba) act on the same brain cell receptors as the mind-altering ingredient in marijuana (THC) and are the most commonly used NPS. Some of them are known to bind more strongly to the cell receptors affected by THC and can produce much stronger and unpredictable effects. Cannabinoids are the most common cause of drug related admissions for mental and behavioural disorders [47].

NPSs continue to present a public health concern as they are deliberately misbranded in attempts to evade regulatory frameworks. Users are therefore susceptible to considerable health and criminal justice harms and, despite efforts to restrict supply, NPSs are still available through illicit means [48].

1.2.7 Prescription Medication

A prescription medicine or Prescription Only Medicine (POM) is a drug that requires a medical prescription in order to be legally dispensed by a medical practitioner, dentist or by qualified nurses or pharmacists [49]. The use of POM is essential for the treatment of various conditions such as diabetes, epilepsy, neurological disorders, and pain management. Using POMS without prescription, for longer/in greater amounts than instructed or in any other way not directed by healthcare professional is considered misuse [50]. The Human Medicines Regulations 2012, regulation 62(3) for drug classification, sets out the criteria used to classify drugs. This includes criteria addressing danger to human health if drugs are used incorrectly. Drugs can be re-classified if there is new evidence to support changes to classification, especially if there is a risk to human health which may lead to death if misused. In the UK, Diclofenac was re-classified upwards from non-prescription to POM due to a newfound cardiovascular risk being identified that made it unsafe for self-medication [51].

In 2018/19, 6.4% of adults in England and Wales aged 16 to 59 misused prescription-only painkillers for medical reasons while 0.2% used it solely for the feeling or experience it gave them. Painkiller misuse is more common in 16 to 25 year-olds and is associated to alcohol misuse [52] . Evidence suggests that being prescribed prescription-only opioids during adolescence is associated to future opioid misuse in adults with little or no previous history of misuse [53]. This may be due to the addictive neurological qualities of some of the opioid based POM’s. People with long-standing illnesses or disabilities are more likely to have misused prescription-only painkillers for medical reasons [52]. The 2015 National Survey on

Drug Use and Health (NSDUH) showed a similar trend: among adults who misused POM pain reliver at least once a year, 63.4% did so to relieve physical pain. Other reasons for prescription-only pain killer misuse include to feel good or to relax and relieve tension [50].

1.2.8 Alcohol

Illicit drug use has well-known harmful effects; however, alcohol has a greater detrimental impact on health globally. Alcohol contributes to 5% of disability adjusted life years, which is comparably larger than the impact of illicit drug use on global disease burden; illicit drugs add 1.4% disability-adjusted life years [54]. This highlights the considerable influence of alcohol on health at a population level, which continues to be a major public health concern and socioeconomic burden [55].

Whilst the adverse health outcomes associated with alcohol abuse are well known, the last thirty years of research has revealed that alcohol has a more severe and complex influence on health that previously thought. This has led to policy changes in the UK, when in 2016 the government updated alcohol consumption guidelines and reduced the recommended maximum number of units per week to 14 for men and women [56].

Unlike illicit drugs, alcohol can be consumed safely in small doses, although it is important to note that it can directly and indirectly affect virtually every organ system in the body and it is detrimental to health in higher doses [57].

Specific harmful effects of alcohol include damage to the heart and elevated blood pressure and increased risk for heart failure and stroke. Excessive alcohol consumption can cause damage to various tissues, bring about negative physiological changes, and impair hormonal and biochemical regulation of a variety of cellular and metabolic functions. High alcohol intake over a longer period of time can also increase risk for developing alcohol dependency syndrome [57]. Alcohol exposure over a longer period also increases the risk for certain cancers. Finally, acute and chronic alcohol use significantly increases the risk for accidental injuries and impairs the recovery from those injuries [58].

Despite stricter policy changes, and medical and scientific advances, alcohol abuse continues to challenge public health services. This may in part be due to the approaches taken, whereby individuals have typically received palliative care rather than preventative treatment, and population-based public health approaches have largely been neglected [55].

2 Background & Policy

2.1 National & International Drug Policy Overview

From Harm to Home 2021 [59] was published in December 2021 to combat illegal drugs by cutting off the supply of drugs by criminal gangs and giving people with a drug addiction a route to a productive and drug-free life. The strategy is underpinned by investment of over £3 billion over the next three years.

National policy places the responsibility for the commissioning of drug treatment services as part of the recommended services commissioned through the local authority public health grant, however it is not a statutory service. Local authorities have responsibilities with regards to the NHS Constitution, under the 2012 legislation, to deliver drug and alcohol recovery services and are required to fund appropriate interventions as recommended by National Institute of Health and Care Excellence (NICE).

NICE have published guidelines on drug treatment and made recommendations about interventions at a system level that can influence drug misuse, but these are not government policy.

The World Health Organisation (WHO) identifies the world drug problem as both a public health issue and a safety and security issue, with different countries responding with their own balance between these two domains. The WHO recommends that drug use disorders are managed within the public health system, as the evidence shows this is what works best. In some countries the idea of including treatment of drug use disorders still meets resistance –partly owing to a delay in transferring science to policy. The WHO advocates a life course approach for prevention on the basis that intervention in the early years has most impact. The UK has taken a less liberal approach to drug decriminalisation. Spain, Italy, Portugal, and Luxembourg, there has been decriminalisation ‘by law’, meaning that the law does not foresee possession for personal consumption of some, or of any drugs (Portugal) as criminal offences.

There are some areas of substance use intervention and practice where there has been significant innovation internationally, especially in relation to heroin assisted treatment such as “safer injecting facilities”. Drug consumption rooms, where illicit drugs can be used under the supervision of trained staff, have been operating for the last three decades and are now found in 11 European countries; Belgium, Finland, Switzerland, Germany, the Netherlands, Spain, Norway, Luxembourg, Denmark, Portugal and France [60]. The benefits of providing supervised drug consumption facilities may include improvements in safe, hygienic drug use, especially among regular clients, increased access to health and social services, and reduced public drug use and associated nuisance. There is no evidence to suggest that the availability of safer injecting facilities increases drug use or frequency of injecting. These services facilitate rather than delay treatment entry and do not result in higher rates of local drug-related crime [61].

A national outcomes framework is being put together, which will endeavour to set out a clear set of measurable goals, to deliver drugs programmes across the country (DHSC,2021).

2.2 The Dame Carol Black Review

"Government faces an unavoidable choice: invest in tackling the problem or keep paying for the consequences"

In 2019, Professor Dame Carol Black was appointed to undertake an independent review of drugs. This was to inform the government's approach to tackling harm caused by drugs. The review [62] examined the challenges posed by drug supply and demand in a £10 billion a year market, with 3 million users, serious violence, harm and exploitation. It also highlighted the declining quality and capacity of drug treatment services, with disproportionate premature death and entrenched drug use associated with deprivation.
The second part of the review [63], commissioned by the Department for Health and Social Care, focuses on prevention, treatment and recovery. The report's aim is to make sure that vulnerable people with substance misuse problems get the support they need. It makes a series of 32 recommendations for Government, Local Government and other organisations around key themes:

- Radical reform of leadership, funding, and commissioning
- Rebuilding services
- Increased focus on primary prevention and early intervention
- Improvements to research and how science informs policy, commissioning, and practice

The review has major implication for future responsibilities and service delivery. A Government response to the review and its recommendations has not yet been published but the BCC public health team working on drug and alcohol support is keeping track of national and regional responses to the recommendations to ensure that local plans and responses are updated at the earliest opportunity.

2.3 National & International Alcohol Policy Overview

The World Health Organisation published their Global strategy to reduce the harmful use of alcohol in 2010 [64] and at the World Health Assembly in 2019 it was agreed that the WHO would report on its implementation during the first decade of its endorsement. The WHO provides a Global Status Report [65] on Alcohol Policy, through the Global Alcohol Policy Alliance.

In 2018 PHE published guidance: "Alcohol: applying All Our Health" [66]. This focuses on work to reduce alcohol harm in professional practice and action that can be taken by front-line health and care professionals. It also outlines actions that can be taken by both management and strategic leaders. The primary measures of the impact of alcohol harm are found in the Public Health Outcomes Framework Indicators (alcohol-related admissions to hospital and successful completion of alcohol treatment).

The most recent National Institute for Clinical Excellence public health guidance (NICE PH24) provides guidelines on prevention and identification of alcohol use disorders among people over 10 years old. It includes recommendations on price availability and marketing, support, screening and referral.

The UK Government Alcohol Strategy [67] was published in 2012. The strategy announced minimum unit pricing; however, this was subject to a U-turn in 2013 and there has been no alcohol specific strategy since. The strategy promotes measurable, evidence-based prevention activities at a local level, and national ambitions to reduce harm.

3 Local Geographical Area and Population Demographics

To understand need, we must first understand our population. Birmingham is the largest local authority in Europe, with a resident population of 1,140,525 as of 2020 (an increase of 67,480 [6.3%] since 2011) (Figure 1).

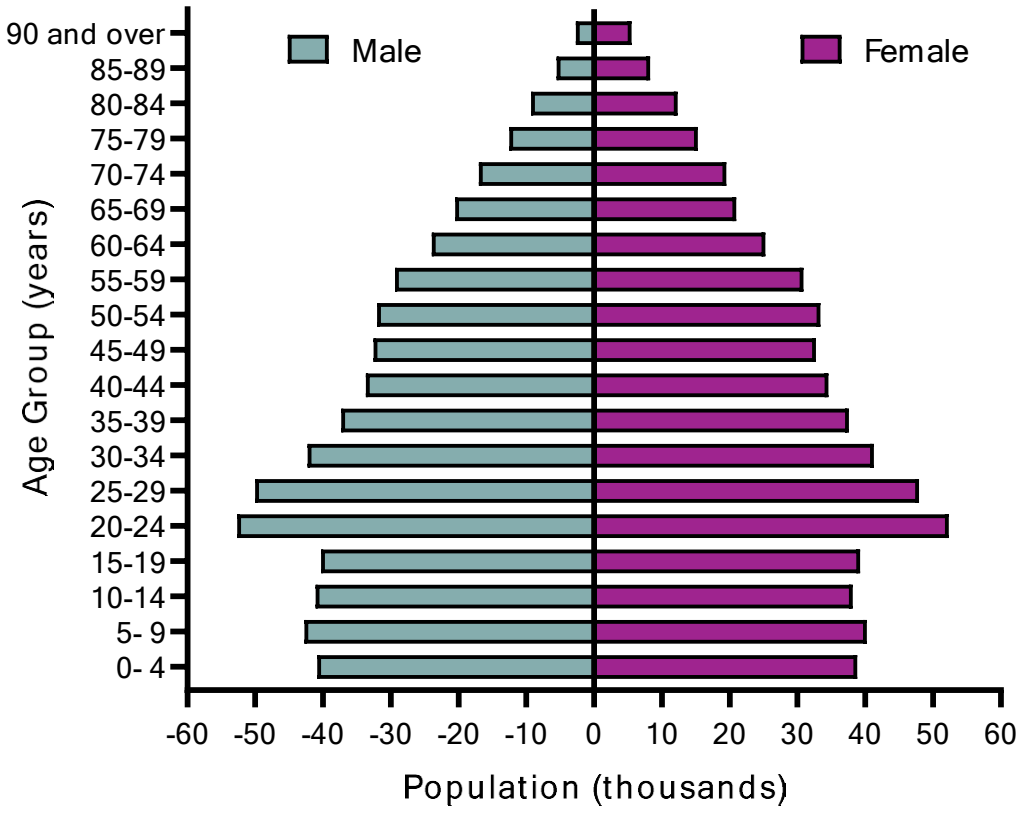
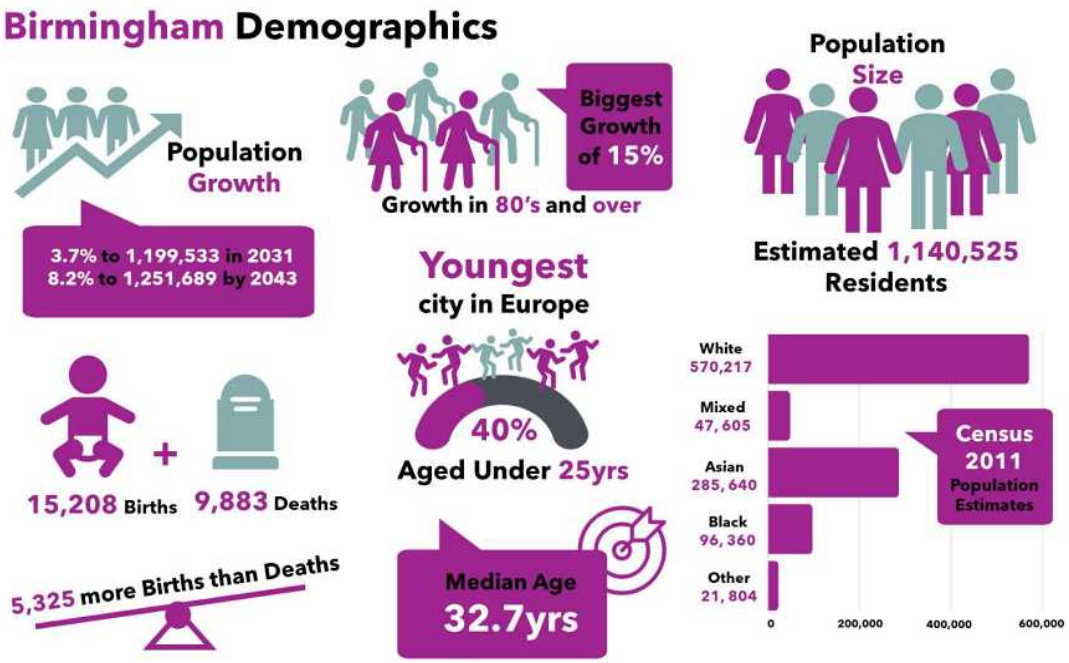


Figure 1: Birmingham population pyramid by age (ONS mid-year population estimates 2020)

Birmingham is made up of 69 Wards, 10 constituencies and 5 localities. It is a young and an ethnically diverse city, which presents many unique opportunities. However, Birmingham has higher than average levels of deprivation compared to the rest of England: 40% of Birmingham's population live in the most deprived decile areas in England (IMD 2019).


Birmingham Demographics
Population Growth
3.7% to 1,199,533 in 2031
8.2% to 1,251,689 by 2043
15,208 Births
9,883 Deaths
5,325 more Births than Deaths
Biggest Growth of 15%
Growth in 80's and over
Youngest city in Europe
40%
Aged Under 25yrs
Median Age 32.7yrs
Population Size
Estimated 1,140,525 Residents
White 570,217
Mixed 47, 605
Asian 285, 640
Black 96, 360
Other 21, 804
Census 2011 Population Estimates
0
200,000
400,000
600,000

4 National Prevalence estimates

4.1 Client Classification

4.1.1 Drugs

For prevalence data, individuals presenting to adult alcohol and drug treatment services are categorised by the substances they cite as problematic at the start of treatment [68]. They are categorised by the following hierarchal criteria:

- any mention of opiate use in any episode would result in the client being categorised as an OPIATE client (irrespective of what other substances are cited)
- clients who present with non-opiate substances (and not opiates or alcohol) will be classified as NON-OPIATE ONLY
- clients who present with a non-opiate substance and alcohol (but not opiates) recorded in any drug in any episode in their treatment journeys will be classified as NON-OPIATE AND ALCOHOL
- clients who present with alcohol and no other substances will be categorised as ALCOHOL ONLY

The classification method is illustrated in Figure 2.

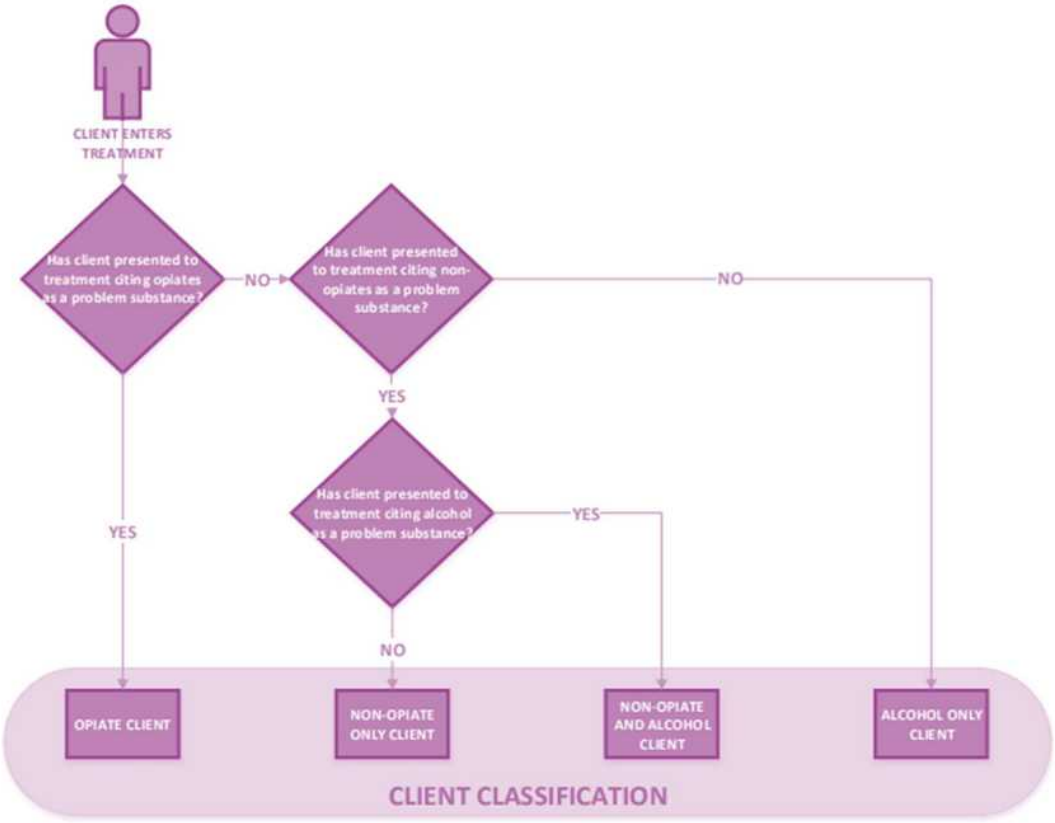


Figure 2: Classification Method for Clients Entering Drugs and Alcohol Treatment [68]

4.1.2 Alcohol

Harmful drinking (high-risk drinking) is defined as a pattern of alcohol consumption causing health problems directly related to alcohol. Alcohol dependence is characterised by craving,

tolerance, a preoccupation with alcohol and continued drinking despite harmful consequences (e.g. liver disease or depression caused by drinking) (NICE CG115).

4.2 Alcohol misuse in the general population

Alcohol consumption is a contributing factor to hospital admissions and deaths from a diverse range of conditions. Alcohol misuse is estimated to cost the NHS about £3.5 billion per year and society £21 billion annually [69].
There are around 600,000 dependent drinkers in England [70] despite a 17% decrease in prevalence between 2014/15 and 2019/20 [71]. Of these, most (82.3%) are not in treatment at a specialist alcohol service [72].

Of the 74,213 people in treatment in 2019, around 39% (28,902 people) [73] successfully completed their treatment. Successful completions are users that complete alcohol treatment in a year and who do not re-present to treatment within 6 months.

Alcohol is responsible for a large proportion of hospital admissions. In 2018/19 there were 1.26 million hospital admissions for alcohol related conditions in England, which equates to 23.7 admissions per 1000 people in England [74]. This includes those solely caused by alcohol consumption such as alcoholic liver disease and acute alcohol intoxication, as well as conditions where it is known that a proportion of the cases are caused by alcohol consumption such as circulatory diseases and certain cancers.

There have been significant increases in the rate of alcohol-specific deaths in people aged 55 to 79 years since 2001[75]. Between 2017 and 2019 there were 17,357 recorded deaths from alcohol-specific conditions which is 10.9 deaths per 100,000 people (directly age-standardised rate[1]). Alcohol specific conditions are those where alcohol is the sole known cause, such as alcoholic liver disease. The rate of alcohol-specific deaths in males (14.9 per 100,000) is significantly higher and more than double the rate for females (7.1 per 100,000) [76].

These statistics show the significant and wide-ranging impact of alcohol consumption and alcoholism across England. It is negatively impacting on NHS resources and on the population's health, particularly in terms of life expectancy and quality of life due to serious alcohol-related health conditions.

4.3 Drug use in the general population

The UK is ranked within the top 10 European countries with the highest rates of any drug use, problem drug use and overdose deaths [77]. The total cost of harms related to illicit drug use in England was £19.3 billion for 2017-18, with drug-related crime being the main driver of total costs. There are also substantial social and economic costs associated with people with drug problems such as homelessness, unemployment, mental health and social care support provided to children and young people who are affected by drug use, including looked after children and safeguarding [78].

Additionally, the needs of people with drug dependence are often more complex than just the dependency itself. Almost a third starting treatment for problems with opiate use have housing needs and half have a mental health need [79]. Despite this, the capacity and quality of the treatment system has been in decline since 2013. More than half of people with the most harmful opiate and crack cocaine addictions are not engaged in treatment [80].

[1] Directly standardized rates (DSRs) adjust for different age distributions in different populations and enable, the rates of disease or death between the populations to be directly compared

An estimated 1 in 11 adults aged 16 to 59 years had taken an illicit drug in the last year (9.4%; approximately 3.2 million people) [21]. This is higher for young adults with 1 in 5 people aged 16 to 24 having taken a drug in the last year, which is around 1.3 million people [52].

Cannabis is the most widely used illicit drug in the UK. 7.6% of adults said that they had used cannabis in the last year. It is the most reported drug in school surveys with 22% of 15-year-olds in England saying they had used cannabis [81].

There are an estimated 313,971 opiate and crack cocaine user (OCU) in England. At a national level, the combined numbers of people who take crack cocaine on its own, illicit opiates on their own and those who take both drugs, has risen by 4.4% between 2014-15 and 2016-17. Despite this, new incidences of heroin use have actually fallen continuously since 2005, while crack cocaine prevalence, has increased [82].

In England there are almost 200,000 people in treatment at specialist drug misuse services, a rate of 4.5 per 100,000 persons. The number of people coming into treatment for crack cocaine problems (without heroin) increased by 49% between 2014 -15 and 2017-18 [83]. There are clear differences in successful completion of treatment depending on the type of addiction. For non-opiates this is around 33.1% but for opiate users this is only 4.4%. Successful completions are users that left drug treatment free of drug(s) of dependence and who do not then re-present to treatment again within 6 months [84].

In 2019/20, there was a 5% decrease in admissions (7,027) for drug-related mental and behavioural disorders compared to 2018/19 (7,736), with a rate of 12.5 admissions per 100,000 people. There was also a 6% decrease in 2019/20 admissions (16,994) for poisoning by drug use compared to 2018/19 (18,053), with a rate of 30.5 admissions per 100,000.

Drug misuse is also a significant cause of premature mortality. Between 2018- 2020, 8,185 deaths from drug misuse were recorded in England, a directly standardised rate of 5.0 per 100,000. Deaths in males are significantly higher than that of females [85].

Drug use disorders are the fourth ranked cause of death in the 15–49 age group in the United Kingdom after cancers, cardiovascular disease, and suicide [86]. In 2020, the highest rate of drug misuse deaths was found in those aged 45 to 49 years, closely followed by those aged 40 to 44 years. Those born between 1970 and 1979, often referred to as ‘Generation X’, have consistently had the highest rates of drug misuse deaths for the past 25 years [87]. However, they are not the only age group affected, and nearly one in nine deaths registered among people in their 20s and 30s in England and Wales were related to drug misuse 2020 [88,89].

4.4 The Impact of the Pandemic

During the COVID-19 public health crisis, stressors such as social isolation, physical and financial insecurity, economic crisis, education, and job limitations (including redundancies) have occurred simultaneously [90,91]. These factors are traumatic and can potentially trigger psychological problems and changes in health behaviours, which can result in addiction and harmful alcohol consumption [91,92].

High-risk consumption of alcohol and the misuse of drugs are lifestyle factors can lead to detrimental health effects. For instance, harmful alcohol consumption can result in individuals becoming more susceptible to COVID-19 due to its effects on immunity and other health issues such as liver disease and cancer which may increase the likelihood of severe symptoms [93].

The use of high doses of opioids, whether illicit or prescription only, may cause respiratory depression, which can leave habitual users at a high risk of mortality from chronic respiratory diseases and COVID-19 [94]. Methamphetamine can reduce the production of antibodies and efficiency of white blood cells, which are essential for adequate immune responses [95]. People Who Inject Drugs (PWID) are a high-risk group for the transmission of COVID-19 due to factors such as poor hygiene and communal drug use, and produce lower levels of COVID-19 antibodies after infection [96].

During the national lockdowns alcohol was classified as an 'essential good' and available for purchase at alcohol retailers throughout the UK, making it relatively easy to purchase and evidence shows that harmful alcohol consumption at home has increased significantly [97,98]. From 2019/2020 to 2020/2021 there was a 24.4% increase in sales volume of alcoholic beverages drunk in places other than the place of sale [97]. The increase was sustained and consistent throughout 2020. Those who were already buying large quantities of alcohol before the pandemic were purchasing even more, 5.3 million litres more (14.3%) [97]. Subsequently there has been a 21% increase in alcoholic liver deaths with rates having accelerated rapidly across the duration of the pandemic [97].

In contrast, the flow of illicit drugs into the UK drug market may have been halted due to sudden temporary border closures during lockdowns [99]. This may have reduced the availability of street drugs to drug users. Preliminary data shows that there was a decline in the use of some drug during the first three month of the pandemic throughout Europe [99]. The closure of common recreational settings such as night clubs where club drugs are commonly in circulation and the social isolation and boredom resulting from national lockdowns and government guidance to 'stay home' may also contributed to this decline in drug circulation [99]. However, this reduction in supply may have also led drug users to alternative harder and/or more widely available drugs instead; for example, the use of prescription-only medication rose in Europe during the pandemic [99].

Research suggests that those who were already using drugs more frequently increased their consumption [99] with COVID-19 related anxiety contributing in part to this increase [100]. Anxieties and stressors such as worrying about the dangers of COVID-19, coming in contact with contaminated surfaces/objects, COVID-19 related compulsive checking and reassurance seeking, and a worry about the socioeconomic impacts of the pandemic were all associated with drug abuse [100].

In May 2021, it was reported that there was a 16.6% increase in the number of people in treatment for opiate use and a 77.5% increase in the number of deaths in treatment for the use of opiates during the pandemic [101]. A study of PWID during the pandemic showed that while they were appreciative of the effort services made to continue supporting them during the pandemic (such as relaxation of rules on taking opiate substitutes under supervision and home delivery of sterile injecting equipment), they also highlighted difficulties engaging with services which were not in-person, and with limited in person support, addictions may have worsened as a result [98]. However, Opioid Substitution Therapy (OST) services and home delivery needle and syringe programmes (NSP) were all viewed positively [98].

Evidence around the impact of the pandemic on substance use is still emerging and the longer-term impact on health and service demand is yet to be realised, however it is an important consideration in planning for future service and resource planning.

5 Local Prevalence and Health Burden

5.1 Prevalence

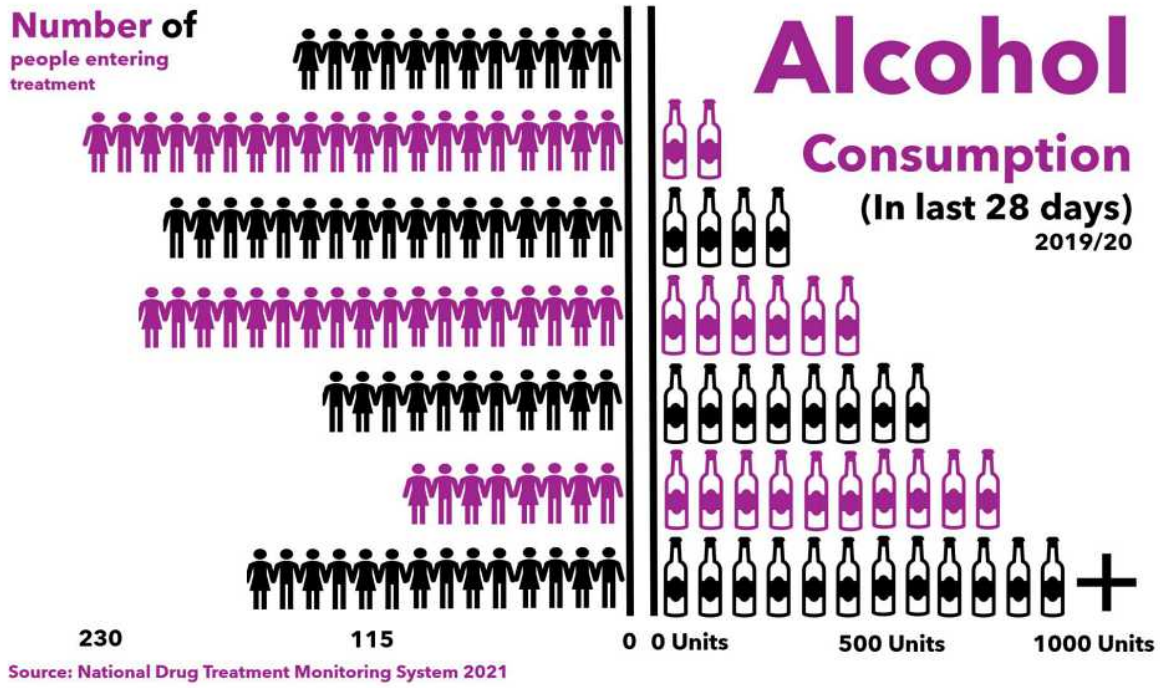
5.1.1 Alcohol

In Birmingham, the estimated number of dependent drinkers was 13,443 (95% CI: 10,654, 17,887) in 2018/19, which represents 1.58% (95% CI: 1.25%, 2.10%) of the adult population. This is higher than the England average (1.37%) [102].

An estimated 20% of all adults with alcohol dependence are parents [103], which would equate to around 2,700 alcohol dependent parents in Birmingham.

The proportion of people regularly drinking more than 14 units of alcohol per week (maximum recommended limit) was 12.2% in Birmingham, which was significantly lower than both the West Midlands (22.2%) and England (22.8%). Almost 11% of adults reported binge drinking in Birmingham compared to 15.1% in the West Midlands and 15.4% in England [104].

In the 28 days before entering treatment, 15% of people entering treatment had been drinking over 1000 units of alcohol. The highest proportion (20%) were drinking up to up to 199 units. 12% reported drinking no units in the 28 days prior to entering treatment [105].



5.1.2 Drugs

The most recent estimate from 2016/17 indicates that there are around 10,525 problem drug users of opiate and/or crack cocaine (OCU) in Birmingham, of which there are an estimated 8,799 (opiate users and 6,817 crack cocaine users. The rate of OCU was 14.2 per 1000 people which is significantly higher compared to a rate of 8.85 for England and 9.61 for the West Midlands (Figure 3) [106]. Prevalence estimates at local authority level for other drug types is not currently captured nationally.

5.2 Hospital Admissions

Figure 3: Hospital Admissions due to Alcohol Consumption and Substance Misuse

5.2.1 Hospital Admissions due to Alcohol – Under 18s

Between 2017/18-2019/20, there were 150 admissions for alcohol-related disease, injury, or condition among underage drinkers. This equates 17.4 admissions per 100,000 people under 18 (13.5 in males and 21.5 in females). This is a lower rate than both the West Midlands (25.8) and England (30.7) [107].

5.2.2 Hospital Admissions due to Alcohol

In 2019/20, there were over 7,000 adult admissions to hospital due to alcohol. This is a rate of 763 admissions per 100,000 people (directly standardised rate). This was almost 3 times higher for males (1,117 per 100,000) than females (377 per 100,000). The overall rate for Birmingham was higher than the West Midlands region (622) and England (644) [108].

5.2.3 Hospital Admissions due to Substance Use - 15–24-year-olds

There were 280 admissions for all types of substance use among young people aged 15-24. This is 50.6 admissions per 100,000 people of that age. This is significantly lower than England (84.7) and the West Midlands (70.5).

5.2.4 Hospital Admissions due to Drugs - Adults

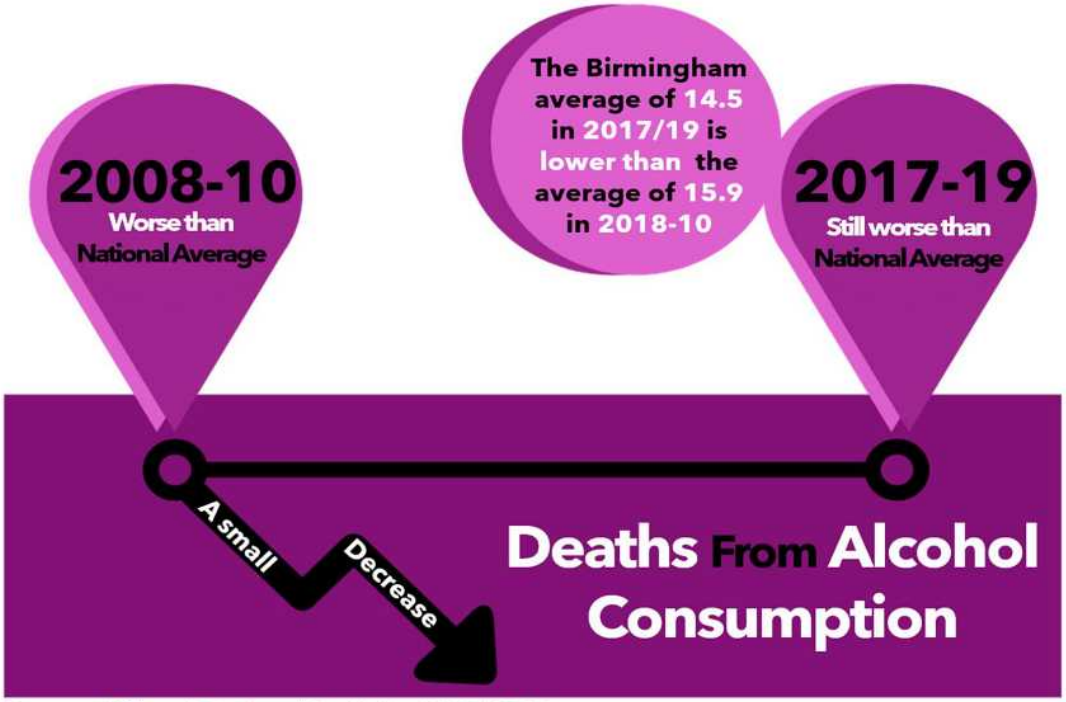
In Birmingham in 2019/20, there were 365 admissions with a primary of poisoning or drug misuse [109] (32 per 100,000 people). This is higher than the West Midlands and England averages of 29 and 30 per 100,000, respectively. There were 2,015 admissions where there is a primary or secondary diagnosis of drug related mental and behavioural disorders (181 per 100,000 people). This is also higher than the West Midlands (143) but similar to the England average (180.5). On average, men account for three quarters of these types of admission.

5.3 Deaths

5.3.1 Alcohol Deaths

Between 2017 and 2019, the alcohol specific mortality rate for Birmingham was 14.5 per 100,000 people (21.9 for males, 7.5 for females), which was higher than the rates for the West Midlands (12.9) and England (10.9). This equates to 384 deaths due to conditions which have been wholly caused by alcohol consumption.

In 2019, there were 370 deaths with alcohol recorded as an underlying cause of alcohol



Source: Office of National Statistics (ONS) 2021
Values display the Age-Standardised Mortality rate per 100,000

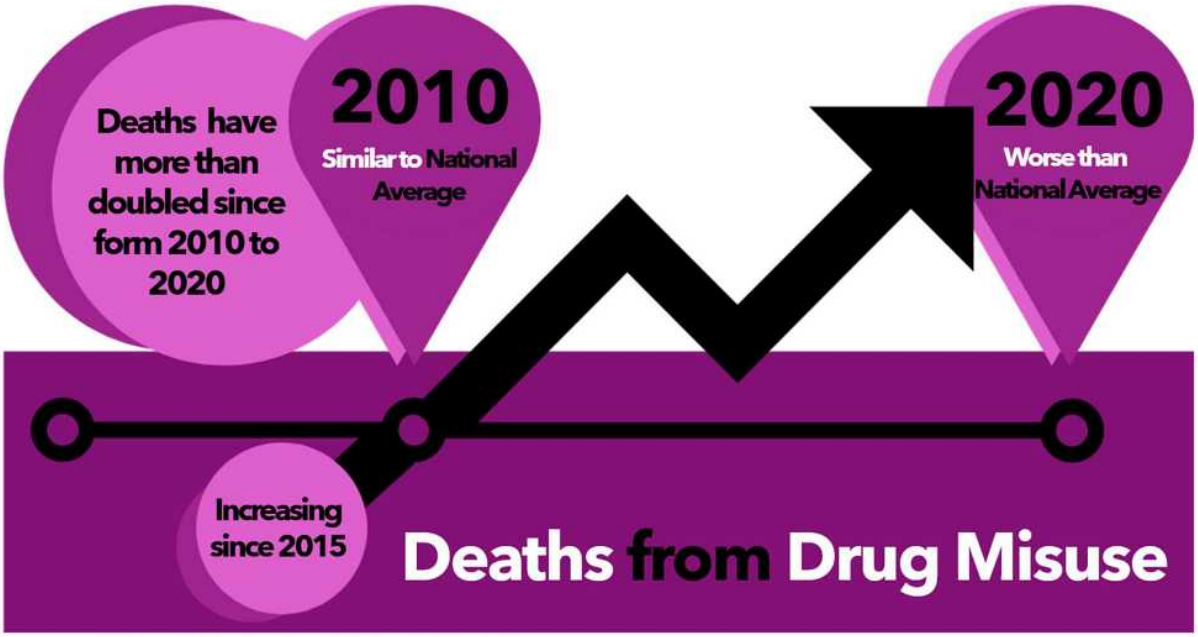
poisoning. The rate for Birmingham (43.5 per 100,000) was higher than the rates for the West Midlands (38.6) and England (35.7) [110].

In 2018, there were a total of 7,386 years of life lost prematurely due to alcohol and the situation in Birmingham (815 years per 100,000 people) is worse than the West Midlands

(708) and England (637). The situation for years of life lost is worse for men (1,186 years per 100,000 men) than women (454 years per 100,000 women) [111].

5.3.2 Death from Drug Misuse

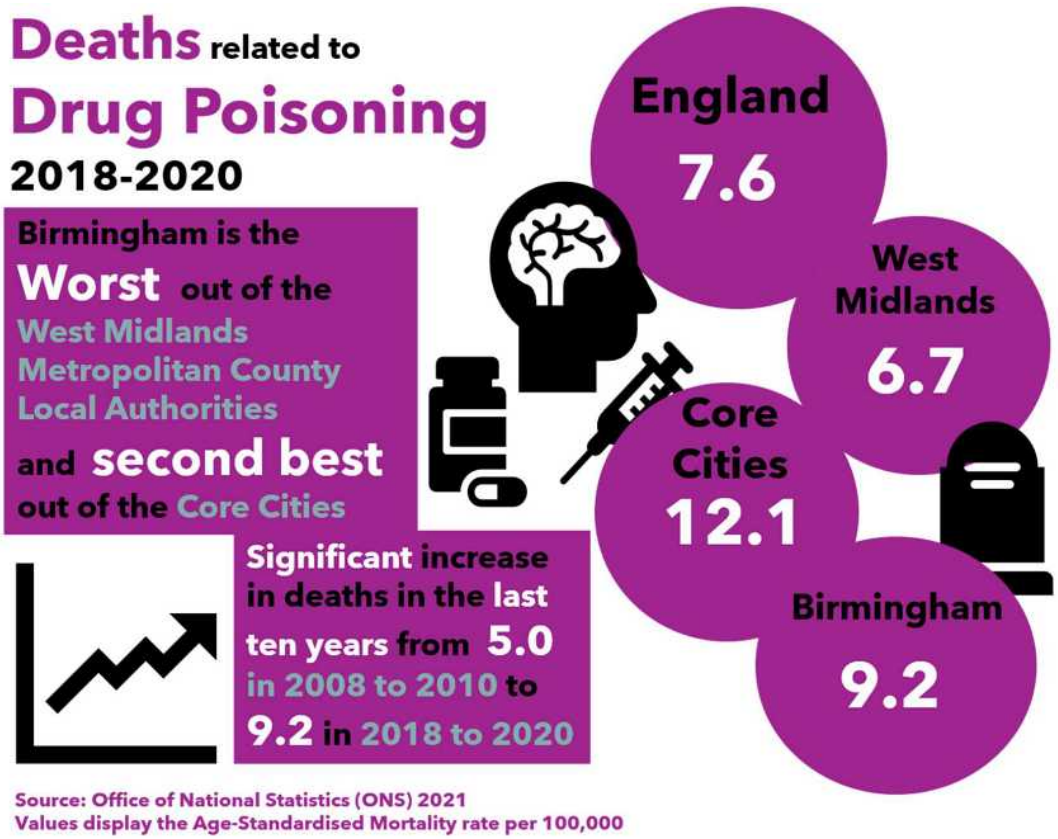
Between 2018 – 2020, there were 246 deaths recorded in Birmingham from drug misuse (80.0% were males, 20.0% were females). This equates to a rate of 7.8 deaths related to drug misuse per 100,000 people. The Birmingham rate is significantly worse than for England (5.0) and the West Midlands (5.3) [112]. Deaths related to drug misuse have increased by 211.4% (167 deaths) from its lowest point in 2010 – 2012.



Source: Office of National Statistics (ONS) 2021

5.3.3 Deaths Related to Drug Poisoning

Between 2018 – 2020, there were 287 deaths recorded in Birmingham related to drug poisoning (78% were males and 22% were females). This equates to 9.2 deaths related to drug poisoning per 100,000 people: higher than the national average of 7.6 deaths per 100,000. Deaths related to drug poisoning have increased by 61.7% (177 deaths) from its lowest point in 2010 – 2012.



Birmingham has one of the lowest rates of death related to drug poisoning (9.2) between the period 2018 – 2020 when compared to Core Cities[2] in England. Newcastle (15.6), Liverpool (15.6) and Manchester (11.3) have the highest rates amongst the Core Cities, and most Core Cities exhibit similar upward trends to Birmingham over the past 10 years.

However, when Birmingham is compared to other West Midlands Metropolitan local authorities (regional average: 6.7), the city has one of the highest rates of deaths related to drug poisoning [113].

5.3.4 Deaths from drug use - under the age of 25

There were fewer than 15 deaths reported in Birmingham between 2017 - 2019 for persons aged under 25 years. Deaths in males were six times higher than that of females. Caution should be taken when interpreting these data as absolute numbers are low.

[2] Core Cities is an association of 11 large UK cities: Belfast, Birmingham, Bristol, Cardiff, Glasgow, Leeds, Liverpool, Manchester, Newcastle, Nottingham. This analysis refers to English Core Cities as the data is for England.

6 Treatment and Recovery

6.1 Birmingham Commissioned Service Providers

In 2020, Birmingham City Council invested £14.8m in drug and alcohol treatment and support for all ages funded by the public health grant. A single system with a matrix of partnership providers has been commissioned to deliver these services. GP and pharmacy primary care, as well as the third sector, are part of the provider matrix. There is a range of services provided through this partnership including specific service elements focused on mental health, prison release, employment, criminal justice, blood-borne viruses, domestic abuse, acute sector, child protection and homelessness.

Birmingham City Council commissions two service providers to support substance misuse services in the city: Aquarius (Young People) and Change Grow Live (Adults). The Birmingham Substance Misuse Providers are displayed in *Figure **4***.

6.1.1 Provider Locations

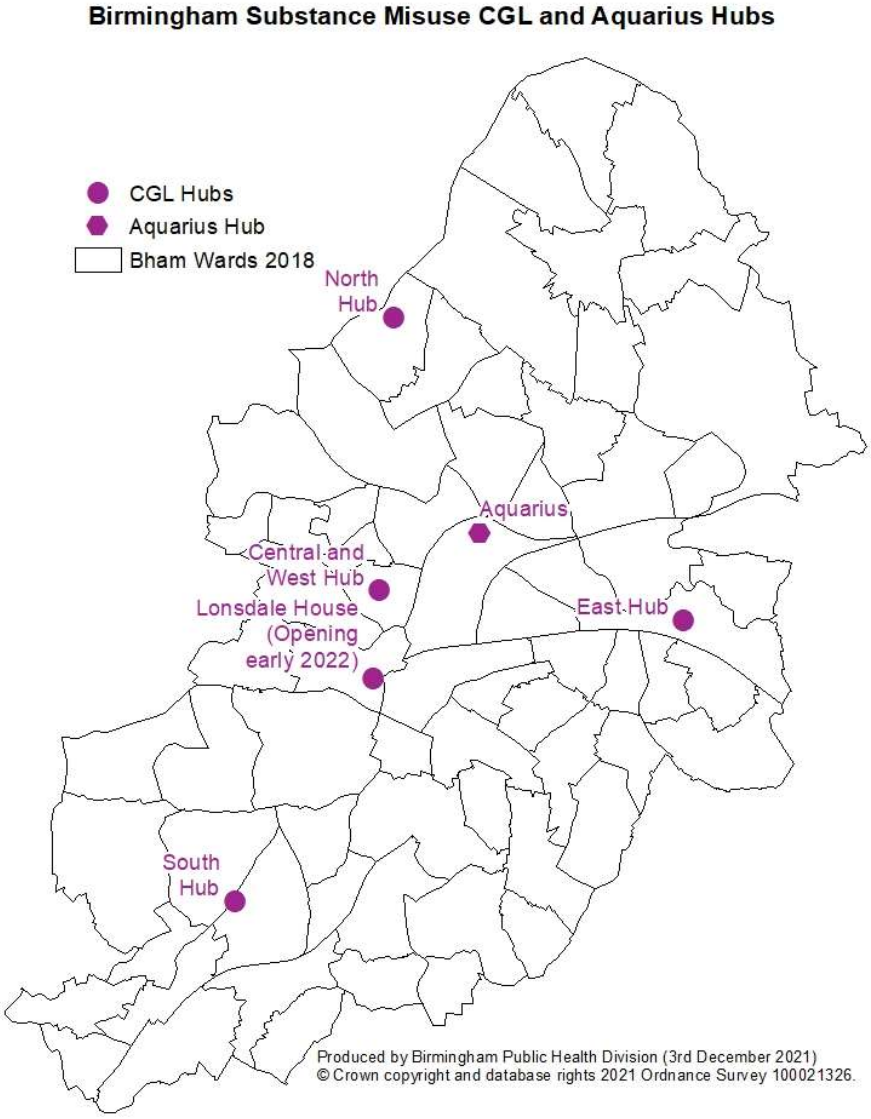


Figure 4: Birmingham Substance Misuse Provider Map

6.1.2 Aquarius Young Persons Service

The Young People's Service is delivered by Aquarius. An original 5-year contract ran from March 2015 – February 2020, with the option to extend for additional 1+1 years exercised, to align with re-procurement of the Adult Services.

Aquarius' head office is in Edgbaston. They work with young people aged under 18 years affected by substance misuse; either young people who are drinking or using drugs themselves OR who have a family member who drinks or uses drugs. Types of support can include:

- Information and advice about drinking and drug use
- A drop-in service
- 1:1 advice and interventions for children and young people using or at risking of using substances
- Structured, evidence-based psychological and psychosocial interventions and support
- Group work

Aquarius works in partnership with other organisations to deliver support including:

Forward Thinking Birmingham – consisting of a consultant psychiatrist, a clinical nurse specialist, and an assistant psychologist to assess and provide specialist support, including opiate substitute prescribing.
St Basil's – to work with young people who are affected by both substance use and homelessness.
Barnardo's – Child Sexual Exploitation worker in the Aquarius team for if there are concerns around both substance use and sexual exploitation
Youth Offending Team – there's an Aquarius Practitioner based in each of the Youth Offending Teams across Birmingham who work with young people if there are concerns around substance use (even if the offending isn't related to substance use).

6.1.3 Change Grow Live

Adult services are commissioned by Birmingham Public Health through a single provider: Change, Grow, Live (CGL). This was originally a 5-year contract March 2015 – February 2020, and a 2-year option to extend via delegated authority was exercised. In February 2021, Cabinet also approved a further 13-month extension due to Public Health supporting the Birmingham City Council COVID-19 response. The new contract end date is 31st March 2023, which aligns with the end of the Young People's contract in order for joint commissioning to take place.

The service is for adults (aged 18 years and above) experiencing difficulties with drugs or alcohol in Birmingham and has four community hubs across the city:

- South Hub, Bournville
- Central and West Hub, Newtown
- East Hub, Stechford
- North Hub, Great Barr

A further City Centre location – Lonsdale House - is due to open January 2022.

Change Grow Live have the following specialist teams:

- Homeless and Rough Sleeper Team working in partnership with the Rough Sleepers Initiative
- Women and Families Team based in Ladywood, female only access
- Hospital Team working across UHB Hospital Sites and City Hospital
- Criminal Justice Team based within CRC
- Criminal Justice Project

- Programmes and Throughcare Team based in all of the hubs and community venues

6.1.4 Needle Exchange

Needle Exchange was first introduced in England in 1985 in response to the HIV/AIDS epidemic. It is a facility where injecting drug users can obtain sterile injecting equipment and dispose of used needles in a responsible, hygienic, and safe manner.

Needle Exchange is a harm reduction method that is offered by many pharmacies in Birmingham. The needle exchange scheme also offers the opportunity for users to learn about safe injecting practises, equipment disposal, access into treatment services and education on drug use in general. This scheme is an opportunity for substance users, not currently in treatment to engage with someone who can provide advice and information.

Birmingham Public Health are supporting the efforts to educate injecting drug users as well as improving services that continue to prevent HIV infections. There is currently an extensive network of 85 pharmacy-based and 4 CGL locality hubs across Birmingham. For individuals who continue to inject, the needle exchanges provide a safe and confidential route for disposal of used works and provision of clean equipment. These services are having a recognisable impact in reducing the risk of spreading blood-borne viruses such as hepatitis and HIV. These services are also available to steroid users.

As well as safer injecting information, advice and general healthcare assessments, specialist needle exchange programmes are available to provide access to confidential Hepatitis B, Hepatitis C and HIV testing along with Hepatitis B vaccination. They also offer referral to prescribing and other health services including Hepatitis C and HIV treatment together with wound care advice and treatment [114].

Between January 2016 to September 2021, 7,138,340 needles have been distributed by pharmacies. There are three different types of packs:

1ml packs: contain 10 fixed needle syringes – these are usually 29G by 12mm and used directly into the vein (arms, feet, in between toes and fingers). Overall, 538,146 packs and 5,381,460 needles have been distributed, an average of 7,799 packs each month.
Deep vein packs: contain 10 x 2ml syringes. Steroid needles need to be thick as they are going through muscle and tissue (groins, thighs, buttocks). Overall, 122,957 packs and 1,229,570 needles have been distributed, an average of 1,781 packs each month.
Steroid packs: contain 10 x 2ml Low dead space (reduces the risk of BBV's) syringe barrels, 10 x green needles (21G x 1.5") and 10 x blue needles (23g x 1.25"). The longer needle 1.5" will be used for drawing up (getting the liquid out of the vial) and the shorter needle (1.25") to inject so in effect there are 10 needles in a pack. Overall, 52,721 packs and 527,210 needles have been distributed, an average of 764 packs per month.

6.2 Alcohol Treatment

6.2.1 Number in treatment

There were 1,470 individuals in treatment at specialist alcohol misuse services in 2020/21 in Birmingham, which is a 40% reduction since the peak number in 2013/14 [101].

6.2.2 Demographics of Alcohol Treatment Clients in Birmingham [115]

- Men accounted for 64% of the client base
- 51% were aged 30-49 years, 39% were over 50 years and 10% were 18-29 years of age
- Individuals from a white ethnic background made up the majority of clients (78%), followed by Asian (12%), Black (5%), Mixed (4%) and Other ethnic backgrounds (1%)
- The most reported disability was behaviour and emotional (27%)
- The majority stated no faith (47%), with Christianity making up 21%, Unknown 18%, Muslim 5%, Sikh 4% and Hindu 1%
- 90% identified as heterosexual, 7% not stated, 2% identified as gay/lesbian and 1% identified as bisexual
- 26% reported being in regular employment, 53% were unemployed, 19% had long-term sickness or disability, 1% in education and 1% other
- 7% reported housing problems and 1% had urgent housing issues
- 18% reported being a parent that lived with children, 21% were parents that did not live with children and 4% were not parents but lived with children
- Half of referrals for alcohol treatment were either self-referral or through family/friends, 30% were from health services and social care, and 11% were from the criminal justice services

6.2.3 Service User Geography

There is geographical variation in the numbers of clients accessing alcohol treatment across the City which may reflect variation in need and possible association with deprivation (see section 10.4) or other demographic variation such as ethnicity (see section 10.2).

As a number per 10,000 of the population, there are significantly more service users from Bartley Green, Lozells, Perry Barr, Stockland Green and Gravelly Hill (Figure 5).

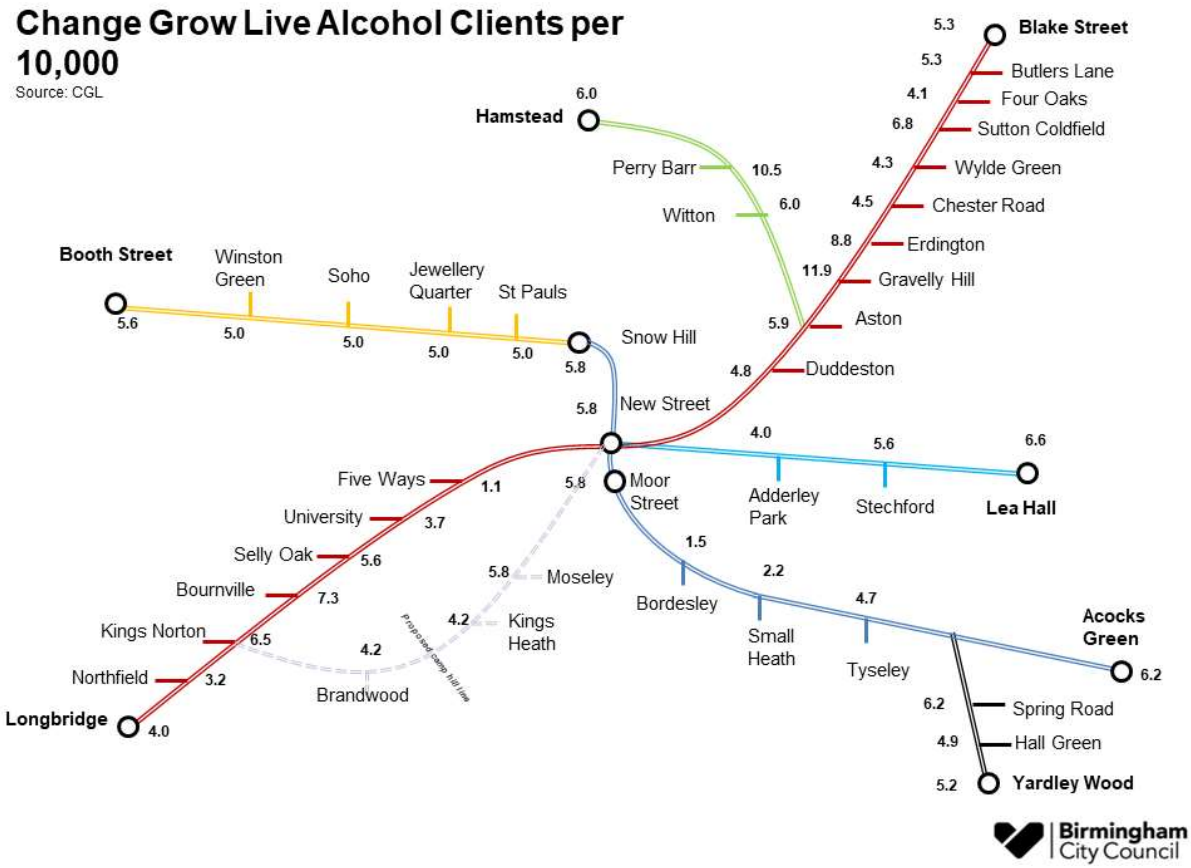
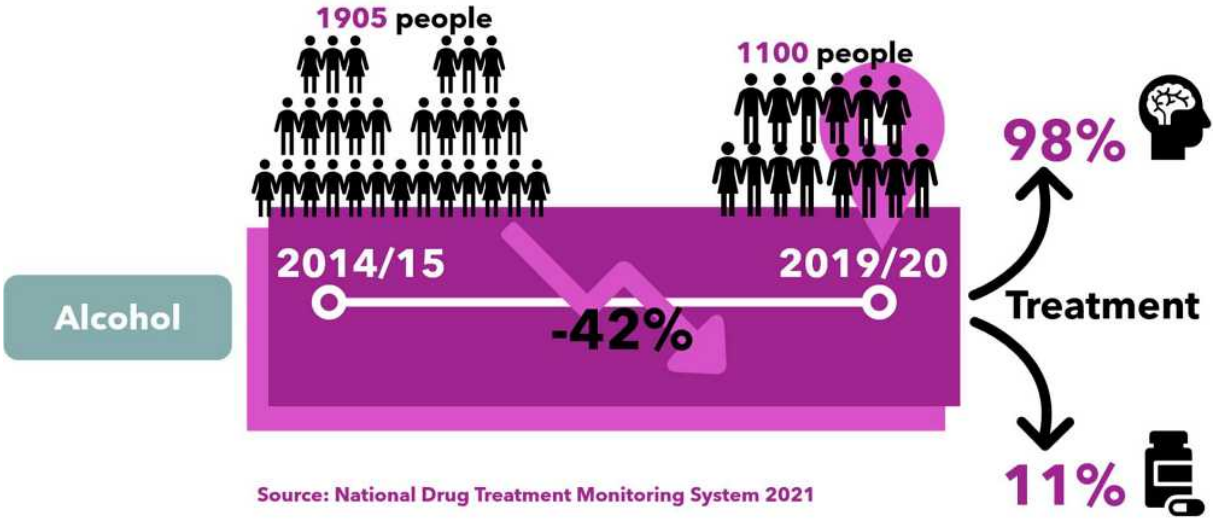


Figure 5: Alcohol Clients Train Map

6.2.4 Treatment Pathways and Service Provision

For the 1,100 people in treatment (with intervention recorded), the intervention provided is either psychosocial (e.g. talking therapy) or pharmacological (e.g. prescribed medication). 98% received psychosocial treatment either on its own or combined with pharmacological, and 11% for pharmacological treatment either on its own or combined with psychosocial.



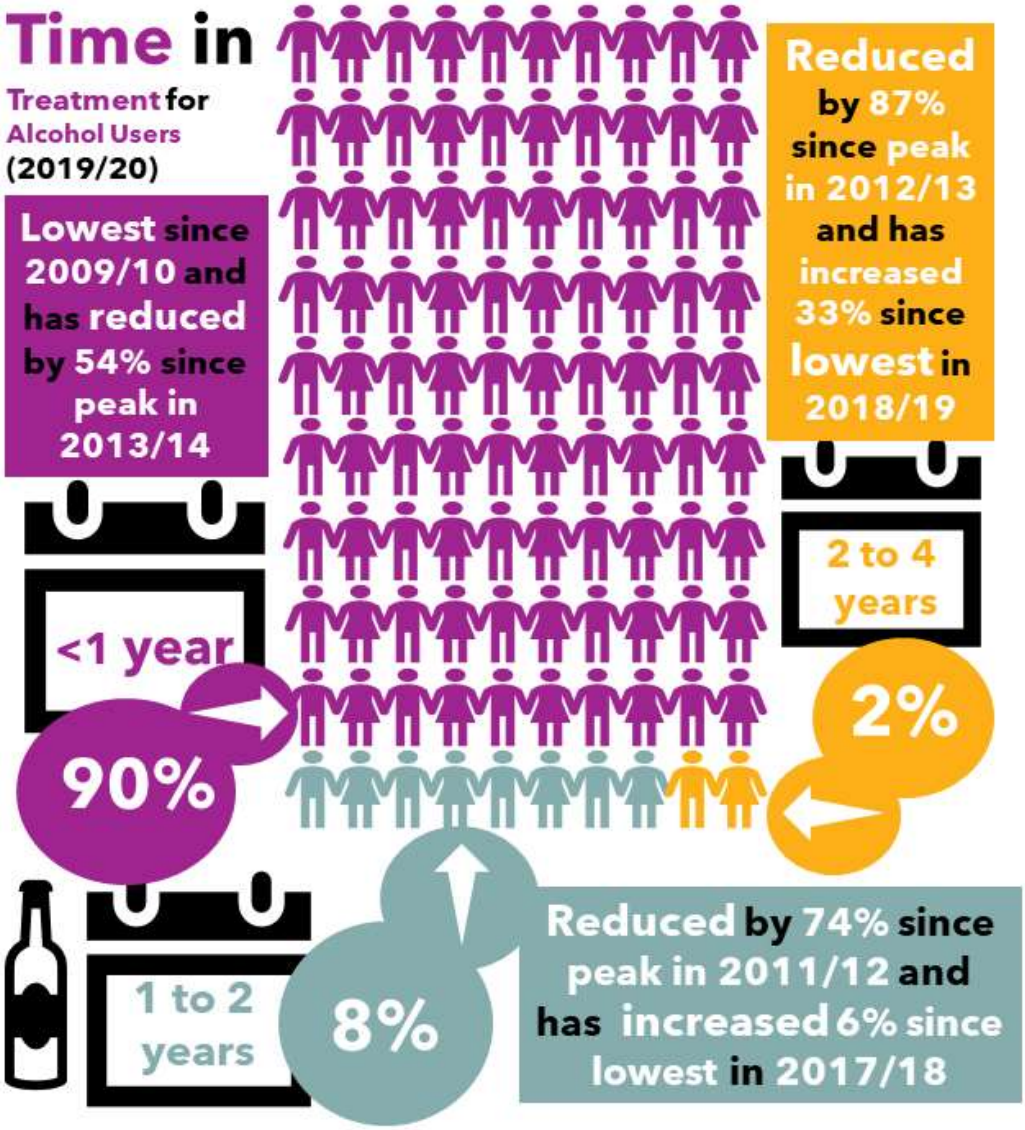
1,030 people were treated in the community, 30 in primary care, 40 in a residential setting and 55 were treated as inpatients. Of the inpatients, all 55 were receiving pharmacological

interventions and 45 also received psychosocial treatment. No one has received treatment in a recovery house since 2015/16 [116].

In 2019/20, 12.1% of those with alcohol dependence in Birmingham were in treatment but only 0.8% had to wait for more than 3 weeks for treatment [117].

6.2.5 Time in Treatment

According to the most recent data (2019/20) [118], 90.4% of alcohol users in Birmingham (n = 1140) are in treatment for less than 1 year . According to the most recent data (2019/20) [118]. 7.9% receive treatment for 1 to 2 years, and 1.8% for 2 to 4 years. None receive treatment for longer than 4 years.



6.2.6 Successful Completions

Successful completion rate of alcohol treatment was lower for Birmingham (33.5%) than for the West Midlands (38.0%) and England (37.8%). 89% of completions were receiving treatment for under 1 year, 10% for 1 to 2 years, and 1% for 2 to 4 years [118]. For the successful completion of alcohol treatment ratio, where observed number is compared with expected (taking different variables such gender, age etc. into account), Birmingham was

similar to the expected ratio (0.90; 95% CI: 0.81 – 1.01) which was down from the 2018 ratio (1.15; 95% CI: 1.02 – 1.30) [119].

6.2.7 Deaths in alcohol treatment:

Between 2017-18 and 2019-20, there were 36 deaths in Birmingham for those aged 18 years and over and receiving alcohol treatment from a specialist misuse service. This represents a mortality ratio of 0.95; lower than the previous 3-year average ratio of 1.17 [120] and comparable to the national ratio (1.00).

6.2.8 Mental Health

In 2016/17, 47.0% of adults in specialist alcohol misuse treatment services were also receiving mental health treatment in Birmingham, a significantly higher proportion than both the West Midlands (25.0%) and England (22.7%) (*Figure **6***) [121].

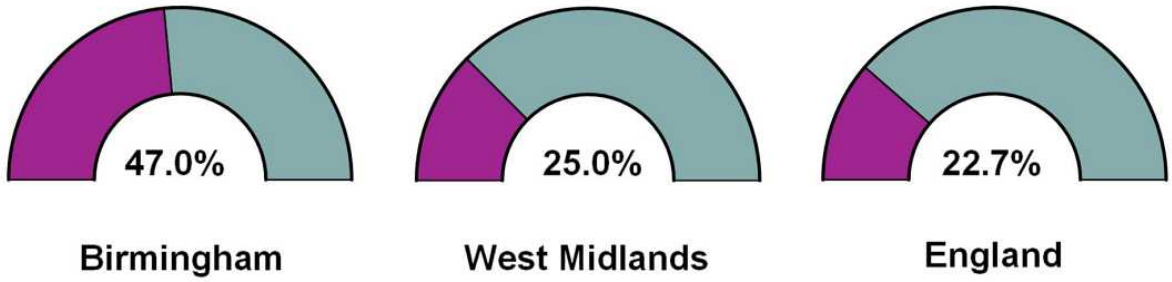
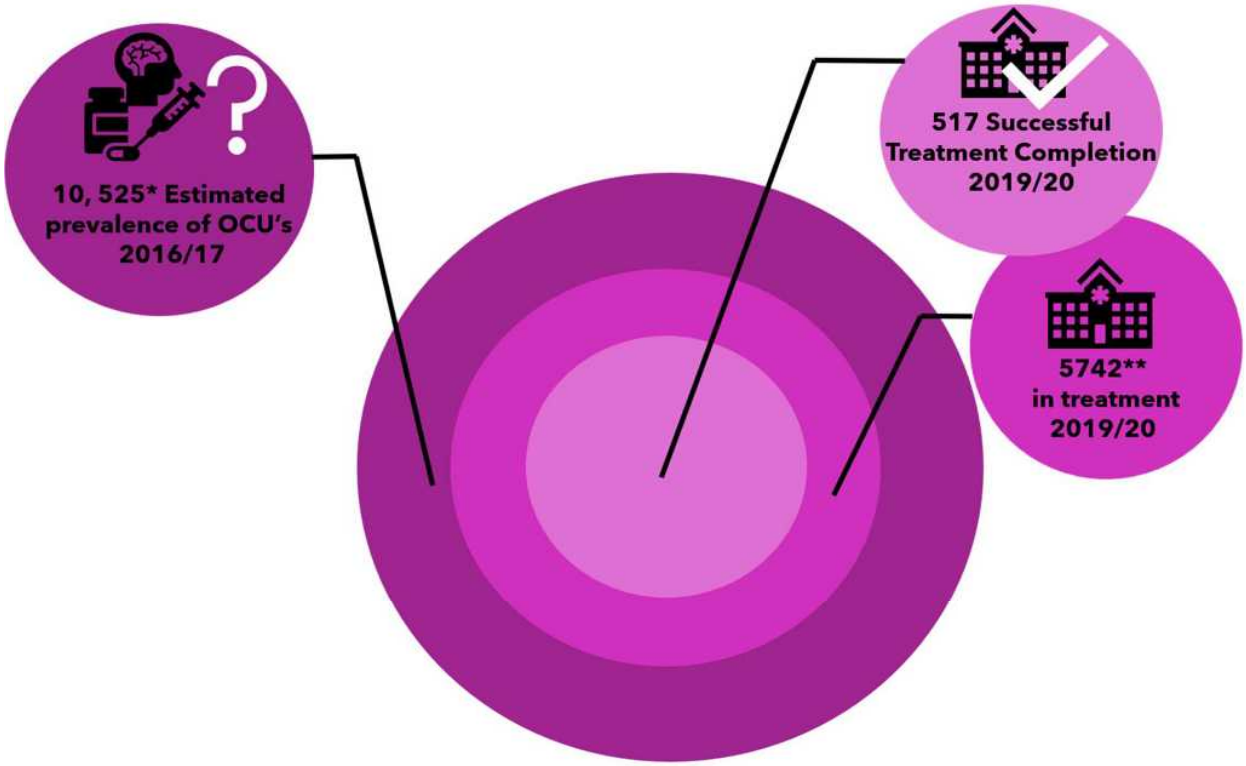


Figure 6: Percentage of Adults in Specialist Alcohol Misuse Treatment Services also receiving Mental Health Treatment

6.3 Drug Treatment



Source: National Drug Treatment Monitoring System 2021 and Adult Misuse Treatment Statistics
*most up to date data available
**all drug users

6.3.1 Number in treatment

6,388 individuals (aged 18+) were in treatment at specialist drug misuse services in 2020/21 in Birmingham. This represents a 19.3% (n = 1,370) reduction in number in treatment at a specialist misuse service in comparison to 2013/14 [122]. The number of clients in treatment by substance category were 4820 for opiates, 470 for non-opiate only and 450 for non-opiate and alcohol [118].

6.3.2 Demographics of Opiate Drug Treatment Clients in Birmingham[115]

- Men accounted for 76% of the opiate client base
- 78% of the opiate client base were aged 30-49 years, 16% were over 50 years and 6% were 18-29 years of age
- Clients from a white ethnic background formed the majority of the client base (75%), followed by Asian (15%), Mixed (5%), Black (3%), and Other ethnic backgrounds (2%)
- Over half (57%) reported a behaviour and emotional disability
- 48% stated no religion, with Christianity making up 19%, Unknown 16%, and Muslim 9%, other 3% and Sikh 1%
- 90% identified as heterosexual, 7% not stated, 2% as gay/lesbian and 1% as bisexual
- 8% reported being in regular employment, with one in three (75%) reported being unemployed, 16% had long-term sickness or disability, and 1% in other
- 10% reported housing problems and 6% had urgent housing problems

6.3.3 Demographics of Non-opiate Drug Treatment Clients in Birmingham[115]

- Men accounted for 74% of non-opiate service users
- 54% were aged 30-49 years, 39% were aged 18-29 years and 8% were over 50 years
- 68% of non-opiate users were from a white ethnic background, followed by Asian (13%), Black (11%), Mixed (7%), and Other ethnic backgrounds (1%)
- 57% reported a behaviour and emotional disability
- 53% reported no religion, Christians made up the next highest proportion of users (15%) alongside those who reported unknown (15%), then Muslim (10%) and other (3%)
- 87% identified as heterosexual, 6% not stated, 3% gay/lesbian and 2% as bisexual and other
- 33% reported being in regular employment, 54% reported being unemployed, 11% had long-term sickness or disability, and 2% in education
- 7% reported housing problems and 1% had urgent housing issues

6.3.4 Service User Geography

The residential location of CGL service users in drug treatment shows significant variation across the City which may reflect variation in need and possible association with deprivation (see section 10.4) or other demographic variation such as ethnicity (see section 10.2).

As a number per 10,000 of the population, there are significantly more non-opiate service users from Perry Common, Erdington, Lozells, Shard End and Garratt's Green wards than the average for Birmingham (*Figure **7***).

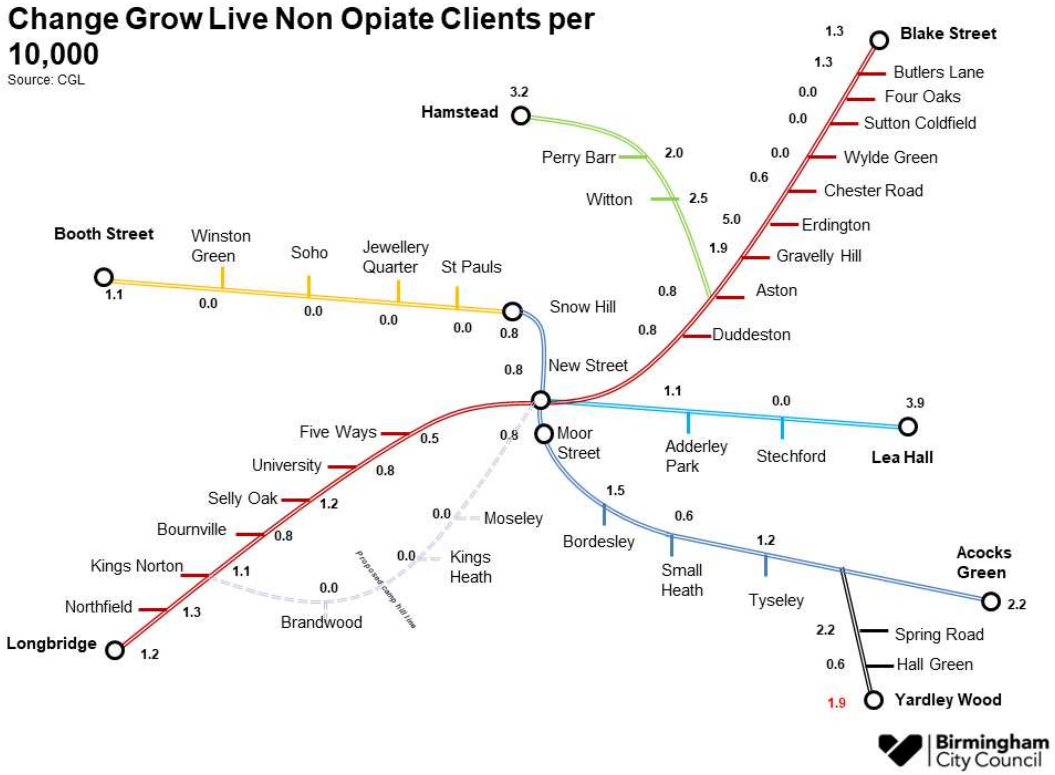


Figure 7: Non-opiate Clients Train Map

For opiate clients, the neighbouring wards of Holyhead, Handsworth, Birchfield, Lozells, Aston, Stockland Green and Gravelly Hill Ladywood, and Sparkbrook and Balsall Heath East have the significantly more service users per 10,000 of the population than the Birmingham average (*Figure **8***).

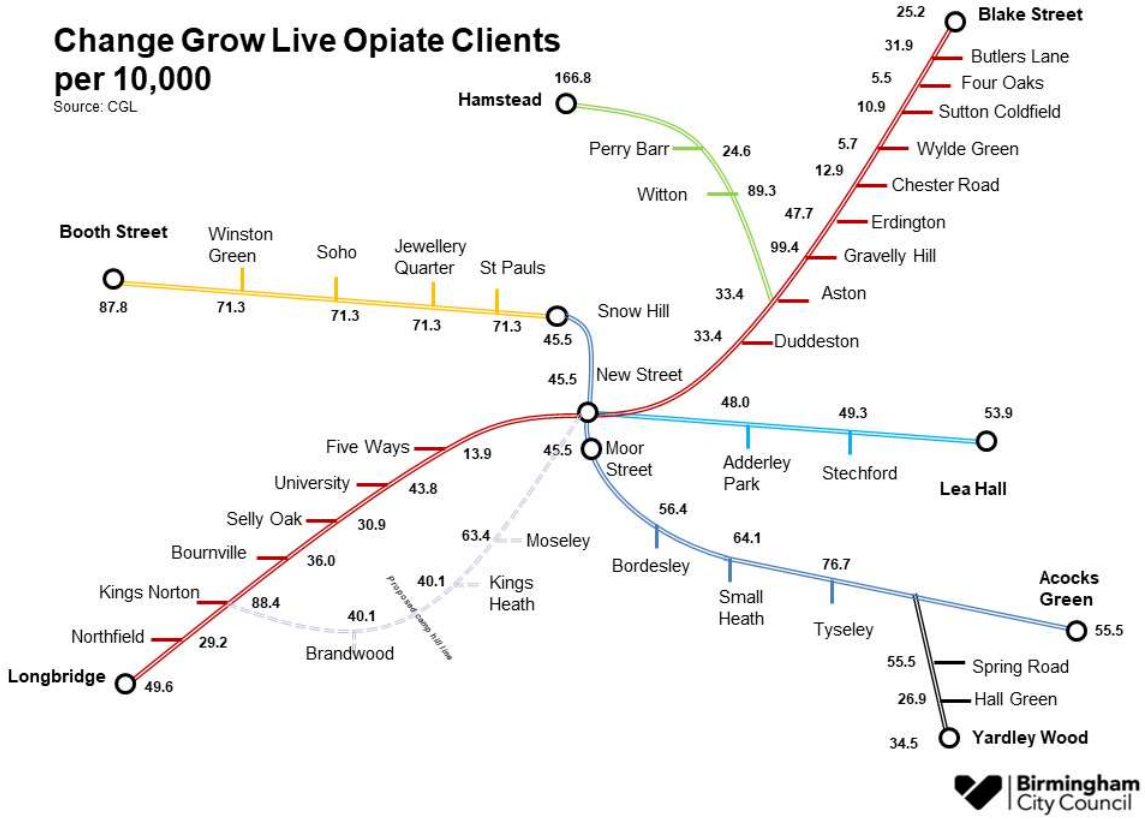
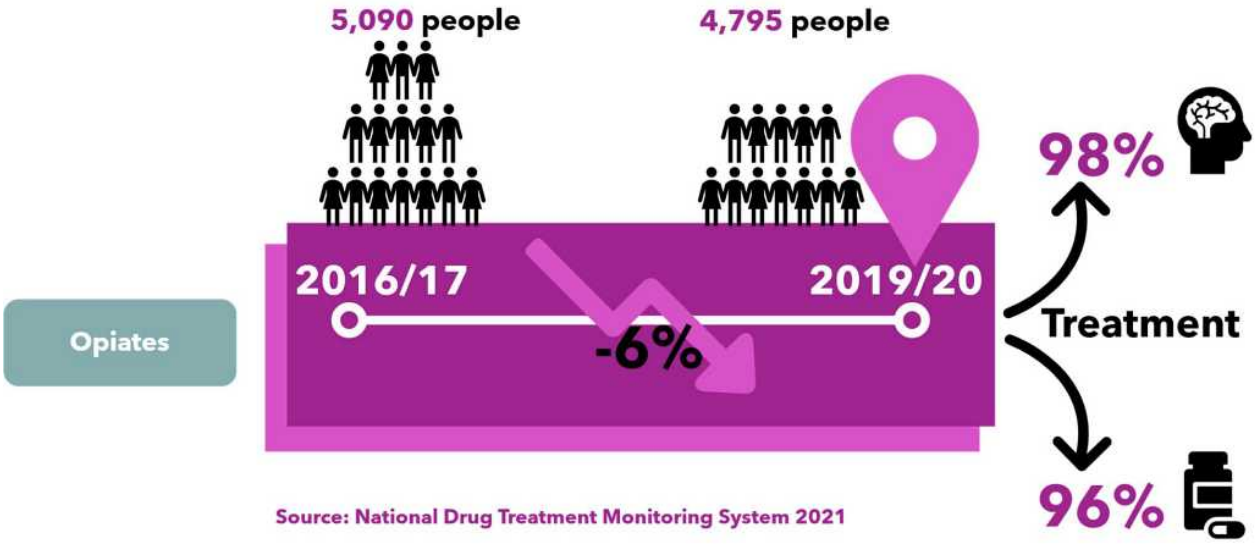


Figure 8: Opiate Clients Train Map

6.3.5 Treatment Pathways and Service Provision [123]

6.3.5.1 Opiate Users

For the people in treatment, most clients received both pharmacological (96%) and psychosocial (98%) treatment interventions.

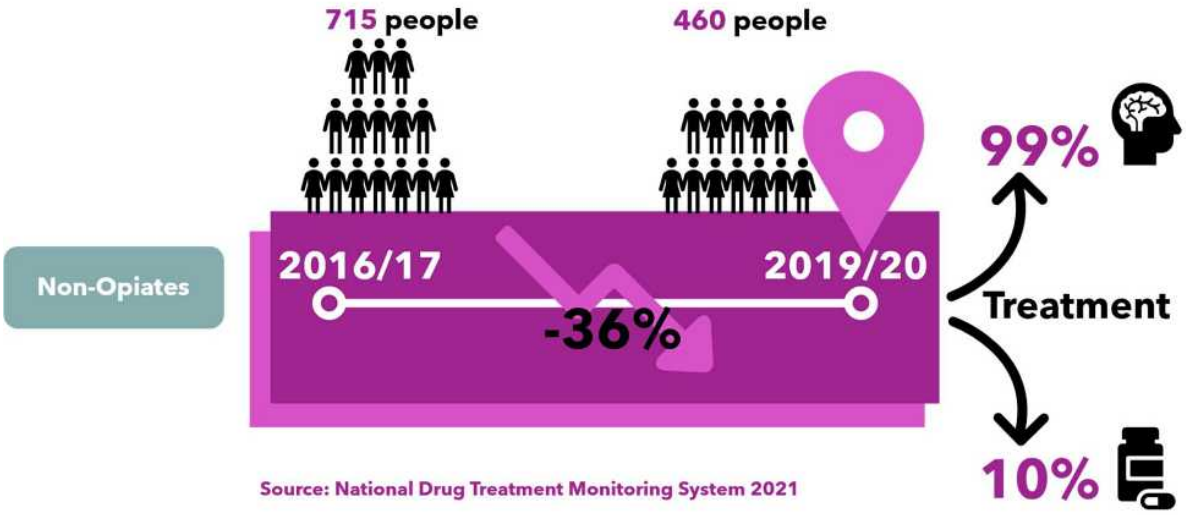


Out of the 4,795 clients, 4,110 were treated in the community, 1,080 in primary care, 115 in a residential setting and 165 were treated as inpatients.

10 individuals were waiting more than three weeks to commence treatment in 2019/20, which is proportionately better than the national figure (0.4% vs 1.2%, respectively). The number waiting over 3 weeks to commence treatment has fallen by 90% since its peak in 2010/11.

6.3.5.2 Non-opiate Users

99% of non-opiate users received psychosocial intervention (with or without pharmacological intervention) and 10% received pharmacological interventions (with or without psychosocial interventions).



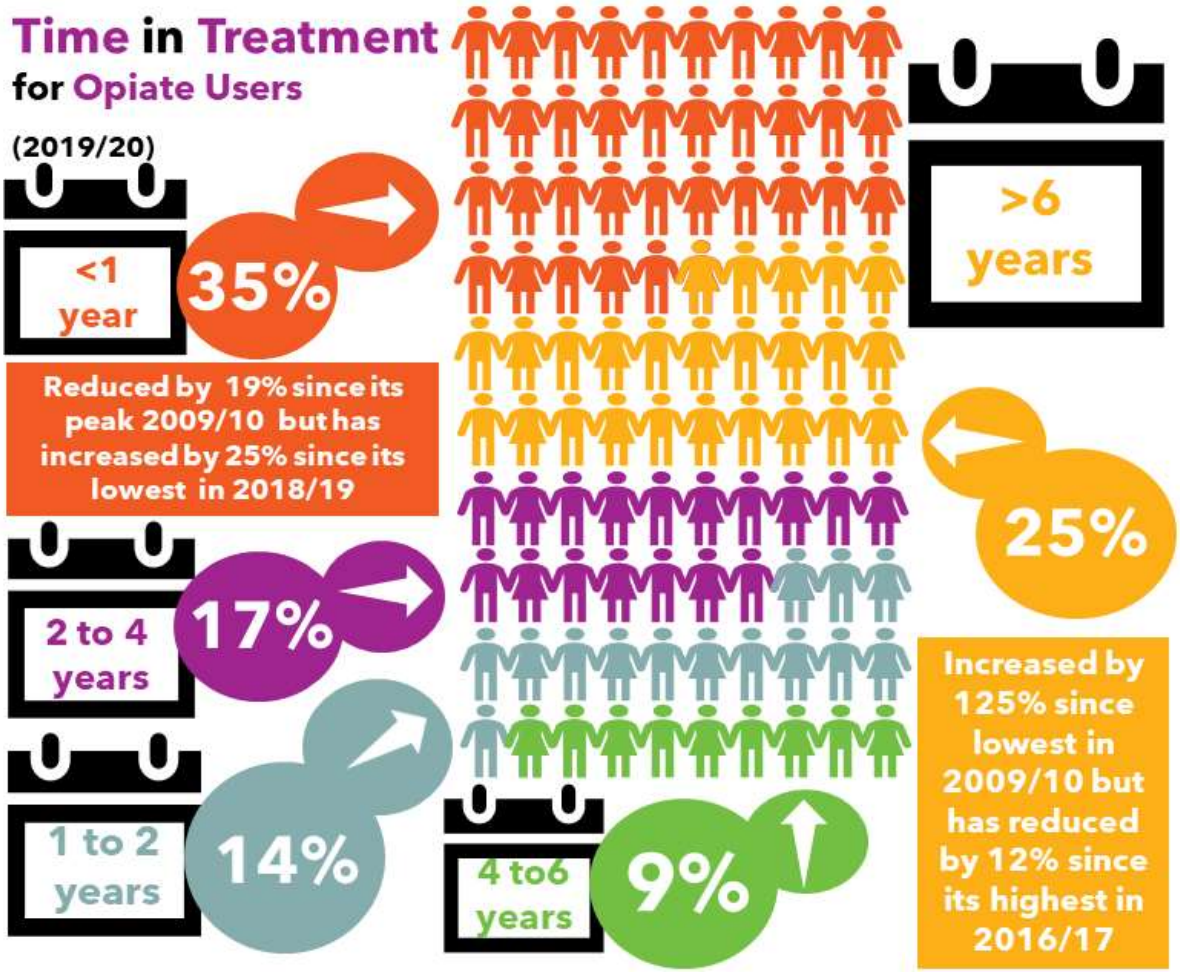
Out of the 460 clients, 445 were treated in the community, 15 in a residential setting and 5 were treated as inpatients. None were treated in a primary care setting.

Five individuals were waiting more than three weeks to commence treatment in 2019/20, which is proportionately better than the national figure (1.1% vs 1.6%, respectively). The number waiting over 3 weeks to commence treatment has fallen by 83% since its peak in 2012/13.

6.3.6 Time in treatment

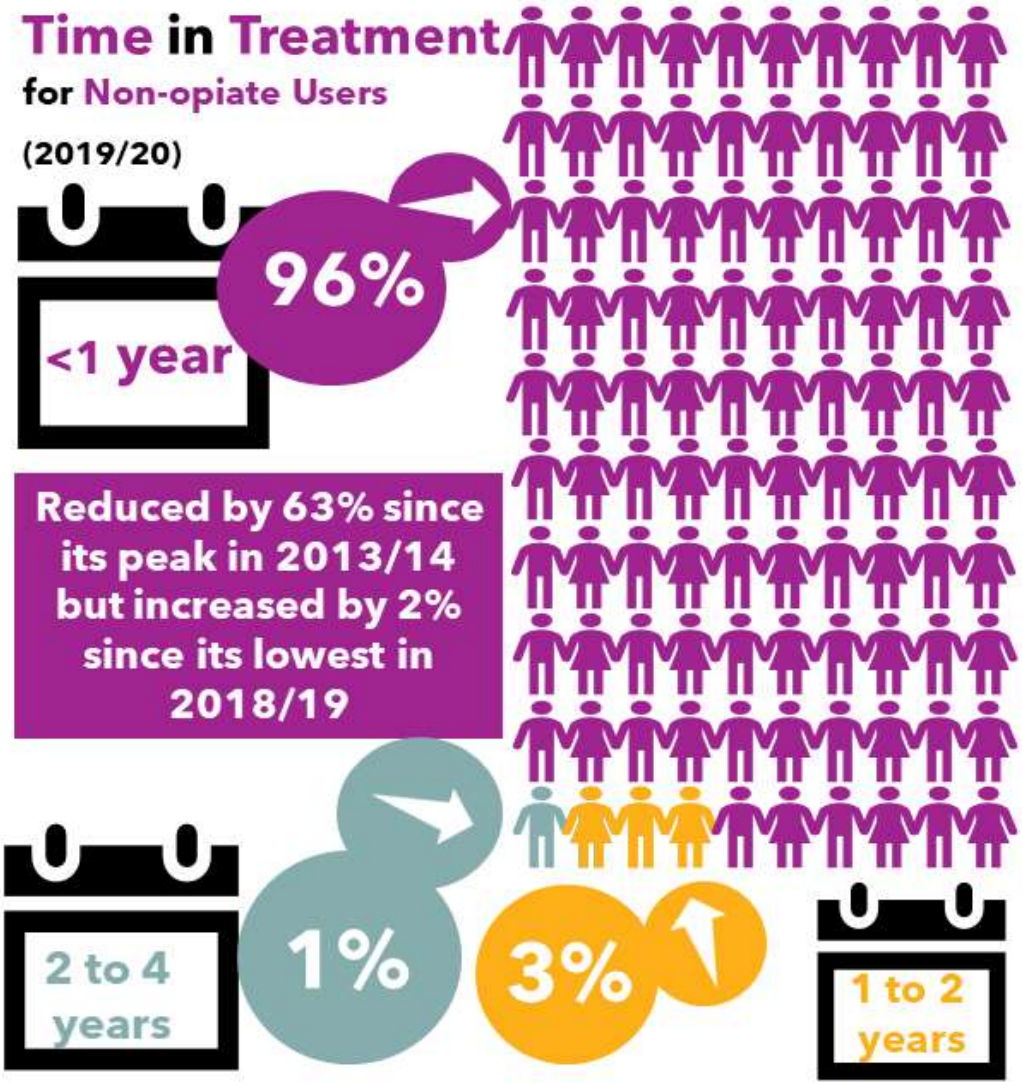
6.3.6.1 Opiate Users

According to the most recent data (2019/20) [118], 34.9% of opiate users in Birmingham (n = 4820) are in treatment for less than 1 year. 24.7% receive treatment for over 6 years. The number receiving treatment for over 6 years has increased by 125% since its lowest in 2009/10 but reduced by 12% since its highest in 2016/17.



6.3.6.2 Non-opiate Users

95.7% of non-opiate users in Birmingham (n = 470) are in treatment for less than 1 year, according to recent estimates (2019/20) [118]. The next highest proportion of non-opiate users in treatment (3.2%) receive treatment for 1 to 2 years, followed by 1.1% for 2 to 4 years. None receive treatment for longer than 4 years.



6.3.6.3 Non-opiate and Alcohol Users (concurrent use)

Based on the most recent data [118], 85.7% of concurrent non-opiate and alcohol users in Birmingham (n = 450) are in treatment for less than 1 year. 9.9% receive treatment for 1 to 2 years and 2.2% for 2 to 4 years. 1.1% are in treatment for 4 to 6 years, and the same proportion receive treatment for over 6 years.

6.3.7 Successful Completions

6.3.7.1 Opiate Treatment

Successful completion rate of opiate treatment was lower for Birmingham (20.5%) than for the West Midlands (20.9%) and England (24.4%). 51% of completions were receiving treatment for under 1 year, 16% for 1 to 2 years, 14% for 2 to 4 years, 6% for 4 to 6 years, and 13% for over 6 years [118].

6.3.7.2 Non-opiate Treatment

Successful completion rate of non-opiate treatment was lower for Birmingham (39.7%) than for the West Midlands (49.3%) and England (53.4%). 97% of completions were receiving treatment for under 1 year [118].

6.3.8 Deaths in drug treatment:

Between 2017-18 and 2019-20, there were 131 deaths in Birmingham for those aged 18 years and over and receiving drug treatment from a specialist misuse service. This represents a mortality ratio of 0.74, which is significantly better than the national figure (1.00) [124].

6.3.9 Mental Health

According to the most recent data (2016/17) [125], 39.5% of adults in specialist drug misuse treatment services were concurrently in contact with mental health services in Birmingham; a significantly higher proportion than both the West Midlands (25.8%) and England (24.3%) (*Figure **9***).

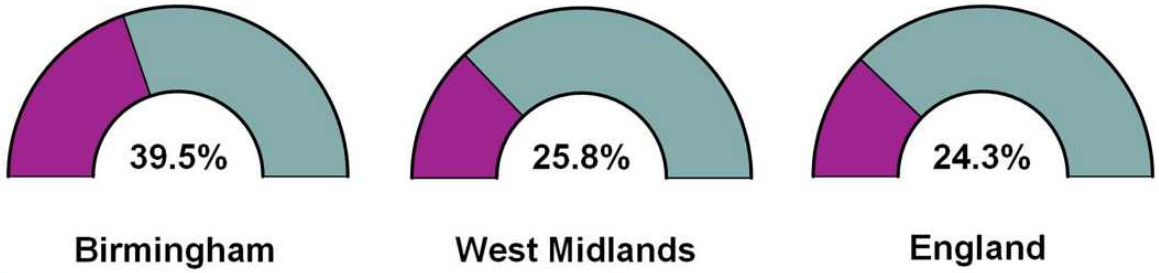


Figure 9: Percentage of Adults in Specialist Drug Misuse Treatment Services also receiving Mental Health Treatment

6.3.10 Hepatitis Testing and Vaccination

Individuals who inject drugs are at higher risk of contracting hepatitis B and C. Hepatitis C virus is mainly transmitted through contact with infected blood. Injecting drug use is the most important risk factor for infection within the UK. Hepatitis left untreated can lead to cirrhosis, a progressive deterioration and malfunction of the liver, and can also lead to liver cancer. People accessing drug treatment services are offered testing and referral for treatment for hepatitis B hepatitis C, and vaccination for hepatitis B.

In 2016/17,109 eligible people entering drug misuse treatment completed a course of Hepatitis B vaccination.

Birmingham had a significantly lower percentage of eligible people completing a course of hepatitis B vaccination (5.2%) compared to England (8.1%) and the West Midlands (7.0%) (*Figure **10***) [126].

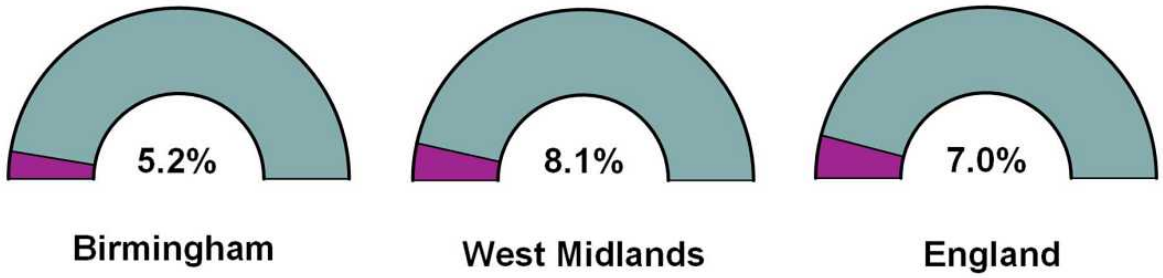


Figure 10: Drug Misuse Treatment - percentage of eligible people completing a course of hepatitis B vaccination

In 2017/18, 1,533 eligible people in drug misuse treatment who inject drugs received a Hepatitis C test.

Birmingham had a significantly lower percentage of eligible people receiving a hepatitis C test (76.0%) compared to England (84.2%) and the West Midlands (79.4%) (*Figure **11***) [127].

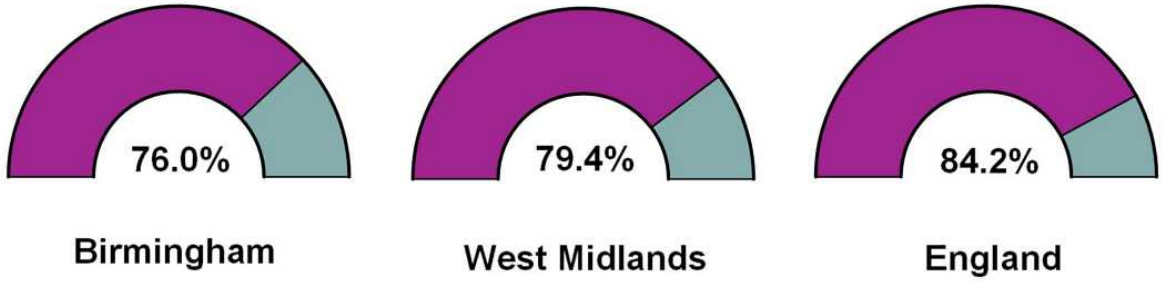


Figure 11: Drug Misuse Treatment - percentage eligible persons who have received a hepatitis C test

6.3.11 Criminal Justice and Prison Release

One of the priorities for the National Partnership Agreement (NPA) for prison healthcare in England (2018) is to reduce the impact of substance misuse, address the risks and harms of misuse, and ensuring the right help is available at the right time [128].

This indicator measures the proportion of adults released from prison (into the Local Authority Area) with substance misuse treatment need who go on to engage in structured treatment interventions in the community within 3 weeks of release.

In Birmingham, 250 adults (aged 18 years+) with substance misuse treatment need successfully engaged in community-based structured treatment following release from prison. This places Birmingham (29.4%) lower than the national (38.1%) and regional (36.2%) figures when expressed as the proportion of adults (*Figure **12***) [129] .

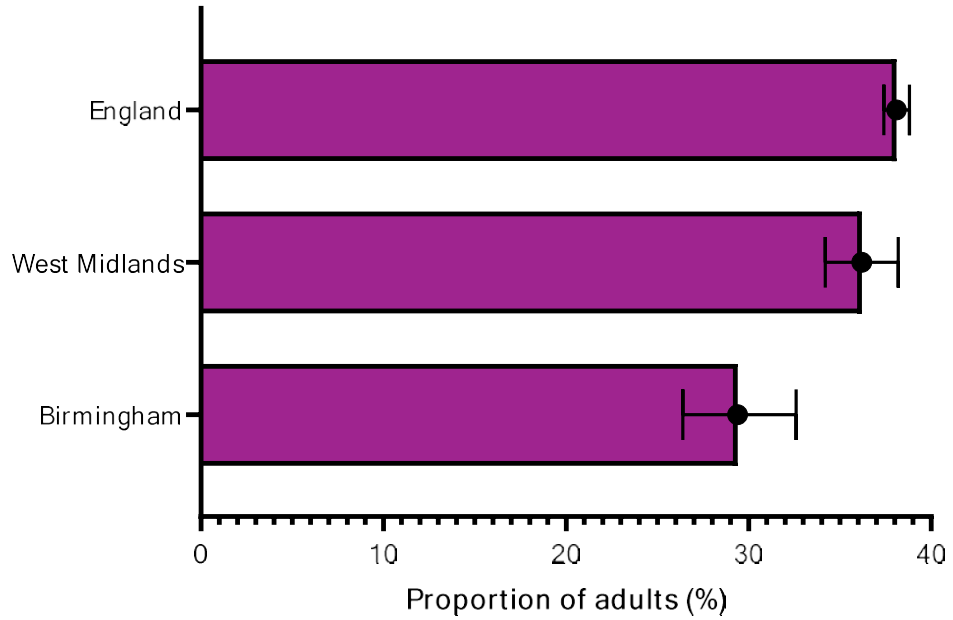
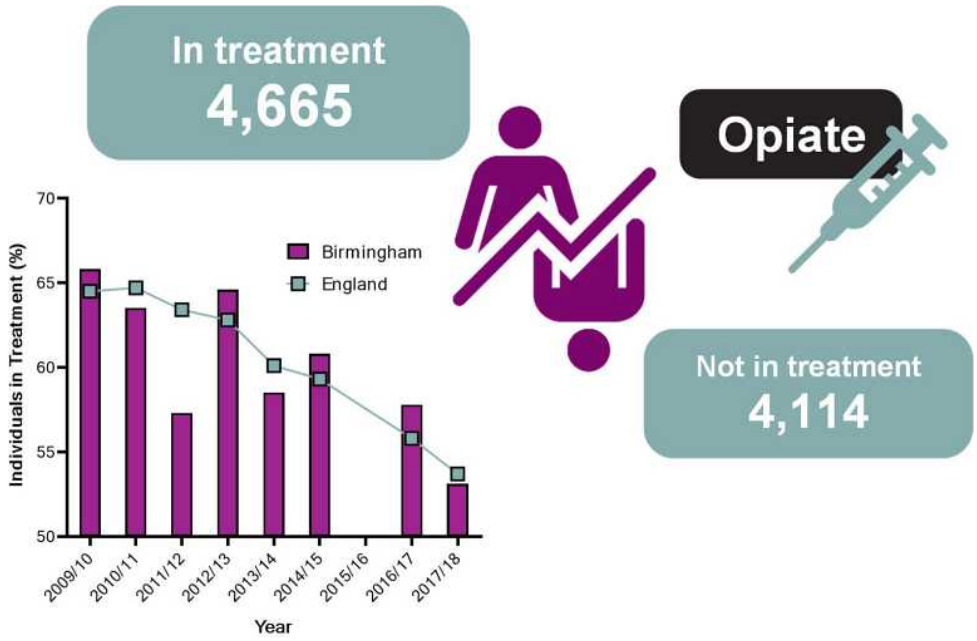


Figure 12: Proportion of adults with substance misuse treatment need who successfully engage in community-based structured treatment following release from prison [129]

7 Unmet Need in Birmingham [130]

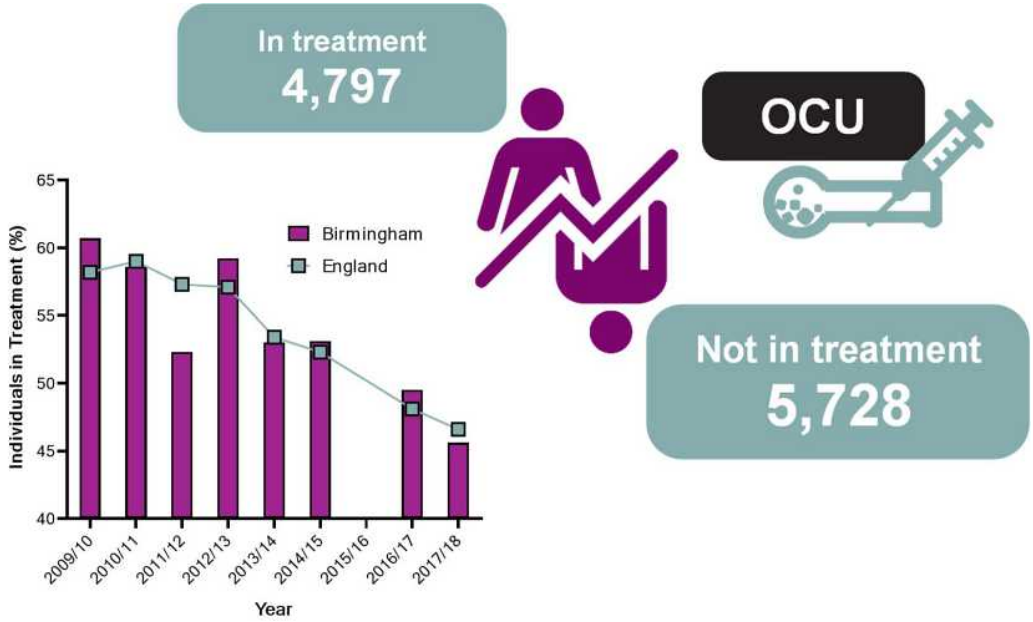
7.1 Opiate Users

According to the most recent data in 2017/18, the number of individuals not in contact with drug treatment services for an opiate problem in Birmingham (n = 4,114) has increased by 42.8% since its lowest number in 2012/13. As a proportion of opiate prevalence (46.9%), this represents an 11.4%-point increase. The proportion of individuals not in treatment is comparable to the national figure (46.3%).



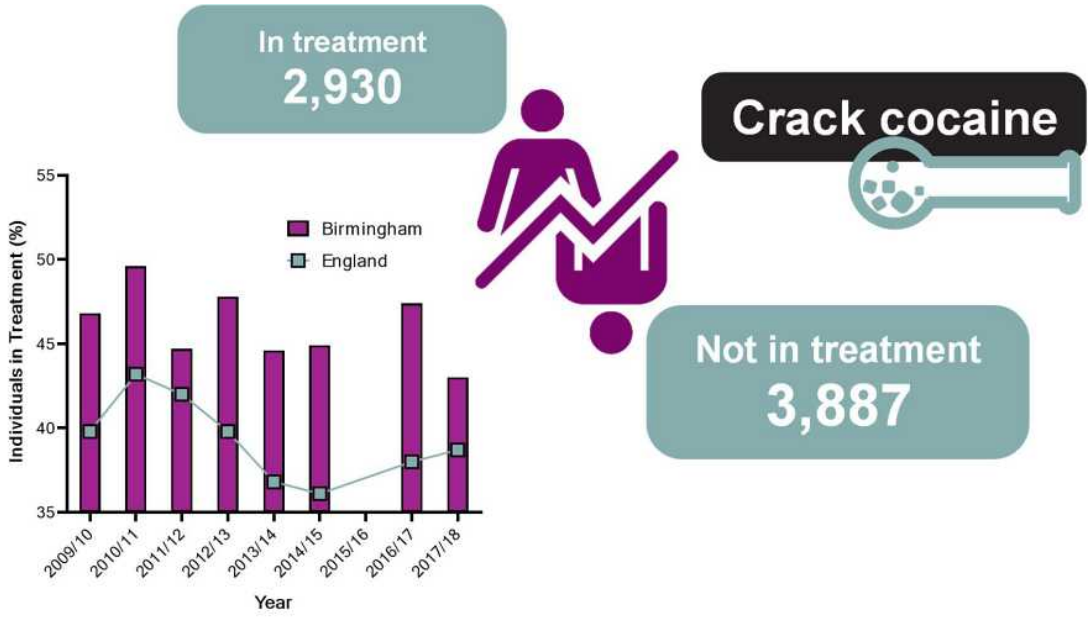
7.2 Opiate and/or Crack cocaine Users (OCU)

Based on recent estimates from 2017/18, the number of individuals not in contact with drug treatment services for an OCU problem in Birmingham (n = 5,728) has increased by 53.6% since its lowest number in 2012/13. As a proportion of OCU prevalence (54.4%), this represents a 13.6%-point increase. The proportion of individuals not in treatment is comparable to the national figure (53.4%).



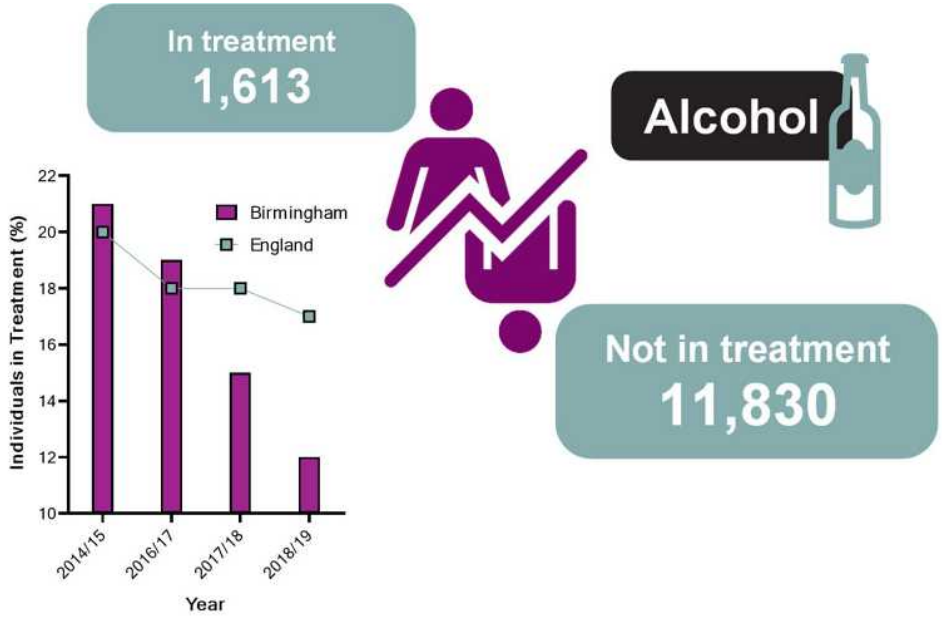
7.3 Crack cocaine Users

In 2017/18, the number of individuals not in contact with drug treatment services for a crack cocaine problem in Birmingham (n = 3,887) has increased by 14.3% since its lowest number in 2012/13. As a proportion of crack cocaine prevalence (57.0%), this represents a 4.9%-point increase. The proportion of individuals not in treatment is lower than the national figure (61.3%).



7.4 Alcohol Users

The most recent data in 2018/19 indicate that the number of individuals not in contact with treatment services for an alcohol problem in Birmingham (n = 11,830) has increased by 10.1% since its lowest number in 2014/15. As a proportion of alcohol dependency prevalence (88.0%), this represents a 9.0%-point increase. The proportion of individuals not in treatment is higher than the national figure (83.0%).



8 Inequalities and Vulnerable Groups

Conceptual models that examine the production of risk and harm in substance use research have been crucial in emphasising the wider environmental and societal factors that influence health outcomes for people who use drugs. The risk environment framework promotes an understanding of harm and harm reduction in the form of contingent causation. Put simply, harm is dependent on social context, involving interactions between individuals and their environments [131].

Whilst such models have been valuable in emphasising key factors associated with substance misuse, they have not been able to fully highlight the nuances and complexities that exist between commonly selected social positions (e.g. sex, ethnicity, gender) and social-structural factors (e.g. deprivation, policy). Therefore, there is a need to acknowledge intersectionality in the context of substance misuse to better understand diverse and complex treatment needs.

For the purposes of this needs assessment, each sociodemographic factor will be considered separately to highlight their individual inequalities before drawing together the evidence through an intersectional lens, providing a holistic view across social-structural dimensions.

8.1 Sex

Traditionally, drug and alcohol abuse were considered to be problems specific to men. Because women were poorly represented in early studies, the majority of drug abuse research has focused on men. However, sex-specific drug and alcohol abuse differences have been now been identified [132]. Whilst men are more likely to use illicit drugs [21], when women develop substance misuse problems it is typically faster than men [133]. Men have typically reported higher rates of cannabis and alcohol abuse, whilst women more often reported use of other narcotics and mild sedatives [134].

Furthermore, women differ from men in their subjective and biological response to drugs and alcohol [135]. The clinical literature indicates that women initiate cocaine use sooner, experience greater intoxication after comparable amounts of alcohol intake, and become addicted to cocaine, opioids and alcohol sooner after initiation than males [136,137].

In England and Wales, drug use is nearly twice as prevalent in men as in women (*Figure 13*). Whilst prevalence by sex data is not available for Birmingham, the proportion of male clients (72%) receiving treatment in Birmingham for drug and alcohol misuse is far greater than women (28%).

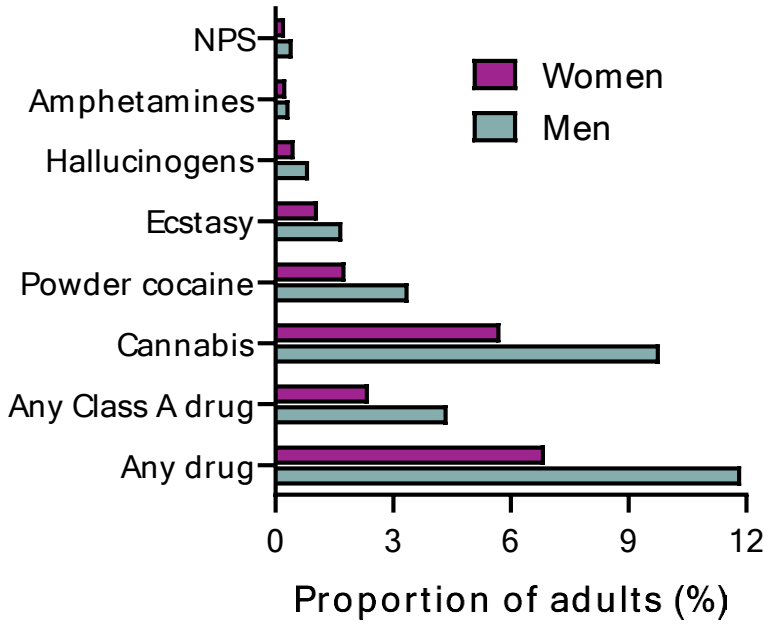


Figure 13: Proportion of adults aged 16 to 59 years who reported using a drug in the last year by sex, England and Wales, year ending March 2020[21]

Given that the experiences of female drug users are often very different to their male counterparts (e.g. women suffer greater societal stigma, more severe addiction, and physical and psychological reactions than men), sex-specific differences related to drug and alcohol abuse present unique challenges to service provision. Health services should consider the sex-specific differences in drug treatment by 1) addressing sex-specific risk factors for reduced treatment initiation, continuation, and treatment outcomes, 2) identifying subgroups of women and men who would benefit from sex-specific interventions, and 3) improving the care and referral pathways into specialised addiction treatment for men and women who seek help in primary care or mental health settings [138,139].

8.2 Ethnicity

The role of ethnicity in substance abuse has been a source of interest for over 30 years [140]. Ethnicity itself is a complex concept, encompassing inherited characteristics (e.g. race) and learned aspects (e.g. religion, language, cultural attitudes, values and customs). Despite the recognised context-dependent and fluid nature of ethnic identity, substance misuse research has tended to analyse ethnicity as something static and discrete with little consideration of the sociocultural decisions that shape drug users' choices to abuse illicit substances [141].

National level data shows that adults of mixed/multiple ethnicities are most likely to use illicit drugs whilst Asian adults are least likely (*Figure 14*). The higher rate of drug use among mixed/multiple ethnicity adults can be explained by relatively higher rates of cannabis use in this (22.1%) compared to White (8.2%), Asian/Asian British (2.9%), Black/African/Caribbean/Black British (4.8%) and other (4.2%) ethnic groups [21].

Sex also plays a considerable role in illicit drug use when categorised by ethnicity – across all ethnicities men are more likely to abuse drugs and alcohol [142]. Different patterns of drug use (i.e. types of drugs, mode of administration and user history) may also differ between ethnic groups as well as the contexts in which drug abuse occurs. For example, fatal cases attributed

to mephedrone (stimulant drug related to amphetamine) use in the UK amongst 16-24 year olds between 2009-2013 were all of white ethnicity [143].

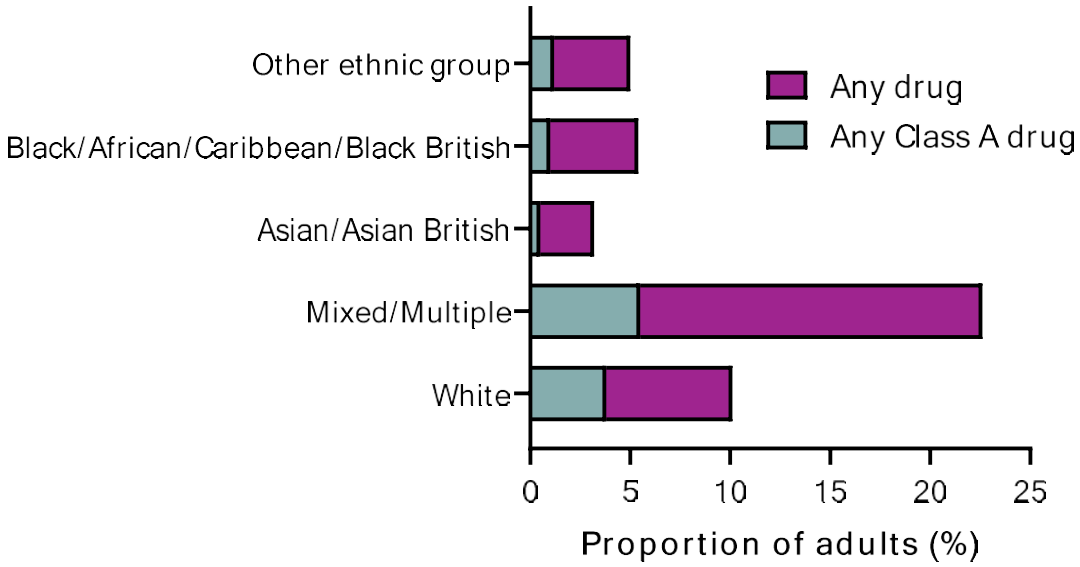


Figure 14: Percentage of adults who used illicit drugs by ethnicity and drug type[21]. Bars are superimposed

In Birmingham, there are ethnicity-specific differences in drug use. The number of CGL clients currently receiving treatment in Birmingham (at 30/06/21) grouped by ethnicity are shown in ***Figure 15***. White British represent the majority of clients, accounting for 65.6% of all clients in Birmingham. Pakistani/Pakistani-British make up the second largest client base (6.5%) whilst Chinese represent the smallest ethnic CGL client base (< 0.1%) in Birmingham.

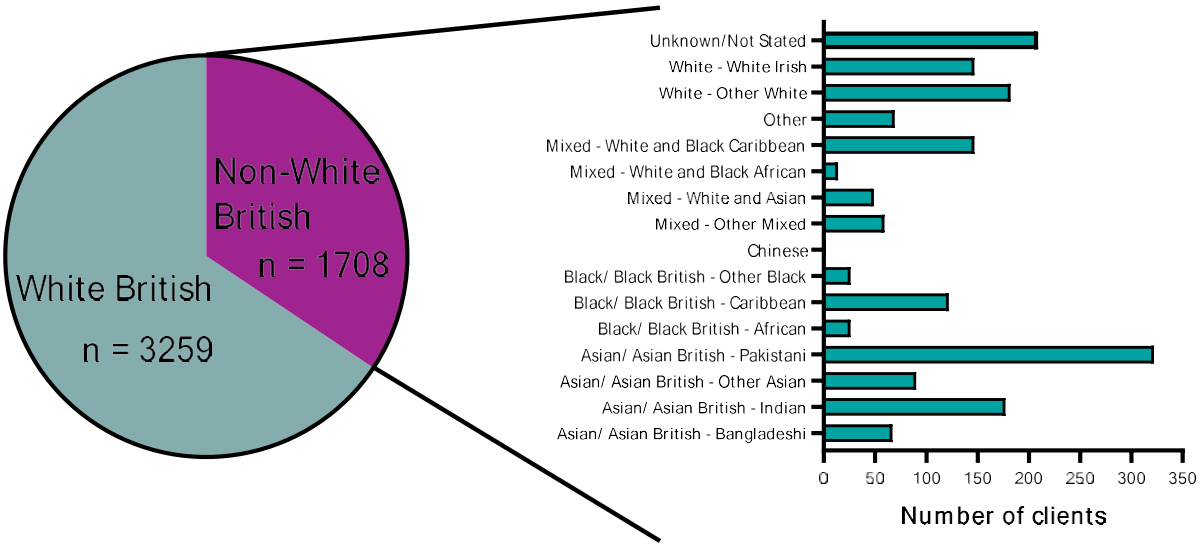


Figure 15: CGL Birmingham current clients by ethnicity at 30/06/21

To fully understand the ethnic-specific differences in illicit drug use, further information is needed on the variation in drug use within specific ethnic communities to identify the role and relative importance of related factors such as personal, social, economic, cultural, geographical. These factors may increase the risk of or provide protection against drug use. Furthermore, as many minority communities reside in more deprived and disadvantaged areas, where drug markets thrive, this may predispose them to future risks and increased prevalence of illicit drug use.

8.3 Age

Age presents a complex social issue with respect to substance abuse. Evidence shows that drug use is more prevalent in younger age groups (***Figure 16***) [21] and that adolescents who use cannabis, either regularly or occasionally, are more likely to graduate on to harmful substance use behaviours in early adulthood [144]. This early-onset of cannabis use may be particularly problematic, as it is not only associated with other drug use but with several adverse health outcomes including substance and cannabis use disorders [145–147].

Conversely, alcohol is the most commonly misused substance among older people in England, with 55-64 year olds representing the age group with the highest proportion of men and women drinking over 14 units per week [148]. Whilst the number of people aged over 50 experiencing problems from substance abuse is rising rapidly [149], alcohol is still the most common substance misused among older people. This is highlighted by a decline in risky drinking (over 14 units per week) in the UK except in people aged 50 years or older [150].

According to experts in this field [151], alcohol misuse in older populations may increase further as “baby boomers” grow older. This is because they typically exhibit more liberal views towards and consume greater levels of alcohol. There is also an upward trend for episodic heavy drinking in this age group [150].

Nationally, illicit drug use and risky drinking varies depending on age. Whilst younger adults aged 20-29 years were more likely to have taken drugs in the last year (***Figure 16***), older adults aged 45-74 years were more likely to exhibit riskier drinking behaviours (*Figure 17*). Sex does not appear to influence this pattern, although the proportions of both drug users and risky drinkers were greater for men than women.

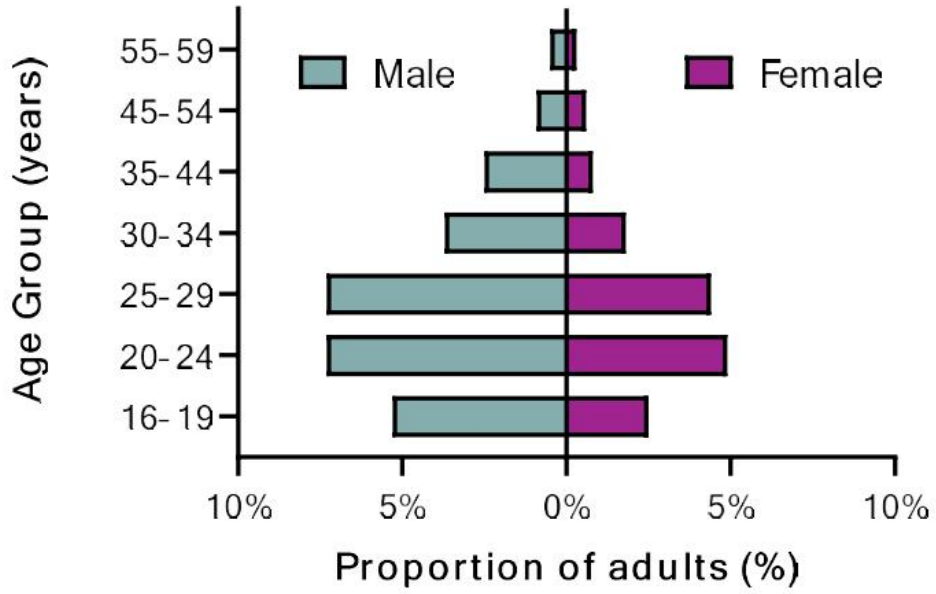


Figure 16: Proportion of 16 to 59 year olds reporting use of illicit drugs in the last year by age and sex (ONS 2020)

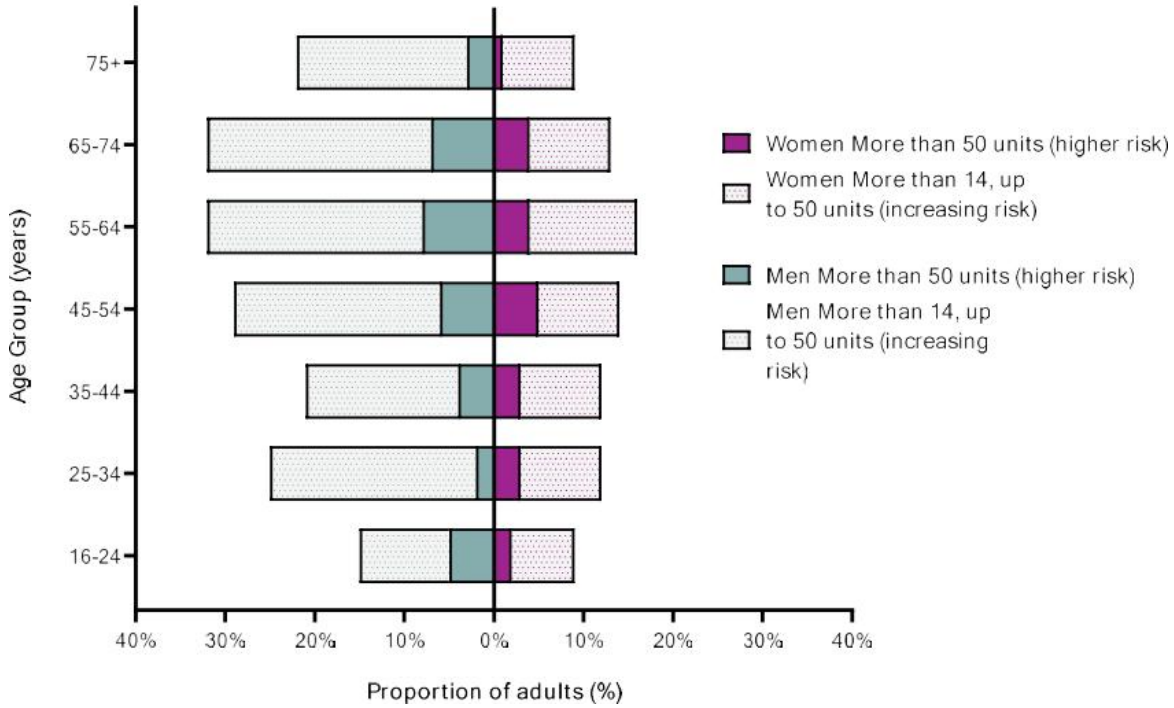


Figure 17: Proportion of adults drinking over 14 units a week (at increased or higher risk of harm), by age and sex[152].

Whilst data on drug use and risky drinking prevalence are unavailable for Birmingham, the number of clients in treatment for drug and alcohol abuse shows that adults aged 40-44 years make up the highest proportion of clients (22.8%) (*Figure **18***). Those aged 35-39 years make up the second highest proportion of clients (16.2%), and those aged 45-49 years are the third most represented (15.6%). These data for clients in treatment in Birmingham conflict somewhat with national prevalence data, suggesting that younger and older adults are less likely to access treatment than middle-aged adults.

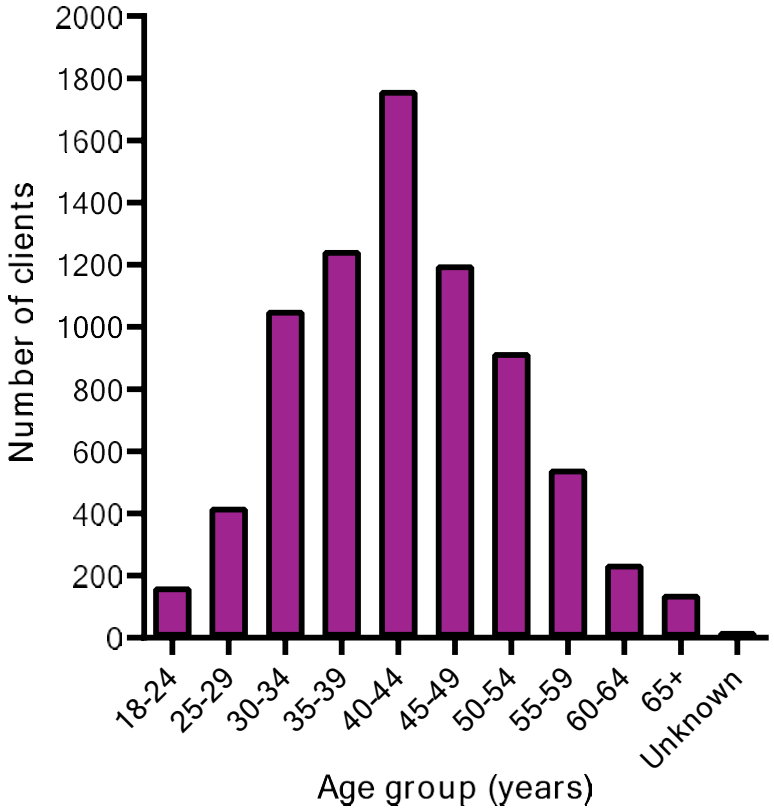


Figure 18: CGL data for clients in treatment by age 01/04/20 to 31/03/21

Younger people are usually perceived as the perpetrators of illicit drug use and heavy episodic drinking; however, evidence shows that it is in older age groups where drug use rates have risen the most and alcohol misuse behaviours are most prevalent. This is possibly the consequence of effective treatment and harm minimisation initiatives, together with medical advances, which has increased the life expectancy of people dependent on drugs [153].

Early intervention is imperative to prevent adolescents who first take drugs or abuse alcohol from progressing onto more harmful drugs and developing drug misuse behaviours and dependency [144,154]. This is highlighted by adolescents/younger adults, particularly males with lower educational levels, being more likely to use cannabis and be at greater risk of cannabis use disorder [146]. Given that younger adolescents face greater societal pressures, early intervention is imperative to prevent adolescents who first take drugs or abuse alcohol from progressing onto more harmful drugs and developing drug misuse behaviours and dependency [144,154]. This is highlighted by adolescents/younger adults, particularly males with lower educational levels, being more likely to use cannabis and being at greater risk of cannabis use disorder [146]. Stigma is a barrier to treatment, however, reduced stigma may encourage greater substance use in younger groups [155]. Given that younger adolescents

face greater societal stigma than older age groups, this presents a complicated public health challenge.

Conversely, with alcohol being the most common substance of misuse among older people, under detection of alcohol problems is of immediate concern in this age group [151]. The challenges posed by different age groups with regards to substance misuse emphasises their disparate needs for treatment and prevention. Services should look to understand the underlying social context for substance misuse, focusing on the role of community social norms in driving an age group's behaviours rather than providing brief counselling on individuals' behaviours[156].

8.4 Deprivation

Deprivation and poverty have been linked to problematic drug use and higher prevalence of substance abuse, with those at the "margins" of society most at risk (e.g. in care, in the criminal justice system, in mental health services and homeless people) [157]. Whilst good quality evidence on drug and alcohol misuse is sparse, available data indicate that substance abuse is a serious problem for those at the "extremes" who face socio-economic barriers such as unemployment and social exclusion [158].

To compound the issue, users who abuse substances and live in deprivation are often less likely to seek care and treatment as well as being less likely to overcome drugs and alcohol misuse problems [159]. Reasons for this are complex and according to Buchanan [160] problematic drug use is a socially constructed phenomenon that is influenced by an individual's structural disadvantages, limited opportunities and lack of alternatives and resources (e.g. access to meaningful employment and housing) rather than personal choice or physical dependence. Deprived areas with high unemployment can also provide an environment for drug dealing to become an established means of earning money. Whilst this may present a societal issue nationally, it is particularly difficult to tackle drug abuse problems at the community level [161].

Nationally, adults living in the lowest income households were more likely to have taken any drug, whilst the use of class A drugs in adults was comparable for lower-, middle- and higher-income households (*Figure 19*).

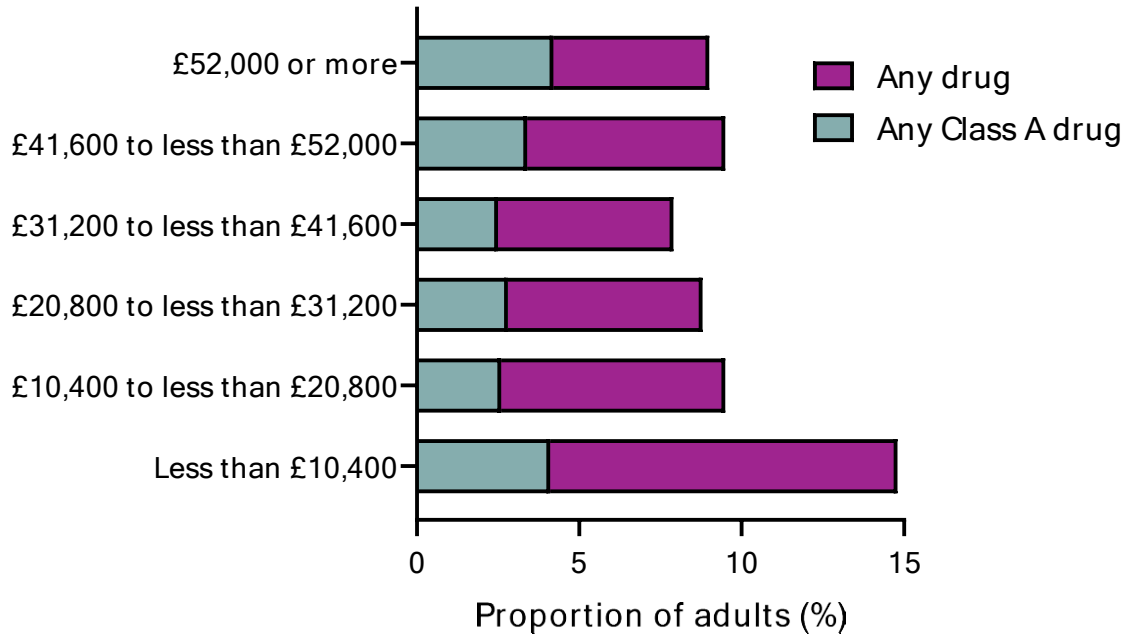


Figure 19: Proportion of adults aged 16 to 59 years who reported using a drug in the last year by total household income, England and Wales, year ending March 2020 [21]. Bars are superimposed

The greater prevalence of any drug in the lowest income households can partly attributed to cannabis use. Those in the lowest income households (13.2%) were more likely to have taken cannabis than those in higher income households (6.3% – 8%). However, the prevalence of powder cocaine was greater in adults from the highest income households (*Figure **20***).

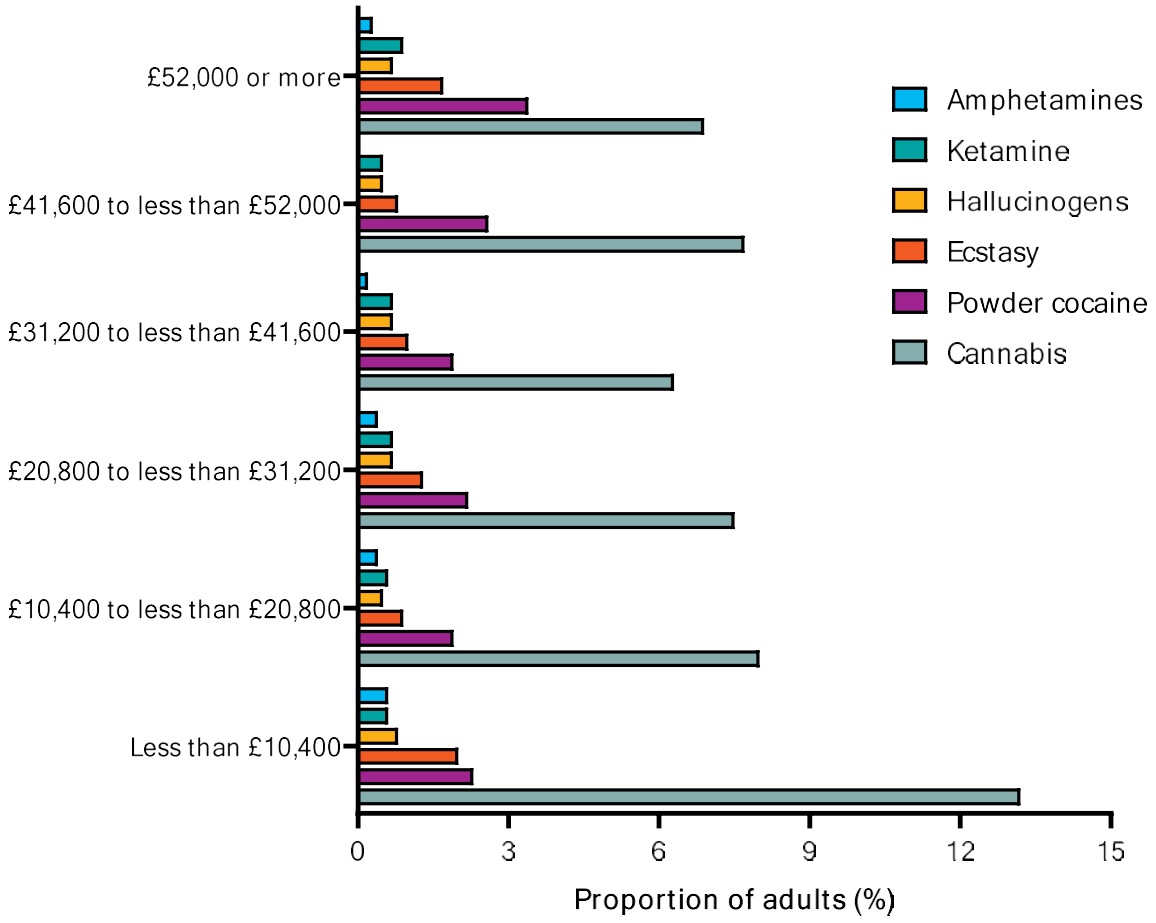


Figure 20: Proportion of adults aged 16 to 59 years who reported using a drug in the last year by total household income and drug type, England and Wales, year ending March 2020 [21].

Some research suggests that the general patterns of drug use and alcohol abuse exhibit little correlation with poverty or social class [158]. However, such observations fail to acknowledge the extremes of problematic substance abuse and the complex socioenvironmental factors that influence these behaviours. For example, deprivation has greater associations with extremes of problematic use and weaker associations with casual, recreational, or intermittent drug use. Deprivation is also related to a lower age of first use, progression to dependence, injecting drug use, risky use, health and social complications from use and to criminal involvement; rather than simply being related to whether people have ever taken drugs [162].

In agreement with previous suggestions [160,163], service provision should focus on reducing social deprivation in order to lower the prevalence of the most damaging drugs. Adopting a more holistic approach for drug and alcohol treatment services will move towards adequately addressing the social context, nature, and underlying causes of problematic drug use in deprived communities.

8.5 Children, Young People and Families

Rates of substance use are lower among children and young people compared to the adult population. However, like all estimates of substance use, there is likely to be underreporting

of the true prevalence. The What About Youth (WAY) Survey [164] of 15 year olds found that Birmingham prevalence of substance use was lower than the England average however there were clear inequalities in sex and ethnicity.

Table 1 Key findings from the What About Youth (WAY) survey regarding drug and alcohol use behaviours

Drug and alcohol use behaviour	Main findings
Getting drunk in the last 4 weeks	Rates were lower in Birmingham than in England (5.9% vs 14.3%) Within Birmingham, rates were higher for girls than boys; highest for white ethnicity amongst girls and mixed ethnicity amongst boys
Ever trying cannabis	A lower proportion of Birmingham children reported ever trying cannabis (6.5%) than in England (10.5%) Within Birmingham, mixed ethnicity had the highest rates.
Taking cannabis in the last month	A lower proportion of Birmingham children reported taking cannabis in the last month (2.0%) than in England (4.55) Within Birmingham, rates were highest for black boys and mixed ethnicity girls.
Ever trying drugs other than cannabis	A lower proportion of Birmingham children reported ever trying drugs other than cannabis (1.4%) than in England (2.4%) Within Birmingham, rates were higher for girls; highest for white girls and black boys
Taking drugs other than cannabis in the last month	A very low proportion of Birmingham children reported taking drugs other than cannabis in the last month (0.2% vs 0.8% in England)

Of those in service, the proportion of opiate users is far smaller than adults in treatment (<1% compared to 68% for adults) (Figure 21). Almost 70 % of young people presented initially with non opiate drug use, the most prevalent being cannabis use. However following referral for cannabis use, interventions with young people can often result in poly use disclosure such as alcohol, nitrous oxide, vaping, THC or cocaine use.

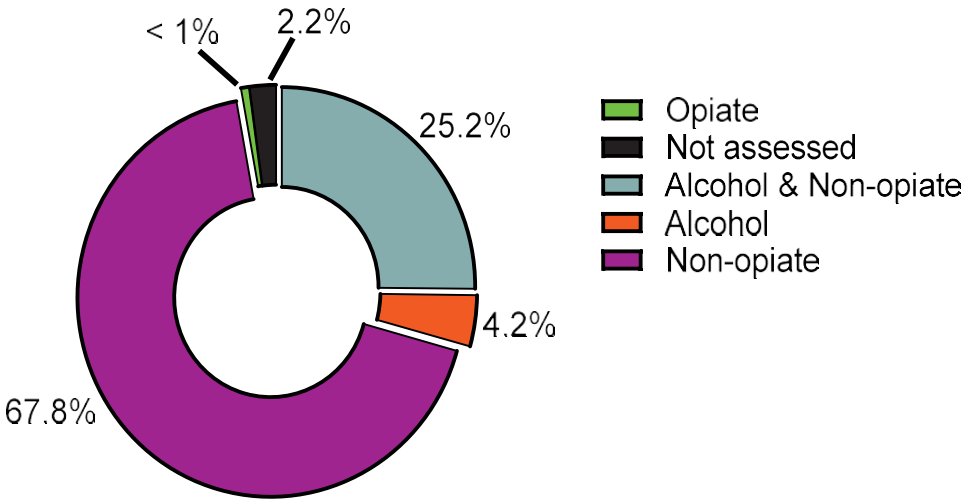


Figure 21: Substances used by Young People presenting to Aquarius.

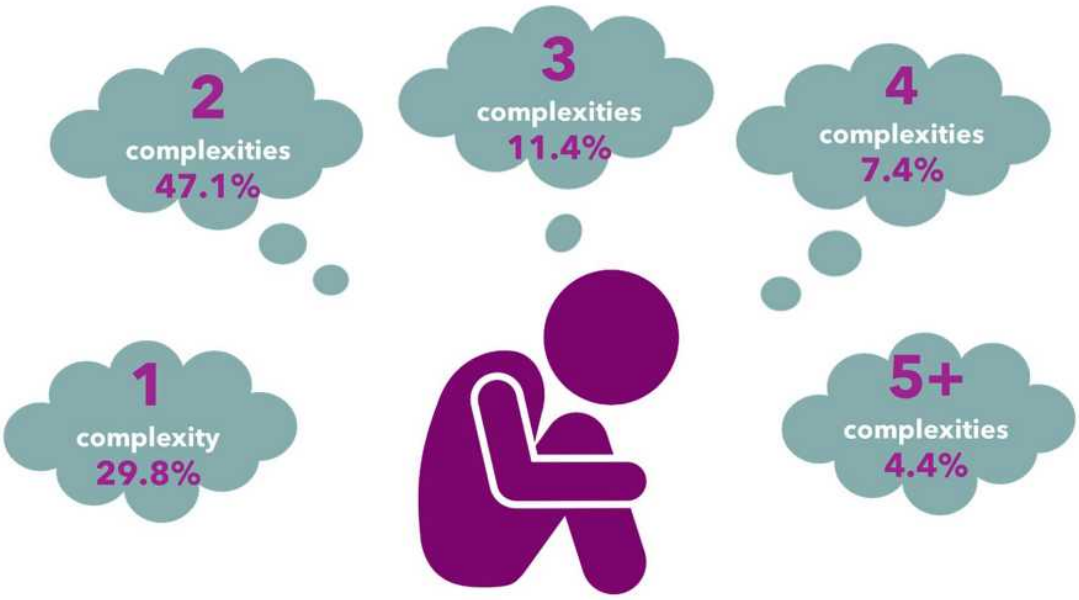
Although the proportion of young people who are using alcohol and drugs (and in particular opiates and crack cocaine) is much smaller than adults, this is a highly vulnerable group. There is evidence to suggest that young people who use recreational drugs run the risk of damage to mental health including suicide, depression, and disruptive behaviour disorders. Regular use of cannabis or other drugs may also lead to dependence. Among 10 to 15 year olds, an increased likelihood of drug use is linked to a range of adverse experiences and behaviour, including truancy, exclusion from school, homelessness, time in care, and serious or frequent offending.

Young people receiving interventions for substance misuse often have a range of vulnerabilities that require specialist support and intervention. Data from the current service provider, Aquarius[3] shows that;

- 89% of young people currently accessing services identify substance misuse amongst family members
- 22% of young people accessing services are open to children's services under a Child Protection Plan
- 70% of young people accessing services have been risk assessed as High & Medium Risk
- 37% of young people referred to services are open to the youth offending team.
- 18% of young people accessing support have identified mental health as a need.
- 14% of young people currently accessing support have been identified as involved in exploitation

Over two thirds of these Children and Young People accessing service have more than one complexity or vulnerability.

[3] Report to Overview and Scrutiny committee November 2021



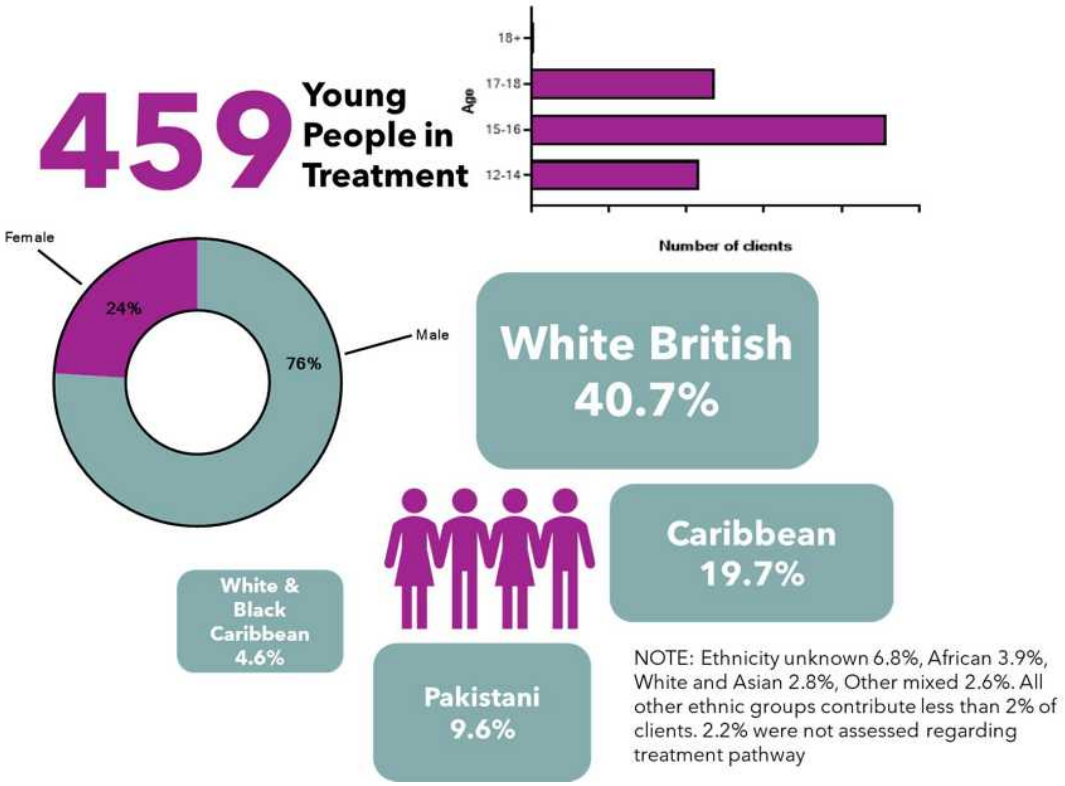
Drug and alcohol misuse impacts children and young people in many ways, either because they are themselves using alcohol or drugs, or their parents or other family members are, or because they are pawns in organised crime or victims of crime. Dependent parental alcohol and drug use has an adverse impact on children, particularly regarding their physical health, psychosocial wellbeing and personal alcohol and drug use.

Findings from the Children's Commissioner applied to the Birmingham population showed [165]:

- 30,000 children and young people aged under 18 in Birmingham are living with an adult who has reported substance misuse
- Of these, over 11,000 are living with an adult who is dependent on drugs or alcohol
- Of these, 2,500 are living with an adult who also has severe mental health problems and has experienced DV

There is increasing evidence that adverse childhood experiences (ACEs) such as living in a household with problem alcohol use can contribute to long-term harms. If a child experiences four or more risk factors during childhood they have a substantially higher risk of developing health-harming behaviors, such as smoking, heavy drinking and cannabis use. Identifying and minimizing risk early on is key to prevention and substance use services should be delivered holistically in partnership with key agencies, addressing wider vulnerabilities as well as misuse.

8.5.1 Demographics of Young People in Service



8.6 Mental Health

Research has shown that comorbidity between mental and substance use disorders is highly prevalent [166] with strong links between cognitive and behavioural disorders and substance use disorders [167]. The co-occurrence of a substance use disorder and a mental health disorder is known as dual diagnosis and it is often under-diagnosed, underestimated and poorly treated throughout the world [168].

People with negative mood states (e.g. depression and anxiety) are more likely to use alcohol [169] and those who suffer psychological distress or social anxiety and rely on alcohol to relieve symptoms are more susceptible to alcohol dependency [170–173]. Anxiety disorders are also associated with cannabis use [174] as well as cocaine although the latter may be influenced by social situation [175].

It is difficult however to understand the relationship and pathways between mental health and substance misuse as they differ across substances and disorders. For example, alcohol abuse likely follows a causal model (i.e. alcohol abuse leads to depression) rather than a self-medication model (i.e. depression leads to increased risk of alcohol abuse) [176]. Conversely, psychoactive substances are likely used as a self-regulation strategy to alleviate distress, which supports the theory of self-medication [177]. Despite the known concerns regarding this issue, it has been acknowledged in the United Kingdom that people with comorbidity often receive poor health care and gaps in service provision are likely due to ambivalence towards the problem (i.e. health professionals hold stereotypical preconceptions about drug users, which may be contrary to those who work within mental health services) [178].

Nationally, 59% of adults starting substance misuse treatment declared having a mental health treatment need [179]; an increase of 6 percentage points from the previous year. In

Birmingham, the number of clients in treatment with a mental health issue is high (n = 1507) (*Figure 22*). Furthermore, a large number are recorded as having a "behavioural and emotional" main disability, which is the most prevalent disability recorded. "Mobility and gross motor" disability is second (3.4%). It appears that dual diagnosis has sex-specific influences and is also related to homelessness based on CGL data. The dedicated "Women's Team" and "Homeless Team" recorded that 29% and 31% of clients had mental health issues, respectively.

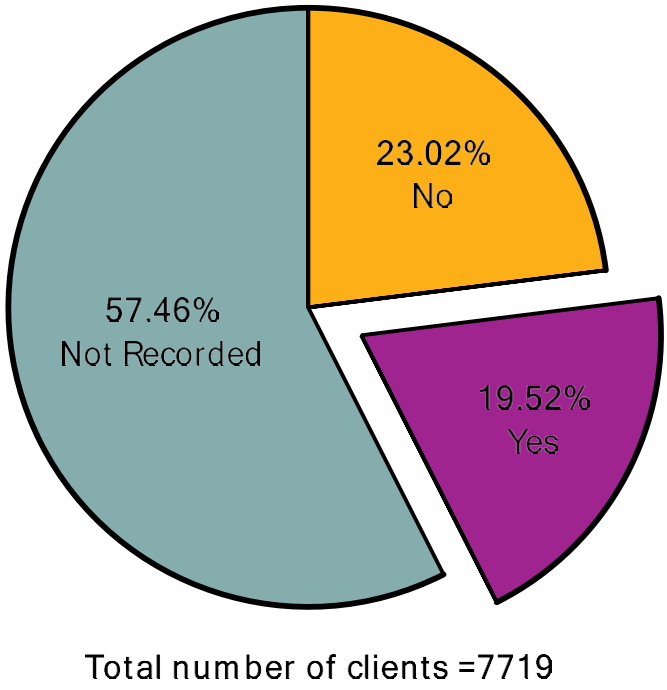


Figure 22: CGL clients 01/04/20 to 21/03/21: with mental health issues recorded

Diagnosing and treating individuals who misuse drugs and alcohol and have a mental health problem is important as these clients often have the most complex needs. However, optimal treatment pathways are ambiguous with regards to dual diagnosis, likely due to its complex nature. This is reflected in policy where it is unclear whether treating mental health issues as the antecedent or consequence of substance misuse behaviour is more effective. For example, policies that reduce the use of substances are likely to reduce the prevalence of mental disorders [166] whilst accessing mental health services in adolescence may reduce the likelihood of using drugs in older adolescence and in adulthood [156].

Understanding the user's experience is imperative in providing effective dual diagnosis treatment. Therefore, treatment should be available in an integrated fashion for both mental and substance use disorders [166]. Such an approach could also enable identification of self-medication or causal models that are related to substance misuse and mental health issues.

8.7 Disability and Long-term Conditions

Long-term conditions or chronic diseases are conditions for which there is currently no cure, and which are managed with drugs and other treatment. Over 18m people in the UK live with long-term health conditions [180].

Given that substance abuse among persons living with a disability (40%) is purportedly more prevalent than in persons without a disability (34%) [181], the absolute number of individuals living with a disability/long term condition and also misusing drugs and or alcohol in the UK is considerable and presents a major public health challenge. Research has consistently shown that individuals with a disability are at increased odds of drug misuse [182,183] and those with physical disabilities may be at particular risk of alcohol and drug abuse [184]. This is reflected in the CGL client base in Birmingham, where mobility and gross motor (n = 262) and physical (n = 119) disabilities are the second and third most reported disabilities, respectively.

Individuals living with a disability battle unique stressors, such as social pressure and stigma, low self-esteem and low self-efficacy amongst other adverse socioeconomic and quality of life outcomes [185,186]. These can contribute to feelings of unhappiness, depression and a lack of purpose. It is reasonable to assume that individuals with disability who abuse substances to cope with impairments related to physical disability have not psychosocially adjusted, although empirical evidence to support this assertion is lacking [185].

It is important to note that disability or a long-term health condition may lead to pain medication addiction, where individuals become addicted to prescription opioids and later develop abusive behaviours for illicit drugs (e.g. heroin) [187–189]. Those with a disability who abuse substances such as opioids are also less likely to enter treatment due to experiencing greater barriers [189].

The available evidence suggests that drug treatment services are often unable to offer effective treatment to individuals with a disability [186]. It has been recommended that national government and local commissioners meet the variable and disparate needs of individuals with a disability by 1) building the capacity and competences of specialist generic disability bodies and support networks regarding drug issues; and 2) enhancing the capacity of existing drug service providers to respond to the needs of people with disabilities [186].

Ultimately, disability further complicates an already complicated phenomenon. Concerns are being raised regarding the specificity (i.e. differences with mainstream addiction) of disability substance abuse treatment services, which is likely due to a lack of integrated service provision.

8.8 Sexual Orientation and Gender Identity

People who identify as lesbian, gay, bisexual, transgender, or queer/questioning (LGBTQ) often face social stigma and discrimination, and a greater risk of harassment and violence not encountered by people who identify as heterosexual. Together with other stressors (e.g. internalised stigma), these factors predispose sexual minorities to an increased risk of behavioural health issues [190]. As a consequence, the proportion of adults (aged 16-59 years) using illicit drugs is higher in those who identify as gay/lesbian (8.8%), bisexual (31.4%) and other (9.0%), than straight/heterosexual (8.8%) (*Figure 23*) [21].

In the UK, mephedrone and crystal meth (stimulants) are particularly used in sexual minority communities to trigger euphoria and sexual arousal. GHB/GBL and ketamine is also used to reduce inhibition and increase sexual pleasure. Intentional sex under the influence of these psychoactive drugs has given rise to the term “chemsex” in recent years [191,192] and it is estimated that 10% of men who have sex with men in England have engaged in chemsex within the past year [193]. However, this estimate may be conservative as other research indicates chemsex prevalence in men who have sex with men is 18.7% in HIV-negative and 41.7% in HIV-positive individuals [194]. This suggests that chemsex is associated with engagement in HIV risk behaviours [194]. In Birmingham specialist chemsex support is provided by Birmingham LGBT, supported by Umbrella Sexual Health.

Whilst chemsex drugs are of particular concern in the LGBTQ community due to increased potential for transmission of sexually transmitted infections (STIs), HIV and other bloodborne viruses [195], cannabis is still the most commonly used drug amongst gay/lesbian and bisexual adults nationally, and is proportionally the most used drug across all genders [21] .

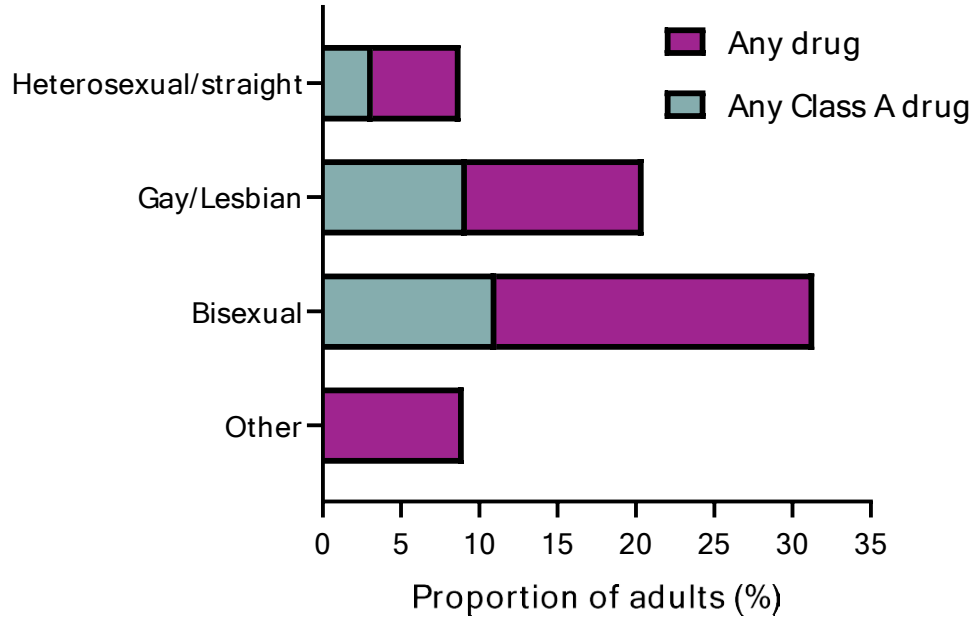


Figure 23: Proportion of 16 to 59 year olds reporting use of illicit drugs in the last year by sexual orientation, year ending March 2020 [21]. Bars are superimposed

For both heterosexual and sexual minority groups, new clients were mainly being treated for alcohol and opiate abuse. A considerable proportion (6.9%) of new clients in Birmingham preferred not to state their sexual orientation. Amongst the new LGBT clients in 2019/20, opiates were the main substance being treated for in adults identifying as bisexual or lesbian, whilst alcohol abuse was the main substance being treated for in gay men (*Figure **24***).

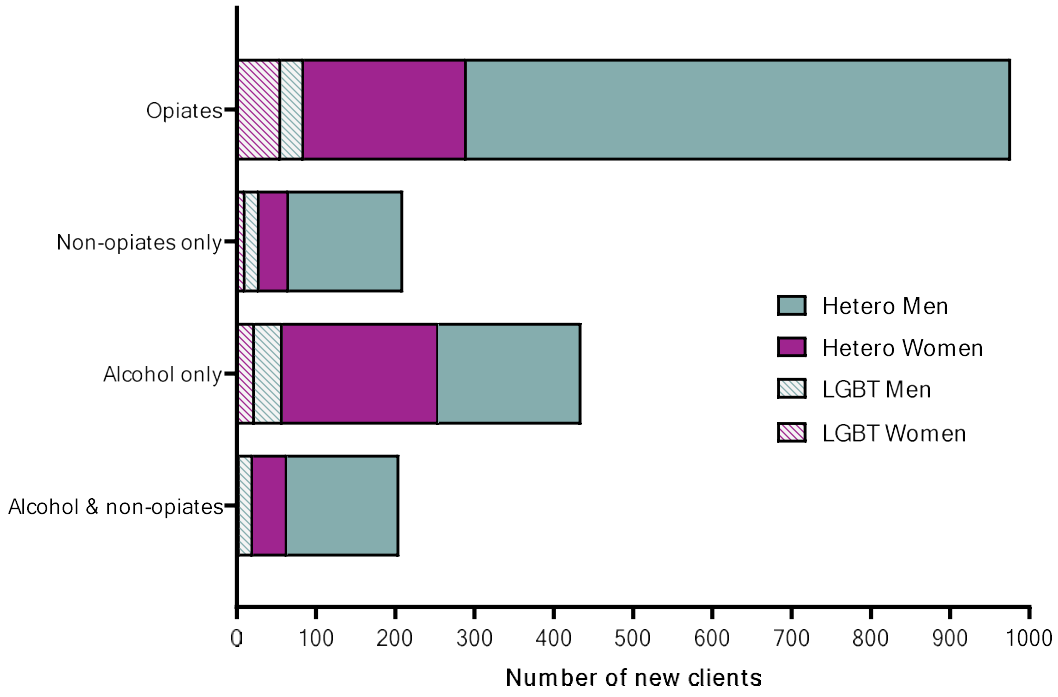


Figure 24: New clients in Birmingham in treatment by drug type and sexual orientation

Epidemiological data on drug and alcohol abuse in sexual minorities are lacking, which presents a major barrier when establishing health policy priority interventions. Furthermore, the complex sociocultural decisions and actions that lead to drug and alcohol abuse in the LGBT community warrant further investigation. Understanding the barriers that prevent LGBT drug users from accessing treatment services (e.g. social stigma) is critical in providing tailored and effective interventions. Societal stigma contributes to minority stress processes and is likely a catalyst for minority stress, which is thought to be a major driver of health inequalities in sexual minority communities [196]. Finally, the high prevalence of drug and alcohol abuse and increased risk of behavioural health issues in this community makes them particularly vulnerable to a range of health, socioeconomic, and criminal justice harms.

While there is an established evidence base around addiction and treatment, the experiences of transgender people have been excluded entirely or grouped with those of sexual minority groups [197]. This is even more the case for non-binary and genderqueer research.

Although an emerging field of research, gender minority groups experience many stressors which drive reliance on substances to cope psychologically [198] including discrimination, gender dysphoria [199] internalised transphobia [200], and higher prevalence of mental health problems.

Evidence, although limited, suggests that transgender individuals have significantly higher use of nicotine, alcohol and drugs compared to cisgender individuals [198]. And experience of any drug use disorder almost 4 times higher than the cisgender population. Non-binary people who used drugs appear to be more likely to report problematic substance use; may require more support with reducing substance use than people of other genders and may be at increased risk of experiencing sexual abuse when under the influence of substances, relative to cis and binary trans people [201].

Service providers should be aware of the multiple, complex drivers of substance use for these groups and ensure non -discriminatory delivery. Given the high prevalence of trauma experienced by gender minority people, trauma-informed psychosocial interventions may be useful in the management of problematic substance

8.9 Sex Workers

There is a strong association between substance use and sex work with research consistently indicating higher prevalence of alcohol and drug misuse than the general population.

Addiction can push individuals into sex work, or sex work can be the catalyst for addiction. It has been suggested that around 55% enter into prostitution with existing addiction, with the remaining 45% commencing drug use at the same time or after [202].

There is often a vicious cycle of using substances to cope with selling sex, violence and abuse, then needing to sell sex specifically to fund problematic addiction [203]. Unlike other substances, research suggests alcohol is less of a driver for entry into prostitution, with alcohol predominantly used as self-medication [204].

Street-based work remains the most visible aspect of the industry and is where the relationship with substance misuse is most prevalent. Evidence consistently demonstrates a high proportion of women involved in street-based prostitution have substance use problems. This group are more like to use class A drugs than indoor workers [205], in particular opiate use, but also frequently injecting and polydrug use [206]. Estimates are as high as 95% of street prostitutes in the UK using crack cocaine or heroin [207]. The Drug Treatment Outcomes Research Study (DTORS) found that 10% of women commencing drug treatment said that they had exchanged sex for money, drugs or something else in the past four weeks and sex workers on the whole have far higher rates of lifetime use of all drugs [208]. (Figure 25)

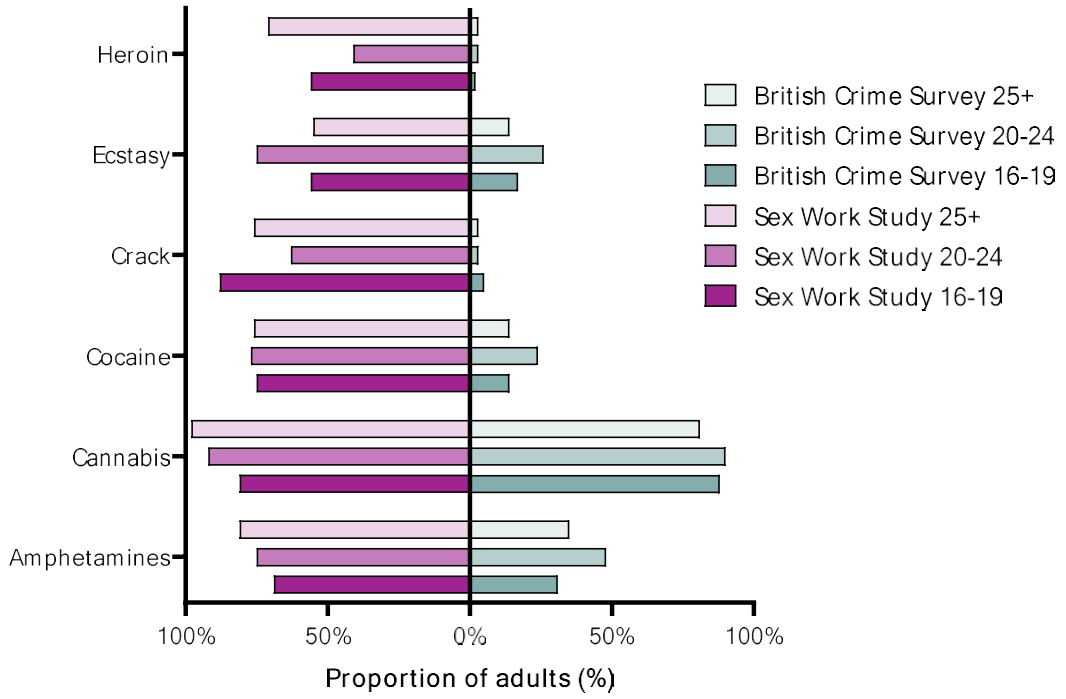


Figure 25: Percentage of Sex Workers who use different types of Drugs compared to the general population.

This is however an extremely vulnerable group often with multiple and complex needs such as homelessness, criminal behaviour, and mental health, with the double stigma of prostitution and addiction often preventing users from seeking support [209]. Addiction also presents additional risks to sexual health through riskier sexual behaviour, mental health, experience of violence, abuse and increased risk of incarceration.

Due to the nature of sex work, there are no comprehensive estimates of the number of people involved in the UK. Estimates range from between 60,000 and 80,000 and up to 5,000 are believed to be under 18 [210] for the UK as a whole. Using these estimates this means there may be 1,250 sex workers in Birmingham, however this could be much higher due to its hidden nature and typically poor engagement with services and research projects due to stigma [211]. Given the high prevalence of problem substance misuse in an already complex cohort of vulnerable individuals, services need to provide a holistic approach which addresses the root cause of substance misuse and the often-complex web of support needs, not just addressing addiction.

8.10 Homeless and Rough Sleepers

Homeless individuals and especially rough sleepers are at high risk of social exclusion, multiple health problems and substance misuse. Substance use can often lead to homelessness when addiction disrupt relationships with family and friends or causes job loss. But in many situations, substance abuse is a result of homelessness rather than a cause. It becomes a means of coping in a difficult situation, to get temporary relief, or even to be accepted. Motivation to stop using substances can be low when survival is more important than seeking support and recovery [212].

UK research shows that almost three quarters of people who had slept rough had had a drug or alcohol need during their life, either historically or still actively using or dependent on them [213]. 'Need' refers to those who consider themselves dependent, have been in treatment, or have high levels of use. 60% had a current need and 12% were defined as having both drug and alcohol needs. Cannabis, crack cocaine and opiates are the most used (Figure 26). Problematic substance use is perhaps most visible in this vulnerable group of citizens.

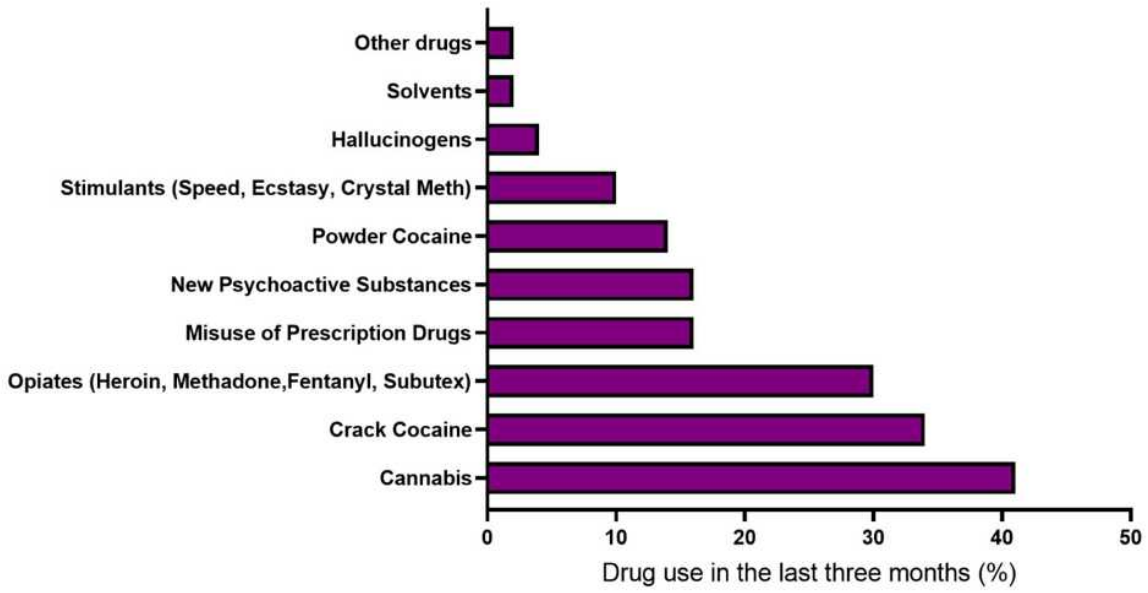


Figure 26: Percentage of rough sleeping respondents using drugs by drug type within the last three months

Dual diagnosis (co-morbidity of substance abuse and mental health issues) is a serious and prevalent problem, particularly within homelessness which presents its own multitude of

barriers when accessing services including mental health support (see section 9.6). Evidence suggests that around 10-20% of the homeless population would fulfil the criteria for dual diagnosis and they are nearly five times more likely to die than the equivalent age group in the general population [214]. The effects of drug and alcohol use also have an extremely detrimental effect on the physical health of homeless people. It causes early alcoholic liver disease and is often also associated with Hepatitis C, both of which often result in severe liver disease and early death.

Statistics show that 37% of all deaths among homeless people in England were a result of drug poisoning compared to 1% for the general population. Around 10% of estimated deaths are from alcohol-specific conditions [215]. This is due in part to higher prevalence of OCU use, however evidence also suggests that the excess deaths we see associated with considerable social exclusion is extreme [216]. They are likely to present a high level of health needs, but at the same time are not accessing health services which exacerbates vulnerability and exclusion.

In Birmingham, drugs and alcohol are the leading cause of death for people sleeping rough or staying in an emergency accommodation in the city. Between 2013 and 2018 this accounted for 19 deaths [217].

A local study of patients registered to Birmingham Homeless Healthcare Centre in Birmingham city centre found that nearly one in eight had been offered support for substance dependence and one in five had been offered support for alcohol misuse [218]. In November 2020, there were 217 known people in the city with an alcohol or drugs problem who are either sleeping rough or in danger of doing so in the future. This includes rough sleepers, people in emergency and temporary accommodation, and people who recently moved into other accommodation. However, true estimates are potentially much higher. The Hard Edges Report [219] estimates that as many as 2.8 people in every 1,000 Birmingham Citizens experience coexisting homelessness AND substance misuse problems, which equates to 1,880 people (this definition of homeless includes those in temporary and emergency accommodation as well as rough sleepers). 31% of these individuals also have mental health problems.

Despite suffering worse health than the general population, homeless people often struggle to access healthcare and support services or maintain engagement. Services should be specialised and accessible with early prevention and treatment of mental health and substance dependence with joined-up social support if the cycle of homelessness is to be broken. The Advisory Council on the Misuse of Drugs (ACDM) recommend [220]:

- local services adopt a tailored approach to tackling the specific needs of homeless drug users in their area
- Integrated and targeted services, outreach, and peer mentors to engage and retain homeless people in proven treatments
- raising awareness among service providers of the levels of stigma experienced by homeless individuals who use drugs and ensure they are treated with respect
- involving people with experience of homelessness and substance use in the design and delivery of the service provision for substance use and homelessness services

8.11 Modern Slavery

Modern slavery is a public health concern due to its major implications on the physical, mental, psychological, and developmental health of the victims [221]. Modern slavery includes sexual exploitation, forced labour, organ harvesting, forced begging and gang related criminality. A large a proportion of modern slaves had unstable lives at home, mental or physical issues and drugs and/or alcohol dependencies prior to being recruited [222]. Victims

with addictions are often supplied alcohol, drugs and gifts as an incentive to partake in criminal activity. This lifestyle is glamorised by offenders to manipulate and exploit victims [222,223]. Drug coercion is a known recruitment tactic; some traffickers target individuals who have recently come out of rehab or detoxification programs or may recruit directly from drug treatment facilities and services [224]. Perpetrators may entrap victims using existing or newly initiated dependencies and use the threat of drug withdrawal for control, this method may cause extreme mental and physical trauma [224]. Opioids are an extremely effective coercion tool due to their pain numbing qualities [225]. Drugs may also be used by victims in order to deal with the trauma captive and abused by traffickers [226].

The report 'A Few Doors Down' commissioned by the Salvation Army and Black Country Women's Aid made links between substance misuse and modern slavery and states that victims are often negatively stigmatised [227]. Childhood abuse, such as that experienced by victims of child modern slavery has been associated with poor adult mental health, which may lead to drug and alcohol misuse [228]. The Independent Anti-Slavery Commissioner estimated that there were 136,000 victims of modern slavery and human trafficking in the UK in 2019 [229]. Furthermore, Birmingham Police service recorded that there was a total of 615 reports of modern slavery offences from March 2019 till March 2021. It is essential that survivors are referred to safe and trauma-informed services and facilities and secure housing when identified [224]. Trauma-informed care prevents re-traumatisation and increases chances of long-term recovery, providing training to healthcare professionals for ethical trauma-informed care is therefore essential [224]. Coordination between drug and alcohol services and healthcare professionals to identify victims with substance use issues could prevent preparators from gaining further access to victims.

9 Service User Perspective

The voice of services users and people with lived experience is a crucial part of understanding need. A user group of past and current service users, facilitated by CGL was held to understand some of the barriers to support and recovery, and what works, and its findings were captured. We have tried to retain the user voice as much as possible while protecting identity.

- There is sometimes too much of an assumption that people have access to technology and can access support and information online. Many people still rely on face to face or telephone contact to get the right support and have conversations with the right people, because they've lost or did not have technology skills in the first place. There always needs to be a non-online option available to people when they're trying to access any service, otherwise you're at risk of people just giving up.

- Support networks either closed completely or totally changed the way they operated during the pandemic.

- Unmet mental health needs fuel people's addiction, which often lead down the road to novel psychoactive substances like spice and mamba. Once those drugs get a hold of you, you're in trouble. You're likely to end up homeless and in need of accommodation

- When you then try to get support, you are given accommodation in settings that will set you back further in your recovery, i.e. hostels/shared housing. Or people are given flats and because they've lost their ability to cope with daily living tasks, they cannot cope with holding down their tenancies, so they just stay stuck as they are.

- People need consistency with services, so that they can build up relationships with the staff and support that is available and learn to trust them. Changing service name, contact details, locations every 3-5 years doesn't help with this. People feel this should stay the same regardless of which provider is responsible for delivering services.

- Members of the public and professionals need to know who the substance misuse provider is, where they are based and how people can access their support. All too often people attend their GP surgery and are met by professionals who themselves have no idea who the drug and alcohol services are and how they can be accessed. And very simply, there is rarely even any posters/information up in GP surgeries for people to read/learn about services in reception areas.

- Lots of people can feel very nervous about seeking support for drug and alcohol issues because they are concerned key people in their lives, i.e. employers/family will be told about their engagement. Service providers need to do a better job at the point of advertising their services, of assuring services are free and, importantly, are confidential!

- People who feel overwhelmed with addiction and their situations will have little to no belief that change is possible and that recovery is attainable. As a result, people don't reach out for support as they don't feel like there is a way out. Service providers need to do a better job of promoting success stories and showing people that recovery is real and is possible with the right support.

- Providers need to do a better of job of helping people to realise they may have an issue that requires support. People are often in denial or have absolutely no idea about how their alcohol or drug use is impacting on them or others around them. They need information and advice delivered in a way that will help them to recognise where they are at with their substance use and how they need to spend some time considering the benefits of making changes.

- Some people reach a point in their addictions where it can feel to the individual person, like society has completely given up on them...

"Services need to attract people by showing them why that service will improve their lives and why it's important. It needs to be more than just simply promoting the support and what's on offer."

- There is still a huge amount of stigma around alcohol and drug issues. People don't understand or acknowledge that drugs and alcohol problems can affect anyone, and people don't see it as an illness There needs to be more publicity about drugs and alcohol that helps the public to understand why people are affected by drugs and alcohol and how they or somebody else they know may need some support.

"Addiction does not discriminate….people assume that you're classed as an alcoholic when you've hit rock bottom and you're

homeless and drinking on a park bench. My sofa in my living room was my park bench"

- There needs to be stronger advertising campaigns about the harm alcohol does to people's health and lives. People feel like the often very discrete "drink aware" messages that are heard on TV, do not carry a strong enough message and that they need to be more serious/improved when it comes to highlighting the harms of drinking alcohol excessively.

- There is an age-old problem with attitudes within mental health services when it comes to drug and alcohol issues. Mental health services need to stop turning people away from support, because they learn about a drug or alcohol issue, and instead recognise that people drink or use drugs because of an underlying mental health issue. Some people feel like there needs to speciality services available to people who have co-existing drug and alcohol, and mental health issues, where individuals will be taken seriously and will be supported for both conditions.

- There needs to be better education amongst the general public about addictions and why people develop them, with information how people can cope / address their issues. This goes for the individual people who have addictions themselves, their children, family members and employers. Everyone involved needs a better understanding and better access to support that will help them through it.

- People need support to recognise they may be developing an addiction sooner, so they can prevent reaching rock bottom.

"Addiction is a progressive illness. I used to look down on those people who sat on park benches or friends who I'd see drinking too much. And back then, I was drinking at levels at which I could have stopped. I wasn't aware of what was happening with my alcohol use, why I was drinking and how this was actually getting out of hand."

What helped / prompted people to get into recovery

- Finally finding the courage to be honest about their drug and alcohol issue with themselves and other people
- Building confidence by getting involved in activities that helped them to realise they could achieve things in life, i.e. courses at college
- Working on their attitudes towards themselves and developing their self-worth
- Breaking old connections and finding support networks where they don't feel judged
- The realisation that their addiction was impacting significantly on their health

"I realised I was killing myself. My drinking was a form of self-abuse. I'd pretty much given up. But then I had a realised I still had a lot to offer in this world. I could still contribute something positive. So, I reached out for support."

10 Health Economics

Health economics is about using resources efficiently and effectively to improve the population's health. This part of the needs assessment looks at what financial resources are available for substance use in the City, and value for money when we consider outcomes using some of the national tools, it is recognised that this does not includes charitable and privately funded services and support.

10.1 Adult's Service

The total expenditure (adults) for substance misuse in Birmingham was £16,388,000 in 2020/21. Total expenditure for alcohol misuse treatment in adults was £2,800,000. Total expenditure for drug misuse treatment in adults was £8,316,000. These are the summative expenditures for all associated service provision.

Other funding sources include the Office for Health Improvement and Disparities (OHID, previously Public Health England), with additional funding from:

Alcohol Capital Grant

The Public Health Division in partnership with CGL successfully bid for and received **£749,971** in April 2019 for the Birmingham Substance Use Service to refurbish and set up four new locality-based Recovery Hubs. These new Recovery Hubs underpin a transformed service model, which will deliver improved access to alcohol treatment for Birmingham citizens.

Rough Sleeping Drug and Alcohol Treatment Grant Scheme

The Public Health Division in partnership with CGL successfully bid for and received **£1,012,683** in March 2021 to fund specialist support for individuals in 2021/22 to access and engage with drug and alcohol treatment and move towards longer-term accommodation, supporting the work of wider homelessness and rough sleeping funding. BCC is currently awaiting confirmation that a similar amount of funding will be available for 2022/23.

Section 31 local authority grants for additional drug treatment crime and harm reduction activity in 2021/22 – Universal funding component

Birmingham was allocated **£1,209,000** in April 2021 by OHID to help local areas drive down the crime associated with the drug market, particularly acquisitive crime and violent crime, and the rise in drug-related deaths. At this juncture it is not known if this funding will be extended to cover 2022/23.

Additional drug treatment crime and harm reduction activity funding in 2021/22

The 14 local authorities in the West Midlands region have been allocated a share of **£1,192,500** by OHID to start commissioning additional inpatient alcohol and drug detoxification provision, which will increase the capacity within the treatment system. Birmingham's share of the **£1,192,500** is **£285,216** (24%) and all 14 local authorities are working in partnership via a Consortium. At this juncture, it is not known if this funding will be extended to cover 2022/23.

Total amount of additional funding from PHE/OHID is: **£3,256,870**

10.2 Children and Young People's Service

The total expenditure for specialist drug and alcohol misuse services for children and young people was £738,000 in 2020/21 for Birmingham. Young people's provision and funding is not split with regards to drugs and alcohol; frontline practitioners work with any presenting substance.

10.3 Spend and Outcomes

The Spend and Outcomes Tool (SPOT) provides a broad overview of spend and outcomes on a range of public health interventions (*Figure **27***). SPOT aims to help local commissioners improve people's health and wellbeing and reduce health inequalities through better information about value for money.

To enable comparison between different indicators, SPOT includes Interquartile Range (IR) scores. An IR-score between 1.5 and 3 signifies a potential outlier, whilst an IR-score above 3 indicates a probable outlier. These values are effectively equivalent to 1 and 2 standard deviations, respectively. Spend figures are based on spend per head per annum and calculated by dividing total spend by total resident population.

For further information on the methodology used for SPOT visit PHE SPOT Methodology and Interpretation [230].

Figure 27: Birmingham Spend vs Outcomes against statistical neighbours (CIPFA)

Birmingham is placed in the upper left quadrant. This indicates that Birmingham has higher spend and worse outcomes compared to the national average.

Interestingly, SPOT results are contradictory to local benchmarking data. As of 2020/21, Birmingham has a spend of £12.44 per head for adult substance misuse services, which is the lowest of all English core cities. The highest is Liverpool with a spend of £26.83 per head; more than double the spend of Birmingham. However, Birmingham ranks relatively poorly for successful opiate, non-opiate and alcohol completion rates compared to English core cities (5th out of 8 for each). When Birmingham is compared to statistical neighbours a similar pattern emerges whereby Birmingham's rank for spend (6th out of 11) is better relative to its outcomes (9th out of 11 for opiate and non-opiate successful completions; 11th out of 11 for successful alcohol completions).

A plausible explanation for higher spend in Birmingham, based on SPOT, is due to Opioid Substitution Treatment (OST). OST is defined as the administration of a prescribed (daily) dosage of opioid medicines to patients with opioid dependence problems. The medications used for OST are methadone and buprenorphine and are recommended by the National Institute for Health and Care Excellence (NICE) guidelines for opioid substitution treatment [NICE TA114]. There are several costs associated with the prescribing of OST (e.g. prescribing, dispensing, pharmacy and GP costs)[4]. In Birmingham, as of November 2021, there were approximately 3,300 service users within the CGL service receiving OST with an estimated cost of £200 - £250k per month.

10.4 Social Return on Investment

Social Return on Investment (SROI) is a framework to measure and account for the broader impact of environmental and social values in order to 1) reduce inequalities and environmental degradation, and 2) increase wellbeing by taking into account the social and environmental costs and benefits alongside the economic costs and benefits (A guide to Social Return on Investments; the SROI Network). This tool allows commissioners and policy makers to make informed decision when commissioning services.

According to the most recent estimates in 2016-17, for every £1 spent on drug and alcohol treatment services in Birmingham, there was an estimated social return on investment of £5.60 for individuals in treatment and £27.10 for individuals in treatment and recovery. The gross benefit per person was £9,640 (in treatment) and £46,761 for long-term gross benefit per person. Table 2 displays the benefits gained from Investment into drug and alcohol treatment in Birmingham.

[4] Pharmacy costs are for supervised consumption whereby the pharmacist or registered technician supervises the consumption of methadone or buprenorphine at the point of dispensing in the pharmacy. GP costs relate to Shared Care GPs who see clients on a 12-week cycle and carry out medication reviews.

Table 2: Estimated benefits gained from investment into drug and alcohol treatment in 2016/17

Offence Type	Estimated Crimes committed before treatment		Estimated Crimes after starting treatment	Drug Users	Alcohol Only
	Drug users	Alcohol Only	% Change	-29%	-45%
Shoplifting	245412	5405	Number of crimes prevented	148,941	2735
Theft of a vehicle	3307	15			
Theft from a vehicle	9922	25	Average crime-related cost	Drug Users	Alcohol Only
Domestic Burglary	1984	78		Before starting treatment (£) → After starting treatment (£)	Before starting treatment (£) → After starting treatment (£)
Non-domestic burglary	12568	44	Social costs	3616 → 2568	772 → 423
Robbery	3969	28	Economic costs	23836 → 16929	1367 → 750
Fraud	5292	15	***Social and Economic costs***	***27451 → 19498***	***2139 → 1173***
Criminal damage and arson	225	36			
Violence against the person	583	128			
Sexual Offences	90	30			
Begging	31090	1			
Drink/Drug driving	49	43	Gross Benefits	Drug Users (£)	Alcohol Only (£)
Other Theft	25137	82	Social Return	6,640,103	652,941
Drug offences	140897	13	Economic Return	43,771,520	1,156,863
Prostitution	32413	0	*Total*	**50,411,623**	**1,809,804**
Breach Offences	590	52			
Public Order	87	18			
Other Theft	428	45			
Total	***514055***	***6059***			

For every £1 spent on drug treatment services, there was an estimated social return on investment of £6.50 for individuals in treatment, and £30.00 for individuals in treatment and recovery. The gross benefit per person was £11,670 (in treatment) and long-term benefit per person was £53,665.

For every £1 spent on alcohol treatment services in Birmingham, there was an estimated social return on investment of £1.80 for individuals in treatment, and £15.50 for individuals in treatment and recovery. The gross benefit per person was £2,780 (in treatment) and £23,424 for long-term benefit per person.

In 2016-17, an estimated 514,044 crimes were committed by drug users and 6,059 crimes by alcohol (only) dependent users, before treatment. Shoplifting (47.7%), drug offences (27.4%) and prostitution (6.3%) were the most reported offences committed by drug users and shoplifting (89.2%) was the main offence for those with alcohol only problems. Substance misuse treatment is estimated to have prevented about 149,000 (a reduction of 29%) crimes committed by drug users and about 2,700 (a reduction of 45%) crimes by alcohol users.

The social and economic costs before starting treatment for drug users was £27,450. This reduced by about 29% to £19,498 after the start of treatment. The social and economic costs before treatment for alcohol only was £2,139, which reduced by about 45% to £1,173 after starting treatment.

10.4.1 Children and Young people

School-based prevention interventions, including those delivered as part of the curriculum, derive cost-benefits for society. For example, interventions to tackle emotional learning save money in the first year by reducing costs for social services, the NHS and criminal justice system, and have recouped £50 for every £1 spent [231].

Specialist interventions for young people's substance misuse are effective and provide value for money. A Department for Education cost-benefit analysis found that every £1 invested saved £1.93 within two years and up to £8.38 in the long
Term [232].

11 Key Findings

- Capturing true prevalence of drug and alcohol misuse in the population is challenging and is likely to be much higher than is currently captured.
- Evidence around the impact of the pandemic on substance use is still emerging and the longer-term impact on health and service demand is yet to be realised, however it is an important consideration in planning for future service and resource planning
- 1,140 individuals are in treatment at specialist alcohol misuse services in Birmingham (2019/20), which is almost a 42% reduction since 2016/17
- There are 10,525 problem drug users of opiate and/or crack cocaine (OCU) in Birmingham, of which 8,799 are opiate users and 6,817 are crack cocaine users. The rate of OCU was 14.2 per 1000 people which is significantly higher than the England (8.9) and the West Midlands (9.6) rates
- White men aged 30-49 years made up the highest proportion of CGL clients in treatment for opiate, non-opiate and alcohol problems
- In Birmingham there are an estimated 13,442 dependent drinkers, which represents 1.58% of the adult population (2019/20). This is higher than the England average (1.37%)
- The number of individuals not in contact with drug treatment services for an opiate problem in Birmingham (n = 4,114) has increased by 42.8% since its lowest number in 2012/13. This represents an unmet need of 46.9%, which is comparable to the national figure (46.3%)
- The number of individuals not in contact with drug treatment services for an OCU problem in Birmingham (n = 5,728) has increased by 53.6% since its lowest number in 2012/13. The unmet need (54.4%) is comparable to the national figure (53.4%)
- The number of individuals not in contact with drug treatment services for a crack cocaine problem in Birmingham (n = 3,887) has increased by 14.3% since its lowest number in 2012/13. The unmet need (57.0%) is lower than the national figure (61.3%)
- The number of individuals not in contact with treatment services for an alcohol problem in Birmingham (n = 11,830) has increased by 10.1% since its lowest number in 2014/15. This represent a large unmet need of 88.0%, which is higher than the national figure (83.0%)
- There are several inequalities that predispose marginalised groups to substance misuse. Therefore, there is a need to acknowledge intersectionality in the context of substance misuse to better understand diverse and complex treatment needs.
- Social return on investment is very high in terms of monetary value and reduction in crime
- For every £1 spent on drug and alcohol treatment services in Birmingham, there was an estimated social return on investment of £5.60 for individuals in treatment and £27.10 for individuals in treatment and recovery. The gross benefit per person was £9,640 (in treatment) and £46,761 for long-term gross benefit per person
- Substance misuse treatment is estimated to have prevented about 149,000 (a reduction of 29%) crimes committed by drug users and about 2,700 (a reduction of 45%) crimes by alcohol users

12 Recommendations

12.1 Recommendations to promote a partnership approach

- Increase engagement with drug and alcohol users through targeted activity (e.g. women less likely to be picked up by services than men)
- Create/enhance pathways between substance misuse services and other services such as the secondary mental health services, CJS and primary care
- Continuation of specific pathways from police custody (e.g. from police healthcare)
- Data sharing to prevent duplication and more efficient progression through concurrent treatment services
- Continuation of a centralised service that links into related services so that clients with complex needs are offered treatment in a timely and orderly manner
- Specialist services should engage with mainstream treatment providers to encourage engagements and successful completions in treatment
- Embed service user voice in treatment planning, evaluation, and service design
- Substance misuse should be included in future inclusion health (inequalities team) needs assessments and deep dives to highlight inequalities and intersectionality in vulnerable groups. For example: sex workers, mental health. This will lead to increased understanding and awareness of the challenges faced by these vulnerable groups

12.2 Recommendations to improve access to services

- A single case-management system that is used by all service providers across Birmingham. This would improve staff efficiencies, reduce administrative inefficiencies, enhance client engagement and experience, and improve access to services for potential clients
- Outreach programmes should be developed jointly by service providers, public health officers and substance misuse treatment service commissioners and coordinated between them to maximise contact with hard-to-reach communities
- Promote the presence and involvement of recovery champions across partnership organisations/services
- Locality based service provision for hot spots in the city

12.3 Recommendations to reduce harms and improve recovery

- Person centred approach offering individualised and flexible treatment, whilst acknowledging the socioenvironmental and demographic factors that cause inequalities related to substance misuse
- Promote client recovery through holistic treatment services that address wider determinants of health concerns (e.g. employment, housing)
- Harm reduction, maintenance and palliative care has been the focus within treatment services. More focus on recovery needs to be adopted within treatment services in Birmingham, in line with the National Drug strategy 2010 [234]
- More focus on prevention is needed, specifically on gateway drugs and alcohol in younger people and opiates in adults
- Improve awareness and knowledge of substance misuse in frontline (non-substance misuse) services by providing specialist training to staff
- Diversity and inclusion training to be a requirement for all staff in substance use service provision

- Ensure resources are distributed according to the level and specificity of substance misuse needs
- Focus on improving health-related outcomes. Spend per head is relatively low in Birmingham for substance misuse services but relatively poor for outcomes in comparison to statistical neighbours and core cities

12.4 Recommendations to improve knowledge and understanding of client base and local prevalence

- Data collection and quality needs to improve. This could be achieved by working with academic partners to collect qualitative and quantitative data on treatment interventions, outcome monitoring, recovery and unmet need
- Data should be routinely collected in education settings (young people) to gather information on early substance use, which could improve the effectiveness of preventative programmes
- More representative data are needed to understand the behaviours associated with and the prevalence of substance misuse. The sample nationally and regionally is not representative of the clients in treatment. More research in and engagement with hard-to-reach communities is warranted, as well as in the general population
- More granular data needed on drug types other than opiate and crack cocaine. Targeted research on prevalence of drugs for which the prevalence is not well established (e.g. opiates, crack cocaine, GBL, cannabis and crystal meth)
- A working group should be formed between relevant bodies (e.g. commissioners, subject experts, service professionals, service users) to develop an action plan for the routine collection of specific data
- Undertake robust research on effectiveness of treatment interventions
- Undertake robust research on efficacy of prevalence and substance use monitoring in different settings (e.g. schools)
- Research should be conducted by independent organisations (e.g. academic and 3rd sector) to detach from institutions that are perceived negatively by respondents and therefore influence the validity of data (i.e. research should not contain words like “crime” that could have an influence on participants)
- Conduct a deep dive focusing on mental health in relation to substance abuse (dual diagnosis)
- Substance misuse should be included in future inclusion health (inequalities team) needs assessments and deep dives to highlight inequalities and intersectionality in vulnerable groups. For example: sex workers, mental health. This will lead to increased understanding and awareness of the challenges faced by these vulnerable groups

13 Limitations

- Prevalence estimates at local authority level for drug types other than opiate, non-opiate and crack cocaine are not currently captured. More granular data are needed on a wider range of drug types
- NDTMS data are not always consistent with Fingertips data, which leads to ambiguity and potential reporting errors
- High fidelity data are unavailable at a local and national level for prevalence by drug type across all ages
- Readers should be cautious when making generalisations based on the data and evidence in this needs assessment. Some of the data are not representative of the general population. Furthermore, the data were largely derived from PHE fingertips and NDTMS, precluding secondary analysis of the data
- The scale of the problem on substance misuse is likely an underestimate. Unmet need represents the proportion of individuals in need of treatment but who are not currently receiving specialist treatment for substance misuse compared to prevalence. Given the propensity for surveys on substance use prevalence to introduce sources of error and provide underestimates [233], this would result in a greater unmet need than currently reported
- Unmet need may also be influenced by temporal lag in reporting. NDTMS data for prevalence after 2016/17 is not available. Therefore, estimated prevalence of OCU and alcohol users beyond this year has been based on the 2016/17 prevalence estimate. Adults in treatment is however reported on till 2020/21. The paucity of up-to-date available data may contribute to an underestimated unmet need

14 References

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