Children and Young People Substance Misuse

Topic information	
Topic title	*Children and Young People Substance Misuse*
Topic owner	*Christine Oliver and Jane Bethea*
Topic author(s)	*Caroline Keenan and Gemma Summerson*
Topic quality reviewed	*April 2016*
Topic endorsed by	*Jane Bethea, Christine Oliver and Tim Spink*
Current version	*April 2016*
Replaces version	*2012*
Linked JSNA topics	*Alcohol, Adult drug use*

Executive summary

Introduction

This JSNA chapter summarises need in relation to substance misuse in children and young people, describes factors associated with variations in use of drugs and alcohol and also describes local context in terms of service provision and use. Please consider this chapter in conjunction with Adult Problem Drug use and Adult Alcohol Use for cross cutting issues. In this chapter children and young people are defined as those aged under 25, and provides where possible data for younger school aged children.

Substance misuse can impact on both physical and emotional health. It can be associated with poor outcomes in relation to sexual health (including risk of teenage pregnancy), mental health, education, employment and training. Misuse is also associated with involvement in anti-social and criminal activity and can have a negative impact on family life. National findings suggest that most young people will experiment with substances as part of natural curiosity, but for some this experimentation will become problematic (Fuller, et al., 2013). Evidence suggests that drug use among young people in England has reduced over the last decade by approximately one third (Her Majesty's Government, 2010). However, the harms to young people associated with drug and alcohol misuse continue to raise concerns both nationally and locally.

Unmet need and gaps

- There is currently limited variation in the referral routes into specialist young people's substance misuse treatment. The majority of referrals come from education and the youth justice system.

- The available data makes it difficult to assess transition from young people's substance misuse treatment into adult substance misuse treatment; however, local services report that numbers transitioning are low.
- There is an under representation of young women in local specialist young people's substance misuse treatment, reasons for this are unclear and warrant further attention.
- New psychoactive substances have been raised by local service providers and by other agencies to be an issue. There is a lack of national and local data on extent of use, characteristics of users and harms associated with use and this requires further attention.

There is a lack of detailed information about the number and needs of children and young people in the City who have substance misuse needs but are not accessing treatment interventions.

Recommendations for consideration by commissioners

- Training should be provided to the wider children and young people's workforce on early identification, brief interventions and making appropriate referrals to substance misuse services.
- Efforts should be made to understand and improve barriers to access and engage with treatment services for females.
- Commissioners should monitor transition from young people and adult services, strengthening referral pathways to increase the number of young people with substance misuse needs who transition to adult services.
- Commissioners should remain abreast of information and data in relation to new psychoactive substances and monitor local emerging trends. Information should be disseminated to colleagues working with young people to ensure that harm reduction messages are relayed through both drug awareness education and through targeted and specialist treatment interventions.
- Commissioners should ensure continuous development within the young people's substance misuse treatment system. A regular consultation process with young people should also be implemented.

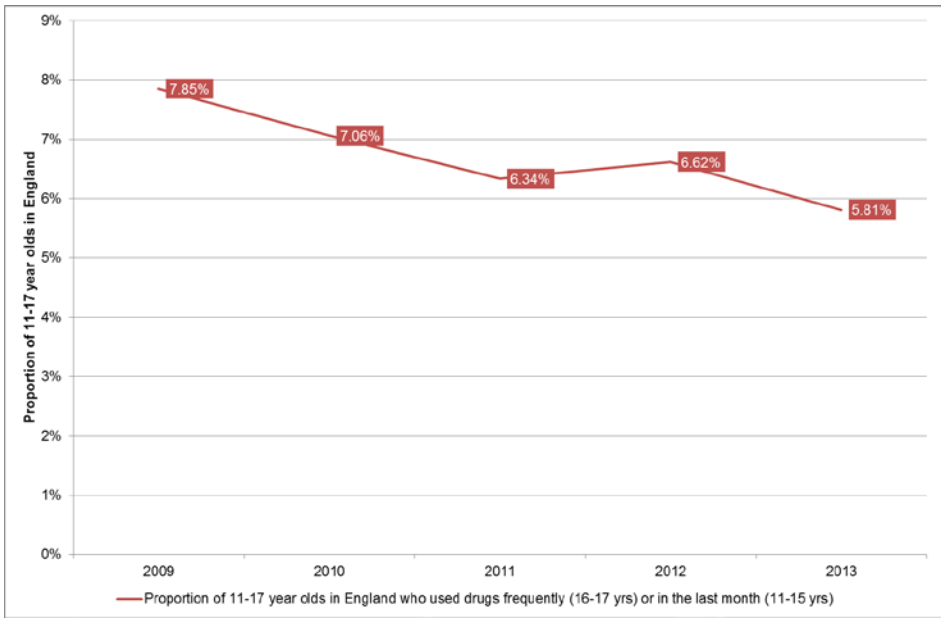
What do we know?

1) Who is at risk and why?

National prevalence

In England, rates of self-reported drug use are higher in young people than in the general population. In 2013-14, 3.1% of people aged 16-59 used drugs frequently (more than once a month in the past year) compared to 6.6% of young people aged 16-24 years (Her Majesty's Government, 2014). Figure 1 presents annual estimates of drug use in young people aged 11-17 in England, using figures from the Census 2011, the Crime Survey for England and Wales (2013-14) and the survey 'Smoking, Drinking and Drugs in Young People' (2013). As shown in this figure, between 2009 and 2013, frequent drug use reduced in this age group by 2.04 percentage points.

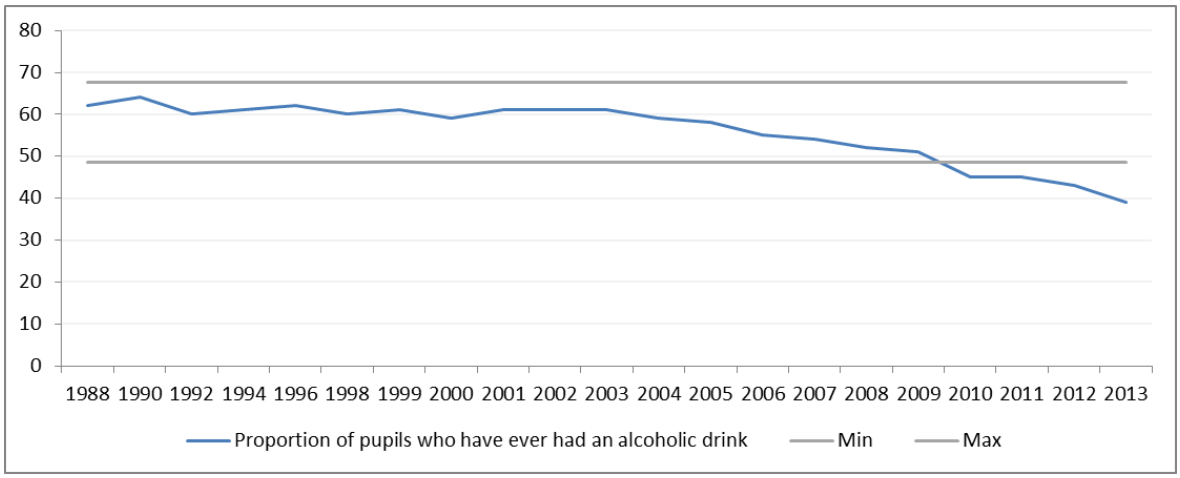
Figure 1: Proportion of 11-17 year olds in England who used drugs frequently (if aged 16-17) or in the last month (if aged 11-15): 2009 to 2013.



Sources: Fuller & Hawkins (2013) and Her Majesty's Government (2014)

In terms of alcohol, findings of The Smoking, Drinking and Drug Use in Young People survey (Fuller & Hawkins, 2013) suggest that since 1988 there has been a statistically significant reduction in the proportion of pupils aged 11-15 who report having consumed alcohol at least once (see Figure 2). In 1988 approximately 60% of young people aged 11-15 had ever consumed alcohol, compared to 40% in 2013. Of those young people in this age group who ever drank alcohol, the proportion that report drinking in the last week has also reduced over time, from 25% in 2003 to 8% in 2014 (Fuller & Hawkins 2013).

Figure 2: Proportion of pupils aged 11-15 years who have ever had an alcoholic drink: 1988 to 2013.



Source: Fuller & Hawkins (2013)

In relation to alcohol use in young people aged 16-24 years, it is estimated that 46% of young people in this age group have consumed alcohol in the last week, and 2% will have consumed alcohol on at least five days during the last week (Office for National Statistics, 2016).

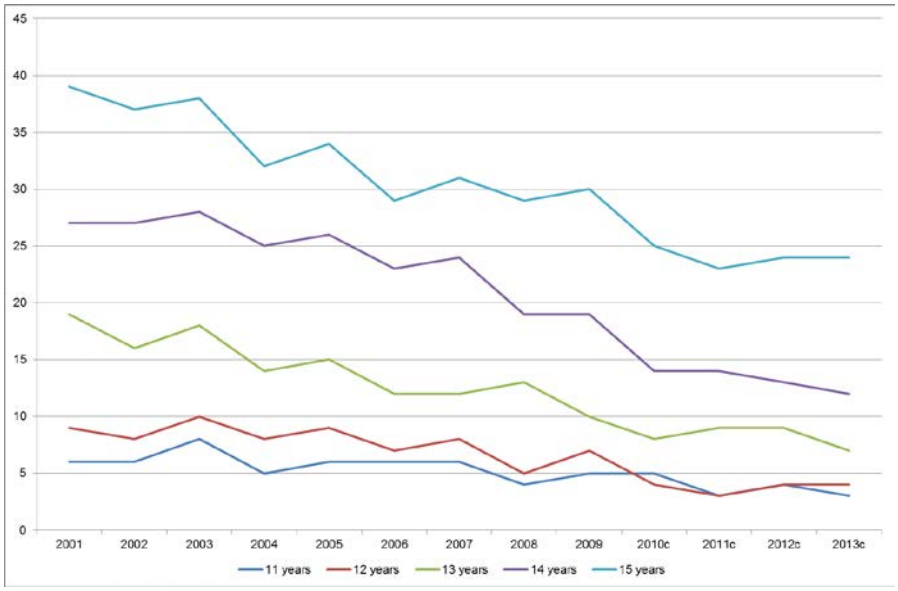
Drug and alcohol use: differences in relation to age, gender, ethnicity and deprivation

Age

The proportion of young people who report illicit drug use increases with age. As shown in Figure 3, approximately 24% of 15 year olds report having used drugs in the last year, compared to 12% of 14 years olds and less than 10% of 13, 12 and 11 year olds. Reported drug use is though declining and the most rapid reductions have been observed in the 13, 14 and 15 year old age groups (Fuller & Hawkins, 2013). Data from the most recent Crime Survey for England suggests that the level of any drug use in the last year across all groups, is highest in young people aged 16-19 years (18.8%) and in 20-24 year olds (19.8%) (Home Office, Drug Misuse: Findings from the 2014/15 Crime Survey for Engalnd and Wales 2nd Edition., 2015).

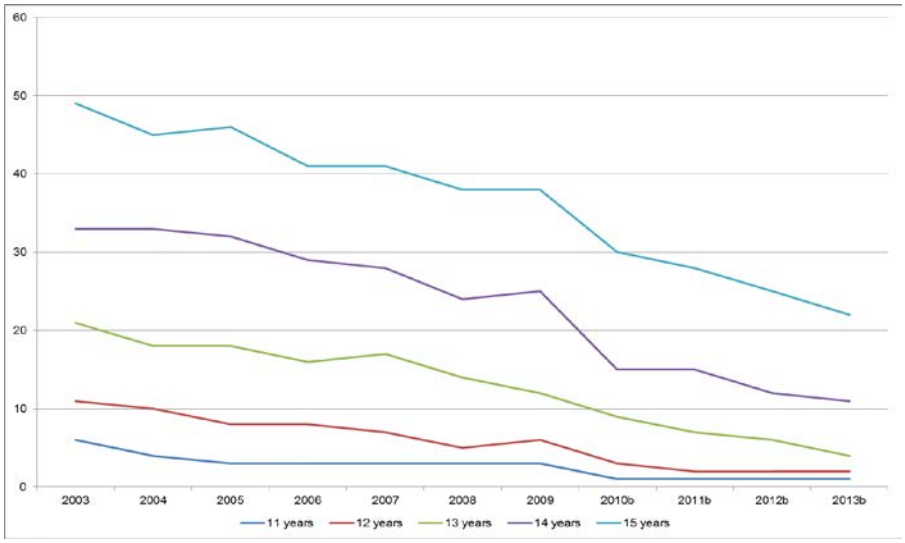
Age at which a person first drinks alcohol has been shown to be associated with risk of dependence in adulthood, with people who start drinking at 11-12 years being almost 10 times more likely to develop dependence issues (DeWit et al., 2000). Whether or not a young person aged 11-15 consumes alcohol is not associated with gender, but there is a strong association with age. Again based on the Smoking, Drinking and Drug Use in Young People Survey, the proportion of pupils who report consuming alcohol in the last week increases from 1% of 11 year olds to 22% of 15 year olds (Fuller and Hawkins 2013). The same source also provides evidence to suggest that the number of units consumed by young people in this age group has reduced overtime. In 2008, the average units of alcohol consumed by young people aged 11-15 was 14.6 per week, reducing to 8.2 in 2013.

Figure 3: Proportion of pupils aged 11-15 years who have taken drugs in the last year: 2001-2013.



[c] *Estimates since 2010 are based on weighted data.*

Figure 4: Proportion of pupils aged 11-15 who have consumed alcohol in the last week: 2001-2013

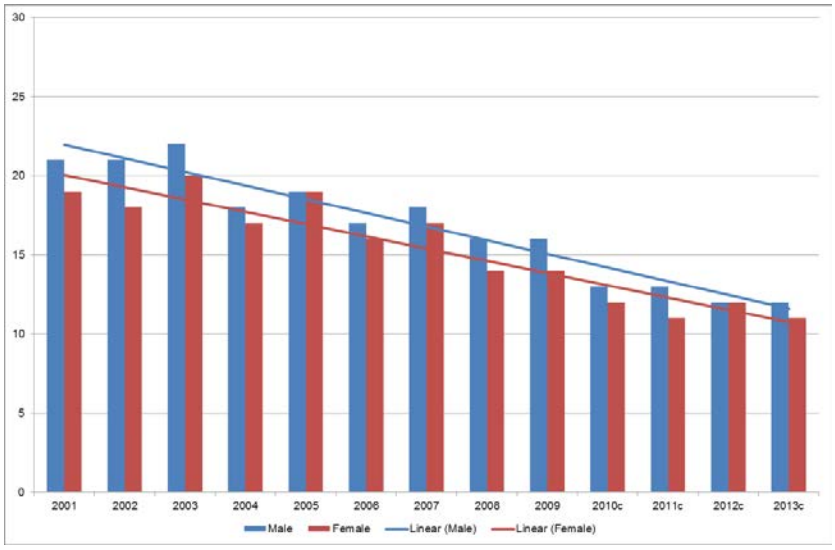


Estimates since 2010 are based on weighted data.

Gender

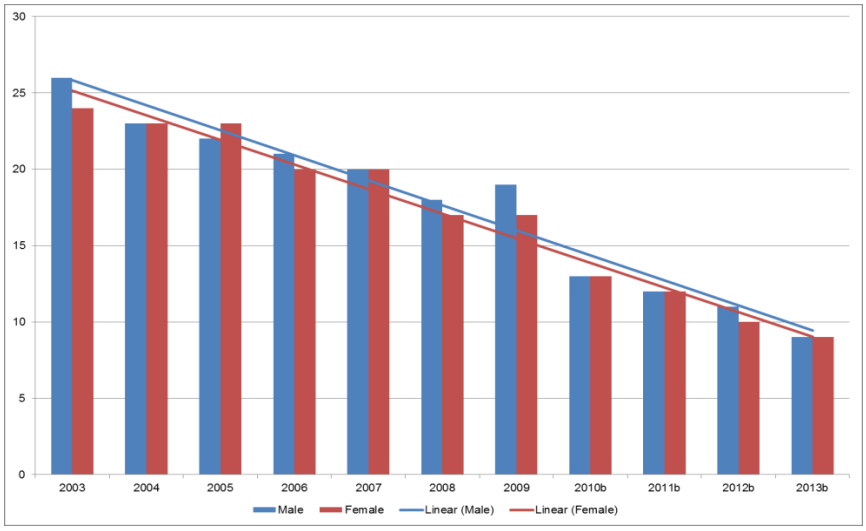
As shown in Figures 5 and 6, levels of self-reported drug and alcohol use in young people aged 11-15 years are similar for both males and females (Fuller & Hawkins, 2013). However gender differences are seen in older young people and according to data from the most recent crime and drugs survey, 24.9% of males aged 16-24 report having used illicit drugs in the past year compared to 13.8% of females (Crime and Drugs Survey 14/15). Gender differences in reported alcohol use in the last week are though less marked, with 43% of young women aged 16-24 reported having consumed alcohol in the last year compared to 49% of young men (ONS – see http://www.ons.gov.uk/ons/taxonomy/index.html?nscl=Alcohol+Consumption#tab-data-tables).

Figure 5: Proportion of pupils aged 11-15 years who used drugs in the last year by gender: 2001-2013



[c] *Estimates since 2010 are based on weighted data.*

Figure 6: Proportion of pupils aged 11-15 years who consumed alcohol in the last week by gender: 2001-2103.



[b] *Estimates since 2010 are based on weighted data.*

Ethnicity

In terms of alcohol, there is evidence of variation in use according to ethnicity. In young people aged 11-15 for example, 42% of white young people reported ever having consumed alcohol, compared to 32% of young people who described their ethnicity as mixed, 21% of young people who identify as black and 10% as Asian. The same study did not though find any differences in relation to ethnicity and drug use. (Health and Social Care Information Centre 2014 http://www.hscic.gov.uk/catalogue/PUB17879/smok-drin-drug-youn-peop-eng-2014-rep.pdf).

Deprivation

Overall (not just specifically for young people), drug use is highest in areas classified as urban, with 9.3% of people living in urban areas reporting drug use in the past year, compared to 6.5% of people living in rural areas (Home Office, Tables for 'Drug misuse:

findings from the 2014 to 2014 Crime Survey for England' Illicit drug use by personal, household and area characteristics and lifestyle factors., 2014). Also those living in areas classified as being most deprived are more likely to report drug use in the past year compared to those living in the most affluent areas (12.1% compared to 7.2%). Interestingly, use of Class A drugs is similar in those with lowest and highest income, with 3.4% of people with an income of less than £10,000 per annum reporting Class A use in the last year, compared to 2.8% of people whose income is in excess of £50,000 per annum. There is also evidence of variation in alcohol use in relation to deprivation, with people living in the most deprived areas being more likely to binge drink (defined as drinking at least double the guideline limits in a single day during the previous week) (Fone DL, 2013).

Factors that increase the risk of alcohol or substance misuse in young people:

A number of factors have been shown to be associated with increased risk of young people developing substance misuse problems. These include having a member of the family with drug or alcohol problems, being a victim of violence, having been sexually abused or witnessing violence (Kilpatrick, 2000).

In terms of young people and alcohol, a large scale study in the UK found a number of factors associated with drinking behavior in those aged 13-16 years (The Joseph Rowntree Foundation, 2011). Drinking behavior was found to be heavily influenced by degree of parental supervision and exposure to close family members or parents drinking or getting drunk. Young people who reported that a close family member drank alcohol on three to six days of the week were just over twice as likely to report drinking in the previous week compared to those whose family members did not drink alcohol. Ease of access to alcohol also influenced use, as did having peers who drank (The Joseph Rowntree Foundation, 2011).

Health and Social Consequences of Substance Misuse

Adolescence is a time of change and is also often the time where people will start misusing drugs and/or alcohol. It is a time of significant brain development and as such substance misuse is likely to have a comparatively greater effect during this period of the life course (Hagell, 2013). The impact of alcohol and drug use in young people can be both physical and psychological. The Department of Health recommends that alcohol is not consumed below 15 years of age (Donaldson, 2009) and more than 27% of deaths in 16-24 years old males have been linked with alcohol consumption (Department of Health, 2011).

Physical health implications of alcohol misuse in young people

Globally it is estimated that 9% of 2.5 million deaths that are directly attributable to alcohol occur in young people aged 15-29 years (World Health Organization, 2011). The physical health implications may be seen in the short term or in the longer term. Longer term health problems are likely to be associated with patterns of drinking established in adolescence, as problematic use in later adolescence can continue into adulthood and has been associated with increased risk of dependence (McCambridge J, 2011). Specific risks associated with alcohol consumption are described below.

Weight Gain

Alcohol has a high calorific value and as such can be associated with weight gain. Five pints of lager each week for example, equates to 44,200kcal per year. In terms of young people, there is evidence to suggest that alcohol intake in young people is associated with weight gain during adolescence (Berkey CS, 2008) and with having a higher percentage body fat (Vagstrand K, 2007).

Sleep Disturbance

Alcohol interferes with sleep patterns by reducing the amount of rapid eye movement sleep, leading to feelings of exhaustion (Drinkaware, 2015a). There is some evidence to suggest that alcohol use, particularly binge drinking is associated with sleep disturbance in young people. A study of 14,000 young people and adolescents found binge drinking to be significantly associated with both ability to fall and then stay asleep (Popovici I, 2013).

Injury

Young people who drink alcohol are at increased risk of injury. A multinational study of almost 50,000 young people aged 11,13 and 15 found that young people who reported excessive drinking (being drunk) were significantly more likely to have had an injury in the previous 12 months. Young people from England who reported excessive alcohol intake were 1.57 times as likely as those not reporting excessive drinking to have had an injury during the last 12 months (Pickett W, 2002).

Increased Blood Pressure (Hypertension)

Alcohol is a contributory factor in the development of hypertension (a form of sustained high blood pressure). Hypertension increases the risk of stroke, heart disease, vascular dementia and chronic kidney disease if untreated and costs the NHS more than £2 billion every year. Consuming more than three alcoholic drinks a day increases the chance of developing hypertension by up to 75% (Alcohol Concern, 2015b). In terms of young people, there is some evidence to suggest that differences in blood pressure are associated with variation in alcohol intake. In a study of 316 young people aged 18-26 years and adjusting for a number of factors including age, sex and BMI, the highest systolic and diastolic blood pressure values were observed in young people who reported drinking 3 or more alcoholic drinks each day (Gillman MW, 1995).

Cancer

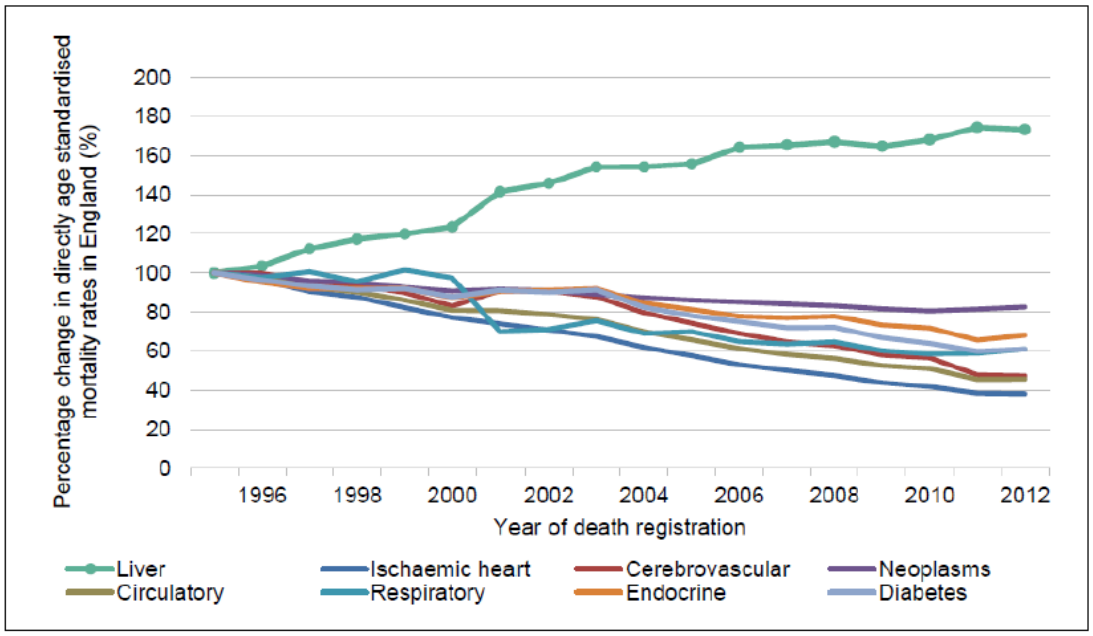
Alcohol is a known cause of seven types of cancer including cancer of the liver, bowel, breast, mouth, throat, esophagus and larynx. In 2011, alcohol was responsible for 3,000 breast cancer cases in the UK which account for 6% of all diagnoses. Every drink consumed per day increases the breast cancer risk in women by 7-12% (Alcohol Concern, 2015c).

Liver Disease

Excessive alcohol consumption can lead to liver disease. It can cause a build-up of fat in the liver, leading to alcoholic fatty liver disease and continued misuse can lead to inflammation of liver tissue. Cirrhosis, the final stage of liver disease, caused by scarred liver tissue is

largely irreversible and has a significant impact on life expectancy (NHS, 2013). Figure 7 shows that mortality from liver disease is increasing in England whilst mortality from other conditions, including diabetes, is reducing (Public Health England, 2014f).

Figure 7: Percentage change in mortality rates (England, 1995-2012) Source: Public Health England (2014f)



Physical health and drug misuse

Breathing problems

Smoking cannabis irritates the lungs and those who smoke cannabis on a frequent basis are likely to develop lung problems that are similar to tobacco smokers. Consequences of frequent cannabis smoking can include coughing, lung illness and increased risk of lung infection (National Institute on Drug Abuse, 2015).

Heart problems

Smoking cannabis increases the heart rate for up to three hours and thereby increases the risk of heart attack (National Institute on Drug Abuse, 2015). Cocaine also leads to increased heart rate and can lead to heart attacks and strokes which may cause sudden death (National Institute on Drug Abuse, 2013). Chronic heroin use can lead to collapsed veins, heart lining infections and pulmonary complications (National Institute on Drug Abuse, 2014).

Drug misuse in pregnancy

Approximately 70% of infants born to drug dependent mothers are affected in some way. Heavy use of cannabis during pregnancy can cause babies to startle more easily. Use of amphetamines and ecstasy may lead to decreased birth weight and increased risk of cleft palate and heart defects. Cocaine may be associated with placental abruption, prolonged rupture of membranes, intra-uterine growth retardation and differences in organisational responses and interactive behavior. Heroin use in pregnancy can lead to low both weight and premature birth. Infants may also show signs of heroin withdrawal which is treated with barbiturates and methadone (Nottingham Neonatal Service, 2014).

Aggression

Research has shown that the use of cocaine and alcohol is significantly associated with aggression. The causal pathway of cocaine use, alcohol use and violence is currently unclear however; this evidence suggests that people who use these substances are more likely to display aggressive behavior (Macdonald, et al., 2008).

Blood borne viruses

HIV diagnoses associated with injecting drug use have been low in recent years. Based on extrapolated data (Public Health England, 2013) it is estimated that there are 20 HIV Positive injecting drug users in Nottingham, two of which may be undiagnosed.

Hepatitis C remains a key area of concern in injecting drug use due to the levels of infection, transmission, the lack of a vaccine, low levels of treatment engagement and the serious effects that it has on health. It is estimated that between 130 and 150 million people globally are infected with chronic hepatitis C (World Health Organisation, 2015).

Injecting drug use remains the main route of hepatitis C infection in the UK, with 90% of those acquiring the infection having done so through injecting drugs. Approximately 50% of injecting drug users in England have been infected with hepatitis C. Around 25% of these will go on to clear their infection naturally, it is therefore estimated that around two in every five injecting drug users in the UK currently have a hepatitis C infection. Furthermore, Public Health England estimates that around half of the injecting drug users in the UK who are infected remain undiagnosed, either because they have not been tested or have been infected since their last negative test.

In England, only 3% of those who have a hepatitis C infection access clinical treatment. It is estimated that in the UK, 215,000 individuals have a chronic hepatitis C infection and hospital admissions and death as a result of hepatitis C are rising. This equates to approximately 2,000 people within Nottingham with a chronic hepatitis C infection. The rate of infection is highest in those aged 25-44 and is higher in males; these characteristics accurately reflect the local opiate using population (Public Health England, 2014).

Drug-related mortality

A process for recording and investigating drug-related deaths within Nottingham City continues to be co-ordinated by the Crime & Drugs Partnership. The local investigator receives reports of potential drug-related deaths occurring within the City and liaises with the Coroner's office to establish the cause of death, and where a death is found to be drug related; investigate the circumstances and background that led to the death.

All deaths are reported to the Confidential Inquiry Review Group; a multi-agency group that receives the investigation reports and identifies any learning points that might arise from them. All learning points are widely circulated across a range of treatment services and partner agencies in order to allow them to be implemented and acted upon to prevent further deaths in future.

A bi-annual report is produced by the Crime & Drugs Partnership summarising City drug-related deaths and identified learning points that arose from the investigations. In the 2011-13 drug-related death report, it was identified that there were ten confirmed drug related deaths in the city.

Mental health and alcohol misuse

Mental health problems directly affect 25% of the population during any given year (Singleton, Bumpstead, O'Brien, Lee & Meltzer, 2001) which was equivalent to 76,420 Nottingham citizens in 2013-14 (according to population statistics reported in the 2011 Census). For people dependent on alcohol, the prevalence of mental health problems is significantly increased to 45% (Coulthard, Farrell, Singleton & Meltzer, 2002). Whilst alcohol is known to have a negative effect on mood and memory (NHS, 2014a) and therefore might contribute to the manifestation of mental ill health, there is also evidence to suggest that alcohol is used to self-medicate existing mental health conditions (Mental Health Foundation, 2014).

In terms of young people, there is evidence to suggest that alcohol use is common amongst young people with a diagnosed mental health problem. A study of 2122 young people accessing mental health treatment reported that approximately one third with depression drank at least weekly, as did approximately 40% with a diagnosis of psychosis (Hermens DF Scott E, 2013).

Mental health and drug misuse

Drug use is commonly reported by young people with a diagnosed mental health problem, with just under a quarter of young people aged 12-17 reporting daily or almost daily cannabis use, rising to approximately one third by age 18-19 years (Hermens DF, Scott E, 2013) .

Schizophrenia

A considerable proportion of people with schizophrenia also smoke cannabis, although for many years the causal pathway for cannabis and schizophrenia has been unclear. Evidence suggests that cannabis consumed in high doses may lead to mental illness and psychosis (McLoughlin, et al., 2014).

Hallucinations

Smoking cannabis has been linked to temporary hallucinations which manifest as sensations or images that seem to be real (National Institute on Drug Abuse, 2015). Hallucinations may lead to increased risk of accident or injury.

Paranoia

Cannabis smokers often experience a sense of paranoia which leads sufferers to distrust others (National Institute on Drug Abuse, 2015). Feelings of paranoia may lead to increased risk of injury of both the sufferer and those around them.

Social consequences

Crime

Approximately one third of young adults in the criminal justice system have an alcohol misuse problem (Prison Reform Trust, 2012), and of all 91,000 offences committed by young people in England and Wales between 2013 and 2014, approximately 8000 were drugs offences (The Ministry of Justice, 2014).

Drug misuse is associated with crime in a number of ways. People who are dependent on drugs may steal in order to fund their addiction. It is estimated that for this reason up to half of all acquisitive crime is drug related. Violent crime is also often associated with drug and

alcohol misuse (DrugScope, 2015). Research has shown that effective treatment interventions significantly reduce drug related offending (Keen, et al., 2000).

Homelessness

Drug misuse is a known cause and consequence of homelessness. The misuse of drugs can be a causal or contributing factor to becoming homeless and drug misuse can also be used as a coping mechanism for dealing with homelessness. The prevalence of drug misuse is considerably increased amongst homeless people; approximately 80% of people who become homeless start using at least one new drug. Furthermore, the misuse of drugs and alcohol accounts for more than a third of deaths amongst homeless people. The lack of stable accommodation is considered a barrier to recovery for many homeless people and this group is recognised as more difficult for intervening services to access (Crisis, 2011).

Families

Drug and alcohol dependent parents can pose a risk to both themselves and their children. Substance misuse can reduce a parent's capacity to provide the necessary practical and emotional care to their children and this may result in reduced educational attainment, mental health problems and increased risk of drug misuse in the child. Whilst living with a child has been considered a preventative factor for developing severe substance misuse problems, substance misuse treatment has been shown to be effective in improving the lives of the families affected (The National Treatment Agency for Substance Misuse, 2012).

Wider determinants and risk of substance misuse

A number of factors that either directly or indirectly may increase risk of misuse of drugs and/or alcohol. Nottingham has higher than average incidence of some of these factors, including:

- A higher than national proportion of delivery episodes for a mother aged under 18 years (2% compared to 1.3% respectively);
- A higher than national proportion of children living in poverty (34% compared to 19.2% nationally);
- A higher than national rate (per 100,000 population) of sexually transmitted infections including chlamydia which has increased from 32 in 2011 to 40 in 2012;
- A significantly higher than national proportion of people aged 16-18 that are not in education, employment or training (6.3% compared to 5.3% respectively); and
- A higher than national proportion of school exclusions in Nottingham are attributable to substance misuse (4.9% in Nottingham compared to 3.5% nationally, 2012/13).

2) Size of the issue locally

Local Prevalence

Developing a clear picture locally around prevalence and patterns of drug use and alcohol consumption is challenging. It is though possible to estimate local prevalence by extrapolating and combining data from the national survey: Smoking, Drinking and Drugs in Young People (Fuller & Hawkins, 2013) which identifies substance misuse in 11-15 year olds, with the British Crime Survey (Her Majesty's Government, 2014) which identifies substance misuse in 16-24 year olds. These surveys suggest that there has been a reduction in the number of young people who use drugs; the proportion of 11-15 year olds

who took drugs in the last month reduced from 8% in 2009 to 6% in 2013 and the proportion of 16-24 year olds who are frequent drug users reduced from 8% in 2009 to 5% in 2013.

Figure 8 gives drug and alcohol use by age and sex, utilising data from the Crime Survey for England and Wales (Her Majesty's Government, 2014) and Smoking, Drinking and Drugs in Young People (Fuller & Hawkins, 2013), and local service data. This suggests that drug and alcohol misuse in young people is slightly higher in males than in females and increases with age. However, although there is little difference in terms of drug and alcohol use between young men and women in Nottingham, the proportion of young men and women in treatment is markedly different (70% males and 30% females), with females appearing to be under-represented. This may reflect referral patterns into the service as a third of all referrals are through the youth justice service, or it may be associated with different patterns of use in males and females.

Figure 8: Demographic composition of young drug users, alcohol users and young people accessing specialist interventions in Nottingham

	Drugs		Alcohol		Treatment	
Demographic	**National**	**Nottm**	**National**	**Nottm**	**National**	**Nottm**
Male[1]	54.34%	53.82%	52.35%	51.83%	66%	70%
Female[1]	45.66%	46.18%	47.65%	48.17%	34%	30%
11-12 years	11.78%	12.07%	8.63%	8.44%	1%[2]	2%[2]
13-14 years	36.70%	36.13%	54.89%	51.51%	19%	24%
15 years	25.79%	26.00%	41.69%	40.06%	25%	21%
16 years	12.85%	13.00%			27%	30%
17 years	12.88%	12.80%			27%	23%

[1]*Gender data is available only for the 11-15 age group.*

[2]*Includes all young people accessing specialist interventions who are 12 and younger.*

There is some local data available on patterns of consumption derived from the Healthy Schools Programme but this is limited in terms of number of respondents and that the data currently available is only representative of a small number of schools across the city. Data collected in 2015 suggests that approximately one half of young people in school years 9-13 have ever drank alcohol (300 of 598 respondents, 50.2%) and of these, half (153 of 296 respondents, 51.7%) had their first drink at age 11 or younger. Less than half had drank in the last 30 days and just over one in ten reported drinking once a week or more than once a week (34 of 298 respondents, 11.4%). The most common source of alcohol for this age group is parents/carers (149 of 256 respondents, 58.2%).

In terms of drugs, there is a single question posed in this survey that asks around use of cannabis, glues/solvents or 'other' substances. Overall the majority of respondents reported not having used any of these substances, 88.1% reported no use of cannabis and 93.1% no use of glues or solvents. Of the 69 (11.9%) who did report cannabis use, a third (33.3%) reported daily use.

Hospital admissions

In addition to limited local data on use of drugs and alcohol in young people, there is also young person specific data available around hospital admissions due to alcohol (Public Health England, 2016). This data suggests that there has been a reduction in the rate of alcohol specific admissions in young people aged under 18, both nationally and locally. In Nottingham in 2006/7-2008/9 the rate of admissions in this age group was 80 per 100,000 compared with 65 per 100,000 in the period 2011/12 -2013/14 (Public Health England, 2016).

In relation to illicit drug use and hospital admissions, in 2013/14 there were for all age groups in England, 7014 admissions where drug related mental health and behavioural disorders was the primary diagnosis. This represents an 11% reduction since 2003/04. In terms of young people, in 2013/14 there were 2213 admissions for this primary diagnosis in young people aged 24 and under, representing 28.1% of all admissions. This has remained stable over the past decade for this age group. Hospital admissions are also recorded where the primary diagnosis is for poisoning by illicit drugs and in 2013/14 there were 13,917 admissions in England for this cause, 3956 of which (28.4%) were in young people aged 24 years and under (Health and Social Care Information Centre, 2014).

3) Targets and performance

Improving access to services for young people continues to be a priority locally. This priority is measured through the number of new presentations to young people's specialist drug and alcohol treatment and the percentage of young people who leave drug and alcohol treatment in an agreed and planned way. Between 2012 and 2014, the number of new presentations to young people's specialist treatment in Nottingham reduced by 20%, from 206 new presentations in 2012-13 to 165 new presentations in 2013-14. Reasons for this reduction are unclear but could be associated with a reduction in the number of young people using drugs and consuming alcohol or could also be related to changes in service provision associated during this period.

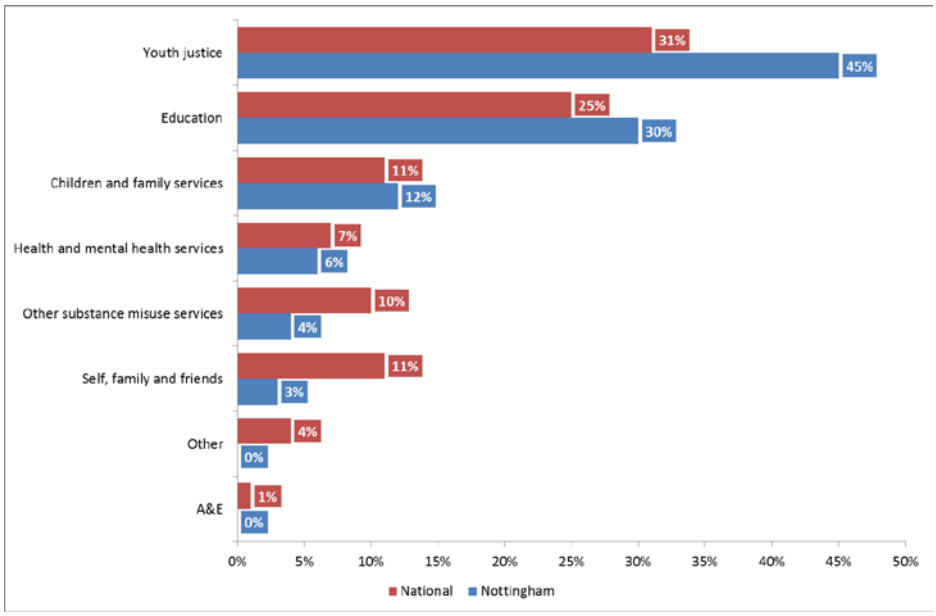
The percentage of young people who leave drug and alcohol treatment in an agreed and planned way also reduced, from 76% in 2012-13 to 63% in 2013-14 (Figure 14). Nottingham's performance has remained below the average performance of the core cities, notwithstanding a similar reduction in the core cities on this measure. Although planned exits have reduced, that only 7% of exits re-presented to treatment within six months may suggest that clients are exiting services at the right point of their treatment journey.

Figure 14: Planned exits as a proportion of all exits (Nottingham and core cities average: 2012-2014.



The Crime & Drugs Partnership is working to improve referrals from service areas that have been typically low in the past, including A&E and children and family services. As shown in Figure 15, in Nottingham referrals via education and youth justice account for 75% of the clients that access treatment. This is higher than the national average and again in comparison to this average, the proportion of referrals that come through other substance misuse services, through self-referral or through family friends is lower.

Figure 15: Referral sources into treatment



4) Current activity, service provision and assets

Current commissioned picture

Universal/prevention

Within Nottingham City, the Local Healthy Schools Programme focuses on identifying health issues of importance to pupils throughout school years, promoting early identification and addressing health needs. The drug and alcohol element of the programme is supported by DrugAware, a locally commissioned aspirational standard awarded to primary and secondary schools that engage in preventive activities known to discourage substance misuse. Currently 90% of Secondary Schools, 100% of Pupil Referral Units and 85% Primary Schools in the city are engaged in the programme and in order to achieve the standard, schools must provide a drugs curriculum and implement 'non-exclusionary' policies in response to substance use. They need to work in close partnership with the locally commissioned targeted and specialist young people's substance misuse service, Lifeline Journey, to 'inclusively' support pupils with identified substance misuse needs.

DrugAware is based on the premise that school-aged children will be less likely to engage in dangerous substance misuse if they understand the risks associated with it and if their school has clear policies in place for responding to substance misuse. In the short term, pupils will have greater awareness of the risks associated with substance misuse and strategies for resisting peer pressure to use drugs, using a strengths-based approach to increase skills and resilience. In the longer term, it is expected that substance misuse in school-aged children will decrease; children will be less likely to engage in anti-social behaviour and be more likely to do better in school.

Early Intervention; Identification & assessment

The NGAGE assessment continues to be a core tool used across the City, particularly in education provision, in the identification and assessment of a broad range of health issues affecting young people, including substance misuse. The Youth Offending Team's assessment tool, ASSET, is based upon a trigger scoring system in several key life areas, including substance misuse. If a substance misuse need is identified, professional consultation on how best to work with the young person to address their needs will be sought from Lifeline Journey and if appropriate, a referral will be made (with consent of the young person) into Lifeline Journey if specialist substance misuse intervention is required.

DrugAware provides targeted age-appropriate substance awareness course guidance and course material for teachers to deliver in classrooms and one-to-one substance specific workbooks for pupils with suspected or identified substance misuse needs. If a substance misuse incident occurs on school grounds, as part of the DrugAware standard, the 'inclusion policy' will include a referral to Lifeline Journey where an Education Link Worker will offer targeted or specialist substance misuse intervention, referring back to the school nurse or form or head tutor once substance misuse needs have reduced to continue aftercare support.

The City's wider children's workforce (universal, targeted & other specialist services) are expected to have a competent awareness of substance misuse issues to be able to identify and address substance misuse concerns early with the children and young people they work

with. Lifeline Journey, the commissioned specialist young people's substance misuse service, offer advice and consultation to professionals with substance misuse concerns regarding children and families they support. Lifeline Journey also offer professional training to 'skill up' the wider children's workforce to identify substance misuse concerns early and be confident and competent to deal with substance misuse issues appropriately.

Specialist

Lifeline Journey was commissioned in November 2014 following a review of the young people's treatment system and a re-tender of the specialist young people's substance misuse service (Compass Young People's Service was the specialist young people's treatment service until 31st October 2014). Lifeline Journey provides specialist substance misuse interventions for young people aged under 18 years. These are age appropriate and evidence-based, and include the provision of multiple interventions, including:

- Harm Reduction
- Cognitive Behavioural Therapy (CBT)
- Motivational Interviewing
- Relapse Prevention
- Family Work

Lifeline Journey also provides targeted provisions, having a named 'link' worker for the following vulnerable groups who are either identified as being 'at risk' of problematic substance misuse problems or 'hard to reach' groups:

- Children in Care
- Homeless Young People
- Not in Education, Employment or Training (NEET)
- Young People at risk of fixed or permanent exclusion
- Absentees
- Black Minority Ethnic Groups (BMEs)
- Young Offenders

Head2Head is a specialist CAMHs (Children & Adolescent Mental Health Service) Service and are locally commissioned to provide a broad range of mental health support, but specifically to the young people's substance misuse treatment system, they are commissioned to provide specialist substance misuse pharmacological interventions (prescribing) and specialist mental health interventions for young people experiencing mental health problems associated with their substance misuse (dual diagnosis). Head2Head work in partnership with Lifeline Journey to provide joint tailored structured one-to-one support to young people around their substance misuse and emotional health needs.

Treatment Penetration

Analysis of treatment penetration into the substance misusing population in Nottingham is a key measure of treatment impact as it assesses the extent to which young people's services are meeting the needs of those who have the capacity to benefit from it. By extrapolating survey results using population figures from the 2011 Census, it can be estimated that in 2013 there were 1,333 young people with the capacity to benefit from support from

substance misuse services. In the same year, the estimated penetration rate for young people in structured treatment in Nottingham was 18% in 2013. This is higher than the national comparator which during this period was 7%.

Treatment Profiles

Vulnerability

Substance misuse has been shown to correlate with other vulnerabilities including sexually transmitted infection, experience of domestic violence, not being in employment, education or training, experience of sexual exploitation, contact with the youth justice system and receiving benefits. Young people receiving specialist interventions are half as likely to be in full-time employment.

One of the key principles of the early intervention agenda is that appropriate substance misuse support should be provided as early as possible, irrespective of whether or not the service in which the client is engaged is a specialist substance misuse agency. Specialist services should be involved if and when substance use is causing harm and as such appropriate pathways must be in place in order for this system to operate effectively.

As shown in Figure 9, the majority of young people in treatment in Nottingham began using substances before the age of 15 years and half use two or more substances. There are no opiate/crack users or injecting drug users in local treatment services according to NDTMS data……

Figure 9: Substance specific vulnerabilities: Nottingham and England

Vulnerability	Nottingham	England
Opiate and/ or crack user	0%	2%
Alcohol user	1%	5%
Using two or more substances (including alcohol)	51%	61%
Began using main substance under 15	81%	90%
Current or previous injector	0%	1%

(Public Health England, 2014)

The presence of wider vulnerabilities in young people in specialist services is summarised in Figure 10. Nottingham exceeds the national average for presence of mental health problems and self-harm. There are also twice as many clients involved in offending and one and a half times the national rate of clients who are not in employment, education or training.

Lower levels of domestic abuse and child exploitation exist in Nottingham compared to England as a whole. This information could be interpreted as a positive finding for the city however; it might be an indication that local services are less effective at identifying vulnerabilities.

Figure 10: Wider vulnerabilities in young people: Nottingham and England

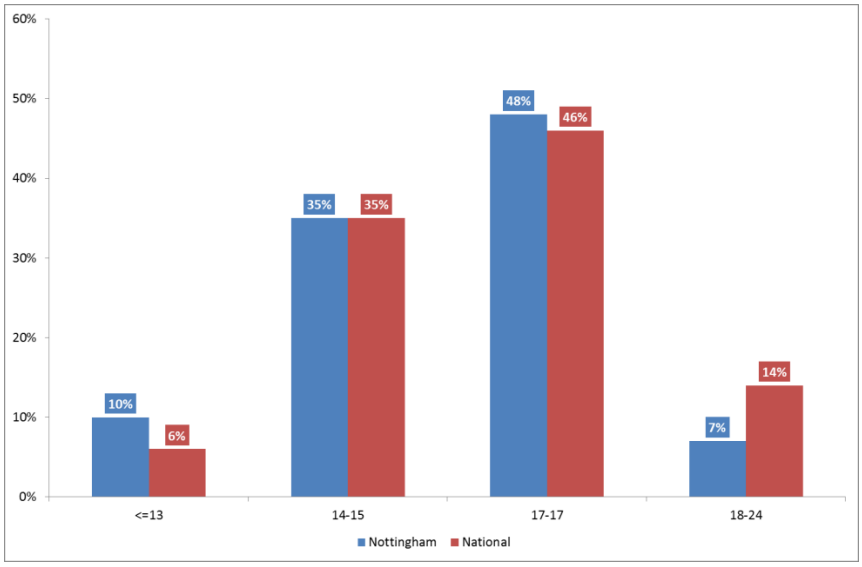
Vulnerability	Nottingham	England
Looked after child	9%	10%
Child in Need	4%	5%
Affected by domestic abuse	7%	17%
Identified mental health problem	16%	15%
Involved in sexual exploitation	1%	4%
Involved in self harm	19%	16%
Not in education, employment or training	26%	17%
No fixed about or unsettled housing	1%	2%
Involved in offending	49%	24%
Pregnant and/ or parent	3%	2%
Subject to a child protection plan	4%	5%
Affected by others' substance misuse	17%	16%

(Public Health England, 2014)

Client age

As shown in Figure 11, the profile of clients in young peoples' treatment services in Nottingham is similar to the national picture; with 35% of the population aged 14-15 years and 48% aged 17 years. The proportion of young people aged 18-24 years being managed by a young people's service in Nottingham is lower compared to national data. This is possibly an indication of appropriate pathways for transition to adult services or could also indicate completion of treatment prior to the client reaching 18. However there is limited data available in relation to transition from young people's to adult services and as such this is difficult to determine.

Figure 11: Age profile of clients in treatment during 2013-14 (Nottingham and England)

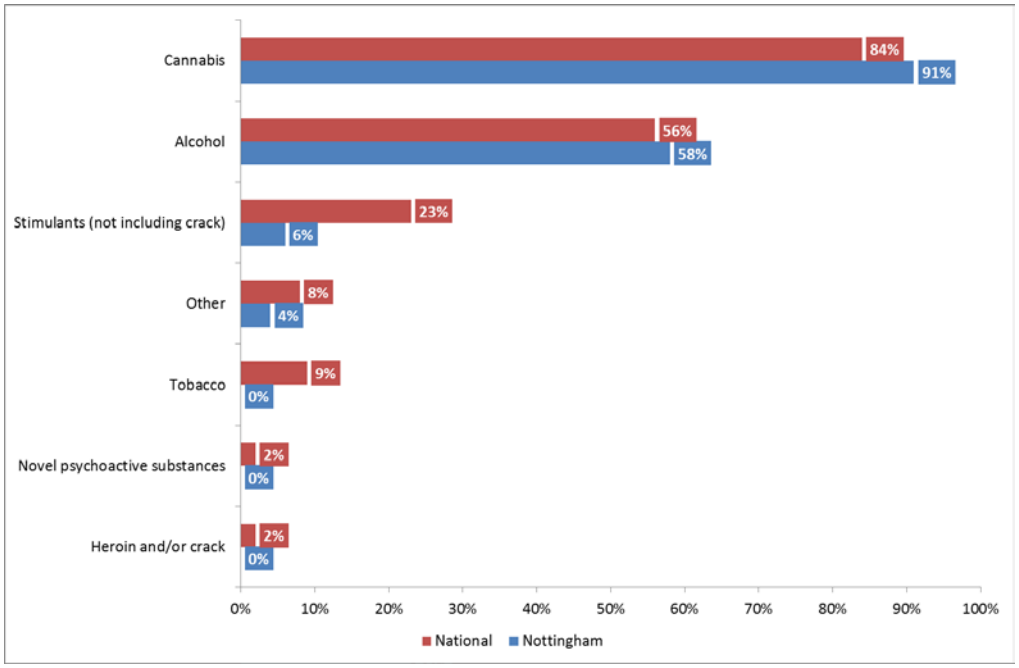


Substance type

As shown in Figure 12, in Nottingham and also nationally, cannabis is the most commonly reported substance, followed by alcohol and stimulants. New Psychoactive Substance (NPS)

use according to this data is not reported by young people in treatment in Nottingham. This is likely to be unrepresentative of actual use as these substances; particularly synthetic cannabinoids have been raised by services locally as being an issue both for young people and for adults. Why this use is not represented in local treatment service data is unclear. It may be related to recording in that use of synthetic cannabinoids for example could be recorded as cannabis use or it may be that service users under report use of these substances as they may not consider their use problematic.

Figure 12: Substance profile of clients in treatment during 2013-14



Gender

In 2013/14, 30% of the young people's treatment cohort was female (*n* = 72) and 70% male (*n* = 167) which mirrors national data. This gender difference may reflect higher levels of misuse in males or may be related to referral patterns, as approximately one third of referrals to the young people's service during this period came through the youth justice system.

As is shown in Figure 13 below, the needs of males and females differ both nationally and locally. Females in Nottingham are more likely to have a diagnosed mental health need, to be involved in self-harm, to use alcohol and be 15 or younger. Males are more likely to have educational, training and/or employment needs, be involved in offending and to cite cannabis as a problematic substance. These are key gender differences that enable a better understanding of the profiles of young people accessing substance misuse treatment today.

Figure 13: Presenting needs by gender: Nottingham and England

	Nottingham		England	
	Females	Males	Females	Males
Affected by domestic abuse	5%	8%	23%	15%
Diagnosed mental health problem	35%	8%	21%	12%
Involved in sexual exploitation	5%	0%	10%	1%
Involved in self-harm	40%	10%	30%	9%
Not in education, employment or training	20%	29%	13%	20%
Involved in offending or antisocial behaviour	35%	55%	16%	28%
Cited alcohol as a problematic substance	63%	54%	71%	49%
Cited cannabis as a problematic substance	88%	95%	75%	91%
Aged 15 or under	58%	44%	53%	44%

5) Evidence of what works

There is a large body of evidence and research relating to 'what works' for substance misuse treatment. National policy outlines the strategy and direction of substance misuse treatment focus and delivery, such as Drug Strategy 2010 - Reducing Demand, Restricting Supply, Building Recovery: Supporting People to Live a Drug Free Life (HM Government, 2010) and The Government's Alcohol Strategy (HM Government, 2012).

National clinical guidelines, frameworks and standards clearly set out how services and interventions should be designed to best meet the needs of the service user, such as the Care Quality Commission (CQC) Standards and the National Institute for Health and Care Excellence (NICE) Guidance. NICE guidelines [PH52] - Needle and syringe programmes (March 2014) contains a number of recommendations in relation to young people and clearly states that there is a need to develop and implement a local, area wide policy on providing needle and syringe programmes and related services to meet the needs of different groups of young people aged under 18 who inject drugs. It also advises to make the governance responsibilities of drug services and safeguarding boards clear and the local safeguarding board should ratify a locally written policy.

Specific guidance in relation to ensuring services are designed to be young people friendly, welcoming and accessible is You're Welcome - Quality criteria for young people friendly health services (DH, 2011), whilst the standards highlighted within Practice standards for young people with substance misuse problems (CCQI, 2012) bring together guidance based on the available evidence and emphasise the need for a sensitive, non-judgemental and collaborative approach to identifying risk, assessing all needs, and offering help and support.

There is a strong evidence base for safeguarding and child protection, placing great emphasis on the importance of multi-agency working and information sharing and building

upon existing individual and family strengths to increase resilience and protective factors. The below are key national safeguarding and child protection documents:

- The Munro Review of Child Protection: A child-centred system (DfE, 2011)
- Hidden harm report on children of drug users (ACMD, 2011)
- Working Together to Safeguard Children - A guide to inter-agency working to safeguard and promote the welfare of children (HM Government, 2013)
- Signs of Safety in England - An NSPCC commissioned report on the Signs of Safety model in child protection (NSPCC, 2013)

Evidence-based approaches to working with children and young people include:

- Issues in Earlier Intervention - identifying and supporting children with additional needs (Department for children, schools and families, 2010)
- Every child matters (HM Government Green Paper, 2003)
- Five Ways to Wellbeing (the new economics foundation, 2008)

Local strategies, such as Nottingham City Health & Wellbeing Strategy 2010-2014, Nottingham City Children & Young People's Plan 2010-2014 and Nottingham City Family Support Strategy 2010-2014 highlight a number of local priorities, including reducing substance misuse among young people, and align local issues to a City agenda, promoting strong multi-agency working across all Nottingham City services to best meet the needs of children, young people and their families.

6) What is on the horizon?

Projected Service Use

A reduction in the number of young people accessing specialist interventions for drug and alcohol misuse has been observed over the previous three years. Furthermore, national and local prevalence data suggests that the number of young people misusing drugs and alcohol is reducing. Figure 16 shows that, if the trend observed in specialist treatment continues, by 2018 as few as 71 young people may access specialist interventions. This projection is very limited as it is based on the assumption that the prevalence of drug and alcohol misuse in young people will continue to reduce at the same rate, and it does not account for a potential rise in substance misuse as a result of emerging new psychoactive substances. The projection is also based on the only three years of data available which reduces accuracy.

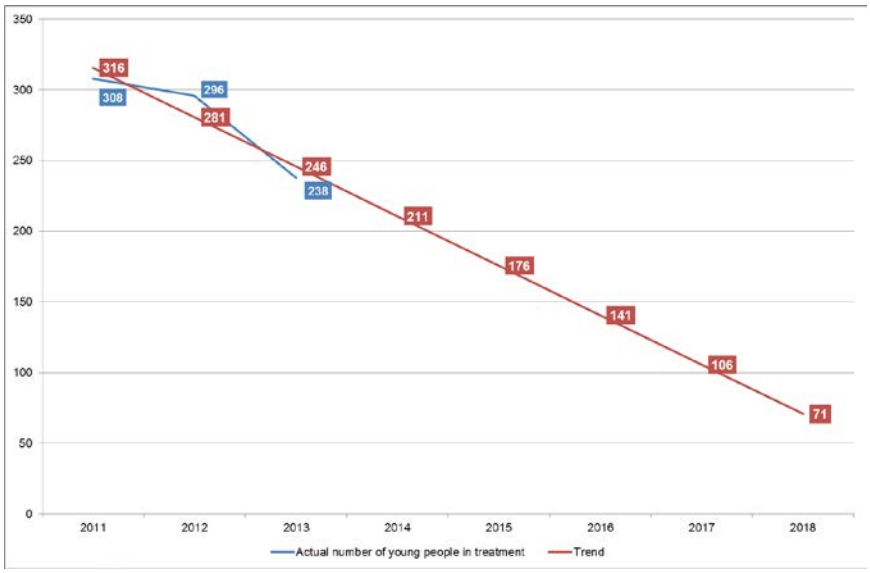
New Psychoactive Substances (NPS)

NPS present a particular issue as both the nature and number of available products changes rapidly. In 2010 there were for example 41 novel NPS reported in the European market, rising to 81 in 2013 (EMCDDA–Europol, 2014). The 2014/15 Crime Survey for England and Wales found that 2.8% of young adults aged 16-24 reported use of a NPS in the last year, with use higher in young men (4%) (Home Office, 2015). Young people who reported illicit drug use and alcohol use were also more likely to report NPS use (Home Office, 2015).

Data on prevalence of use of these substances at a local level is though limited. A recent review of the evidence reported that data on overall prevalence, characteristics of users, and

information on the long term and acute harms of use was limited and required further attention (Home Office, New Psychoactive Substances in England: A review of the evidence, 2014). Locally NPS has been raised by a number of agencies, including young people's services, as an issue but the extent of use is not known. Nottingham City Council are working with the University of Nottingham on a research study that will aim to give some local insight into extent of NPS use and characteristics of users. This work will be completed in August 2016.

Figure 16: Actual number of young people in treatment in Nottingham and projected trend: 2011-2018

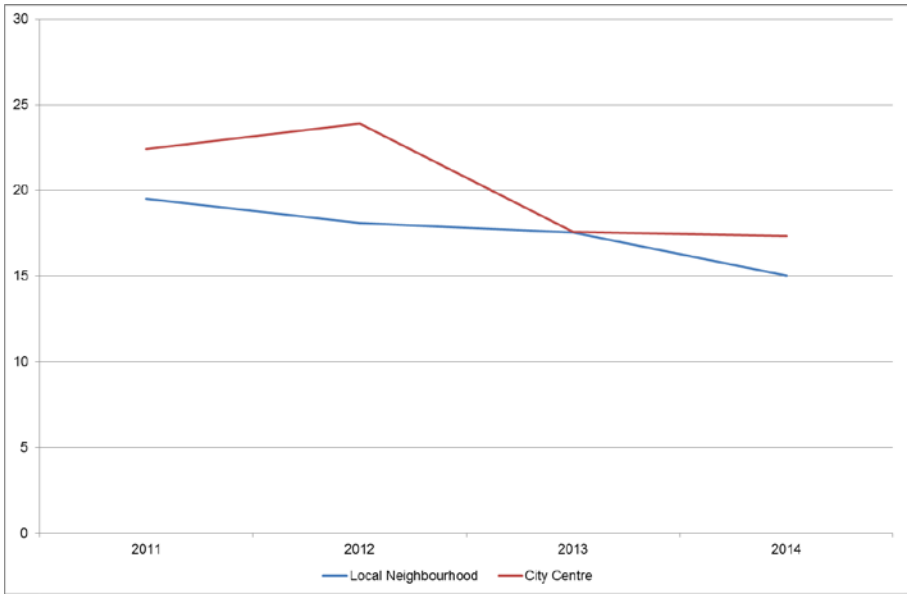


7) Local Views

In July 2015, the Crime & Drugs Partnership carried out a consultation with 215 service users, service managers and staff, partner stakeholders, voluntary sector services, family and carers and the general public. The results showed that over 50% of respondents felt that substance misuse services were either very or fairly easy to access and 60% of respondents felt that it was very or fairly easy to refer someone to the correct substance misuse service for the first time. Over 48% of respondents disagreed or strongly disagreed with the age limit of 18 for young people's treatment services and felt that the age limit should be increased.

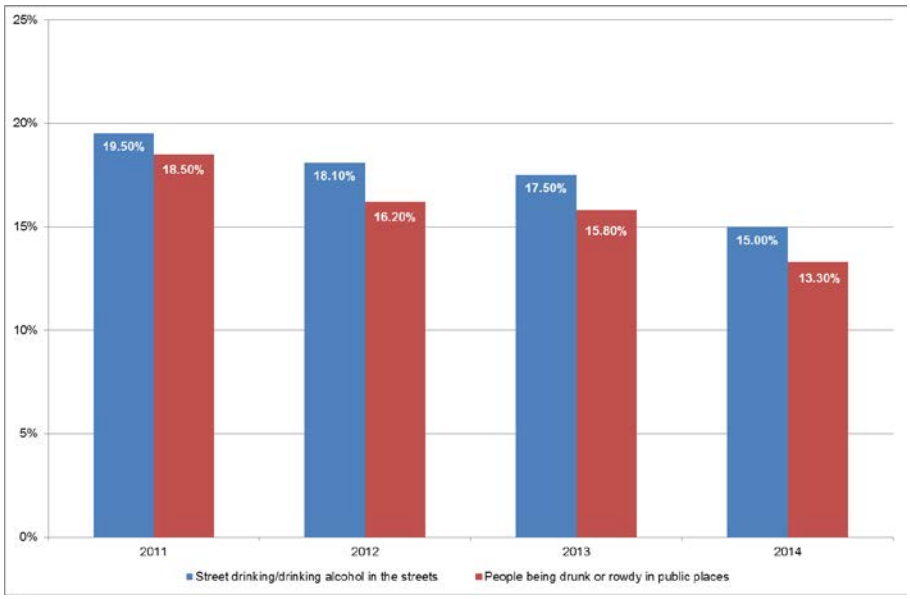
The opinions of citizens in respect of anti-social behaviour issues are sought annually via the Respect for Nottingham survey. The survey asks residents about their opinions on people using and dealing drugs both in their local neighbourhood and in the City Centre. The results, summarised in Figure 17, show a general decline in the proportion of respondents who felt that drug use or dealing drugs was a fairly or very big problem in the local neighbourhood. However, dealing and using drugs remains one of the highest public concerns city-wide.

Figure 17: Proportion of Respect Survey respondents who felt that drug use and drug dealing was a fairly or very big problem in their local neighbourhood and in the City Centre



According to the last four years of survey results, the percentage of respondents who felt that street drinking and drinking alcohol on the street in their local neighbourhood was either a fairly or very big problem reduced from 19.5% to 15%. A similar reduction was observed in the percentage of respondents who said that people being drunk or rowdy in public places within their local neighbourhood was a very of fairly big problem (18.5% to 13.3%, as shown below in Figure 18).

Figure 18: Percentage of Respect Survey respondents who felt that alcohol was a fairly or very big problem in their local neighbourhood (2011-2014)



What does this tell us?

8) Unmet needs and service gaps

- There is currently limited variation in the referral routes into specialist young people's substance misuse treatment. The majority of referrals come from education and the youth justice system.
- The available data makes it difficult to assess transition from young people's substance misuse treatment into adult substance misuse treatment; however, local services report that numbers transitioning are low.
- There is an under representation of young women in local specialist young people's substance misuse treatment, reasons for this are unclear and warrant further attention.
- New psychoactive substances have been raised by local service providers and by other agencies to be an issue. There is a lack of national and local data on extent of use, characteristics of users and harms associated with use and this requires further attention.

There is a lack of detailed information about the number and needs of children and young people in the City who have substance misuse needs but are not accessing treatment interventions.

9) Knowledge gaps

- The extent of use and impact of novel psychoactive substances is unknown, both for adults and for young people.
- It is difficult to assess the levels of transition from young people's substance misuse treatment to adult drug and alcohol treatment with the data using the data currently available.
- Statistics pertaining to drug and alcohol treatment reported by Public Health England via the National Drug Treatment Monitoring System are restricted and, as a result, cannot be lawfully published prior to official release. The information contained within this chapter includes data up until 2013-14 which means that more up to date information cannot be taken into account if the findings are to be shared in a public arena. This issue represents a challenge and knowledge gap for commissioners.

What should we do next?

10) Recommendations for consideration by commissioners

- Training should be provided to the wider children and young people's workforce on early identification, brief interventions and making appropriate referrals to substance misuse services.
- Efforts should be made to understand and improve barriers to access and engage with treatment services for females.
- Commissioners should monitor transition from young people and adult services, strengthening referral pathways to increase the number of young people with substance misuse needs who transition to adult services.
- Commissioners should remain abreast of information and data in relation to new psychoactive substances and monitor local emerging trends. Information should be disseminated to colleagues working with young people to ensure that harm reduction messages are relayed through both drug awareness education and through targeted and specialist treatment interventions.

Commissioners should ensure continuous development within the young people's substance misuse treatment system. A regular consultation process with young people should also be implemented.

Key contacts

Gemma Summerson, Strategy and Commissioning Officer, Nottingham City Council, Gemma.Summerson@nottinghamcity.gov.uk

Caroline Keenan, Senior Performance and Insight Officer, Nottingham City Council, Caroline.Keenan@nottinghamcity.gov.uk

References

Alcohol Concern (2015b) *Factsheet: Alcohol and Hypertension*.

Alcohol Concern (2015c) *Factsheet: Alcohol and Breast Cancer*.

Berkey CS, R. H. (2008). Weight gain in older adolescent females: The internet, sleep, coffee and alcohol. The Journal of Pediatrics, 153(5), 635-639.

Coulthard, M. Farrell, M. Singleton, N. Meltzer, H. (2002) *Tobacco, Alcohol and Drug Use and Mental Health*. London: The Stationery Office. Available at: www.statistics.gov.uk
[Accessed 13 November 2015]

Department of Health. (2011). A Summary of the Health Harms of Drugs. London: National Treatment Agency for Substance Misuse.

DeWit DJ, Adlaf EM, Oford DR, Ogbourne AC (2000). Age at first alcohol use: A risk factor for the development of alcohol disorders. American Journal of Psychiatry 157:745-750.

Donaldson, L. (2009). Guidance on the Consumption of Alcohol by Children and Young People. London: Department of Health.

Drinkaware (2015a) Alcohol and sleep, Available at: https://www.drinkaware.co.uk/check-the-facts/health-effects-of-alcohol/effects-on-the-body/alcohol-and-sleep (Accessed: 4th April 2016).

EMCDDA–Europol. (2014). EMCDDA–Europol 2013 Annual Report on the implementation of Council Decision 2005/387/JHA: In accordance with Article 10 of Council Decision 2005/387/JHA on the information exchange, risk assessment and control of new psychoactive substances. Available: http://www.emcdda.europa.eu/attachements.cfm/att_229598_EN_TDAN14001ENN.pdf.

Fone DL, F. D. (2013). Socioeconomic patterning of excess alcohol consumption and binge drinking: a cross-sectional study of multilevel associations with neighbourhood deprivation. BMJ Open, doi:10.1136/.

Fuller, E., & Hawkins, V. (2013). Smoking, drinking and drug use in young people in England in 2013. London: Health and Social Care Information Centre.

Fuller, E., Henderson, H., Nass, L., Payne, C., Phelps, A., & Ryley, A. (2013). Smoking, drinking and drug use among young people in England in 2012. London: Health and Social Care Information Centre.

Gillman MW, C. N. (1995). Relationship between alcohol intake with blood pressure in young adults. Hypertension, 25, 1106-1110.

Hagell, A. (2013). Adolescent Substance Use: AYPH research summary No 15, November 2013. London: Association for Young People's Health & Public Health England.

Health and Social Care Information Centre. (2014). Statistics on Drugs Misuse, England 2014. Retrieved March 11, 2016

Her Majesty's Government. (2003). Every Child Matters. Norwich: TSO (The Stationery Office).

Her Majesty's Government. (2010). Drug Strategy 2010 Reducing Demand, Restricting Supply, Building Recovery: Supporting people to live a drug free life. London: Her Majesty's Government.

Her Majesty's Government. (2014). Drug misuse: Findings from the 2013 ro 2014 CSEW second edition. Retrieved November 21, 2015, from https://www.gov.uk/government/statistics/drug-misuse-findings-from-the-2013-to-2014-csew

Hermens DF Scott E et al (2013). Frequent alcohol, nicotine or cannabis use is common in young persons presenting for mental healthcare: a cross sectional study. BMJ Open, doi:10.1136/bmjopen-2012-002229.

Hermens DF, L. J.-W. (2012). Pathways to alcohol-induced brain impairment in young people: a review. Cortex, 49, 3-17.

Home Office. (2014). New Psychoactive Substances in England. A review of the evidence. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/368587/NPSevidenceReview.pdf.

Home Office. (2014). Tables for 'Drug misuse: findings from the 2014 to 2014 Crime Survey for England' Illicit drug use by personal, household and area characteristics and lifestyle factors. Retrieved from https://www.gov.uk/government/statistics/tables-for-drug-misuse-findings-from-the-2013-to-2014-csew: https://www.gov.uk/government/statistics/tables-for-drug-misuse-findings-from-the-2013-to-2014-csew

Home Office. (2015). Drug Misuse: Findings from the 2014/15 Crime Survey for England and Wales 2nd Edition. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/462885/drug-misuse-1415.pdf.

Kilpatrick D.G., Acierno R., Saunders B., Resnick, H.S., Best C.Cl & Schnurr P.P. (2000). Risk factors for adolescent substance misuse and dependence: data from a national sample. Journal of Consultant Clinical Psychology. 68(1):19-30.

McCambridge J, M. J. (2011). Adult consequences of late adolescent alcohol consumption: a systematic review of cohort studies. PLoS Med, 8e1000413.

National Institute on Drug Abuse, 2015. *DrugFacts: Marijuana.* [Online] Available at: http://www.drugabuse.gov/publications/drugfacts/marijuana [Accessed 19 November 2015].

NHS (2014a) *The risks of drinking too much,* Available at: *http://www.nhs.uk/Livewell/alcohol/Pages/Effectsofalcohol.aspx* [Accessed: 26 August 2015].

NHS (2015) *Cirrhosis,* Available at:*http://www.nhs.uk/Conditions/Cirrhosis/Pages/Introduction.aspx* (Accessed: 4th April 2016).

Office for National Statistics. (2016). Drug use, alcohol and smoking. Retrieved March 2016, 14, from http://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/drugusealcoholandsmoking

Pickett W, B. W. (2002). Multiple Risk Behaviour and Injury. Arch Pediatr Adolesc Med, 156, 786-793.

Popovici I, F. M. (2013). Binge drinking and sleep problems among young adults. Drug Alcohol Depend, doi:10.1016/j.drugaldep.2013.02.001.

Prison Reform Trust. (2012). Old Enough to Know Better? A briefing on young adults in the criminal justice system in England and Wales. http://www.prisonreformtrust.org.uk/portals/0/documents/oldenoughtoknowbetter.pdf.

Public Health England. (2014). Young people's substance misuse data: JSNA support packKey data for planning effective young people's substance misuse interventions in 2015-16. 2014: Public Health England.

Public Health England (2014f). *The burden of liver disease in the East Midlands.* Available at:

http://www.empho.org.uk/Download/Public/13149/1/East%20Midlands%20Liver%20Disease%20Briefing%202014.pdf [Accessed 27 August 2015].

Public Health England. (2016). Local Alcohol Profiles for England. Retrieved March 12th, 2016, from http://fingertips.phe.org.uk/profile/local-alcohol-profiles/data#page/10/gid/1938132833/pat/6/par/E12000004/ati/102/are/E06000018

Singleton N, Bumpstead R, O'Brien M, Lee A, Meltzer H. (2001) Psychiatric Morbidity Among Adults Living In Private Households 2000 London: The Stationery Office p32.

The Joseph Rowntree Foundation. (2011). Young people, alcohol and influences. A study of young people and their relationship with alcohol. https://www.jrf.org.uk/report/young-people-alcohol-and-influences#jl_downloads_0.

The Ministry of Justice. (2014). Youth Justice Statistics: 2013/14 England and Wales. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/399379/youth-justice-annual-stats-13-14.pdf.

UK Drug Policy Commission. (2010). Drugs and Diversity: Ethnic minority groups. Learning from the evidence. UK Drugs Policy Commission.

Vagstrand K, B. B. (2007). Eating habits in relation to body fatness and gender in adolescents - results from the 'SWEDES' study. Eur J Clin Nutr, 61, 517-525.

World Health Organization. (2011). Global Status Report on Alcohol and Health. Geneva: WHO.