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Emerging Drug Trends in Lancashire: Nightclub Surveys

Phase Three Report

LANCASTER UNIVERSITY

LANCASHIRE DRUG AND ALCOHOL ACTION TEAM

Breaking the cycle of substance misuse

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Introduction

Emerging Drug Trends: A Research Programme

This is the third report from the Lancashire Drug and Alcohol Action Team (LDAAT)-funded Emerging Drug Trends (hereafter EDT) research programme (2010-13), with Phase Three undertaken by Dr Fiona Measham, Dr Karenza Moore, Zoë Welch and assistants at Lancaster University. The LU/LDAAT EDT programme explores changing trends in legal and illicit drug use across Lancashire and its policy implications through a series of studies in different leisure contexts and with different communities and social groups. This report presents the findings from Phase Three of the ongoing programme exploring alcohol and drug use in nightclubs situated in four towns and cities across Lancashire.

Phase Three builds on the findings of Phases One and Two of the research programme[1]. Phase One surveyed customers in the High Street night-time economies (hereafter NTE) of four town and city centres across Lancashire to assess use of alcohol, illegal drugs and novel psychoactive substances (hereafter NPS) or so-called 'legal highs' in the NTE (Measham et al 2011). Phase Two featured focus groups and short surveys with both 'mainstream' and 'marginalised' groups of young adults to explore their attitudes towards, and experiences of, legal and illicit drug use (Moore et al 2011). Phase Three is a pioneering survey of alcohol and drug consumption in 'standard' High Street nightclubs selected at random from a short list of venues identified as nightclubs across the four chosen locations. In Phase Three we also expand on some of the key findings from the earlier studies, such as the practice of preloading with alcohol before going out and the prevalence of 'Bubble' use, a term used in the north west of England for mephedrone and more broadly for any unidentified white powders with stimulant effects (Measham et al 2011; 2011a).

Phase Three has two main research aims: firstly, to assess patterns and prevalence of alcohol and illicit drug use including NPS amongst adults frequenting standard nightclubs in a region of England and secondly, to compare standard nightclubs with a specialist dance event to explore whether a musical, stylistic and pharmacological distinction between nightclubs and dance events currently exists, and if so, how such a distinction might be defined and operationalised.

[1] The reports from Phase One and Phase Two can be downloaded at www.ldaat.org.

Phase Three: Undertaking *In Situ* Surveys in 'Standard' High Street Nightclubs

Having captured data about adults' substance use on the streets of Lancashire's NTE in Phase One, we saw an opportunity to build on this work by surveying customers at those 'standard' High Street nightclubs that populate the majority of UK town and city centres. These are venues that may be owned by national chains and typically have local resident DJs or CD/computer systems playing chart pop, commercial dance and commercial R&B music[2].

Academic research exploring drug use in nightclub settings in the UK has tended to focus predominately on dance music events or 'dance clubs' where illicit drug use tends to be higher than in both general population surveys and amongst bar customers (Measham et al 2001; Measham and Brain 2005; Measham and Moore 2009). However to the best of our knowledge there has never been an *in situ* survey of alcohol and drug use in 'standard' or 'mainstream' nightclubs (hereafter nightclubs) that the majority of the UK late night dancing population frequents. Hence in Phase Three we have attempted to fill this gap in the knowledge base.

This report commences with an outline of and justification for the *Methods* used in Phase Three. We then present *Socio-demographic Data* from the nightclub surveys, followed by sections exploring key findings in more depth: *Drinking and Smoking Amongst Customers in Lancashire Nightclubs* and *Prevalence and Patterns of Illicit Drug Use in Lancashire Nightclubs*. *Conclusions* and *Policy Recommendations* are then drawn, with a focus on the implications of these findings for LDAAT, as commissioners of this research. The *Conclusions* and *Policy Recommendations* sections were produced in collaboration with LDAAT. The *Appendices* contain the observational reports for the six fieldwork nights alongside details of a novel urine analysis pilot study and a detailed breakdown of the data collected.

[2] Today the acronym R&B is used instead of the full term rhythm and blues and has evolved to refer to modern, 'mainstream' soul and funk-influenced pop music that developed in the wake of disco's waning appeal in the early 1980s. Commercial R&B often fuses this soul and funk-influenced pop music with other genres including hip hop, rock and power ballads, which lends it an even broader appeal. Alongside chart pop and commercial dance, commercial R&B was the music we heard played most often in the nightclubs we surveyed.

Methods

This section details the survey and non-survey methods we employed to gather data about the legal and illicit drug use of nightclub customers situated in Lancashire's NTE.

Sampling

In order to provide comparative data to Phase One, in Phase Three we have used the same four fieldwork sites as Phase One, selected in consultation with LDAAT as being representative of a range of characteristics across the county and within different police localities. These are: Burnley, Chorley, Lancaster and Preston.

Defining a 'Nightclub'

Given that Phase Three aimed to survey customers in nightclubs selected at random in the four localities we first had to go through a process of defining a 'nightclub', as opposed to other late licensed leisure venues, in order to draw up our short list of nightclubs from our long list of all licensed premises. This proved to be challenging. There is a taken-for-granted understanding of what is and is not a nightclub, yet in an environment of increasingly complex licensing laws and varieties of licensed leisure venues it proved difficult to identify and isolate the defining characteristics of what defines a 'nightclub', at least in the UK context.

Our starting point was the need to distinguish between nightclubs and:

- Off-licenses, that is those 'off-trade' premises which are licensed to sell alcohol but which have no 'entertainment' aspect to their trading activities;
- Late licensed 'fun' pubs and bars that might have a DJ and/or dancefloor. These have become increasingly popular since changes to licensing laws and the expansion of the NTE from the mid 1980s onwards in the UK (Chatterton and Hollands 2003; Hadfield 2006). Customers at these and other bars would have been captured by our Phase One surveys;
- Lap dancing venues, which require a 'sexual entertainment' license. This is because this study was looking at consumption in standard nightclubs where all customers are freely able to

dance, rather than sexual encounter venues where it is predominantly female employees who are paid to dance and male customers who pay to watch them dancing;

- Venues with a late license but which are not open to the general public on a regular basis, such as function rooms, membership clubs, political party venues and working men's clubs.

Following consultation with the local Police Licensing Officers (PLOs) and Licensing Teams, we compiled a full list of over 1,800 licensed premises in the four fieldwork areas. We then utilised a set of criteria to identify those premises which could be considered nightclubs and to exclude other forms of late licensed leisure venue, resulting in a shortlist of 15 possible venues. The shortlist included genre-specific clubs (e.g. R'n'B nightclubs) and student venues.[3]

Based on nightclub opening times, size of fieldwork towns, time period at each venue and size of research team, we surveyed two nightclubs on any given fieldwork night in the three towns/cities with a population of over 40,000 population and one nightclub in the town with a population under 40,000. This led the research team to survey seven nightclubs out of our shortlist of 15 in March 2012. These seven nightclubs were randomly selected from the shortlist of 15 by being pulled out of a 'hat' and ranked according to the order in which they were chosen.

In April 2012 and June 2012 we surveyed two more standard High Street nightclubs in Lancaster that had been included in the shortlist of 15 nightclubs but not pulled out of the 'hat', specifically chosen to provide a booster sample for Lancaster. We also undertook one fieldwork night at a nightclub from our original shortlist of 15 that we identified as putting on 'dance events' with nationally renowned dance DJs (see 'Undertaking a Comparative Survey at a Dance Event' section below). Hence we surveyed seven nightclubs that were randomly selected from our shortlist of 15 nightclubs across the four town and cities and a further three that were purposively sampled, two of which were on the original shortlist and one that was not open in March 2012.

Participation and Refusal

[3] Further details of the research design and definition of a 'nightclub' will be provided in forthcoming journal articles.

Having compiled our sample, we made contact with the owners or managers of our first choice venues in each area. This contact was supported by the police and/or PLOs (the main point of liaison between venues and the various authorities) as well as Licensing Officers in each area[4]. Where possible, we met with the key contacts in order to explain the purpose of the research, what it would entail on the night and to examine the venue prior to the research.

The first two nightclubs in each area were approached and asked to participate, with the understanding that if any refused, we would move down the list in rank order. All nightclub management agreed to participate except one who said that he would prefer not to. This reluctance was conveyed to the research team via the city centre's PLO who explained that the nightclub "would rather not take part", which we accepted as we did not want to 'push' the venue to participate[5]. We were told by the PLO this particular club had been under scrutiny from the licensing authorities in the past for drug-related incidents and therefore the management might have been concerned about the risk to their future licensing applications if drug use on the premises was disclosed by their customers. In this case we approached the manager of the third choice club on our list for that location who agreed to take part.

Undertaking a Comparative Survey at a 'Dance Event'

Therefore this report discusses the findings from a total of ten nightclubs we surveyed across six nights, seven nightclubs selected at random and a further three purposively selected (two from our shortlist of 15), from an overall pool of over 1,800 licensed premises in four Lancashire towns and cities. The 'dance event' was chosen because of its contrasting music policy to the 'standard' High Street nightclubs although the event took place in a venue that was included in our shortlist of 15 nightclubs. Our original aim was to survey more dance events but we discovered to our surprise that there were no regular dance events or dance clubs operating in the four localities during the fieldwork period in spring 2012 and there were only a very limited number of irregular dance events running. Throughout this report we have included the dance event in our overall nightclub sample, but given that there were differences in

[4] Licensing Officers (LOs) are the administrative officers within the Local Authority who issue the licenses. The Police Licensing Officers (PLOs) work on the ground, visiting premises to ensure the licensing conditions are being upheld.

[5] Our preference is that venue managers and staff are supportive of our research and willingly participate in the process.

terms of alcohol and illicit drug use, we also compare the findings from our dance event with the 'standard' High Street nightclubs (see 'A Comparative Survey at a Dance Event' in the *Findings* section).

Gaining access to dance clubs/dance events proved to be challenging. We were able to gain access to only one of three dance events timetabled to occur during our data collection period (March to June 2012). We were unable to access the other two dance events because although the promoters and DJs gave their consent for the research to be carried out at their dance event, the venue managers refused. In both cases the reason given was the perceived disruption it would cause to the smooth running of the events which they anticipated would be very busy. Despite our best efforts to reassure the managers of our many years' experience conducting surveys in licensed leisure venues and our understanding of their commercial and safety concerns, we were unable to persuade them otherwise.

Survey Method

We surveyed a total of ten nightclubs on six fieldwork nights. The fieldwork was undertaken in each of the four Lancashire towns and cities on four separate Saturday nights in March 2012 (seven venues), one Thursday night in April 2012 (the dance event) and another Saturday night in June 2012 (two venues). Saturdays were chosen both to compliment the research in Phase One, which was carried out on Friday nights, and in accordance with the views of venue managers and the local police that Saturday was the busiest night of the week.

Following discussion between the research team and with the venue managers, surveys were conducted from around 11pm onwards, just after each nightclub opened its doors and started filling up, so that the research team approached customers at their lowest levels of intoxication during their night out (Measham and Moore 2009). The nightclubs tended to fill up at staggered times so we were able to choose the order in which to conduct the surveys at the two venues accordingly, at around 11pm for the first venue and 12.30am for the second. However, some clubs that had anticipated receiving customers at around 11pm in fact did not receive any customers at all until after midnight. This was most notable in Burnley, and so the research team instead undertook observations in the town centre's pubs and bars whilst waiting for the clubs to fill up with customers. The data collection period ended at between

12:45am[6] and 3am, by which time some customers were very intoxicated, increasingly challenging to engage with and on occasion became aggressive towards research team members.

All research team members wore visible identification badges and carried clipboards. Any (potential) respondents who required further information were given flyers with details of the researchers' website[7] and/or one of the researchers' business cards. Lancashire Constabulary was briefed about the surveys in advance via the key contact at LDAAT. Specifically Lancashire PLOs were briefed about the surveys in advance and where possible met with research team members on the fieldwork night to facilitate liaison 'on the ground' (see below for more details).

Research team members usually worked either in pairs or alone but within sight of one another. Potential participants were approached at random and politely asked if they would like to participate in a short survey about their alcohol and drug use, with an explanation of the purpose of the research. Participants were assured of anonymity in taking part and they gave verbal consent for inclusion in the study. No names were asked for or given. Where an individual declined to participate in the study, numbers and gender were recorded so that the refusal rate could be calculated. Typically venues had a quiet corner where potential respondents could be intercepted on their way to and from different parts of the club. Given the volume of music and layout of some of the nightclubs, a number of the surveys took place in smoking/'chill out' areas and in entry queues (away from the earshot of the door staff and other customers). In order to respect customers' nights out, the commercial business and health and safety in venues, as well as facilitate more conducive interview conditions within the limitations of the nightclub setting (Measham et al 2001), researchers tended to stay away from bar areas, fire exits and busy dance floors.

Negotiating Degrees of Access

For all but one nightclub full access was provided on the fieldwork night. However, on arrival at one nightclub the research team had to negotiate degrees of access with the management and security staff. On arrival at this particular venue, research team members were told access would only be partial; the research team were restricted to interviewing customers in the reception area, the entry queue and the

[6] The Lancaster nightclub survey undertaken on 2nd June was abandoned at 12.45am due to unacceptable levels of aggression from nightclub customers towards research team members.
[7] Please see www.clubbingresearch.com

smoking area (the latter two being immediately outside the venue) but were not allowed into the main room (which had a bar and a dance floor). It remains unclear as to why this occurred, but there appeared to have been an overeager interpretation by front of house staff on the fieldwork night of the owner's 'rules'. After attempts to negotiate full access failed and in order to maintain good relations with the venue's staff, partial access was accepted by the research team members in attendance.

Survey instrument

The Phase Three study utilised the research design and survey instrument developed by Measham in the 1990s and 2000s for *in situ* surveys with thousands of dance club customers (Measham et al 2001; Measham and Moore 2009) and bar customers (Measham and Brain 2005) in the UK NTE. The survey instrument was also adapted by Measham and Moore for use in the Phase One report (Measham et al 2011). The survey instrument was a two-sided A4 questionnaire, which collected basic socio-demographic data and use of alcohol, cigarettes and illicit psychoactive drugs. The list of drugs was determined prior to the survey by the research team and both legal and illegal drugs were included. After respondents provided consent, the researcher completed the questionnaire with each respondent based on the responses given.

As in Phase One, police officers encountered during the course of each of the four surveys were approached by the researchers, the research was explained to them and they were asked for general observations on the events and atmosphere in the town and if appropriate, in the nightclubs being surveyed that night. PLOs, police community support officers (PCSOs), nightclub management, security and bar staff all provided invaluable perspectives about the survey sites and broader NTE including police/management relations; the popularity (or otherwise) of certain events; venue policies regarding queue management, entry and dealing with potentially aggressive customers; processing those caught in possession of illicit drugs; and crowd dispersal at closing times.

Fieldwork reports from each of the fieldwork sites written by the lead researcher the day after each night's work can be found in Appendix A.

Data analysis

Data were analysed using the Statistical Package for the Social Sciences Version 19.0 (SPSS 19) and are presented descriptively. Frequency tables can be found in Appendix B.

NTE Survey Population

Overall, 343 people provided valid answers for the LDAAT Phase Three nightclub surveys. In total 436 people were approached of which 85 people refused and 8 people were either deemed to be too intoxicated or walked away without completion of the nightclub survey. Therefore the non-response rate is 21% or 1 in 5. This is considerably higher than our previous research in 'dance clubs' (see Moore and Measham 2009; Measham et al 2011b) and raises interesting issues about *type* of drug consumed, as well as the level of intoxication when attempting to obtain informed consent from prospective research participants.

The six fieldwork nights of data collection were comprised of:

1. Saturday 3rd March 2012: in Preston, 81 respondents participated in the survey (24% of the overall Phase Three sample, and 9% of the total club admissions[8]) at two nightclubs;
2. Saturday 10th March 2012: in Lancaster, 87 people participated in the survey (25% of the overall sample, and 8% of the total club admissions[9]) at two nightclubs;
3. Saturday 17th March 2012: in Burnley, 62 people participated in the survey (18% of the overall sample) at two nightclubs;
4. Saturday 24th March 2012: in Chorley, 27 people participated in the survey (8% of the overall sample) at one nightclub;
5. Thursday 26th April 2012: in Lancaster, 65 people participated in the survey (19% of the overall sample, and 23% of the total club admissions) at one dance event held in a nightclub;
6. Saturday 2nd June 2012: in Lancaster, 27 people participated in the survey (6% of the overall sample) at two nightclubs.

[8] Following the fieldwork night, we requested total admissions and total bar takings data from each club (See Appendix C). Not all clubs were able to provide the data. Where the data was available, the sample is listed as a percentage of the overall club population.

[9] Admission figures for venue 2.2 counted customers exiting and re-entering the building either to smoke or to go out with smoking friends for a chat and 'chill', therefore the figure will not be a true reflection of the actual number of admissions.

This means that overall 50% of the Phase Three sample was surveyed in Lancaster, 24% in Preston, 18% in Burnley and 8% in Chorley. The higher figures for Lancaster reflect the three extra nightclubs surveyed over the course of two additional fieldwork nights in April and June 2012. The low figures for Chorley reflect the smaller sized town and the lower number of customers attending the one nightclub surveyed.

Triangulation of Datasets on Illicit Drug Use

Laboratory Analysis of Novel Psychoactive Substances

The findings from the Phase One research highlighted that there was significant self reported use of 'Bubble' yet there was also confusion amongst respondents about what this white powder was thought to be (Measham et al 2011; 2011a). This heightened concern amongst both LDAAT and the local constabulary about the public health risks relating to the sale and use of NPS of unknown content with potentially adverse effects (Brandt et al 2010, 2011) in Lancashire's NTE. There has also been concern about the risk of caffeine toxicity amongst those using NPS given the high caffeine content found in some NPS (Davies et al 2012). Therefore a key aspect of Phase Three was to explore Bubble use through the attempted triangulation of data between self report surveys of what NPS users thought they had consumed with analyses of the substances that they had consumed. As such, we sought permission and developed a protocol to gather from our respondents small samples of white powders thought by them to be 'legal highs' that would then be sent for analysis to Lancashire Constabulary laboratories. Permission was given by LDAAT, Lancaster University Ethics Committee (pFACT: 46387), Lancashire Constabulary and nightclub owners/managers. A copy of the protocol followed by the research team can be found in Appendix D.

All those who indicated they had taken and/or were planning to take 'Bubble' or 'Other legal highs' on the fieldwork day were asked if they would be willing to provide a small sample of their NPS for analysis, with the findings being relayed back to them. Unfortunately we had a 100% refusal rate: none of the five respondents that fitted the above profile provided us with samples to analyse. However, the process of gaining permission from the project funders, police, club management and the university ethics committee to undertake such analyses and the recognition of the value of such analyses is

groundbreaking and we hope will set a precedent for future *in situ* research with drug users and triangulation of social surveys and laboratory analyses.

Urine analysis

During the fieldwork preparation, we were approached to participate in a national project analysing urine in the NTE. This project was organised by TICTAC Communications and funded by the Home Office Centre for Applied Science and Technology (CAST). This allowed a second tier of potential triangulation of data between our surveys of drug users and urine collected in the same city centre during the same Saturday night/Sunday morning time frame as our surveys. A four-person portable men's urinal was placed in one of the research sites on the same weekend as the research team carried out surveys, in a popular alley way near the central strip of pubs and clubs. Samples of the urine collected by men using the urinals throughout Saturday night and Sunday morning were collected on Sunday afternoon and sent for comprehensive analysis of licit and illicit drugs. Photographs of the process of urine extraction can be found in Appendix E and a technical breakdown of the findings is provided in Appendix F. The findings of this element of the Phase Three are presented on page 34.

Socio-demographic Data

Gender, Age, Ethnicity and Employment

48% of the Lancashire nightclub respondents were male and 52% were female. The mean age was 23 years (standard deviation 5.39), with men in our sample being on average two years older than the women. The age of respondents ranged from 17-55 years. This closely mirrors the age and gender profile of the 2010 NTE surveys reported in Phase One of the research programme (Measham et al 2011) whereby the gender split was 50% men and 50% women and the mean age of participants was 24 (standard deviation 6.82) and ranged from 16-51 years.

The majority (96%) of those in the Lancashire nightclub survey sample defined their ethnicity as white. 2% identified as mixed race, under 1% as black, under 1% as Asian and under 1% as being from an 'Other' ethnic group. We captured slightly more non-white participants in the nightclub surveys than in

the 2010 NTE surveys reported in Phase One of the research programme, where 99% of respondents were white (Measham et al 2011).

The majority of respondents in the Lancashire nightclub survey sample (41%) were in full-time employment; 37% were in university/higher education, 9% were in part time employment, 6% were in further education/sixth form college, 3% were unemployed/looking for a job, 2% were looking after a child/relative/family full-time (no men defined themselves in this way, only women), 2% defined themselves as 'other', under 1% were on a job training scheme and under 1% were at school.

In Preston, 44% of the 81 respondents interviewed came from Preston, 12% came from Leyland, and 6% came from Whitehaven. Otherwise people came from a wide range of places including Chorley, Deepdale and Workington.

In Lancaster, 50% of the 173 respondents interviewed came from Lancaster (including the university campus), 6% came from Preston, 6% from nearby Morecambe and the remainder came from other local areas including Carnforth, Heysham and Kirkby Lonsdale.

In Burnley, 37% of the 62 respondents interviewed came from Burnley, 10% came from Nelson, 8% came from Rossendale. Otherwise people came from a range of places including Southport, Chesterfield, Clitheroe and Colne.

In Chorley, 55% of the 27 respondents interviewed came from Chorley, 11% came from Preston. Otherwise people came from places such as Adlington.

Drinking and Smoking Amongst Customers in Lancashire Nightclubs

Introduction - National Consumption Levels of Alcohol and Tobacco

Intense intoxication from alcohol or what Martinic and Measham (2008) term 'extreme drinking' was evident in the nightclubs surveyed for this study. The Lancashire area thereby reflects the familiar mediatised image of young adults 'binge drinking' in what has been colloquially termed 'Booze Britain' (Hayward and Hobbs 2007). However, despite the continued perception that Britain is the "binge-drinking capital of Europe" (The Telegraph 2010), there has been a significant reduction in the UK's overall position in the binge drinking European 'league tables'. The UK now has the 12th highest level of binge drinking of 36 participating countries, having been in the top five youth binge drinking European nations since the beginning of the 1990s (Atkinson et al 2012).

According to the latest UK figures reported in the annual General Lifestyle Survey for 2010 (Dunstan and Robinson 2012), the average weekly alcohol consumption for the general adult population (ie. those over 16 years of age) was 11.5 units of alcohol. However the aforementioned mediatised image of young adults 'binge drinking' in the NTE can be contrasted with the national picture regarding which age groups consume most in terms of alcohol units per week. Amongst UK young adults aged 16-24 the average weekly alcohol consumption is 11.1 units, less than those aged 25-44 (12.2 units) which is in turn less than those aged 45-64 (13.1 units) (Dunstan and Robinson 2012). Herring et al (2012) note in their study of youthful abstainers from alcohol, young people's drinking is a matter of social, political and media concern. However, one fifth of those aged 16-24 do not drink alcohol, whilst 11% drink less than one unit a week (NHS Information Centre for Health and Social Care 2012). Hence it would seem that much media and public concern about alcohol consumption relates to a perception of a binge drinking problem; a highly visible 'deviant' or 'impermissible' activity undertaken in public spaces by the younger generation (Measham and Brain 2005; Moore and Measham 2012).

According to the most recent UK figures available, the majority (54%) of UK adults drink alcohol at least once a week (Dunstan and Robinson 2012: 22). Furthermore most UK adults who drink do so in excess of the recommended daily sensible consumption levels. According to the latest national figures available,

amongst those UK adults who drank in the last week, over half (53%) consume more than 4 units (for men) or 3 units (for women) (the maximum daily sensible consumption recommended by the Department of Health). Over a quarter (27%) exceed 8 units on one day (for men) and more than 6 units (for women) (defined as 'heavy drinking' or 'binge drinking') and 14% consume more than 12 units (for men) and more than 9 units (for women) on at least one day (defined as 'very heavy drinking').

Regarding gender, adult men's weekly average consumption of alcohol is around twice that of adult women, 16.4 units compared to 8 units respectively (NHS Information Centre for Health and Social Care 2012). Men tend to drink slightly more units than women on at least one day a week. For 24% of men and 17% of women aged 16-24, and for 25% of men and 19% of women aged 25-44 their alcohol unit intake is defined as 'heavy drinking' or 'binge drinking'. For 16% of men and 12% of women aged 16-24, and for 15% of men and 11% of women aged 25-44 their unit intake is defined as 'very heavy drinking' (Dunstan and Robinson 2012: 28-29).

There are regional differences in drinking patterns amongst UK adults which are pertinent to our study. The north west of England (in which Lancashire is situated) has the highest proportion of adults consuming comparably more units than adults in all other regions, with 38% consuming over 4 (for men) or 3 (for women) units on their heaviest drinking day (of the last week), compared to only 24% of adults in the West Midlands (the lowest proportion). Adults in the north west of England also have the highest levels of heavy drinking of all regions, with 20% of adults exceeding 8 (for men) or 6 (for women) units on their heaviest drinking day (of the last week), compared to only 12% of adults in the East Midlands (the lowest proportion) (Dunstan and Robinson 2012: 32; see also Roberts et al 2012).

Having outlined some key national survey data on the UK adult population's alcohol consumption, we now turn to the data on drinking and smoking produced by our nightclub surveys.

Drinking and Smoking Amongst Customers in Lancashire Nightclubs[10]

98% of those surveyed in our nightclub surveys reported that they drank alcohol, 1% reported that they had stopped drinking alcohol and 1% reported that they had never consumed alcohol. On the fieldwork

[10] Please note that comparisons in drinking and drug use between the 'standard' High Street nightclub sample and the 'dance event' are dealt with in the section 'Comparative Survey at a Dance Event'.

night most of our respondents who drank reported that they had already consumed alcohol (96%). 47% of the sample did not smoke cigarettes, 39% reported smoking cigarettes every day and 14% reported non-daily smoking, meaning just over half of the sample (53%) were smokers.

Self reported usual frequency of alcohol consumption amongst our Phrase Three respondents is shown in Table 1 in Appendix B. Three quarters of respondents said that they usually drink alcohol once a week or more and four in ten respondents reported that they usually drink alcohol two to three times a week or more. Over one in twenty men compared with just under 2% of women reported usually drinking alcohol every day.

Our sample had higher numbers of smokers (53%) and drinkers (98%) than in the national population (20% and 83% respectively) and lower numbers of abstainers from cigarette smoking (47%) and from alcohol (2%) than in the general population (80% and 16% respectively) (Dunstan and Robinson 2012). Our study also found that the daily smokers frequenting Lancashire nightclubs consumed on average more units of alcohol on the fieldwork night (14.8) compared to non-daily smokers (12.6) and non smokers (12.1) (see Table 3 in Appendix B; see also Preloading section below). This is perhaps unsurprising given that our sample was obtained in nightclubs where the main activities undertaken by customers are drinking alcohol, alongside dancing, smoking, socialising with friends and strangers, and when we know that adults who frequent bars and nightclubs have higher levels of drinking, smoking and illicit drug use than the general population. As noted in the 2010/11 British Crime Survey (BCS)[11] data on illicit drug use amongst adults:

> *"There is a clear relationship between nightclub and pub visits and illicit drug use; levels of drug use increased with increasing frequency of visits to a nightclub or pub. Adults not visiting a nightclub in the past month were less likely to have taken any illicit or Class A drug in the past year (6.0%, any drug; 1.6%, Class A) than those visiting four or more times (32.8%, any drug; 13.7%, Class A). This relationship has remained consistent and stable since estimates broken down by this lifestyle factor were published in the 2007/08 BCS." (Smith and Flatley 2011: 20)*

The average number of units of alcohol consumed by respondents who were drinking on the fieldwork night was 13.1 (see Table 3, Appendix B). The average number of units of alcohol consumed at home

[11] The BCS was renamed the Crime Survey for England and Wales (CSEW) from April 2012 to better reflect its geographical coverage. The first CSEW was published in July 2012.

before going out (preloading) was 9, whilst the average number of units of alcohol consumed once out in the NTE was 8.1 (see Table 3)[12]. Men drank more units of alcohol on the fieldwork night (16.9) than women (9.2). Weekly drinkers also drank more units of alcohol on the fieldwork night (13.8) than non weekly drinkers (11.2).

Those surveyed in Burnley drank more units of alcohol on the fieldwork night (16.2) than those surveyed in Preston (13.9), Chorley (12.9) and Lancaster (12.1). It is interesting to note that preloading was more significant in Burnley than the other three localities with Burnley respondents showing the largest difference in terms of average units of alcohol consumed in domestic settings (preloading) at 11.7 units compared to 7.7 units alcohol consumed once out in the NTE. The reverse was true of those surveyed in Chorley where preloading was much lower (6.7 units) compared to when they went out in the NTE (10.5 units). Levels of preloading were also higher in Burnley in the Phase One NTE surveys (Measham et al 2011). In Preston and Lancaster there was less distinction between levels of consumption at home and after going out (9.1 and 9.1 respectively in Preston and 8.4 and 7.3 respectively in Lancaster) (see Table 3). Both polydrug users[13] and non-polydrug users drank the same number of units in total (13.1), although polydrug users preloaded more (9.7 units) and drank less once out in the NTE (6.5 units) than those drinkers who were not polydrug users (8.6 units preloaded and 8.2 units once out).

Table 4 in Appendix B details the units of specific alcoholic beverages that different groups consumed. Men drank on average over three times the number of units in beer (5.7) than women (1.6), with beer being particularly popular amongst men in Lancaster and Preston. Beer was popular amongst those that had consumed one drug on the fieldwork night but not amongst polydrug users (defined as having consumed two or more illegal drugs on the fieldwork night). Spirits were more popular amongst men who drank on average 4.5 units compared to women who drank on average 2.2 units. Women drank on average 2 units of wine, double that of men. Burnley respondents showed a clear preference for spirits, drinking on average 4.5 units, compared to 2.4 units of beer and 2.7 units of wine. The average units of 'alcopops' (ready to drink spirit mixers) consumed was extremely low (<1 unit) for the total sample, with no group showing a preference for them.

[12] It should be noted, however, that there are methodological challenges in obtaining detailed and accurate information on alcohol consumption through interviews with a sample of people who for the most part are at least moderately intoxicated (Measham and Moore 2009).

[13] 'Polydrug users' (*n*=10) were those who reported having taken and/or were planning to take two or more illegal drugs on the fieldwork night. Given the low numbers of polydrug users these findings must be treated with caution.

It is also worth noting that Jagermeister (a herbal-flavoured German 35% ABV liqueur or 'digestif') and 'Jagerbombs' (a shot of Jagermeister in an energy drink such as Red Bull) were mentioned by a greater number of respondents in Phase Three compared to Phase One. Jagermeister was coded in our Phase 3 dataset as a spirit/shot. The rapid emergence of Jagermeister as the drink of choice for many young adults in Lancashire's NTE highlights the importance of fashion trends in relation to alcohol consumption, whereby previously popular alcoholic beverages rapidly fall out of favour with those frequenting bars and clubs, only to be replaced by other products. The popularity of 'Jagerbombs' (and lack of interest in 'alcopops') in Lancashire's nightclubs corresponds to what Pennay and Lubman (2012) note is a rapidly growing international trend of young adults combining alcohol and energy drinks (AEDs) and illustrates a broader point that fashions in alcohol consumption receive limited attention from alcohol researchers (Measham 2008).

We now turn specifically to our findings with regard to alcohol preloading amongst those frequenting Lancashire nightclubs.

Preloading

As with Phase One, the nightclub surveys were devised to collect and analyse data regarding alcohol 'preloading', namely drinking at home or at friends' houses before entering the NTE. Preloading has been associated with higher consumption levels, crime and other risky behaviours (Hughes et al 2007; Wells et al 2009) and has implications for not only owners, managers and staff of nightclubs but also service providers (including DAATs, police and health services) who are charged with managing intoxicated individuals in premises and on the streets at night and reducing alcohol-related problems in wider society (see *Policy Recommendations*).

It is notable that comparative preloading data were not readily available highlighting that questions around preloading are rarely asked in contemporary alcohol studies. From the studies that did provide comparative data, we found a higher number of individuals preloaded in our Lancashire nightclub surveys. 65% of our total survey sample (aged 16-51) reported that they had had alcohol (either at their own or a friend's house) before they arrived in the town/city centre in which they were surveyed. This is compared to 58% who preloaded in a study examining the impact of preloading on young people's

nightlife experiences in the north west (Hughes et al 2008), and 53% preloading in a study surveying and testing the blood alcohol levels of NTE users across three cities in the north west (Hughes et al 2009).

Preloading was a majority activity amongst those attending nightclubs in the four Lancashire towns and cities we surveyed. The average units of alcohol consumed on the fieldwork night was 13.1. The average number of units of alcohol preloaded was 9, whilst the average number of units of alcohol consumed once out in the NTE was 8.1. However, the similarity in average units consumed in domestic settings (preloading) and once out in the NTE obscures considerable variation in drinking patterns between different groups surveyed (see Table 3). From our survey data we are able to look at differences in terms of the average units consumed in domestic settings (preloading) on the fieldwork night and once out in the NTE between different groups frequenting Lancashire nightclubs. Those frequenting nightclubs in Burnley (77%) were more likely to preload than those in nightclubs in Lancaster (64%), Preston (63%) and Chorley (48%). Not only did more club-goers preload with alcohol in Burnley than the other areas but they also drank more alcohol when they preloaded, drinking 11.7 units of alcohol in Burnley compared to 6.7 units of alcohol in Chorley (see Table 3).

Women were only slightly more likely to preload (68%) than men (62%). This differs to our Phase One findings where women were significantly more likely to preload than men (66% and 49% respectively) (Measham et al 2011). There were differences in the numbers preloading in each of the four areas by gender (See Table 2). Women in Chorley (58%), Lancaster (55%) and Burnley (57%) all preloaded more than their male counterparts (42%, 45%, 44%). The exception is Preston, where men (68%) were more than twice as likely to preload as women (32%). Women in Burnley were more likely than men to report preloading in our Phase One NTE fieldwork in 2010 (80% and 45% respectively) but whilst men reporting preloading has remain stable, the percentage of women reporting preloading has fallen (57%).

We found that daily smokers drank higher quantities of alcohol at home (preloading on average 10.7 units) than non daily smokers (9.2) and non smokers (7.3). We also found that on average men drank twice as much as women both before coming out (12.1 units compared with 6.1) and also once out in the night time economy (10.1 units compared with 5.7) (see Table 3). However, we also looked at the number of hours that respondents had been drinking and it appears that men drank for extended time periods but did not drink significantly more per hour than women.

The average age of those who were preloading in our sample is 22 years old, whereas the average age for those interviewed during the fieldwork nights who did not preload is 24 years old. Hence younger adults were slightly more likely to preload than older drinkers, but as with Phase One, preloading was not a feature specifically of the underage drinkers (under 18 years old) in our study.

Frequency of usual alcohol consumption differed between those reporting preloading and those who were not preloading on the fieldwork night. 43% of preloaders compared with 33% of non preloaders reported that they usually drink alcohol two to three times a week or more.

Prevalence and Patterns of Illicit Drug Use in Lancashire Nightclubs

Introduction

This section presents data on the prevalence and patterns of illicit[14] drug use amongst the sample captured by our nightclub surveys in ten venues on six fieldwork nights across four Lancashire towns and cities. We first present our findings on prevalence of illicit drug use and then compare our sample with the latest national household survey – the 2011/12 Crime Survey for England and Wales (CSEW) (Home Office 2012) – and other surveys of drug-using populations to explore where those frequenting Lancashire's nightclubs sit in terms of their illicit drug use. Finally we present data on those frequenting Lancashire nightclubs as compared to those who attended a 'dance event'.

Self Reported Prevalence of Illicit Drug Use

The frequencies for self reported drug use for the variables lifetime, past year, past month, past week, already taken, planning on taking later, and combined planning and/or already taken on fieldwork night are shown in Table 5 in Appendix B. This is the key table presenting the prevalence of illicit drug use by the Lancashire nightclub survey sample. 62% of respondents reported that they had tried an illegal drug at least once in their lifetime, 45% had had an illegal drug in the past year, nearly one third had had an illegal drug in the past month and just over one in five had had an illegal drug in the past week. Given that our respondents were stopped at random in randomly selected nightclubs, it is perhaps surprising that a sizeable minority are regular illegal drug users, as indicated by relatively high levels of past month use.

Lifetime prevalence was highest for cannabis (58%), cocaine (35%), ecstasy pills (29%), speed (26%) and MDMA crystal (24%). Past month use followed this same pattern, apart from in relation to MDMA

[14] We include 'Bubble' in our analysis of 'illicit' drugs but note that the exact contents of 'Bubble' remain unclear. It is not possible to say whether or not it contains any controlled drugs although police seizures in the north west suggest that it often contains mephedrone, a Class B controlled drug.

crystal with more people (18%) reporting its use than speed (11%)[15]. Past month use of ecstasy pills was the same as past month use of MDMA crystal at 7% of the total sample. A quarter of those surveyed reported using cannabis in the past month whilst 12% reported using cocaine in the past month. In terms of past week use, 17% of respondents had used cannabis in the past week, 7% cocaine, 3% MDMA crystal, 3% ecstasy pills and 2% ketamine.

Looking at illegal drug use taking place on the fieldwork night, we see that around one in seven people (14%) had taken and/or were planning to take drugs, again a not insignificant number given that these were nightclub customers in four towns and cities in Lancashire who were stopped at random. Cannabis (11%) and cocaine (4%) were the two most popular drugs consumed on the fieldwork night.

Following consultation with LDAAT, we added 'benzodiazepine' to the list of drugs on our Phase Three survey sheets. There has been ongoing concern about the illicit and/or dependent use of benzodiazepines at a national level, although there is limited data regarding the extent of the problem in the UK, with calls for more research on the prevalence and the characteristics of populations most at risk (Reed et al 2011). What little data is available suggests that there are some 1.5 million people using prescribed benzodiazepines in the UK, with an estimated 0.2 million illicit users (Reay 2008). In this context we note that 8% of nightclub survey respondents reported lifetime use of benzodiazepine, 5% reported past year use, and 3% past week use. These are respondents reporting use of benzodiazepines *without* a prescription.

What is particularly striking are the similarities in terms of illicit drug use between respondents surveyed in Lancashire's NTE in Phase One and respondents surveyed in Lancashire nightclubs in Phase Three (see Table 10, Appendix B). If we take speed as an example, 28% reported lifetime use in Phase One compared to 26% in Phase Three, 11% reported past year use in both Phase One and Phase Three, and 3% reported past month use in Phase One compared to 4% in Phase Three. However we captured more ketamine users and more MDMA crystal users in Phase Three than we did in Phase One (see Table 10).

[15] This is likely to be as a result of a cohort of older clubbers in the north west of England for whom speed was a drug of choice in the 1990s rave era (see Measham et al 2011).

Novel Psychoactive Substances

Mephedrone was not widely used on the fieldwork night (1%). When comparing Phase Three nightclub surveys undertaken in spring 2012 with Phase One NTE surveys undertaken in autumn 2010, we see that whilst lifetime use of mephedrone stood at 13% for both surveys, past year and past month use is lower, with 7% of the 2012 sample reporting past year use of mephedrone compared to 11% of the 2010 sample. In addition, 2% of the 2012 sample reported past month use of mephedrone compared to 5% of the 2010 sample (see Table 10). This suggests that the popularity of mephedrone may have waned since the height of concern about the drug in the UK in 2010. A reduction in use is reflected nationally, with the reported last year use of mephedrone among adults aged 16 to 59 falling from 1.4% in the 2010/11 survey to 1.1% in the CSEW 2011/12 (Home Office 2012). Nationally, mephedrone is the fourth most prevalent drug measured by the CSEW 2011/12 across the whole age range. Among 16–24 year olds, last year use of mephedrone was at the same level as ecstasy (3.3%), making it the third most prevalent drug used within this age group. However, use has fallen in this age group from 4.4% in the 2010/11 survey to 3.3% in the 2011/12 survey (Home Office 2012).

'Bubble' was not widely used on the fieldwork night amongst those frequenting Lancashire nightclubs in spring 2012 (2%). However, lifetime and past month use of Bubble was notable; with 18% reporting that they had ever tried it, 11% having used it within the past year and 3% within the past month. These figures are less than those reported in the aforementioned Phase One NTE surveys of 2010, when 16% reported having used Bubble within the past year and 5% within the past month. As we reported in the Phase One report (Measham et al 2011) and elsewhere (Measham et al 2011a) there remains a degree of confusion around the contents of 'Bubble'.

Methoxetamine use (3% past year, 2% past month) was not insignificant bearing in mind that this was a sample of adults in standard nightclubs, rather than a specialist group of experienced drug users at a dance club or festival, with usually higher rates of experimentation and use. However, the research was conducted in March 2010 just before the first ever Temporary Control Drug Order was passed for methoxetamine by the UK government, which banned the sale (but not possession) of methoxetamine and therefore might be expected to reduce its availability, at least through internet suppliers.

Locality Differences in Illicit Drug Use

In terms of differences between localities, we can see that *recent* drug use is strikingly similar for the four Lancashire towns and cities surveyed in Phase Three. However, there are bigger differences between localities in terms of lifetime use (see Table 6). Lifetime use of any illegal drug was higher in Preston (71%) than Lancaster (63%), but Lancaster had higher rates of past week use (26%) than Preston (19%) suggesting that we captured more ex-drug users and occasional users in Preston. Past month use was above the average for the total sample (30%) in both Preston (35%) and Lancaster (34%) which in turn were higher than past month use reported in Chorley (19%) and Burnley (15%). We suggest however that some of these monthly users at Preston and Lancaster might also be those who are prepared to travel further afield to dance events given that there are no regular, tailored dance clubs in Lancashire for dance music aficionados.

Gender and Age Differences in Illicit Drug Use

Within the Lancashire nightclub sample, gender differences emerged in terms of illicit drug use, as well as in relation to smoking and drinking as discussed earlier in this report. Men's drug experiences exceed those of their female counterparts, with lifetime, past month, past year, past week and fieldwork night (planned and/or already taken) self reported drug use all higher amongst men than women. As apparent in Table 7, the difference in men and women's experiences with illicit drugs is most notable for recent use.

This Lancashire picture corresponds relatively well with both the national and regional picture. In general, national surveys suggest a male: female ratio of around 2:1, a long term trend as captured by the BCS, in which around twice as many men as women reported past year use of any illegal drug and any Class A drug (see Smith and Flatley 2011). Similar gender differences have been apparent throughout the 1990s (Measham et al 2001). In the most recent CSEW also, 16 to 59 year old men were more than twice as likely as women to have used any drug (12.4% of men and 5.5% of women) and any Class A drug (4.4% of men and 1.6% of women) in the last year (Home Office 2012)[16]. In a nutshell, gender remains a crucial factor in relation to levels of illicit drug use on a national and local level.

[16] Please note that figures for illicit drug use amongst the 16-24 year old age group by gender are not available in the latest 2011/12 CSEW data.

Age also emerged as a crucial factor influencing prevalence and patterns of illicit drug use in Phase Three, just as it did in the Lancashire NTE survey sample discussed in the Phase One report (Measham et al 2011) and as it does nationally (Home Office 2012). From the 2011/12 CSEW data, those aged 16-24 were more likely than the general population (16-59) to have used any illicit drug in the last year (19.3% compared to 6.3%) and more likely to than the general population to have used a Class A drug in the last year (6.3% compared to 2.1%). The average age of our nightclub sample was 23 years; hence our respondents are situated in the key age bracket for illicit drug use as highlighted by national figures.

The average age of those in the nightclub sample who reported using any illegal drug in the past year, month, past week or on the fieldwork night was lower than those who reported not using illegal drugs. The average age of those preloading with alcohol was also lower (21.7) than those who weren't preloading (23.7). There were variations in the average age of those reporting recent use (in the last month) of specific drugs, with those reporting use of speed (24.0), ketamine (22.9) and GHB/GBL (29.2) being on average older than those reporting past month use of Bubble (22.8), cocaine (21.8) ecstasy pills (21.7), MDMA crystal (21.5) and cannabis (21.2). Hence cannabis users had the lowest average age of respondents reporting recent use of illegal drugs. Lifetime GHB/GBL users had the highest average age. This corresponds to literature on GHB/GBL users which highlights that they tend to be older than those using the more familiar dance drugs (Measham et al 2001; McCambridge et al 2005).

Ethnicity and Illicit Drug Use

In terms of ethnicity, lifetime prevalence rates of illegal drug use were highest amongst 'other' respondents (67%) and white respondents (63%) compared to black (50%), Asian (33%) and mixed race respondents (29%) (see Table 8). However all data displayed in Table 8 must be treated with caution due to the low numbers of non-white respondents.

Polydrug Use

42% of the nightclub sample indicated they were lifetime polydrug users, that is they reported having used two or more illegal drugs in their lifetime. 29% of the nightclub sample reported using two or more illegal drugs in the past month, and 14% reported using two or more illegal drugs in the past month.

However, there were only very low numbers of polydrug users on the fieldwork night (*n*=10) so again caution is required with these comparisons.

Polydrug Use and Gender

Polydrug users (using two or more illegal drugs) were predominantly male. However in terms of recent use, the expected gender ration (of 2:1) is not apparent. Whilst 43% of men had taken two or more illegal drugs in their lifetime compared to 39% of women and 30% of men compared to 25% of women reported polydrug use in the past year, only 13% of men compared to 14% of women reported polydrug use in the past month whilst 6% of men and 7% of women reported polydrug use in the past week. 5% of men reported polydrug use on the fieldwork night compared to 3% of women.

Polydrug Use and Excessive Drinking

The total amount of alcohol consumed on the fieldwork night is similar for polydrug users and non polydrug users, at an average of 13.1 units of alcohol. However although polydrug users drink similar amounts in total, they are more likely to drink higher quantities of alcohol at home and less once out in the night time economy compared to those drinkers taking no drugs or just one drug that night (see Table 3).

Comparing the Lancashire Nightclub Survey Data to the National Picture

The UK national picture offers a useful point of comparison to the Lancashire nightclub survey sample. It is important to recognise that national household surveys produce underestimates of adult drug use (Newcombe 2007). As noted in Phase One, this is in part related to how national surveys exclude groups of people who are more likely to be drug users, such as students, particularly those living in student halls of residence; transitory populations, those people living in non-standard accommodation such as hostels and institutions; and revellers, that is those who frequent the NTE and who by definition are more likely to be out in the evening when national surveys tend to be conducted. As a result, we found that respondents in Lancashire nightclubs are more drug experienced than the general population at least compared to those captured by lifetime, past year and past month drug use figures in the CSEW 2011/12.

The number of adults (16-59 year olds) in the UK who have ever used an illegal drug was 36.5% according to the 2011/12 CSEW (Home Office 2012). By way of comparison, 62% of the 343 respondents surveyed in Lancashire nightclubs reported that they had tried an illegal drug at least once in their lifetime (see Table 5).

In terms of past year use of any illegal drug, the 2011/2012 CSEW figure stands at 8.9%. This contrasts with the Lancashire nightclub survey where 45% of respondents reported having used any illegal drug within the past year. 5.2% of adults in the 2011/2012 CSEW sample had consumed any illegal drug in the past month compared with 30% of our Lancashire nightclub sample.

As noted in the socio-demographic data section, the mean age of respondents in Phase Three was 23 and ranged from 17-55 which closely mirrors Phase One. Given that the majority of the nightclub survey sample falls within the 16-24 year age bracket used to denote 'young adults' within the national BCS/CSEW, we offer the 2011/12 CSEW figures on this age group's illegal drug use as a further point of comparison. 37.7% of 16-24 year olds in the CSEW sample reported lifetime use of any drug, compared to 62% of those in the Lancashire nightclub survey sample, with lifetime use of cannabis the highest amongst this age group (32% in CSEW sample; 58% in the Lancashire nightclub survey sample) followed by lifetime use of cocaine powder (10.5% and 35% respectively) and then lifetime use of ecstasy (8.8% and 29% respectively). Therefore those frequenting Lancashire's nightclubs have considerably higher rates of illegal drug use than those in the same age bracket in the general population, although again we note that CSEW figures are likely to be underestimates.

The 2011/12 CSEW data on drug use on regional use in England and Wales highlights that the north west of England (compared to all other regions including Wales) has amongst the highest proportions of adults (16-59 year olds) reporting past year use of any drug at 9.4%, with cannabis at 7.3%, powder cocaine at 2.3, ecstasy 1.5%, amphetamines 0.6% and hallucinogens 0.5%. These regional figures are all higher than UK national averages. At 3.0%, the north west of England follows only London (4.3%) and the north east of England (3.7%) for the proportion of adults using any Class A drug in the past year (Home Office 2012). Other surveys of young people's drug use in the north west of England also find higher levels of drug use compared to the national average (Aldridge et al 2011; Parker et al 1998). However, it should be noted that the north east and south west of England have emerged in the latest CSEW data as contenders for the regions with the highest proportions of adults taking illegal drugs (Home Office 2012).

We can compare the Lancashire nightclub survey with this 2011/12 CSEW regional data for the north west of England. 45% of the Lancashire nightclub sample reported use of 'any drug' in the past year (9.4% in CSEW); 39% reported past year use of cannabis (7.3%); 24% reported past year use of cocaine (2.3%); 16% reported past year use of ecstasy (1.5%) and 11% reported past year use of amphetamines (speed) (0.6%). Hence, all the nightclub survey sample figures for past year drug use are higher than those from the CSEW regional data, indicating that those frequenting the Lancashire nightclubs are more likely to use illegal drugs than the general population of the north west of England. However, the rankings of individual drugs is similar to that of the CSEW regional data in terms of rank ordering of drugs, in that last year prevalence is highest for cannabis, cocaine, then ecstasy.

Of direct relevance to the Lancashire nightclub survey sample is the number of adults (16-59 year olds) in the 2011/12 CSEW figures reporting use of individual drugs in the past year by frequency of nightclub visits in the past month, measured as 'no visits', '1 to 3 visits', or '4 or more visits' in the past month. Those frequently attending nightclubs as captured by the CSEW are likely to be closer in terms of lifestyle factors to the Lancashire nightclub sample than the more general population of adults captured by the CSEW. For instance cannabis use in the Lancashire nightclub sample (39%) is close to those who attended nightclubs 4 or times according to the CSEW survey (25.6%); cannabis use amongst those reporting '1 to 3 visits' was 14.3%, whilst amongst those reporting 'no visits' it was only 4.9% compared to 6.9% amongst the national sample (Home Office 2012). However past month ecstasy use and in particular cocaine use is still considerably higher in our Lancashire nightclub sample (29% and 35% respectively) compared to the national level even among those who frequent nightclubs four or more times a month (9.7% and 11.1% respectively) (Home Office 2012).

A Comparative Survey at a 'Dance Event'

The findings from the survey we undertook at one 'dance event' in a student-orientated standard High Street nightclub on a Thursday night in Lancaster are now presented as a point of comparison with the findings from the other nine nightclubs surveyed[17]. Of our 343 respondents across all ten standard High

[17] The music at the standard nightclubs could be characterised as commercial dance remixes of pop tunes, sometimes pre-recorded, whereas 'dance events' could be characterised by the employment of often nationally renowned DJs mixing specific genres of 'electronic dance music' such as house, trance, dubstep or drum and bass. However, this characterisation obscures the thorny issue of defining what a 'dance event' is and indeed what 'dance music' is which is subject to academic debate.

Street nightclubs, 19% (n=65) were in the dance event sample which we compare here to the 81% (n=278) in the standard nightclub sample. There were six refusals from potential respondents at the dance event (three male, three female), a refusal rate of about one in ten respondents, around half of the refusal rate at the standard nightclubs. This may indicate a greater willingness to be interviewed and less hostility towards the research team at the dance event compared with some of the other nightclubs.

Those attending the dance event drank slightly less on the fieldwork night than those attending the nightclubs (10.3 units compared with 14.1) (see Table 3). However, this finding may be a function of the fact that the dance event was held on a Thursday night compared to Saturday night for the other nine venues. There were more weekly drinkers in the dance event sample (77%) than in the nightclub sample (74%). The alcohol profiles of dance night and nightclub attendees were similar; the key differences between the two fieldwork sites emerged in relation to illegal drug use rather than alcohol use.

Dance event respondents used considerably more illegal drugs than nightclub respondents (see Table 9), which is in keeping with our previous work in this area (Measham et al 2001; Measham and Moore 2009). Past month use, past week use and fieldwork night use of any illegal drug amongst dance event respondents were double that of the nightclub respondents (see Table 9). Amongst the nightclub sample, only cannabis and cocaine were used by more than one in ten respondents within the last month. However, lifetime use was similar between the two groups which suggests that it is the recent and regular use of illegal drugs - notably stimulants - which sets apart the dance event respondents from their nightclub-frequenting counterparts. Indeed a quarter of dance event respondents had consumed an illegal drug on the fieldwork night; with one in 12 of our dance respondents having had a stimulant drug[18] on the fieldwork night (a Thursday night), as opposed to one in 20 nightclub respondents (on Saturday nights) (See Table 9).

Having presented the findings from our *in situ* surveys of nightclubs across four Lancashire towns and cities, we now turn to the findings from an innovative addition to the statistical and observational data (see Appendix F), the analysis of pooled samples of urine gathered in Lancashire's NTE. This pilot study

[18] Ecstasy pills, MDMA crystal, cocaine and mephedrone were the four drugs included in the 'stimulant drug' variable used in this analysis.

was undertaken as part of a broader study by the UK Home Office and others to use such research to gain a better understanding of prevalence and patterns of drug use in the NTE and beyond.

Analysis of Pooled Samples of Urine Gathered in Lancaster's NTE

In March-May 2012 a pilot project was undertaken on behalf of the Home Office Centre for Applied Science and Technology (CAST) to analyse pooled urine from a number of city centres across the UK. The aim of the project was to assess the ability of pooled urine analysis to identify what prescription and illicit drugs were being consumed by customers in the NTE and which, if any, of the recently identified NPS were being consumed in the UK. Over the weekend of 9/10th March 2012 a pilot of this project was conducted in Lancaster. This was carried out on the same night as our Lancaster standard nightclubs surveys in order to compare the findings of the social surveys and urine analyses.

To obtain urine samples a portable standalone four-person men's urinal was placed in an alleyway close to three of the city's nightclubs. The location had been identified by the PLO as a frequent spot for public urination (see Appendix E). This method of urine collection and analysis does not require consent from individuals as the pooled urine is not traceable to any individual person; participation was therefore anonymous and voluntary. Being a men's urinal it did, by definition, exclude collection of urine from women.

Portable urinals are frequently used in larger cities across the UK to stop men urinating in public and against property. However the urinal in Lancaster was placed specifically for this project and the public were not accustomed to it being there. As a result, it contained less urine than the other cities in the project where urinals had been situated for some time. The volume of available pooled urine to test from Lancaster's urinal was therefore, relatively low. It should be noted that the men using the urinal were not necessarily the same men as in the Lancaster nightclub sample.

The Urinal Results

A number of traditional 'club drugs' were detected along with several (prescribed) medicines known to be misused. The 'club drugs' identified were amphetamine, cocaine and MDMA as well as some metabolites of these indicating that the drugs had been consumed and not just discarded into the urinal. Of the commonly misused prescribed drugs, dihydrocodeine, morphine and tramadol were found. Given

the relatively light use of the urinal, it is interesting to note that prescribed medicines included three different antidepressants.

Unsurprisingly, ethanol (alcohol) levels in the urine were high (113mg/100mL) and nicotine was detected along with other commonly used legal substances including caffeine, ibuprofen and paracetamol. Quinine was found but was most likely to be from tonic water added to gin/vodka and tonic drinks. No mephedrone was detected and with the possible exception of Hordenine[19], there did not appear to be any NPS present in the Lancaster sample. The full report can be found in Appendix F.

[19] Hordenine, a halluciongenic substance from cacti, which was detected in the urine sample, is seen in some NPS/legal highs sold as hallucinogens. However, drinks containing hop such as beer and stout also contain hordenine which, given the locations and indeed rationale for the temporary urinals, may be a more probable explanation for its presence.

Conclusions

This report has presented findings from nightclub surveys, field observations and urine analysis undertaken across four Lancashire towns and cities for Phase Three of the LU/LDAAT Emerging Drug Trends research programme. From our research it is clear that alcohol is the most popular and perhaps also the most problematic 'drug' amongst those frequenting 'standard' High Street nightclubs located in Lancashire's towns and cities at night. We found similar high levels of drinking in Phase Three surveys of nightclub customers on Saturday nights in spring 2012 to those in Phase One surveys of bar customers on Friday nights in autumn 2010. We suggest that 'extreme drinking' (Martinic and Measham 2008) is the norm in the Lancashire NTE, with an average of 13 units being consumed in the course of one evening, with both women and men exceeding 'heavy' drinking levels.

The vast majority of our Phase Three respondents drank a considerable amount of alcohol in domestic settings before going out. 'Preloading' with alcohol in domestic settings before going to pubs and clubs has become a 'majority activity' for those frequenting the Lancashire NTE, highlighting the growing need amongst those with responsibility for the safety of night-time revellers to understand the prevalence and patterns of preloading. NTE premises have to deal with preloading customers sometimes without receiving significant revenue in terms of bar expenditure themselves yet having to endure the 'burden of blame' (Crawford and Flint 2009: 406) for their intoxicated customers. The motivations for and consequences of preloading with alcohol were explored in the LDAAT Phase Two study (Moore et al 2011; see also Seaman and Ikegwuonu 2010) but we suggest that this issue needs more detailed investigation from alcohol, drug and NTE researchers.

When we look at the top ten drugs, cannabis was by far the most prevalent illegal drug, with a quarter of all nightclub respondents reporting having used cannabis in the past month, with cocaine and ecstasy being the second and third most popular drugs. In the 18 months between Phase One and Phase Three of the research programme one of the most notable differences is that past year and past month use of 'Bubble' and mephedrone use was considerably lower in Phase Three than in Phase One. Talking to participants during the surveys it was apparent that people who had used mephedrone or 'Bubble' in the past had subsequently stopped taking it, with many reporting unpleasant effects and experiences. In terms of prevalence, 14% of the overall nightclub survey sample had taken and/or were planning to take

illegal drugs on the fieldwork night with prevalence of both past and recent drug use higher amongst Lancashire standard nightclub customers than amongst the general population, as captured by the 2011/12 CSEW (Home Office 2012). However those at the dance event were twice as likely to have taken illegal drugs recently and taken/planned on the fieldwork night (23% compared with 12%). Whilst drug use amongst 'standard' High Street nightclub customers was lower than at the dance event, it remains higher than in general population surveys, suggesting that a minority of NTE customers regularly take controlled drugs for recreational purposes. This is supported by the analysis of urine from the public urinal in Lancaster on the fieldwork weekend. Again alcohol emerges as the common factor regardless of entertainment provision. When comparing the 'standard' High Street nightclubs with the dance event (albeit held in a 'standard' nightclub as opposed to a dedicated dance music venue of the type located in larger cities), it is apparent that nearly everybody drinks alcohol with no simple alcohol versus 'club drugs' type distinction. This reinforces the need for universal alcohol awareness provision across the NTE regardless of customer base, music genre or venue type. We deal with these issues in the *Policy Recommendations* section below.

Whilst reported use of NPS or so-called 'legal highs' is low, it is not insignificant bearing in mind the research design and sampling. Eight survey respondents said they had had methoxetamine (which at the time of the research had been placed under a Temporary Class Drug Order). Therefore, whilst 'Bubble' and mephedrone use appeared to have diminished between Phases One and Three, there is some evidence to suggest that NPS *are* being consumed by a minority of those frequenting 'standard' High Street nightclubs. .

We now turn to the policy recommendations that have emerged from the findings presented in this report and which have been produced in collaboration with LDAAT[20].

[20] We would also like to thank all those who attended the Drugs, Alcohol and the Night-Time Economy Stakeholders' Knowledge Exchange Conference (NTE-SKEC) 2012 at Lancaster University in July 2012 (see www.nteconference.org) for their invaluable suggestions regarding the implications of our Phase Three findings for policy and practice at both a national and local level.

Policy Recommendations

The findings from the Phase Three research support a number of policy recommendations relating to information, the NTE environment, data collection and knowledge exchange at both strategic and operational levels. We describe these in full below, before presenting them in 'at-a-glance' summary form.

1. Information to Minimise Harm

The research identified differences in drug and alcohol use at 'standard' nightclubs in contrast to dance events. The field notes (Appendix A) also highlight some of the qualitative differences in attitudes and behaviours of customers in these two types of venue. Based on these findings we have identified recommendations relating to the provision of health and personal safety information aimed at minimising harm to individuals and the community within the NTE to be targeted specifically at either 'standard' nightclubs or 'dance events' and 'dance clubs'. These recommendations also relate to 3: *Risk and Response* and 4: *Data Collection and Knowledge Exchange.*

All NTE customers

- Given that alcohol consumption was high across all venues, information campaigns relating to the two key areas of concern – alcohol-related health problems and personal safety – should be promoted in all venues, targeting all customers;

- Recognising that dehydration is an issue for alcohol and drug users alike, we recommend helping customers to recognise and address the early stages of dehydration, for example by using simple urine analysis chart on toilet doors (such as the 'Wee-meter' – see Appendix G). With mass printing, the estimated cost for each Wee-meter could be less than 5p per chart, therefore less than £1 expenditure for 20 toilet cubicles. Drinks manufacturers, national bar chains or trade organisations such as the British Beer and Pub Association could consider investing in the printing of Wee-meters for all licensed premises as an indication of their commitment to social responsibility in the sale and consumption of alcohol;

- Venues should be encouraged to install drinking water fountains in the toilets and actively offer water behind the bar to encourage rehydration and sensible drinking. There is also scope to improve notification for customers of the availability of free tap water in all licensed premises under the 2010 mandatory conditions, as well as stricter enforcement of those venues which refuse water to customers (see also Home Office/KPMG 2008; Hadfield and Measham 2011);

- Preloading is a key issue so it is important to recognise the onus of responsibility and cost for intoxication in the NTE should not entirely fall on pub and club management. Information to address alcohol related harm should also be targeted at off-sales premises including supermarkets;

Wider community

- Alcohol related health and personal safety information should be promoted to the wider community and to young people (the next generation of NTE users) through both universal and targeted information campaigns. This would have the potential to reach those outside the NTE and reinforce messages presented to NTE customers. For example, a 'getting home safely' campaign could be run in conjunction with local transport services or outreach work delivered via 'youth buses' in town centres, community centres and housing estates;

Targeted

- Through the communication networks outlined in section 3 and working alongside LDAAT and the police; licence holders and club owners/managers should ensure that they are in receipt of and are able to promote accurate and relevant information and practices to their customers in order to reduce alcohol and drug-related harm;

- Given that current and recent use of illegal drugs is higher at 'dance clubs' along with a wider range of drugs being used, we recommend that an enhanced package of information should be available at dance events. This could include information on alcohol and personal safety but also specific and accurate information on established street drugs and NPS with core information on dealing with the effects of different drugs and of polydrug use;

- We recognise the limited knowledge and rapidly changing situation regarding the use of NPS and do not recommend giving out information on all NPS to all drug users but that stakeholders are aware of drug trends and appropriate responses.

2. Managing the Environment

All stakeholders

This set of policy recommendations is aimed at the owners, managers and staff of nightclubs and dance clubs, as well as police and licensing officers working in the NTE. We suggest:

- Recognising the relationship between nightclub cleanliness and client behaviour management. This recommendation emerges from Phase Three observations (see Appendix A) that the majority of nightclubs we surveyed were unclean, especially in the toilets. This recommendation draws on Graham and Homel's (2008) research on violent incidents in licensed premises and their finding that "cleanliness is a proxy for management style and serves as a form of expectation setting for customers";

- Seeking better management of noise levels in nightclubs based on evidence that faster drinking occurs in "too loud for talk" environments (Hadfield 2006) and vertical drinking establishments (Home Office/KPMG 2008). This predominately applies to 'standard' nightclubs where the focus is on drinking and talking rather than dancing. However, not just the volume of music but also certain musical genres, tribal affiliations to football songs and particularly the tempo of music can also influence the atmosphere in a venue, with music potentially able to be used as a 'soft' policing option to reduce the risk of aggression without the need for intervention from security staff (Hadfield 2006);

- Lack of seating, overcrowding and the unavailability of food have been found to increase the risk of alcohol-related harm (Graham and Homel 2008; see also Jones et al 2011). In reviewing the management of venues, these factors should also be considered;

- Improving support and training for bar/club staff (by management and police) in refusals to serve (see also Hadfield and Measham 2011).

- Continuing the good practice in evidence across the fieldwork venues of door staff refusing entry to excessively drunk customers and the rapid containment of violent behaviour that did erupt within premises;

- Venues should ensure they have a quiet area for anyone feeling unwell and staff should be trained in dealing with alcohol or drug-related episodes.

3. Risk and Response

Understanding drug use trends and the different patterns of drug and alcohol consumption within particular club/music 'scenes' are key to the effective targeting of resources. Awareness facilitates credible and informed advice, information and practices within the NTE. Research and experience have found this to be more effective in the delivery of health promotion messages and community safety strategies.

Information on new drugs or batches of drugs linked with hospital admissions are regularly sent via e-mail to health and social care agencies. These are often inaccurate, out of date or specific to another area of the country. In many cases, these warnings serve little or no purpose as those receiving them do not know what to do with them or how to respond.

All stakeholders

- The development of a local, sustainable Early Warning System (EWS) using existing data sources from A and E admissions, drugs services, police and probation could ensure the rapid collection, analysis and exchange of information relating to particular drugs and more recently, NPS. There are various systems already in place such as the Home Office Forensic Early Warning System which tests police drug seizures at a number of summer music festivals in the UK and highlights to the festival police any results of concern which might require a drug alert to festival-goers. Also the WEDINOS is an EWS being piloted in Wales based in A and E departments which records information anonymously and offers testing of drug samples, sharing the results with individuals who have been hospitalised by the drug. Such schemes could be expanded and co-ordinated to allow for the systematic testing and recording of information on street drugs that were seized by police, implicated in hospital admissions or came to light in other ways. The Dutch Drug

Information and Monitoring System (DIMS) is an example of a more co-ordinated approach to testing illicit drugs, publishing monitoring reports and operating an alert system;

- Local systems should be put in place to ensure that appropriate stakeholders such as the police, club management, Licensing Officers and commissioners are linked in to the EWS network;

- In order to ensure the most accurate information possible regarding drug alerts and to avoid 'scaremongering', the EWS network should liaise with both the police press office and the media to provide accurate and credible drug alerts targeted at the public or specific groups of users.

4. Data Collection and Knowledge Exchange

In addition to the EWS outlined above, Phase Three identified a number of gaps in the collection of data which would support the effective responses and targeted commissioning of resources.

LDAAT, Licensing Authorities, Fire services and Police

- The feasibility of compiling a database listing all relevant information relating to specific NTE venues should be explored. A database which stores information to support the identification of specific types of venue in each would assist commissioners and emergency services in the effective targeting of resources. For example given the number of nightclub deaths caused by fires and overcrowding, the authors were concerned to discover that since 2005 there has been no obligation on venues to provide licensing authorities with details of capacity at premises for health and safety purposes or fire certificates. The authors acknowledge the barriers that exist in relation to inter-agency data sharing, however, and the practical requirements and tasks involved. A list of possible data requirements and protocols in relation to alcohol can be found in Hadfield and Newton (2010).

LDAAT, A&E and Police

- A data sharing protocol combining police and hospital data to trigger licensing reviews following the identification of premises that consistently experience alcohol related violence have been found to be effective in alcohol related incidents (Alcohol Concern 2010). A 'traffic light' system

of risk assessment of licensed premises on the basis of recorded incidents is used by police in Cardiff. This has allowed for the effective targeting of enforcement and has credibility with licensees as the basis of the risk rating is transparent; the information underpinning the risk assessment being shared with venue management and opportunities for remedial action offered. This creates a more equitable and "level regulatory playing field" (Hadfield 2011);

- There should be an ongoing dialogue between stakeholders, including researchers, regarding drug trends and appropriate responses in each district in order to ensure relevant and timely responses. This can be done systematically through existing communication channels and appropriate strategic bodies. The possible establishment of an online knowledge exchange forum should also be explored.

Summary Policy Recommendations

Information to Minimise Harm

- Universal health and personal safety information across NTE (e.g. Wee-meter™)
- Community-based campaigns for reinforcement and reach of message
- 'Enhanced' harm minimisation information targeted at 'dance events'

Managing the environment

- Recognising the relationship between nightclub cleanliness and client behaviour management
- Management of music volume and genre to facilitate conversation and consequently reduce drinking speed
- Implementation and adherence to Social Responsibility Standards by door and bar staff

Risk and Response

- Develop an Early Warning System (EWS) using existing data sources eg. A&E, drugs services, police and probation to ensure the rapid collection, analysis and exchange of information relating to individual drugs and NPS
- This could include mechanisms to test unknown powders and pills which have been identified through the EWS as problematic and the systematic test purchasing of NPS from shops and online

Data Collection and Knowledge Exchange

- Awareness of patterns of consumption, drug trends and results of drug testing across all stakeholders through early warning systems (EWS) and other communication forum
- Compile a database to identify venue type for targeted provision
- Data sharing schemes on venues and alcohol/drug-related crime and disorder to trigger licensing reviews

Appendix A: Fieldwork Reports

Fieldwork Notes: Preston Saturday 3rd March 2012

Karenza, Zoë and Chris

We arrived in Preston at about 10:45pm, it seemed relatively quiet on the main 'drag'. There were a fair few people walking down the cobbled street at the end of which was situated the first survey venue, a 3 floor brick building which looked old. We met the manager who was very friendly and helpful (as were the door staff) – she suggested a few places to stand inside where the music was a little quieter but where there was a good flow of people. Z and I set up camp near a staircase between the second floor (Indie classics: The Smiths, Blur etc) and third floor (commercial dance music, dubstep etc); C went outside in the smoking area which was situated directly in front of the club on the cobbled street. The first floor was 'Emo/Rock' and was the largest and busiest of the three floors. The whole club felt 'student-orientated', it was dark and there was a lot of 'milling' around. Most customers seemed to be with relatively small groups of friends, although we did talk to a larger group of lads who had travelled from Whitehaven to Preston to see 'Rizzle Kicks' (commercial hip hop). We started surveying about 11pm and the club was already relatively busy. It filled up and was pretty full by the time we left at about 12:30am. The club shut at 2:30am. The crowd seemed quite young, and sweet and polite. Most were dressed in an 'indie style', the girls wearing low heels or boots, jeans or jean shorts and T-shirts, the lads mainly in jeans, T-shirts and trainers. It wasn't very 'dressy'. A few were very drunk but there was no hint of violence or 'trouble'. There were no visible signs of any drug use anywhere in the first survey venue.

We left the first survey venue at about 12:30 to go to the second survey venue which was a two minute walk, and situated on the main road. It was still quiet on the streets, at least compared to what we had expected for a Saturday night. We'd not seen any police officers at all or any signs of 'trouble'. The second venue looked more like a (commercial) 'nightclub' than the first venue – a neon sign, a wide entrance with two or three bouncers in high-viz jackets, a few girls in short skirts and high heels chatting to the bouncers who again were very friendly and helpful to us. The manager came to meet us, he was also very friendly and enthusiastic. The club itself was one large room with an elevated DJ box and a screen with the name of the venue projected onto it. The DJ was playing commercial R'n'B and chart dance, there were about 30 people dancing and about another 50 or so standing round the edges of the dance floor or near the bar. The music was too loud to be able to talk to each other for any length of

time. The venue had posters advertising other nights of the week (Thursdays were "The Only Way is Thursday", Fridays were "For the LGBT Crowd" and Saturdays were "Seduction: Playing the best in R'n'B and chart dance") and lots of drinks promotions including The Goldfish Bowl which was a bowl of very blue cocktail (not sure what was in it). The crowd were different to the first venue, young girls (18 or so) who were a bit more dressed up accompanied by a few straight lads alongside groups of slightly older gay guys. Again the atmosphere was friendly, people seemed drunk and there was a bit of 'sexualised' dancing by the girls (Rhianna style) but no hint of violence or aggression. The bouncers seemed to know a few of the customers to talk to. It was too loud to talk to people in the main room of the club so we surveyed outside in the smoking area (which was freezing). Z surveyed some women who were then seen discretely snorting cocaine in the toilets. However there was no other sign of visible drug use (baggies on the floor etc) in the nightclub. By about 2am the club had filled up a little, with maybe 150 people, but it didn't feel that busy (quite a large space to fill). By about 1:30am the girls in particular were becoming harder to talk to as they were becoming increasingly drunk. The most lucid young lad K spoke to at about 1:30pm said he'd taken coke that night. The venue was open until 4am. We left at about 2:15am having thanked the manager and the door staff. The streets were still relatively quiet, we saw one man who had just been arrested but that was our first and only glimpse of the police.

Fieldwork Notes: Lancaster, Saturday 10th March 2012

Karenza, Zoë, Bina and Mike

Bina and I met Zoë and Mike in the first venue at around 10:30pm. It was quite deceiving in terms of size; it appeared small when we first entered the main downstairs bar area, but we soon found a larger area upstairs. At about 1:15pm the venue staff pulled back a curtain to another area, which was more akin to a separate dance floor. Lots of customers quickly gravitated to the dance floor and the bar area emptied out. Nearly everyone seemed very drunk by about 11:30pm, and there was quite a lot of boisterous behaviour, although the atmosphere wasn't particularly threatening. The music was chart dance and R'n'B.

We left the first survey venue at about 12:30 to go to the second survey venue which was a five minute walk away. There were throngs of people walking through the streets; it did seem busier than Preston. K, B and M waited outside whilst Z went to check on our "drug urinal" (as we'd named it) on Pitt Street. Z had noticed that the urinal had been tipped over earlier on in the day, and had spoken to PC Phil Hutchinson to ask if he would mind, equipped with blue gloves, to right it, which he kindly agreed to do. The support of PC Phil Hutchinson was another reassuring aspect of this fieldwork. Indeed, as with Preston, venue managers, door staff, and police officers we met were all very helpful, if a little baffled as to why we were collecting people's urine. With regards the problem of public urination, Z had an interesting conversation with PC Phil Hutchinson.

We entered the second venue at 12:40am. There were about 60 customers, including a large group of about 18 'hens' dressed as 'Where's Wally?' Most customers either sat on the sofas and tables around the edge of the dance floor, or at the bar. There was a DJ situated at the far end of the dance floor – which coupled as a walk-through from the main entrance to the bar and toilet - playing commercial house tunes. Given that it was relatively late we were relieved to find that the music was not loud; we could talk easily to people without having to shout. This compared favourably to the first venue which turned the music up at about 11pm. There were a few people half-heartedly dancing, but this venue did not feel like a club. The crowd were slightly older, less 'studenty' and all seemed intoxicated, predominately through alcohol. One woman K spoke to said she previously had an issue with coke, but had stopped taking it as her boyfriend (who looked on rather moodily as K did the interview) disapproved. There seemed to be a number of customers we spoke to who situated their drug use in the

past, saying things like "but that was in my student days" or "I'm good now". There seemed to be more openness about discussing drugs amongst the second venue's crowd than at the first venue.

By about 2am Z, B and K were all getting tired of having to fend off the attentions of the male customers and it was becoming difficult to interact with people as they were becoming extremely drunk. One man kept trying to steal K's drink; another started biting B's survey sheets for some unknown reason. Z and I did talk to a polite group of older male customers (around 40 years of age) who were former Lancaster students and in the city for a rugby match and 'old boys' reunion. One of the group said that he tried amphetamines once in his early twenties and hadn't like it, and that *"it's all about mephedrone with these youngsters now*". After having a chat with him outside in the 'smoking area' (basically the street just outside the venue) and thanking the manager and door staff again, we left. It was 2:10am. The streets were still busy and felt relatively safe. We saw a number of police officers and three street pastors on leaving the second venue.

There was a relatively high police presence in Lancaster which we all commented on, both in terms of officers in patrol cars/van and on foot. In the first venue two female officers walked through the venue at about midnight – we assumed this was related to a specific incident but on speaking to the officers they said it was a routine licensing check. One of the officers commented on how *"about 40 people left as soon as we walked in"!* We hadn't seen any specific signs of 'trouble' in terms of police/customer interaction – that said the atmosphere in the city centre was at points quite rowdy and intimidating. M commented on the rudeness of some of the customers in the first venue. However we did have a team discussion that this may be a perception amongst us as slightly older individuals who are used to less drinking-oriented music venues.

Fieldwork Notes: Burnley, Saturday 17th March 2012

Karenza, Chris, Emma and Katie

We arrived in Burnley at around 10:30pm, so had a drink in a pub on the main street as we waited for Venue One to open at 11pm, when we had arranged to meet the manager. It was relatively quiet on the streets but those people who were around had clearly been celebrating St Patricks Day for a while. Many were wearing green and white hats and had shamrocks painted on their faces. The music in the pub was loud, and the DJ was announcing time-limited offers on alcohol, such as (to one large group of people celebrating a friend's birthday) *"Buy 10 shots in the next 10 minutes, and we'll give you a bottle of champagne"*. The group responded with much enthusiasm. We commented on how many of the young women were very dressed up, for example in extremely high heels, whilst the men were less smart, mostly in jeans, T-shirts and trainers or shoes.

Just after 11pm we went to the first venue which had not long opened, and met the manager, who was helpful and friendly, as were the door and bar staff. The venue had a reasonably sized dance floor (complete with flashing squares and "metal-barred cages" for customers to dance in; the latter proved popular with the female customers). The DJ was playing mostly retro tunes from the 1980s. It started to fill up slowly; around midnight more people started to arrive. The crowd were mixed in age, all white and relatively young, around mid-20s. As soon as people entered the venue they either went straight to the bar or onto the dance floor, so it was hard to capture them for interview. Chris stood at the top of the stairs to try to capture people there, but this didn't work well as we felt we were 'hassling' them before they'd had a chance to settle in. Luckily the music was not loud so we surveyed people inside the main room on some 'loveseats' around the edge of the dancing space.

Whilst everyone was intoxicated, it appeared to be predominately from alcohol. There was no evidence of visible drug use. Although the women were quite friendly to us, Chris was told to "f*ck off" several times by the men. This level of rudeness, verging on aggression, seemed to be the norm; we experienced and witnessed it throughout the night, both to ourselves, between male customers and by men towards women, on the streets and in the venues we visited. Venue One remained relatively quiet and so at about 12:30 we decided to move on. As we were leaving there was an altercation between two lads and a girl, who were subsequently removed from the premises. The manager looked a little embarrassed by this event, saying to us *"Oh all the weird ones are in tonight"* by way of explanation.

We met the manager of the second venue, which was much bigger and housed in a lovely old stone building. It was open until 5am, and was apparently, as one interviewee told us, *"Where everyone ends up"*. It had a good sized and comfortable smoking terrace so we spent time out there surveying people, and also captured people inside the venue's main room. Again the girls were friendly, but there were large groups of men, some of whom were aggressive: we witnessed several 'near-fights' which were mainly broken up by male friends or tearful girlfriends.

There appeared to be more drug use at this venue which was borne out in interviews, with cocaine and 'Bubble' the main drugs mentioned. When asked, interviewees said that 'Bubble' was *"about £10 a gram"* and that *"everyone does it in Burnley"*. Several of K's interviewees when asked what was in 'Bubble' said *"Plant fertiliser"*. Chris spoke to one interviewee who said he was *"addicted to mephedrone",* others mentioned cannabis as their problem drug, and when asked why said *"because I smoke everyday"*. Another girl K interviewed said she had experienced *"the worst time of my life on Bubble"* and had ended up in hospital as she couldn't breathe properly. When K asked her what she thought was in 'Bubble' she said *"a load of sh*t"*. Another male interviewee said *"it's like a cheap version of speed"*.

By about 2am the altercations were becoming more frequent and we saw the bouncers intervene on several occasions. One man who claimed to be the club's drug dealer (we couldn't verify this claim) later became aggressive towards Emma and Katie, grabbing Emma's surveys and clipboard and refusing to return them. K intervened as politely as possible and we left shortly after, at about 2:15am. The streets were busier on our walk back to the car, with a good 10 or 12 police officers standing on the main street surveying the action. We stopped for a while to watch; the main street felt safe but the side roads were all poorly lit and we felt uncomfortable not being in the view of the police and/or bouncers. We left Burnley about 2:30am. As Katie commented on the way home *"It's like another world"*.

Fieldwork Notes: Chorley, Saturday 24th March 2012

Karenza, Chris and Hugh

Chris and I arrived in Chorley at 11pm to meet Hugh outside the venue. The large pub outside which we'd surveyed during LDAAT Phase1 was busy. The streets were busy with a generally good-natured atmosphere. We found the venue and Hugh who said the venue had literally just opened. Karenza told the security team who we were and asked to see the manager. The team seemed quite wary of us and straight away the head bouncer asked if the manager had informed us of "the rules", that we were to remain discreet and not "hassle" the customers. One of us would be stationed in the reception area and two in the smoking area and entrance queue. Initially these rules were off-putting, but as the club started to slowly fill up we saw some sense in them. There were a lot of people going out for cigarettes in the alleyway near the club door, so it proved a fruitful place to capture participants for Chris and Hugh. Karenza was inside in what was quite a narrow corridor but with a long seat which proved to be a good place for surveying. The main room was very loud and dark, with a DJ playing a mix of chart R'n'B and dance classics. The main room was probably the most 'club-like' of the venues we'd surveyed so far. The venue held 450, by the time we left at 3pm probably about 150 people had been through the door. It was open until 4am. There was no sign of visible drug use, but we did speak to quite a few 'Bubble' users (also £10 a gram in Chorley as in Burnley), although again no one willing to offer us a sample.

The customers were a lot calmer and quieter than those we'd met in Burnley. They were easier to approach and talk to. There didn't seem to be the intense intoxication we'd witnessed the previous weekends. Many of the customers clearly knew each other, perhaps unsurprisingly given that Chorley is relatively small. As time wore on the security team seemed to warm to us, and even supplied us with cups of tea. We continued until about 3am (actually 2am as the clocks had gone forward).

Fieldwork Notes: Lancaster, Thursday 26th April 2012

Zoë, Mike and Sam

The dance night we were going to was at a student union venue in the city centre where a commercial drum & bass DJ and producer was playing (with a live band), supported by two other DJs beforehand. Having liaised with the venue manager, we were told the night would be finishing at 1am since it was a live act rather than a normal club night.

Mike, Sam and I met in the pub next door to the venue then went over to the club at 9pm. The door staff were very friendly and on entry we were greeted by a member of staff at a desk who was checking tickets. Door staff were checking ID of all customers on entry. As we walked in the club was very quiet, with maybe 80 people at most there already. People were mainly milling around the bar area, with one or two already dancing on the dance floor to commercial drum & bass and dubstep. Sam and I went to put notices up about the research in the women's toilets and Mike in the men's. We immediately got chatting to people and carried out a few surveys from the off. I went to have a look round the club. The back room of the club, which was often used as a second/'chillout' room with a separate bar, had been closed off to be used as a hospitality room for the act, leaving just the main room for customers. There was very little seating, a few bar stools and high tables round the bar area and stools down the side of the dance floor.

Having surveyed a few people sitting round the bar, I went outside to talk to people smoking at the main entrance. Despite the rain, people were still happy to be surveyed outside. Mike stayed round the bar area, surveying people on their way to and from the bar, where again, particularly as the night went on, people were happy to talk.

It was immediately obvious that this was a young crowd (18-21). The main act had had recent commercial success we were told, with two 'number one' hit records and most of those we talked to had come specifically to see him and the live band play. Tickets were £16.50, which everyone we talked to thought was too high and a product of his commercial success.

There seemed to be a fairly even split between students and locals and from my initial impressions, drug use and the range of drugs used seemed to be more prevalent amongst the locals, although Mike

thought that drug use amongst the students interviewed was quite high. Alcohol was being widely used but unlike the other clubs in our fieldwork, there were only a handful of people who were very drunk. Preloading on the whole seemed to be lower and it might have been a feature of starting the surveys at 9pm or it being a week night but people generally seemed to have consumed far less alcohol in the time they'd been out.

Drug use was a lot more prevalent than in the other venues and it appeared that ecstasy (pills and MDMA) and cannabis were the most commonly used drugs in general, with ecstasy being most commonly used that night. Ketamine also seemed to be popular amongst individual groups of people, when asked why, one of the girls I spoke to said, '*just coz it's like nothing else*.' A number of the people all three of us spoke to asked why there weren't hallucinogens included on the survey, explaining that they liked magic mushrooms and that recently they'd been taking acid (LSD tabs) which seemed to be available to both locals and students. A pair of friends I spoke to said that acid was their favourite drug.

Despite being young, many of the girls Sam and I spoke to were seasoned drug takers and very much into a dance scene going to dance nights, festivals and parties in the local area. It was these groups who were the most experimental with the range of drugs they used and, again, from initial impressions, seemed on the whole to drink less alcohol, with some saying they hardly drank at all. Conversely, Sam and I also spoke to a number of young women (mainly students) who had very strong anti-drug views, saying they thought it was '*wrong'* and '*foul'* and that '*people are harming themselves'*.

At 10.30 the club was still relatively quiet so I went to talk to the door staff to see how they were doing on entry numbers. At 10.30 they only had 200 people in, when they were apparently expecting 1000. Ticket sales had been low, which staff thought might have been a combination of the high ticket price, impending exams and that the ticket to the 'Grad Ball' at the university had gone on sale that week for £45. The night had been marketed for over a month so it wasn't thought to be that.

We left just before midnight as the main act and his band were coming on. It was still relatively quiet – I'd guess maybe 250 people by then, all of whom were on the dance floor. At this time, I observed just three girls who were clearly drunk, stumbling at the side of the dance floor. The crowd was very friendly and despite being relatively quiet, there was a good atmosphere. Participation in surveys was high for all of the researchers with only a few refusals at the beginning of the night.

Fieldwork Notes: Lancaster Saturday 2nd June 2012

Zoë, Mike and Sam

In order to try and capture another 'dance' crowd to compare with the data from the mainstream clubs across Lancashire we decided to do an additional night in Lancaster by going to what we thought was a more dance music-focussed venue than our original venues.

We arrived at the venue at 10.30pm. It was just opening, with the bar being stocked, no music on and was completely empty. I spoke to the bar staff explaining what we were doing and asked about the clientele of the club. They said that whilst they played dance music they would not describe it as a 'dance club' where people would come specifically for the music or to see a particular DJ and that they played mainly commercial dance and R'n' B. They said it was a very young drinking crowd and that the club wouldn't fill up until midnight.

Given we needed to do something until our first chosen venue filled up we decided to see if there were any one-off local dance music events on. Through Facebook we looked at local events that one of the researchers might have been invited to and rang a local pub with a function room which hosts occasional dance nights. It was apparent that there was nothing specific on that night. There was a club open next door which was already playing music and seemed to have a few customers. The venue had recently re-opened, hence not being on our initial short list of 15, but fitted our criteria for a nightclub. I spoke to the door staff and the manager about our research and they were happy for us to survey people until we moved back to the first chosen venue.

Again, despite the music, at 10.45pm the second nightclub was still virtually devoid of customers. There were two rooms, but only one room was open, playing indie and chart music. The second room which was due to open at midnight was reportedly where they tended to play dance music. However by the time we left there were no signs of it opening, perhaps unsurprising given it was a quiet night. There were maybe five customers in the whole club at this time, most of whom appeared to be very drunk. Given it was so quiet where we were positioned, I went for a wander around the nightclub. I sat down next to a girl sitting on her own and started the survey. Her boyfriend came over almost immediately and swore and asked aggressively what I was doing. I politely and calmly explained I was from Lancaster

University and doing a survey with his girlfriend. He then pulled me up by the shoulder and told me to "f*ck off" and pushed me. I walked away and told the door staff what had happened who acted immediately. He was made to apologise (which he did in front of the door staff then continued to be aggressive when they were out of earshot) and then was asked to leave. This situation left me feeling rather shaken. The nightclub was slowly filling up around 11pm and we did manage to survey a few people, a couple of whom were using cocaine that night and who were fairly regular polydrug users (one of whom felt that his ketamine use had become a problem) but by and large it seemed to be a mainly drinking crowd with a number of the women expressing strong anti-drugs views.

At 12.15am the second venue was still very quiet, the second 'dance' room hadn't opened and a few people had refused to participate so we decided to head back over to the first nightclub. This first venue was now busier and playing very loud commercial dance music. It was too loud and too dark to try and conduct the surveys in the main part of the club so we headed towards the toilet area. We managed to speak to a couple of people each but we started to get mainly refusals. People were very drunk so were either unable to participate or too aggressive to wish to take part. There was a group of students who refused just as they were leaving. Given the number of refusals and the general levels of intoxication and aggression, we decided to call it a night at around 12:45am. We only managed to survey a small number on this night, a total of 22 from both venues.

Appendix B: Frequency Tables

Table 1: Self reported usual frequency of alcohol consumption (%)

	Every day	*Most days a week*	*2-3 times a week*	*Once a week*	*Once a fortnight*	*Once a month*	*Several times a year*	*Once a year or less*
Burnley	7	4	23	32	13	14	4	4
Chorley	4	4	19	54	12	8	0	0
Lancaster	3	7	35	33	9	12	2	0
Preston	3	5	30	37	14	10	1	0
Female	2	5	31	30	12	18	1	1
Male	5	6	29	40	10	5	3	1
All respondents	**4**	**6**	**30**	**36**	**11**	**12**	**2**	**1**

Table 2: Alcohol preloading by gender and fieldwork location (%)

	Chorley	***Lancaster***	***Burnley***	***Preston***	***Total***
Females	58	55	57	32	**50**
Males	42	45	43	68	**50**
Total	**100**	**100**	**100**	**100**	**100**

Table 3: Mean units of alcohol consumed when preloading, when out and in total – for different groups on the fieldwork night

	Preloading	*In NTE*	*Total units*
Female	6.1	5.7	**9.2**
Male	12.1	10.1	**16.9**
Daily smokers	10.7	8.1	**14.8**
Non daily smokers	9.2	8.1	**12.6**
Non smokers	7.3	8.2	**12.1**
Polydrug users *	9.7	6.5	**13.1**
Non polydrug users	8.6	8.2	**13.1**
Standard Nightclubs	9.5	8.7	**14.1**
Dance Event	7.7	6.0	**10.3**
Weekly drinker	9.4	8.5	**13.8**
Non weekly drinker	7.7	7.1	**11.2**
Burnley	11.7	7.7	**16.2**
Chorley	6.7	10.5	**12.9**
Preston	9.1	9.1	**13.9**
Lancaster	8.4	7.3	**12.1**
Total	***9.0***	***8.1***	***13.1***

* Polydrug users on the fieldwork night (n=10) reported having taken and/or planning to take two or more illegal drugs on the fieldwork night

Table 4: Mean units of alcohol consumed of specific alcoholic drinks by groups

	Beer	*Spirits*	*Wine*	*Alcopops*	*Other*
Female	1.6	2.2	2.0	0.2	0.04
Male	5.7	4.5	1.0	0.3	0
Burnley	2.4	4.5	2.7	0.2	0.1
Chorley	3.2	1.8	1.8	0	0
Lancaster	4.0	2.8	1.3	0.2	0
Preston	3.9	3.9	0.6	0.5	0
Any illegal drug on fieldwork day	4.0	8.4	0.9	0.2	0
No illegal drugs on fieldwork day	3.6	2.6	1.5	0.3	0.02
Polydrug use on fieldwork day	2.6	5.4	1.0	0.2	0
Not polydrug use on fieldwork day	3.7	3.3	1.4	0.2	0.02
Total	*3.6*	*3.3*	*1.5*	*0.2*	*0.02*

Table 5: Self reported prevalence of drug use by whole sample % (n=343)

	Lifetime	*Past Year*	*Past Month*	*Past Week*	*Already taken*	*Planned later*	*Planned &/or already taken*
Any illegal drug	62	45	30	22	13	10	14
Polydrug use *	41	29	14	7	2	2	4
Benzodiazepines	8	5	3	1	0	0	0
Bubble	18	11	3	2	2	1	2
Cannabis	58	39	25	17	10	7	11
Cocaine	35	24	12	7	4	3	4
Ecstasy pills	29	16	7	3	0	1	1
GHB/GBL	4	1	<0.5	0	0	0	0
Heroin	2	1	<0.5	0	0	0	0
Ketamine	18	11	3	2	0	0	0
MDMA crystal	24	18	7	3	<0.5	1	1
Mephedrone	13	7	2	1	1	1	1
Methoxetamine	3	3	2	1	0	0	0
Speed	26	11	4	2	<0.5	<0.5	<0.5
Steroids	3	2	1	<0.5	<0.5	0	<0.5
Other Legal Highs	17	8	3	1	0	0	0

*Polydrug use is defined as use of two or more illegal drugs

Table 6: Self reported use of any illegal drug by fieldwork location % (n=343)

	Burnley	*Chorley*	*Lancaster*	*Preston*	*Total*
Lifetime	51	54	63	71	**62**
Past Year	32	27	48	53	**45**
Past Month	15	19	34	35	**30**
Past Week	15	15	26	19	**22**
Already Had Today	11	12	14	13	**13**
Planned Later	6	12	12	8	**10**
Planned &/Or Already Had	13	15	15	13	**14**

Table 7: Self reported prevalence of use of any illegal drug by gender % (n=334)

	Female	*Male*	*Total*
n=	*161*	*173*	***334***
Lifetime	58	66	**62**
Past Year	42	47	**45**
Past Month	28	32	**30**
Past Week	17	25	**21**
Already Had Today	10	16	**13**
Planned Later	7	13	**10**
Planned &/Or Already Had	12	17	**14**

Table 8: Self reported prevalence of use of any illegal drug by self defined ethnicity % (n=334)

	White	*Mixed Race*	*Asian*	*Black*	*Other*	*Total*
n=	*319*	*7*	*3*	*2*	*3*	***334***
Lifetime	63	29	33	50	67	**62**
Past Year	46	0	33	50	0	**45**
Past Month	31	0	33	50	0	**30**
Past Week	22	0	33	50	0	**22**
Already Had Today	14	0	0	50	0	**13**
Planned Later	10	0	0	0	0	**10**
Planned &/Or Already Had	15	0	0	50	0	**14**

Table 9: Self reported prevalence of use of any illegal drug by standard nightclub versus dance event % (n=335)

	Standard Nightclub	*Dance Event*	*Total*
n=	*252*	*83*	***335***
Lifetime	61	65	**62**
Past Year	40	58	**45**
Past Month	24	48	**30**
Past Week	16	39	**21**
Already Had Today	10	23	**13**
Planned Later	7	17	**10**
Planned &/Or Already Had	12	23	**14**
Taken stimulant on fieldwork night	5	8	**6**
Weekly drinker	74	77	**75**
Non weekly drinker	26	23	**25**

Table 10: Prevalence of drug use in Lancashire's NTE (Top 10 drugs in Phase 3/Phase 1)

	Lifetime use	*Past year*	*Past month*
Cannabis	58/62	39/31	25/19
Cocaine	35/43	24/25	12/17
Ecstasy pills	29/39	16/18	7/8
Speed	26/28	11/11	4/3
MDMA crystal	24/20	18/14	7/6
Bubble	18/18	11/16	3/9
Ketamine	18/16	11/9	3/5
Mephedrone	13/13	7/11	2/5
Benzodiazepines	8/na	5/na	3/na
GHB/GBL	4/6	1/1	<0.5/1

Appendix C: Nightclub Admissions and Bar Takings on Survey Night

Location	*Venue*	*Number of admissions*	*Total bar takings (£)*	*Average spend per customer (£)*
Preston	1.1	688	6628	9.63
Preston	1.2	189	3008	15.90
Lancaster	2.1	1,373	6202	4.51
Lancaster	2.2	834*	4839	5.80
Lancaster	2.3	279	3000	10.75
Lancaster	2.4	No longer trading	No longer trading	No longer trading
Lancaster	2.5	579	2734	4.72
Burnley	3.1	Requested, but not available	Requested, but not available	Requested, but not available
Burnley	3.2	Requested, but not available	Requested, but not available	Requested, but not available
Chorley	4.1	Requested, but not available	Requested, but not available	Requested, but not available

* figure includes smokers exiting and re-entering club

Appendix D: Protocol for obtaining Novel Psychoactive Substances samples

In terms of consent for the gathering and analysis of samples of white powders bought as 'legal highs', if a survey participant indicated when asked that they had taken and/or were planning to take a legal high on the fieldwork day, all researchers were trained to follow the protocol below:

"Some people are concerned about what is in legal highs and whether they contain what they are supposed to contain. We are able to get legal highs tested at a local laboratory to see what is in them and whether they contain any harmful ingredients. If you have got any legal highs on you we are able to take a small sample and test it and let you know what it contains if you would be interested. Would you be interested? It would be totally anonymous. We don't need to know your name or number. We would just give you a website address to find out the results. Would you be willing to give us a tiny sample of your legal highs?"

Appendix E: Urine Extraction Process Images

Figure 1: Proposed position of the urinal (X marks position of urinal)

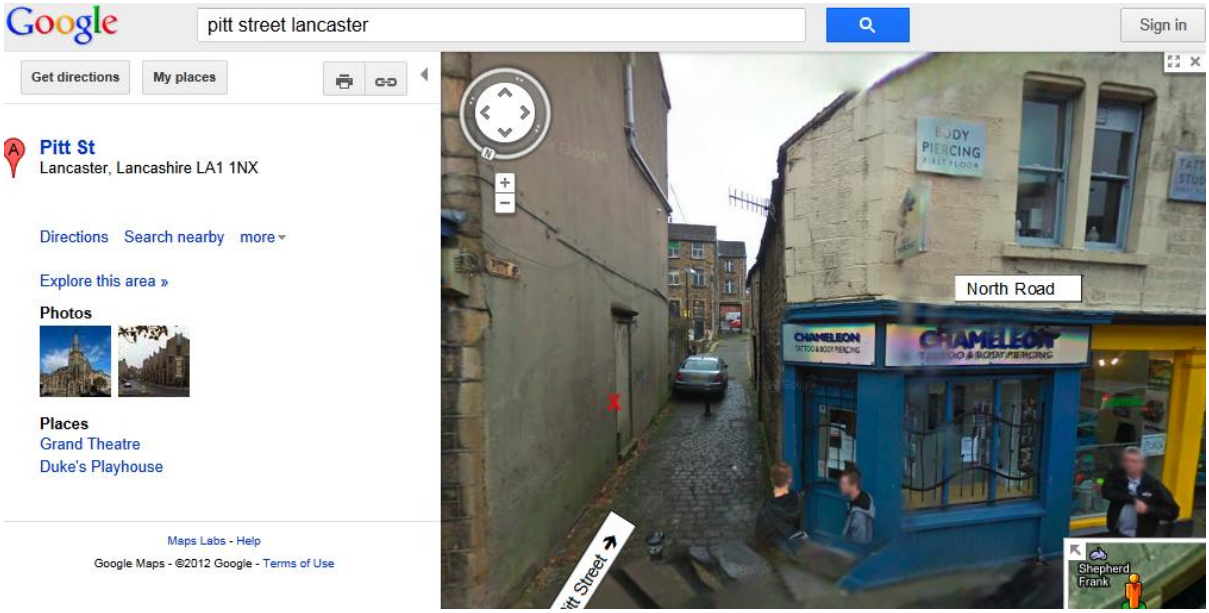


Figure 2: Urinal in situ

Figure 3: Removing the urine through outlet pipe

Appendix F: Laboratory Urine Analyses

TICTAC Communications Limited

LANCASTER EXCERPTS FROM THE CITY CENTRE POOLED URINE ANALYSIS PROJECT

In March - May 2012 a pilot project was undertaken on behalf of the Home Office Centre for Applied Science and Technology (CAST) to analyse pooled urine from a number of city centres. Over the weekend of 09/10 March 2012 a pre-pilot of this project was conducted in Lancaster.

The project was undertaken to assess the ability of pooled urine analysis to identify which, if any, of the recently identified new psychoactive substances (NPS) are being consumed in the UK.

An overall report of the project was submitted to CAST on 25 June 2012. Following, are the excerpts taken from this report that pertain to Lancaster.

Samples were analysed by two analytical laboratories, based on that lab's area of expertise.

1) HFL Sport Science (HFL) – Screening by high resolution LCMS for NPS including synthetic cannabinoid receptor agonists.
2) Analytical Services International Ltd. (ASI) – Screening with a combination of mass spectrometry and immunoassays for traditional drugs of abuse, alcohol quantitation, GBL/GHB quantitation and creatinine.

While the project focus was on NPS, screening for the traditional drugs of abuse, as well as alcohol, GBL/GHB and creatinine concentration help put into context the results of any NPS found to be present.

Differences in what was detected by HFL and ASI will partly be a result of the differences in analytical sensitivity of the methods used. The urinal used in Lancaster was placed there specifically for this project and thus the public were not accustomed to it being there. As a result, it contained less urine than the other cities in the project, where urinals have been situated for some time.

Lancaster pre-pilot

Findings from HFL. With the possible exception of Hordenine, there does not appear to be any NPS present[1] in the Lancaster sample. A number of both traditional "club drugs" were detected along with several therapeutic drugs known to be abused. For the former, these include amphetamine, cocaine and MDMA as well as some metabolites and diluents of these. The latter includes dihydrocodeine, morphine and tramadol. An assortment of therapeutic drugs was also detected and given the relatively light use of the urinal, it is interesting to note that this these included three different antidepressants. The full list of the substances detected can be seen below.

[1] Hordenine, which was detected, is seen in tablets containing NPS/legal highs. However, it is also the marker for some beers (stouts) as it occurs in sprouting barley. Given the locations and indeed rationale for the temporary urinals, this may be a more probable explanation for the presence of hordenine.

Findings from Analytical Services International Ltd (ASI). Consistent with the HFL results, ASI detected cocaine metabolites. The creatinine level was low at less than 0.1mmol/L. The urine alcohol level detected was moderately high at 113mg/100mL which equates to the UK blood 80mg/100mL drink drive limit. The full findings can be seen below.
Detailed findings.

The substances detected have been classified into four groups; new psychoactive substances, traditional drugs of abuse (i.e. cocaine and MDMA etc.), therapeutic drugs with the potential for abuse (i.e. codeine and morphine etc.) and therapeutic drugs/other. A substance was put into a given classification because of either the substance itself (e.g. cocaine), because it is a metabolite of a substance (e.g. benzoylecgonine) or because it is a known diluent or additive (e.g. benzocaine). In these three examples, all have been classified as traditional drugs of abuse.

1. Alcohol quantification

Ethanol levels varied significantly across the 17 sample but in general, were high. Swansea and Maidstone share the honour of the highest while the City of London had the lowest levels.

Location	**LANCASTER**
Date	11/03/2012
Ethanol	113 mg/100mL

Highest ethanol levels Lowest ethanol levels

2. Creatinine quantification

While there are no established normal ranges of creatinine levels for pooled urine, it can reasonably be concluded that the levels detected in the samples were low as seen below. There is an inverse relationship between creatinine and alcohol levels, with Charterhouse Street London having the highest creatinine levels and Maidstone and Swansea the lowest. The Maidstone results suggest the possibility that the creatinine might have decomposed as the samples were not collected until approximately 24 hours later, on Mondays.

Location	**LANCASTER**
Date	11/03/2012
Creatinine	Less than 0.1mmol/L

Detailed results - drugs detected by HFL: Lancaster

Key to classifications	
	NPS/metabolites
	Traditional drug of abuse/metabolite/diluent/used with
	Abused therapeutic drug/metabolite
	Therapeutic drug/other

Lancaster 11.03.2012 pilot
55374888
amitriptyline
amphetamine
benzoylecgonine
caffeine
cetirizine + metab
citalopram + metabs
cotinine
dihydrocodeine
EDDP
fluoxetine
HMMA
hordenine
ibuprofen
ketoprofen
MDA
MDMA
morphine
nicotine
paracetamol
quetiapine + metabs
quinine + metabs
tetramisole
THC metabolites
theobromine
theophylline
tramadol + metabs

Summary results from
Analytical Services International Ltd (ASI)

Location	LANCASTER
Date	11/03/2012
Case	17265
Reference	55374870
6-MAM	
Amphetamines	None detected
Antifungal Drugs Screen	None detected
Antiretroviral Drugs Screen (ARV)	None detected
Barbiturates	None detected
Benzodiazepines	None detected
Cocaine metabolites	Positive
Buprenorphine	None detected
Basic Drugs Screen	Nicotine and Citalopram
Cannabinoids	None detected
Creatinine	Less than 0.1mmol/L
Ibuprofen	None detected
Mephedrone (4-Methylmethcathinone)	None detected
Methadone	None detected
Opiates	None detected
Paracetamol	Positive
Piperazine Screen	None detected
Salicylate	None detected
Ethanol	113 mg/100mL
GHB/GBL	None detected

The references cited above are intended to place our results in the context of published sources on drug concentrations and clinical effects. They are not a specific interpretation in this case. Please contact the laboratory if you require further information on the interpretation of our findings

Antiretroviral Drugs Screen (ARV) includes: Efavirenz, Atazanavir, Ritonavir and Lopinavir.

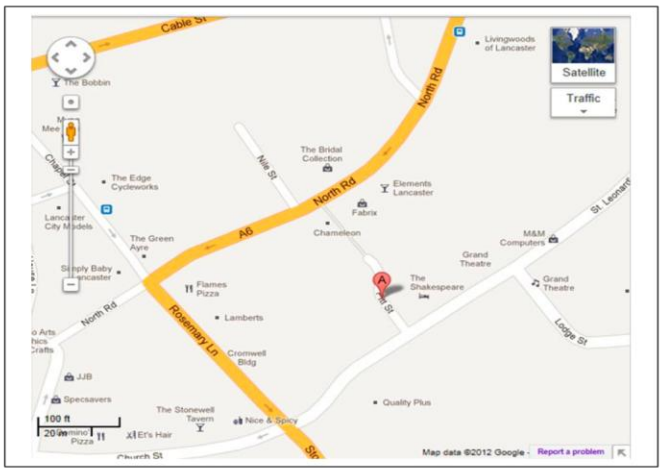
Antifungal Drugs Screen includes: Itraconazole, Hydroxyitraconazole, Posaconzole and Voriconazole.

Piperazine Screen includes: 1-Benzylpiperazine (BZP), N-(3-Trifluoromethylphenyl)piperazine (TFMPP), 1-(3-
chlorophenyl)piperazine (mCPP), 1-methyl-4-benzylpiperazine (MBZP), 1,4-Dibenzylpiperazine (DBZP) and 1-(2-
methoxyphenyl)piperazine (MPP)

GHB - Gamma-hydroxy butyrate / GBL - Gamma-butyrolactone. Analysis involves conversion of GHB to GBL and quantification of total GBL.

Maps and images of collection locations

Pitt Steet Lancaster



Map and image from Google Maps.

Appendix G: The Wee-Meter™

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