


DRUG ALCOHOL FINDINGS *Research analysis*

This entry is our analysis of a study considered particularly relevant to improving outcomes from drug or alcohol interventions in the UK. The original study was not published by Findings; click [Title](#) to order a copy. Free reprints may be available from the authors – click [prepared e-mail](#). [Links](#) to other documents. [Hover over](#) for notes. [Click to](#) highlight passage referred to. [Unfold extra text](#)  The Summary conveys the findings and views expressed in the study. Below is a commentary from Drug and Alcohol Findings.

Send email for updates

SEND[About updates](#)
[Copy title and link](#) | [Comment/query](#) | [Tweet](#)

► Drug safety testing, disposals and dealing in an English field: Exploring the operational and behavioural outcomes of the UK's first onsite 'drug checking' service.

Measham F.C.

International Journal of Drug Policy: 2019, 67, p. 102–107.

Unable to obtain a copy by clicking title? Try asking the author for a reprint by adapting this [prepared e-mail](#) or by writing to Dr Measham at f.measham@durham.ac.uk. You could also try this [alternative](#) source.

In a year when drug-related deaths in the UK had peaked, a pioneering study of drug safety testing was conducted on festival grounds. Its impact on drug-related harm was measured at various levels, including drug-related hospital admissions, behaviours of 230 people who received harm reduction advice, and actions that stakeholders took after receiving information about drugs being mis-sold or contaminated.

SUMMARY

In 2016, a year when UK drug-related deaths and festival drug-related deaths reached their highest on record to date, a drug safety testing service was piloted on the grounds of a festival with the aim of reducing drug-related harm.

Drug safety testing has existed in various forms for over 50 years, enabling the general public to submit illicit drugs for content analysis. The drive for drug safety testing has stemmed from concerns about specific drugs and drug use in specific contexts, for example new psychoactive substances entering the market, the contamination of drug markets with fentanyl, and the advent of acid house, rave, and electronic dance music and associated use of synthetic 'party drugs' such as MDMA (ecstasy).

Uniquely, drug safety testing can close the gap between what people think they are taking and what they are actually taking. However, for critics, conducting forensic analyses in challenging conditions means that at best drug safety testing gives an illusion of safety, and at worst can provide dangerously inadequate test results given the inevitable trade-off between speed, accuracy, reliability and portability of equipment. Further concerns include: a focus on risky substances (particularly contaminants) at the expense of risky behaviours (such as bingeing and polydrug use); the potential for non-enforcement of drug controls within a police 'tolerance zone' to be the 'thin end of the wedge' to decriminalisation; and a broader, more nebulous concern about drug safety testing 'normalising' attitudes to drug use amongst the wider population.

Though it is also known as 'drug checking', drug safety testing is the preferred term by British stakeholders as it emphasises the aim to help keep the public safe and distinguishes it from testing for surveillance purposes such as in prisons or workplaces, and from checking drugs which may evoke assisting or encouraging a crime (see [Serious Crime Act 2007](#)).

Multi-agency safety testing, the model of drug safety testing developed in the UK, is distinctive in that: (1) it foregrounds the sharing of test results with onsite and offsite stakeholders with the agreed aim of reducing drug-related harm; and (2) test results are delivered by healthcare staff in the context of a discussion with the client which takes the form of a [brief intervention](#) aiming to reduce drug-related harm.

In this pilot, multi-agency safety testing was run out of a large tent in the designated welfare area of a festival, alongside paramedic and other health and wellbeing services. Police agreed to this being a 'tolerance zone', where members of the public could bring any substances of concern for testing and receive results as part of an individually tailored brief intervention.

- The testing worked by service users putting a dose – a pill or approximately 5 mg of powder (but not vegetable or fungal matter) – into a small plastic bag which they sealed and posted in a locked amnesty bin



Key points From summary and commentary

Drug safety testing was piloted at a UK festival in 2016, enabling attendees to submit their illicit drugs for forensic testing and receive harm reduction advice.

In total, 20% of drugs were not what they were sold as, and this mis-selling was twice as high when drugs were bought at the festival than when they were bought offsite.

Upon hearing the test results, one in five service users chose to dispose of their drugs, and targeted alerts were disseminated with the support of festival management and police, including for chloroquine and ketamine mis-sold as cocaine, and pills with high MDMA content.

that was regularly taken and emptied in the lab. They received a unique ID number and were asked to return about an hour later.

- Brief interventions (lasting approximately 15/20 minutes) followed a predetermined structure: a scripted general warning about all drug use carrying risks and drug use not being encouraged or facilitated by the service; medical and drugs histories; current drinking and use of drugs and medications; what the sample was bought as, what it was thought to be, and what the test revealed it to be; as well as harm reduction advice tailored to the individual and their consultation. Risky behaviours such as bingeing, polydrug use and specific drug combinations of concern were also discussed. In addition, there were opportunities for questions, free harm reduction leaflets, and onwards signposting to a local drugs service.
- Finally, all service users were offered the opportunity to use a disposal service whereby further substances of concern in their possession could be handed over for onward safe destruction by the police.

Main findings

A total of 230 brief interventions were delivered, with a further 17 forensic test results not collected by service users. People tended to visit the testing service in friendship groups of four, resulting in harm reduction advice embedded in the local drug market context being distributed directly to roughly 900 service users. This equated to approximately one in five drug users at that festival, based on the [estimated](#) 21% of UK festival-goers taking illegal drugs.

Over half of service users were male (66%), most (87%) self-identified as White, and the average age was 28 years old. Service users who were taking ketamine tended to be younger (24 years) than MDMA (28 years) and cocaine (28 years) users.

Just 5% reported having previously accessed support or treatment from a healthcare professional for their drinking or drug use. Half (50%) of service users bought or acquired their substance offsite and successfully smuggled it past security search procedures at entry. The other half (48%) bought or acquired their substance from a friend, acquaintance, or dealer within the festival grounds.

Tests revealed that 37% of samples were MDMA crystal/powder and 20% pills, 14% ketamine, and 10% cocaine, with one in five samples (20%) not what they were sold as. Substances acquired within the festival grounds were more than twice as likely to be at variance with what they were sold as compared with those bought offsite (27% vs. 12%).

In terms of mis-sold substances:

- Some samples were revealed to be cheaper psychoactive drugs mis-sold as more expensive drugs, for example ketamine mis-sold as cocaine which has up to double the street price and greater criminal penalties in the UK, resulting in a higher reward-to-risk ratio for a dealer, and cathinones mis-sold as cocaine, ketamine, or MDMA.
- A number of samples contained pharmaceuticals and 'cutting agents' including chloroquine (a prescription anti-malaria medicine), benzocaine, caffeine, ephedrine, and paracetamol, all mis-sold as cocaine.
- Other mis-sold samples contained inactive but relatively harmless ingredients such as six samples of plaster of paris mis-sold as ecstasy pills and four samples of brown sugar mis-sold as MDMA crystal.

Upon hearing the test result, one in five service users (21%) chose to use the disposal service. Two thirds of those whose test result revealed their sample to be at variance with what it was sold as then handed over further substances in their possession compared with one in ten whose sample was confirmed to be as sold (67% vs. 9%). Those who obtained their sample within the festival grounds were nearly twice as likely to use the disposal service as those who obtained their sample offsite (27% vs. 15%).

Other outcomes included 22 service users saying that they would take the substance over a longer time period or after leaving the festival, and another seven said that they intended to take a smaller quantity of the drug. For most of these their test result confirmed the substance to be as sold but of a higher strength than anticipated, with the consultation session providing an opportunity for healthcare staff to discuss estimated strength and appropriate dosage. Six respondents reported their intention to throw away further substances in their possession after hearing the test result.

Through daily security advisory group meetings, all onsite agencies at the festival (including police, welfare, security and paramedical services) were updated on the results of drug testing, which revealed significant mis-selling onsite. This prompted the circulation of targeted alerts with the support of festival management and police, including for chloroquine and ketamine mis-sold as cocaine, and pills with high MDMA content.

The year that multi-agency safety testing was introduced, the festival reported a 95% reduction in drug-related hospital admissions from the previous year (one admission versus 19 in 2015). Festival and partner agencies suggested a number of possible explanations for this fall:

- heightened awareness of contaminants in circulation and mis-selling onsite;
- early presentation for drug-related problems combined with a greater confidence amongst paramedics in treating drug-related presentations onsite rather than sending people to hospital.

The authors' conclusions

Overall, the findings of the pilot study suggested that: festival-goers engage productively with onsite

drug safety testing services when given the opportunity; such services can access harder-to-reach or new user groups; and can play a part in reducing drug-related harm by identifying and informing service users, emergency services, and offsite drug-using communities about substances of concern. Use of the disposal service for destruction of substances by the police provided an externally corroborated measure of impact, reducing harm to the individual and others by removing such substances from site.

One of the implications of the findings is for future policing. Security procedures combined with onsite dealing practices could significantly increase drug-related harm as drugs bought onsite were more than twice as likely to be mis-sold as those bought offsite.

FINDINGS COMMENTARY The aim of the piloted drug safety testing service was to reduce drug-related harm – in part by closing the gap between what people think they are taking and what they are actually taking. As with other harm reduction interventions, its full impact was difficult to measure. Researchers tend to undertake evaluations of harm reduction in real-world settings, in which the effects of the interventions are obscured by a complex set of factors not under their control, as opposed to meeting the scientific ‘gold standard’ of a randomised controlled trial, where participants are randomly assigned to an intervention versus an alternative intervention or no intervention at all. Despite this, it may be possible to at least estimate the likelihood that an intervention (in this case, drug safety testing) is having a positive or negative impact. For instance, it may not be possible to determine impacts on risky drug use in general, but it is possible to observe impacts on indicators of risky drug use such as drug-related hospital admissions, or indicators of positive health choices such as choosing to dispose of drugs that were mis-sold or contaminated. Another issue related to measuring impact is that advice given to people attending a harm reduction service may subsequently be passed on through word-of-mouth to peers and elicit a change in the behaviour of people in the wider drug-using population. This means that the baseline attitudes, beliefs, or behaviours of the wider population may not provide a true no-intervention group with which to compare and therefore reduce the power of the study to detect positive outcomes.

Weighing up how to measure impact in the present study, the author noted that while “a reduction in drug-related deaths could be considered a clear measure of positive behavioural outcomes”, drug-related deaths are relatively rare at festivals and often influenced by many factors. A perceived “more useful measure of efficacy” at the festival population level was drug-related hospital admissions (incidents requiring major critical care), for which there was a drop between 2015 and 2016 (from 19 to one). However, these figures could also have been influenced by factors outside of or in addition to harm reduction advice received from staff at the drug safety testing service.

According to a [2017 market research report](#) based on a sample of 8,000 festival-goers, one in five (20.9%) admitted to taking illicit drugs at a festival and 1.3% to taking ‘legal highs’ (now known as new psychoactive substances). While security measures may be in place to try and eradicate drug possession and drug use onsite, the featured pilot found that they may be counterproductive. For instance, searching for drugs on entry combined with dealers on the festival site who have managed to smuggle substances in may encourage onsite purchases which could increase drug-related harm, as drugs bought onsite were more than twice as likely to be misrepresented.

The evolution of multi-agency safety testing, the pilot drug safety testing service run by the not-for-profit organisation [The Loop](#), was described in a [report](#) on reducing drug-related harm in the night time economy:

From 2010 onwards [Fiona Measham, the author of the featured paper, Professor of Criminology at Durham University, and co-founder/Director of The Loop] shadowed Home Office and academic scientists who conducted forensic analysis ‘back of house’ or behind the scenes at festivals and nightclubs primarily for intelligence and evidential purposes and to collect drug market trend data. In 2013 The Loop was founded and started forensic testing behind the scenes for police and paramedics at a number of UK festivals and nightclubs, using similar equipment and analytical methods[...], to share intelligence with partner organisations and to reduce drug-related harm both on and off site. This ‘halfway house’ model of testing expanded the sample gathering and intelligence sharing from primarily police to paramedics and other stakeholders (1). It is this ‘halfway house’ model of onsite testing as a collaboration between stakeholders but without public access that has been recommended by the Victoria Parliament’s recent inquiry (2).

In 2016 the general public were added to this reciprocal information-sharing process and with police support, were able to bring samples for testing too, in a new ‘front of house’ testing service coined Multi Agency Safety Testing (MAST). The Loop’s MAST service places strong emphases on both the brief interventions delivered by experienced healthcare professionals ahead of disseminating test results, and also on the collaborative, multi agency partnership approach to the testing service. Test results and trend data are shared with partner organisations

both on and off-site, as well as alerts issued on and off-site, with an overall aim of reducing drug-related harm at leisure events and more widely through greater monitoring of illegal drug markets. The Loop's protocol is designed to operate within UK law and multi-agency safety testing only operates after obtaining the full support of police, public health, local authorities, event organisers and other stakeholders.

Partners of The Loop include **Release** (the national centre of expertise on drugs and drugs law), Cambridgeshire Police, Cumbria Constabulary, and the Royal Society for Public Health.

Last revised 28 May 2019. First uploaded 07 May 2019

- ▶ [Comment/query](#)
- ▶ [Give us your feedback on the site \(two-minute survey\)](#)
- ▶ Open Effectiveness Bank [home page](#)
- ▶ Add your name to the [mailing list](#) to be alerted to new studies and other site updates

Top 10 most closely related documents on this site. For more try a [subject or free text search](#)

MATRIX CELL 2017 [Drug Matrix cell A1: Interventions; Reducing harm](#)

MATRIX CELL 2017 [Drug Matrix cell C1: Management/supervision: Reducing harm](#)

MATRIX CELL 2017 [Drug Treatment Matrix cell E1: Local and national systems; Reducing harm](#)

MATRIX CELL 2017 [Drug Treatment Matrix cell D1: Organisational functioning; Reducing harm](#)

REVIEW 2009 [Alcohol and drug screening of occupational drivers for preventing injury](#)

MATRIX CELL 2017 [Drug Treatment Matrix cell B1: Practitioners; Reducing harm](#)

REVIEW 2011 [Alcohol and drug prevention in nightlife settings: a review of experimental studies](#)

REVIEW 2014 [A review of buprenorphine diversion and misuse: the current evidence base and experiences from around the world](#)

STUDY 2018 [Adult substance misuse statistics from the National Drug Treatment Monitoring System \(NDTMS\) 1 April 2016 to 31 March 2017](#)

STUDY 2014 [Drug treatment in England 2013–14](#)