

Factsheet “Drug Checking”

What is drug checking?

“Drug-Checking” is a harm reduction intervention aimed at users of psychoactive substances. It consists of two elements – a chemical analysis of an illegally obtained psychoactive substance provided by the client; and a one-on-one counseling session. Drug checking is an acceptance-based, low threshold, anonymous and free-of-charge intervention targeting mainly, but not exclusively, people who use drugs recreationally. The chemical analysis is performed according to validated methods and by specialized laboratories. In Switzerland, government-sanctioned drug checking services operate in the canton of Bern, the city of Zürich, in the cantons of Basel-Stadt and Basel-Land since 1998, 2001 and the mid-2010, respectively and in the canton of Geneva. Eve&rave, a non-governmental organization, offered drug checking services already in the early 1990s.

How does drug checking work in practice?

Drug checking is not only – some argue not even primarily – about chemically analyzing illegally obtained substances. Much more, it is a way to gain access to a population of drug users often otherwise inaccessible to prevention and harm reduction services. Clients must take part in a counseling session, are informed about the results of the analysis and are given harm reduction advice depending on the substance(s) and dosages detected in the analysis.

Further, if unusual or unexpected substances (i.e. previously unknown substances, substances other than those the client believed to have bought, other psychoactive substances used as adulterants, potentially health-damaging adulterants) or unusually high dosages are detected, warnings are disseminated. They are published on websites frequented by the target population and shared with the police, hospitals, forensic laboratories, toxicological institutes, and other prevention and harm reduction services.

Drug checking at festivals and in clubs

A mobile laboratory is used for onsite testing at festivals and in clubs. The analysis of samples takes approximately twenty minutes. During this time, clients take part in a compulsory counseling session. Further, clients are asked to voluntarily provide additional information by filling in an anonymous questionnaire. By doing so, information not only about consumption behaviors but also about some aspects of retail drug markets can be collected (in which context and at what price the substance was bought). Clients are informed onsite about test results and are given additional advice based on the substance(s) and dosage detected if necessary.

Drug checking as a walk-in service

Walk-in drug checking services are offered in Bern and Zürich on a weekly basis. The procedure is similar to the mobile set-up –including a compulsory counseling session and further data collection through an optional questionnaire – but test results take several days to return. They are communicated during the next walk-in, by phone or by e-mail, depending on clients’ preferences. Walk-ins help to reach recreational drug users who tend not to frequent festivals or nightlife settings more generally. Communicating test results several days after a first encounter provides consumers with time to reflect on their consumption behavior and is an additional opportunity for a brief counseling intervention.

Does drug checking actually reduce harm?

Drug checking is designed to help prevention and harm reduction services access the often hidden population of recreational drug users. A study commissioned by the EU in 2001 showed that recreational drug users often get in contact with prevention and harm reduction services for the first time when they use of drug checking services.¹ Experience from Bern and Zürich suggests that, today, clients of drug checking services are better informed about the risks of drug consumption than they were when services started to operate in the 1990s and 2000s.

In 2015 approximately 1500 counseling sessions were held.² Additionally, around the same number of less formal contacts took place at the information stand accompanying the mobile laboratory. Around 150 clients were advised to consider seeking medical or other therapeutic assistance. Besides providing access to and engaging recreational drug users, drug checking contributes to a better understanding of trends in drug markets and drug consumption. As such, it can serve as an early detection mechanism for dangerous developments on drug markets (e.g. dangerous substances, significant and systematic changes in purity/dosage), especially those difficult to access be other services or the police. In this sense, drug checking also helps to monitor substances and markets. The knowledge about users and markets obtained from sample analyses, counseling sessions and questionnaires can be used to inform the public about potentially health-damaging trends – if warning is deemed appropriate – or to improve advice to clients on safer use and other harm reduction measures.

Who uses drug checking services?

Most drug checking clients are experienced recreational drug users. Data obtained from the questionnaires shows that the majority of them consume illegal psychoactive substances – other than cannabis – mostly on weekends and on an irregular basis.³ A majority of clients consumes more than one psychoactive substance (including alcohol, but excluding tobacco) during a typical party night. Cannabis, ecstasy, cocaine and amphetamine are the most commonly consumed illegal substances. However, alcohol and tobacco are consumed more frequently by clients of drug checking services than any illegal substance.

Clients are 27 years (mobile service) and 29 years (walk-in) old on average, respectively. Their age ranges from 15 to 71, but the majority is between 18 and 30 years old. The most common age is 22. Around a fifth of clients hold a university degree. Walk-in services are also used by relatives and partners of consumers.

What substances are tested?

Drug checking services in Switzerland analyzed 2242 samples in 2015. In 1379 cases unexpected substances or unusually high dosages/purity were detected. This is an increase of 19% compared to the previous year. Overall, the majority of samples tested in 2015 concerned cocaine. However, in mobile testing, MDMA samples prevailed.

¹ Kriener, H. (2001): An inventory of on-site pill-testing interventions. European Monitoring Centre for Drugs and Drug Addiction, Lissabon.

² Some clients are using drug checking services repeatedly over the course of a year. Under certain circumstances, returning clients do not have to take a counselling session every time they bring in a sample. This explains why the number of samples analyzed is higher than the number of counselling sessions.

³ Maier, L. J. et al. (2014): Früherkennung und Frühintervention von problematischem Substanzkonsum im Schweizer Nachtleben – Synthesebericht der Ergebnisse der Datenerhebung 2011 bis 2013. Bern.

Taken together, in descending order, cocaine, amphetamine and MDMA (tablets or powders) were the stimulants most often tested in 2015. LSD concerned 5.7% of all samples (+1.7% since 2013). Other substances such as ketamine, heroin, methamphetamine or so called NPS are even rarer. Questionnaires suggests that this distribution largely reflects the consumption behavior of drug checking clients more generally (including those who did not bring in substances).

How are samples analyzed?

High-Performance Liquid Chromatography (HPLC-DAD) is used to analyze samples. The HPLC-DAD method provides qualitative and quantitative results allowing to determine the dose per pill or the amount of pharmacologically active substances in powders. Furthermore HPLC-DAD as a robust technique provides reliable results in a variety of test settings (i.e. laboratory, clubs or even open-air parties with a mobile lab). New or unknown substances are, whenever necessary, further analyzed using other methods as Gas- or Liquid Chromatography coupled with Mass Spectrometry (GC-MS, LC-MS) or Infrared Spectroscopy (FT-IR). Those methods are also used to confirm HPLC-DAD results if required.

Is drug checking legal?

In 1997, two renowned legal scholars, Stefan Seiler⁴ and Peter Albrecht,⁵ concluded in separate legal opinions that testing ecstasy pills is not prohibited according to Swiss law; if its purpose is to protect drug users from consuming particularly dangerous psychoactive substances. The opinions further stated that test results can be communicated to clients both orally or in written form. Additionally to the result, users must be informed about the risks and illegality of the substance. The analysis can be undertaken by any laboratories in possession of a government issued license for handling prohibited substances, irrespective of the laboratory being a government institution or privately owned.

The future of drug checking

As long as most psychoactive substances remain illegal, there will be a need for drug checking. Previously unknown substance will appear on the market; known but rarely used substances can gain popularity; the purity of powders and the dosage in pills will continue to fluctuate as will the use of potentially dangerous adulterants.

Today, drug checking services still mainly attract recreational drug users. The reach of drug checking services could and should be extended to other users such as those frequenting drug consumption rooms, cannabis users and users of illegally obtained steroidal androgens, for example.

With only a handful of services in place, much of Switzerland is not covered by the existing offer. This means that in most place in Switzerland, the demand for drug checking services remains unmet. But it also means that the potential of drug checking as an early warning and market monitoring tool is not fully exploited. With more drug checking services in place, cantonal and federal governments could know more about illegal markets and how they change than they do today.

⁴ Seiler, H. (1997): Gutachten zu Rechtsfragen eines Ecstasy-Monitorings. Münsingen.

⁵ Albrecht, P. (1997): Gutachten zu strafrechtlichen Fragen in Zusammenhang mit den Ecstasy-Testings. Basel.

Selected bibliography

- Albrecht P. (1997): Gutachten zu strafrechtlichen Fragen in Zusammenhang mit den Ecstasy-Testings. Basel.
- Benschop A., Rabes M., Korf D.J. (2002): Pill Testing – Ecstasy & Prevention. Niedersächsische Landesstelle Suchtgefahren, Hannover.
- Infodrog, (2015): Reporting Safer Nightlife 2013/2014, Bern.
- Kriener H. (2001): An inventory of on-site pill-testing interventions. European Monitoring Centre for Drugs and Drug Addiction, Lissabon.
- Hungerbuehler, I., Buecheli, A., Schaub, M. (2011): Drug-Checking: A prevention measure for a heterogeneous group with high consumption frequency and polydrug use - evaluation of Zurich's Drug-Checking services. Harm reduction journal, 10 June 2011, vol./is. 8/1(16).
- NEWIP (2012): Good Practice Standards for Drug-Checking Services. Lissabon
- Seiler, H. (1997): Gutachten zu Rechtsfragen eines Ecstasy-Monitorings. Münsingen.
- Trimbos Institute (2010): DIMS, 1992-2010, (Drug Information and Monitoring System) Annual Reports. Utrecht.
- Vogels, N., Brunt, T.M., Rigter, S., Van Dijk, P., Vervaeke, H., Niesink, R.J.M (2009): Content of ecstasy in the Netherlands: 1993-2008. Addiction, 104, 2057-2066.

Selected weblinks

- <http://www.harmreductionjournal.com/content/pdf/1477-7517-8-16.pdf> / Accessed 11.04.17
- http://www.emcdda.europa.eu/attachements.cfm/att_231074_EN_INT15_NEWIP_Drug%20checking_standards-final_20.12-A4.pdf / Accessed 11.04.17
- <http://www.eve-rave.net/abfahrer/drugchecking.sp?text=1&page=7#kap1> / Accessed 11.04.17
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