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des Drogues et des Toxicomanies

EN

# NATIONAL DRUG REPORT 2020

## THE DRUG PHENOMENON IN THE GRAND DUCHY OF LUXEMBOURG: TRENDS AND DEVELOPMENTS (key issues)

Authors:

Nadine Berndt, PhD • Rita Seixas, PhD • Alain Origer, PhD

With the support of the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA)  
and the Réseau Luxembourgeois d'Information sur les Stupéfiants et les Toxicomanies (RELIS)

LE GOUVERNEMENT DU GRAND-DUCHÉ DE LUXEMBOURG

Ministère de la Santé

Direction de la santé

Service épidémiologie & statistique

Point Focal Luxembourgeois de l'OEDT

Bâtiment Greenfinch - 20, rue de Bitbourg - L-1273 Luxembourg-Hamm

[www.relis.lu](http://www.relis.lu) • [www.sante.public.lu](http://www.sante.public.lu) • [www.gouvernement.lu](http://www.gouvernement.lu)

## THE DRUG PHENOMENON IN THE GRAND DUCHY

## OF LUXEMBOURG: TRENDS AND DEVELOPMENTS

# 2020

## April 2021

This report presents an overview of the drug phenomenon in Luxembourg, covering drug policy, drug supply and demand, drug use patterns, health consequences and responses, as well as drug markets and crime. The statistical data and analysis presented in this report relate to 2019 or the most

recent year for which data are available and were provided to the Luxembourg Focal Point of the EMCDDA (PFLDT) from routine monitoring by the RELIS network, unless stated otherwise.

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# 1.

## DRUG POLICY



# 1. DRUG POLICY

## 1.1. NATIONAL DRUG STRATEGY

The 5<sup>th</sup> National Drug Strategy and Action Plan 2020-2024, relying on the governmental programme 2018-2023<sup>1</sup>, was presented by the Health Ministry and the National Drug Coordinator in 2020 and adopted by the Council of government on October 9<sup>th</sup> 2020 (Ministère de la Santé, 2020). It is based on a holistic approach and addresses illicit drugs, alcohol, tobacco, psychotropic drugs and behavioural addictions. It builds upon the two pillars of drug demand and drug supply reduction, and four transversal themes: (1) harm reduction, (2) research and information, (3) international cooperation, and (4) coordination. Its overall objective is to contribute to achieve a high level of protection in terms of public health, public security and social cohesion.

Luxembourg evaluates its drug policy and strategy by means of routine indicators' monitoring and specific research projects and evaluations. An external mixed-methods evaluation of the 4<sup>th</sup> National Drug Strategy and Action Plan was conducted by the Trimbos Institute of the Netherlands in 2019. The recommendations of the external evaluation contributed to the elaboration of the current 2020-2024 Drug Strategy and Action Plan. The evaluation revealed that the majority of the objectives outlined in the 2015-2019 action plan were met and proven to be effective, recommending to pursue the adopted approach and underlying principles of evidence-based policies, with a balanced approach and focus on health and human rights (Kools, van der Gouwe & Strada, 2019). The 2020-2024 National Drug Strategy and Action Plan is transversal and multidimensional, while its elaboration also involved stakeholders and experts from different fields at both national and international levels.

The new National Drug Strategy and Action Plan reflects the priorities set by the government. This means providing objective and reliable information on psychoactive substances and the effects and potential consequences of their use, preventing and reducing the initiation to drug use and addictive behaviours, ensuring decentralised, diversified and high-quality offers of treatment and harm reduction offers for people suffering from addiction, reducing the prevalence of drug use and addictive behaviours in the general population, as well as health and social damage generated by illicit drug use, and reducing damage caused by drug trafficking. Moreover, it aims to contribute to better housing and rehabilitation offers and an enhanced collaboration with law enforcement agencies at the national and international level. The Action Plan 2020-2024 lists around 80 separate actions developed in close collaboration with field actors and ministries, and approved by the "Groupe Interministériel Toxicomanie". The domains of action include universal, indicated and selective prevention with a focus on young people; diversity and high-quality treatment and care offers; socio-professional reintegration; reduction of risks and harms, especially among high-risk groups and expansion of substitution treatment offers; research, evaluation and information; supply reduction; coordination and international relations. Special focus is also given to regionalisation and decentralisation, and thereby the diversification and improvement of the accessibility of treatment offers. In terms of integration and rehabilitation, the objectives to be achieved are the extension of the existing offers of accommodation and supervised housing, adapted to the situations and needs of (ex-) drug users, and low-threshold socio-professional reinsertion measures. Finally, research in the field of illicit drugs and addictions and the evaluation of specialised offers should be further promoted and supported. The selection of specific actions, projects or programmes is based upon a 6-criteria matrix including pertinence, opportunity, feasibility, cost-benefit/quality factors, quality assurance mechanisms and measurability of results/impact. Like previous action plans, the National Drug Strategy and Action Plan 2020-2024 will also be subject to a final external evaluation towards the end of its implementation.

## 1.2. DRUG POLICY COORDINATION

The national drug policy coordination mainly involves five ministries: The Ministry of Health, the Ministry of Justice, the Ministry of Internal Security, the Ministry of Family and Integration, and the Ministry of Foreign Affairs. The Ministry of Health is in charge of drug-related demand and harm reduction, the Ministry of Justice and the Ministry

1 Présentation du « Plan d'action national drogues illicites 2020-2024 » : <https://sante.public.lu/fr/actualites/2020/10/plan-action-national-drogues-2020-2024/index.html>

of Internal Security are responsible for supply reduction, the Ministry of Family and Integration is competent in the field of homelessness and related integration measures, and the Ministry of Foreign Affairs deals with international cooperation. The Ministry of Health plays a central role as the National Drug Coordinator chairs the ICD (Inter-ministerial Committee on Drugs). This committee is composed of senior delegates from all ministerial departments involved in the drug field, directors of specialised NGOs and invited experts from civil society. Its main purpose is to organise and follow-up the implementation and effectiveness of National Drug Strategy and Action Plan, as well as to assess the needs and elaborate national recommendations. A more restricted group, including NGOs, is responsible for drafting action plans and national strategies, to be validated by the ICD and approved by the Council of government.

### 1.3. DRUG RELATED PUBLIC EXPENDITURE

The global budget of the Ministry of Health granted to drug demand reduction related services and programs went up from EUR 2,066,000.- in 2000 to EUR 13,994,013.- in 2018, and EUR 16,255,746.- in 2019, thus witnessing a progression rate of 16% since the previous year. In reference to the year 2005, the global budget dedicated to drug demand reduction related services and programs by the Ministry of Health was EUR 6,196,000.-, the progression rate to 2019 is 162%. Overall public expenditures in the field of drug demand and drug supply reduction per year have been estimated at 38,500,000.- EUR (Origer, 2010; 2017).

### 1.4. LEGAL PENALTIES FOR PERSONAL DRUG POSSESSION AND USE

The national reference law on drugs dates back to February 19th 1973<sup>2</sup>, and addresses the selling of pharmaceuticals and the fight against drugs and drug addiction. The 1973 basic national drug law regulates both, the selling of controlled medicines and the fight against drug addiction. This law prohibits the illicit use, transportation and selling of drugs. It has been amended by the law of April 27<sup>3</sup> 2001 and again in 2018<sup>4</sup>.

In 2001, the respective law of April 27 introduced the following amendments: cannabis use and possession for personal use were decriminalised at the national level and are since then punishable only by a fine. Prison sentences are foreseen in case of aggravating circumstances (e.g. use in schools or in the presence of minors). Moreover, the law introduced alleviation of penalties for simple drug use, and an enhanced overall differentiation of penalties according to the type of drug offences and the nature of controlled substances involved. Penalties for possession and use of controlled substances other than cannabis include imprisonment between 8 days and 6 months and/or a fine. Prosecution may be halted or penalties reduced if a drug user has taken steps to seek specialised help (see Fig. 1).

The national legislation does not differentiate between small-scale and large-scale drug deals or distribution. Sentences for both currently range from one to 5 years' imprisonment and/or a fine, while a prison sentence of 5-10 years can be imposed if the distributed drug has caused severe damage to health. If the drug has fatal consequences for the user, punishment for the distributor can be increased to 15-20 years' imprisonment.

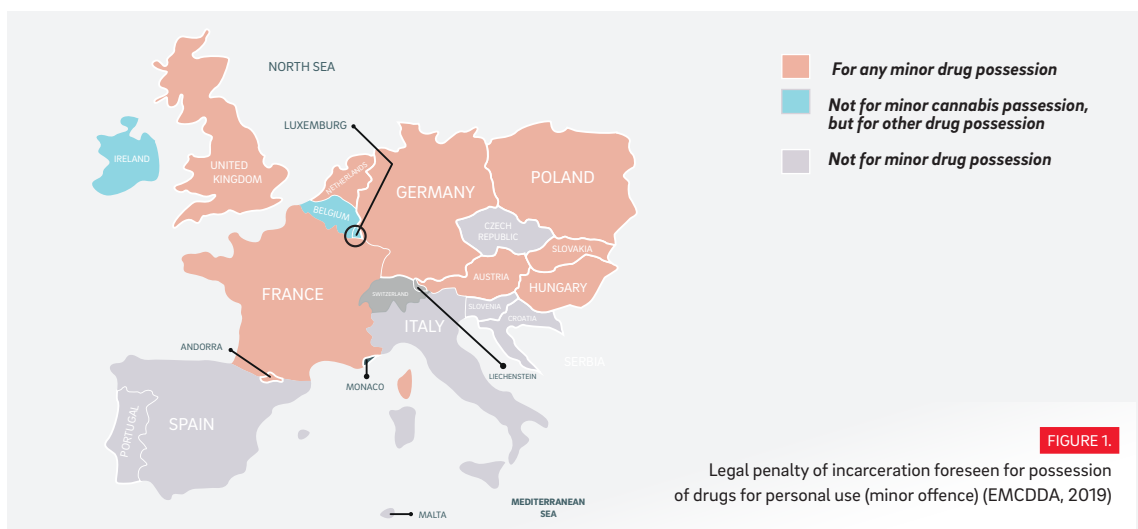
New psychoactive substances (NPS) are regulated and controlled by the same legal instruments as other controlled substances. Controlled narcotic, psychotropic and toxic substances are listed by means of various Grand Ducal Decrees.

The law of 27 April 2001 further foresees a legal framework for a series of treatment and harm reduction measures, namely, drug substitution treatment, needle exchange and supervised drug consumption rooms state accredited and Heroin Assisted Treatment (HAT), launched as a pilot programme in June 2017.

2 Official gazette A-12 du 3 mars 1973, Loi du 19 février 1973 concernant la vente des substances médicamenteuses et la lutte contre la toxicomanie, p. 319-324. (Adoption: 19.02.1973. Entry into force: 03.03.1973)

3 Official gazette A-61 du 17 mai 2001, Loi du 27 avril 2001 modifiant la loi modifiée du 19 février 1973 concernant la vente de substances médicamenteuses et la lutte contre la toxicomanie, p. 1180 (Adoption 27.04.2001. Entry into force: 17.05.2001)

4 Official gazette A-638 du 1 août, 2018, Loi du 20 juillet 2018 modifiant la loi modifiée du 19 février 1973 concernant la vente des substances médicamenteuses et la lutte contre la toxicomanie, p. 319-324. (Adoption: 20.07. 2018. Entry into force: 01.08.2018)



## 1.5. NEW DEVELOPMENTS REGARDING CANNABIS FOR MEDICAL AND NON-MEDICAL PURPOSES

### CANNABIS FOR MEDICAL PURPOSES

Legal access to cannabis for medical purposes has been regulated in the Grand Duchy of Luxembourg in 2018. The respective law was modified and entered in force on August 1<sup>st</sup> 2018 (« Loi du 20 juillet 2018 modifiant la loi modifiée du 19 février 1973 concernant la vente de substances médicamenteuses et la lutte contre la toxicomanie »). The Grand Ducal Decree (« Règlement grand-ducal du 21 août 2018 déterminant les modalités de prescription et d'accès à l'usage de cannabis à des fins médicales, ainsi que le contenu et la durée de la formation spéciale pour les médecins-spécialistes ») defining the medical prescriptions modalities and respective conditions, as well as the training to be pursued by medical doctors, entered into force on September 28<sup>th</sup>, 2018<sup>5</sup>.

### REGULATION OF LEGAL ACCESS TO CANNABIS FOR NON-MEDICAL PURPOSES

By the end of the year 2018, the coalition agreement of the current government included a chapter on a future regulation on legal access to cannabis for non-medical purposes. More specifically, the coalition agreement of the government states that the main purposes of regulating legal access to cannabis for non-medical purposes are to regulate, under conditions yet to be defined, the domestic production as well as the purchase and possession of cannabis for non-medical use for the personal needs of residents of the Grand Duchy of Luxembourg who have reached the age of majority. The objectives mentioned in the coalition agreement for regulating legal access to cannabis for non-medical purposes are to reduce the illicit market, to reduce the psychological and physical dangers linked to its use, and to fight crime at the level of supply. The coalition agreement also mentions that to this end, a State controlled chain of production and national sales will be set up, guaranteeing the quality of legal products. Proceeds from the sale of cannabis will be invested primarily in prevention, health promotion and education, and treatment in the broad area of dependence. Discussions and preparations towards regulating the legal access to non-medical cannabis are ongoing and involve numerous governmental and non-governmental actors.

5 Règlement grand-ducal du 21 août 2018 déterminant les modalités de prescription et d'accès à l'usage de cannabis à des fins médicales, ainsi que le contenu et la durée de la formation spéciale pour les médecins-spécialistes et modifiant :

1° le règlement grand-ducal modifié du 19 février 1974 portant exécution de la loi du 19 février 1973 sur la vente des substances médicamenteuses et la lutte contre la toxicomanie ;

2° le règlement grand-ducal modifié du 18 janvier 2005 déterminant le modèle du carnet à souches prévu à l'article 30-1 de la loi modifiée du 19 février 1973 concernant la vente de substances médicamenteuses et la lutte contre la toxicomanie.

# 2.

## PREVALENCE, PATTERNS AND DEVELOPMENTS IN DRUG USE



## 2. PREVALENCE, PATTERNS AND DEVELOPMENTS IN DRUG USE

### 2.1. DRUG USE IN THE GENERAL POPULATION

Drug use among the general population in Luxembourg is assessed by means of the cross-sectional population-based survey “European Health Interview Survey (EHIS)”. EHIS is implemented in all European Union (EU) Member States and is conducted every five years according to the Regulation 1338/2008 on Community statistics on public health and health and safety at work. A module covering the topic of illicit and new psychoactive substances has been added to the survey by the EMCDDA Luxembourg Focal Point (PFLDT) since 2014. This non-mandatory module assesses amongst others the lifetime prevalence, the last year prevalence and the last month prevalence of use of several illicit drugs. The latest EHIS wave in Luxembourg took place in 2019.

The data presented below are based on the 2014 and 2019 EHIS waves. EHIS targets illicit drugs and NPS’ use among the general population aged 15-64 years. In 2019, a total number of 3,514 valid questionnaires from respondents of this age category could be retained, a total number of 1,052 valid questionnaires from respondents aged 15-34 years old, and a total number of 165 valid questionnaires from respondents to 15-18 years old.

#### CANNABIS



Cannabis is the drug most commonly used at the national level. Figure 2 compares lifetime, last year and last month prevalence of cannabis use across three age groups. Globally, the comparison between 2014 and 2019 data suggests an increase in cannabis use across all age groups.

- > Lifetime use - lifetime cannabis use occurs to be highest among young adults (15-34y) with a proportion of 32.7% in 2019 and 31.5% in 2014. Its lifetime use among youngsters (15-18y) showed a statistically non-significant increase from 16.6% in 2014 to 18.2% in 2019.
- > Last year use - recent (last year) use of cannabis among the general population increased since 2014 (4.8% in 2014 and 5.4% in 2019). This increase is observed among young adults (15-34y) (9.8% in 2014 and 12% in 2019), and particularly among youngsters (15-18y) (11.2% in 2014 and 15.2% in 2019).
- > The observed increases in lifetime and last year cannabis use are not statistically significant. Recent use (last year) of cannabis among young adults (15-34y) in Luxembourg remains below the EU average - 12% in Luxembourg compared to 15% EU average as reported in the 2020 European Drug Report (EMCDDA, 2020).
- > Last month use - current use (last month) of cannabis shows a statistically non-significant increase between 2014 and 2019, notably among youngest users (15-18y) – 4.7% in 2014 and 7.3% in 2019 (see Fig. 2).

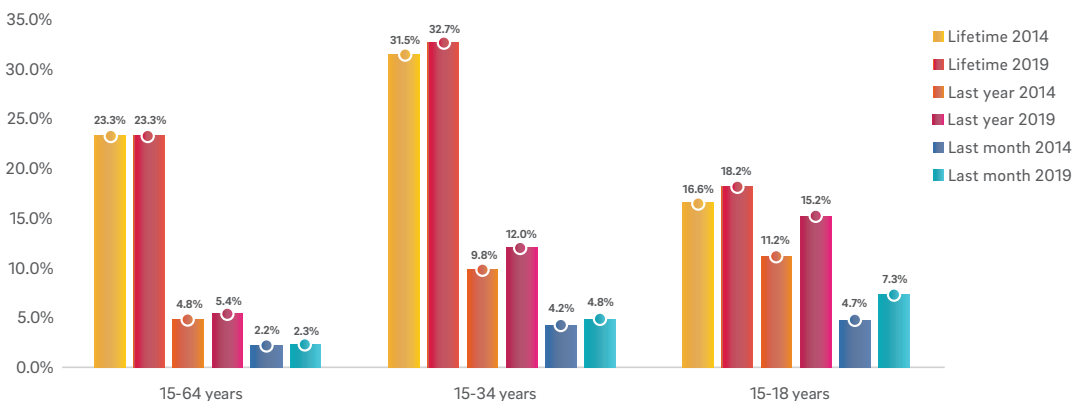


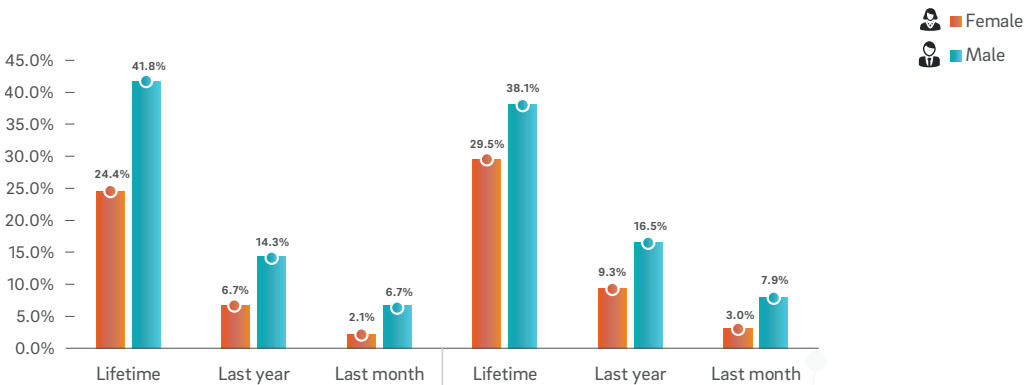
FIGURE 2.

Comparison of 2014 and 2019 lifetime, last year and last month prevalence of cannabis use across different age groups (EHIS, 2014; 2019)





- > **Gender differences** - gender differences are also worth mentioning. During both 2014 and 2019, a higher proportion of men report cannabis use compared to women (in lifetime, as well as last year and last month):
  - o Men report greater recent (last year) cannabis use (7% of the entire male population aged 15-64y and 16.5% of male young adults aged 15-34y) compared to women (4% of all women aged 15-64y and 9.3% of young women aged 15-34y).
  - o With regard to current use (last month), the percentage of young male adults who report having used cannabis is more than double the percentage of women both in 2014 (6.7% of men and 2.1% of women) and in 2019 (7.9% of men and 3% of female) (see Fig. 3).



**FIGURE 3.**

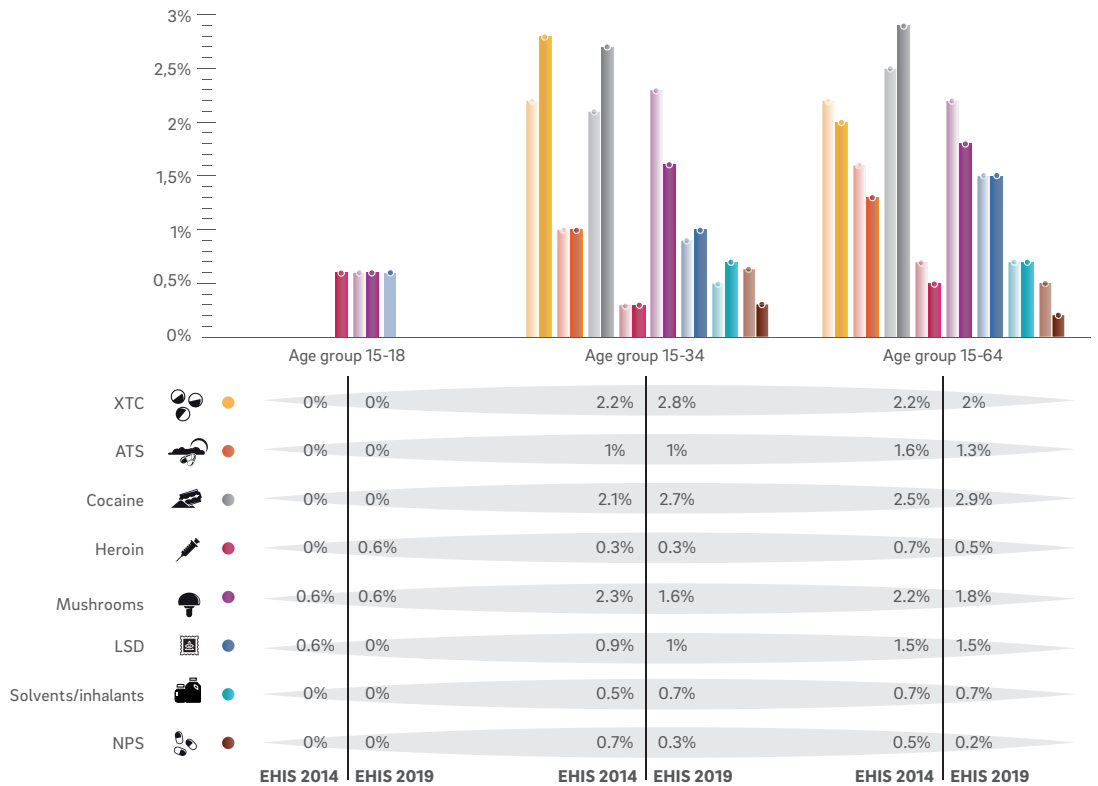
Comparison of lifetime, last year and last month prevalence of cannabis use among young adults (15-34y): evolution 2014 – 2019 (EHIS, 2014; 2019)

#### OTHER SUBSTANCES



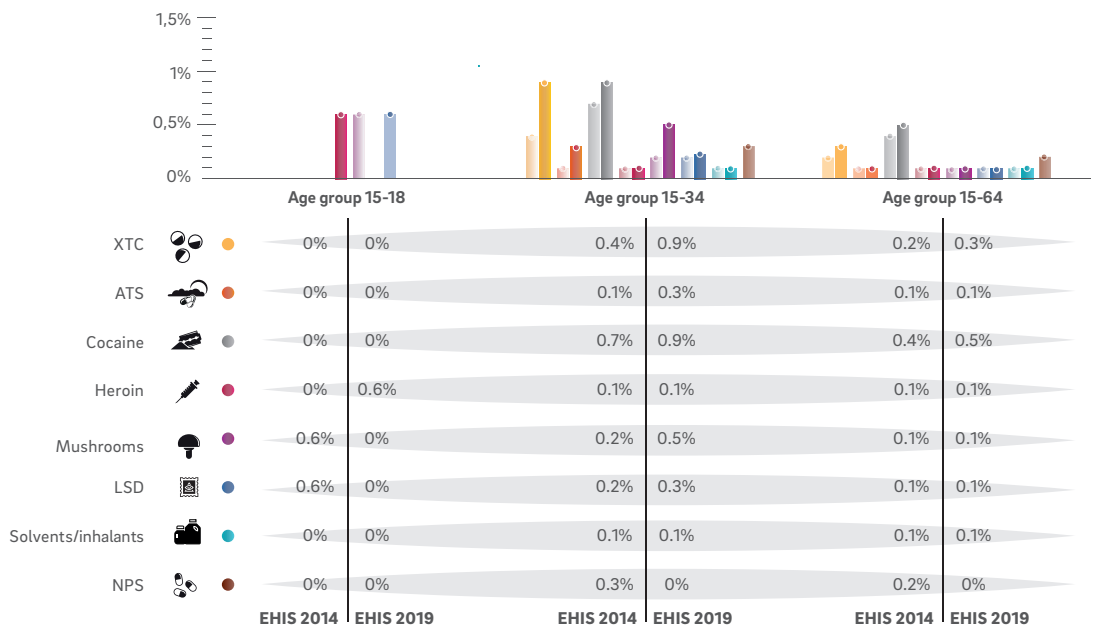
Following cannabis, the 2014 and 2019 EHIS waves reveal that stimulants are the most commonly used drugs among the general population:

- > **Lifetime use** - in 2019, a slightly higher proportion of young adults (15-34y) reported lifetime use of ecstasy, cocaine and LSD compared to 2014. On the contrary, hallucinogenic mushrooms and NPS's use decreased slightly. These differences are not statistically significant (see Fig. 4).
- > **Last year use** - with regard to recent (last year) use, 2019 data suggest an increase for ecstasy, amphetamines, cocaine, mushrooms and LSD use among young adults (15-34y), and an increase in recent use of ecstasy and cocaine when considering the entire population (15-64y) compared to 2014 data. These differences are not statistically significant though (see Fig. 5). Recent (last year) use of stimulants among young adults (15-34y) in Luxembourg are below the EU average (EMCDDA, 2020) - ecstasy (0.9% in Luxembourg compared to 1.9% EU average), amphetamines (0.3% in Luxembourg compared to 1.2% EU average) and cocaine (0.9% in Luxembourg compared to 2.4% EU average) (see Fig. 5).



**FIGURE 4.**

Lifetime prevalence of illicit drugs' use across different age groups: comparison of 2014 and 2019 data (EHIS, 2014; 2019)

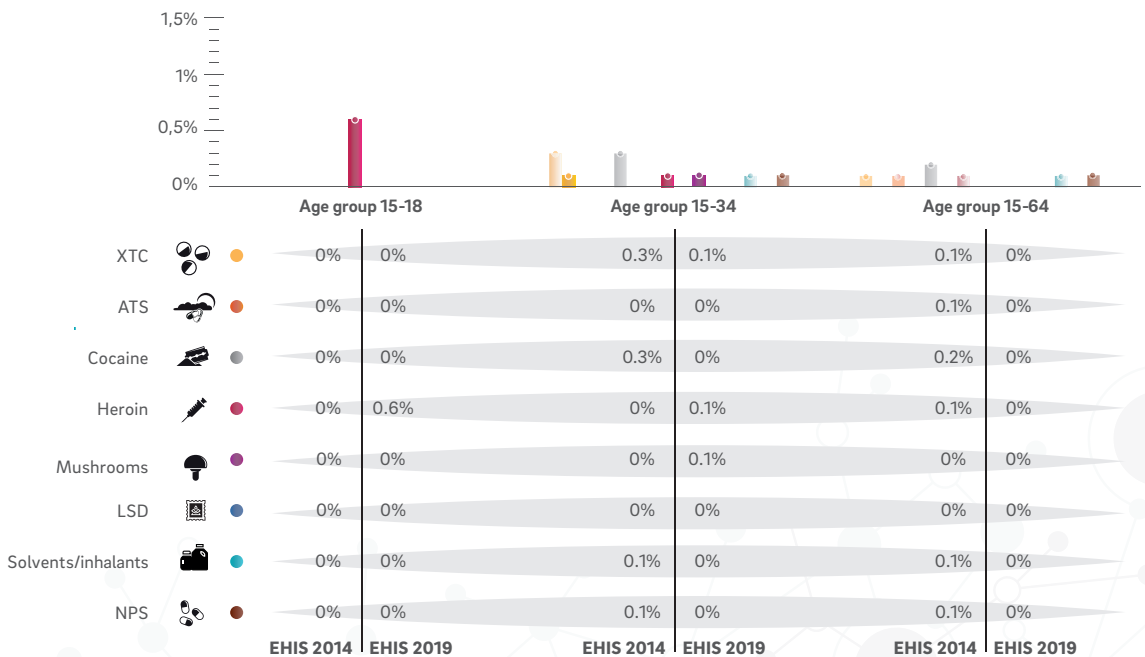


**FIGURE 5.**

Last year prevalence of illicit drugs' use across different age groups: comparison of 2014 and 2019 data (EHIS, 2014; 2019)



- > **Last month use** - as far as current use (last month) is concerned, EHS data are suggestive of a decrease in the prevalence rates for the majority of drugs. This said, it is important to highlight that in Luxembourg, due to the small size of the population, the subsamples of specific age groups (e.g. 15-18y) concerned by the questions on recent use (last year) and current use (last month) are obviously small. Hence, the differences in the prevalence rates are explained by very small differences in terms of the number of effective cases (see Fig. 6).
- > **Age of first use** - cannabis and solvents are the drugs with an earlier age of first use (cannabis at 19y and solvents at 17y, on average) (EHIS, 2019). It is relevant to highlight that the average age of first use of heroin appears to be decreasing (23y in 2014 and 19y in 2019) as well as the average of first use of amphetamines appears to be decreasing (21y in 2014 and 20y in 2019). The initiation of using other drugs such as ecstasy, LSD and NPS appears to occur at a later age.



**FIGURE 6.** Last month prevalence of illicit drugs' use across different age groups: comparison of 2014 and 2019 data (EHIS, 2014; 2019)



- > **Gender differences** - on average, EHS data from both 2014 and 2019 yield that women report trying drugs at the same age or later than their male counterparts, except for heroin, magic mushrooms and solvents (not in Figure/Table).

## 2.2. DRUG USE AMONG YOUNG SCHOLARS

Drug use among young scholars is assessed through the representative cross-sectional survey “Health Behaviour in School-Aged Children (HBSC)”, which is conducted every four years – the first dating from 2006. The University of Luxembourg scientifically coordinates the HBSC survey in Luxembourg. The data on cannabis presented here are derived from the latest HBSC Luxembourg trends report (Heinz, van Duin, Kern, Catunda, & Willems, 2020). Data on other illicit substances are based on the 2006 - 2014 waves as reported in the 2018 National Drug Report (Berndt, Seixas, & Origer, 2018). Throughout the past four waves of the HBSC survey, 12 to 18 year old adolescents in secondary schools were consistently asked if they had ever used cannabis in their life and in the past 30 days. Previous waves of the HBSC survey also addressed the use of other illicit drugs. Whereas a total number of 8,732 pupils aged between 11 and 18 years participated in 2018 wave of the HBSC survey, the results below present the prevalence rates of cannabis use among young scholars between the age of 15 and 18 years (n=4,154)<sup>6</sup>.

### CANNABIS



- > Lifetime and last month use - lifetime use of cannabis among scholars has been stable over the last 12 years (around 30%) with a slight decrease in 2018 (27%). While experimental (lifetime) use has been stable, current use (last month prevalence) slightly increased from 2006 (11%) to 2018 (13%) (Fig. 7).
- > Hence, although between 2006 and 2018 a slight decrease of lifetime cannabis use has been observed, current use (last month prevalence) revealed a moderate but significant increase between 2006 and 2018 among scholars aged 15-18 years-old that participated in the HBSC study - around 11% in 2006 and 2010 to around 13% in 2014 and 2018.

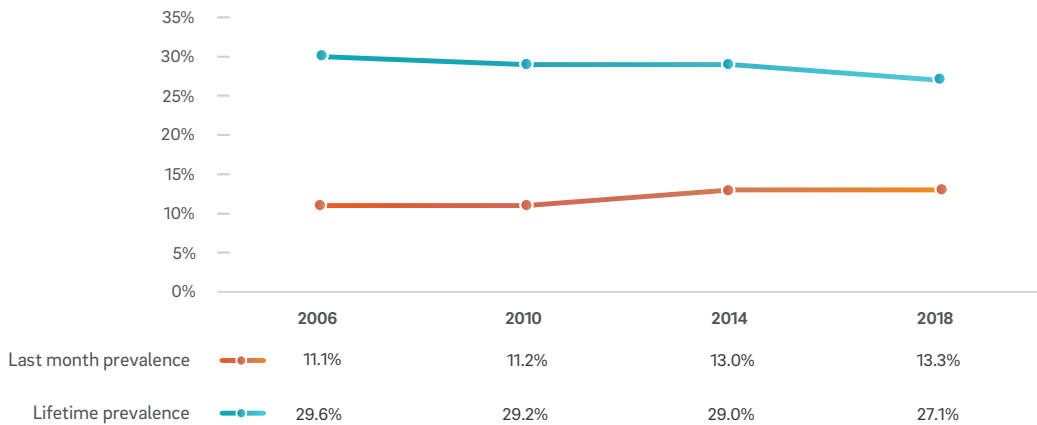


FIGURE 7.

Lifetime and last month prevalence of cannabis use among scholars (15-18 years-old) (%) (HBSC, 2006 – 2018)

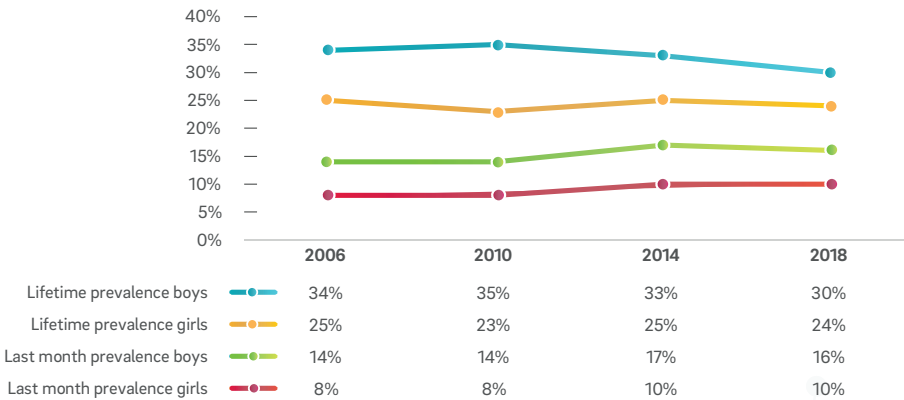


- > Lifetime use of cannabis is less meaningful than recent and current use of cannabis as it covers both experimental and regular use. While there is a mixed picture regarding the use of cannabis, the proportion of young scholars (boys and girls) who report to use cannabis currently (during the last month) has risen overall (although this overall increase is likely to be due to the significant increase among girls).

<sup>6</sup> Methodological note: Prevalence rates have been recalculated for 2006, 2010 and 2014 data in order to guarantee comparability of the data. Later in the same year, following the new HBSC wave (2018) which only assessed cannabis use, data from previous years (2006, 2010, 2014 and 2018) were re-analysed, although only for cannabis. Hence, data on prevalence of cannabis use and on prevalence of use of other drugs are presented separately.



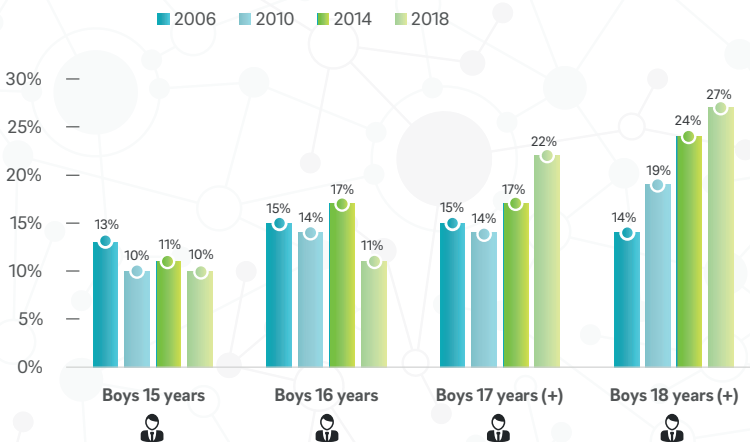
- > **Gender differences** - a closer look into gender differences suggests that the proportion of ever (lifetime) and current (last month) cannabis users is slightly higher among boys than among girls:
  - o For both genders, a slight increase in current (last month) cannabis use has been observed from 2006 to 2018 - for girls it increased from 8% in 2006 to 10% in 2018 (this increase is statistically significant), and for boys from 14% to 16% in the same period (this increase is statistically non-significant).
  - o Moreover, while the proportion of boys who ever used cannabis during their lifetime has slightly decreased over the past years (from 34% in 2006 to 30% in 2018), the proportion of girls who ever used cannabis remained largely stable (around 24-25%) (see Fig. 8).



**FIGURE 8.** LTP and LMP of cannabis use among young scholars (boys and girls) (15-18y) (valid %) (HBSC, 2006 – 2018)



- > **Age differences** - prevalence rates of cannabis use are consistently higher among the older age groups (17-18y) than among the younger age groups (15-16y). A longitudinal comparison points out that for older scholars (17-18y) current use of cannabis has been increasing over the years (regardless of gender), while it has been stable for younger scholars (15-16y) (Fig. 9, 10) (HBSC, 2018).
- > However, an analysis by age group shows that there has been a shift in age: for both boys and girls, use has decreased among younger scholars and increased among older ones, respectively (Fig. 9, 10).



**FIGURE 9.** Last month prevalence of cannabis use among boys across different ages (valid %) (HBSC, 2006 – 2018)

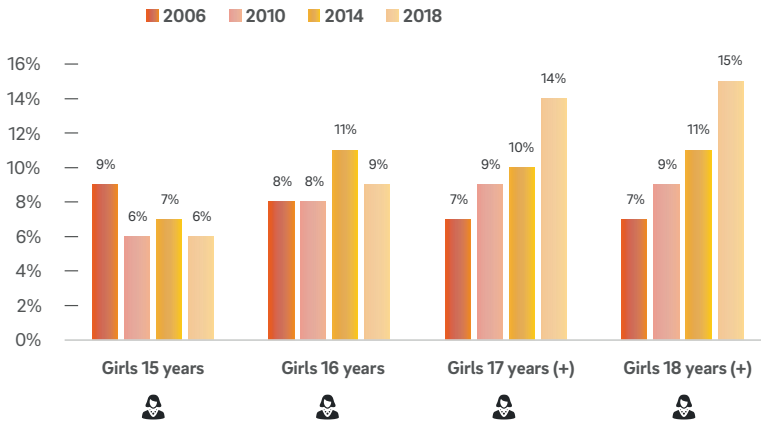


FIGURE 10.

Last month prevalence of cannabis use among girls across different ages (valid %) (HBSC, 2006 – 2018)

- > The 2014 HBSC survey also inquired if young scholars had used cannabis recently (in the last year). The findings of lifetime, last year and last month cannabis use across different age groups (13-14y, 15-16y and 17-18y) are presented in Figure 11 and also suggest that the use of cannabis, being it experimental, recent or current, is more frequent among older age groups.

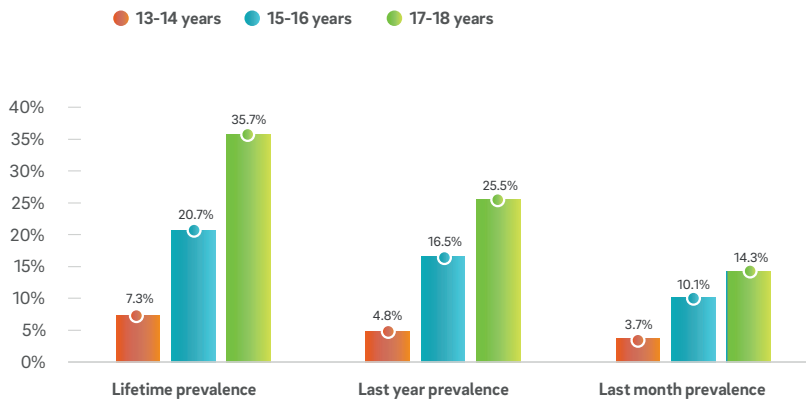


FIGURE 11.

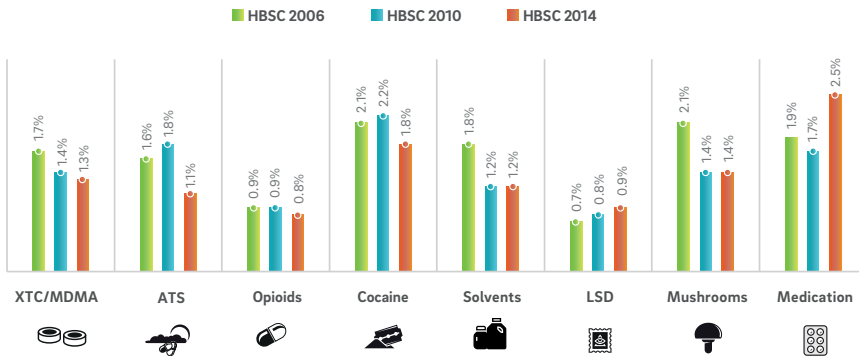
Lifetime, last year and last month prevalence rates of cannabis use across different age groups (valid %) (HBSC, 2014)

#### OTHER ILLICIT DRUGS

- > **Lifetime use** – the experimental use of illicit drugs other than cannabis has been assessed in the 2006, 2010 and 2014 HBSC waves:
  - o Lifetime use of illicit drug use in young scholars (13-18y) decreased between 2006 and 2014 for a great number of substances – cocaine (2006: 2.1%; 2014: 1.8%); MDMA (2006: 1.7%; 2014: 1.3%); amphetamines (2006: 1.6%; 2014: 1.1%); magic mushrooms (2006: 2.1%; 2014: 1.4%); and opioids (2006: 0.9%; 2014: 0.8%) (Origer, Lopes da Costa, & Diederich, 2008; Origer, Lopes da Costa, Diederich, & Schram, 2012; Berndt et al., 2018).



- o However, with regard to LSD and “abuse of medication to get high” increases were observed during this period – LSD (2006: 0.7%; 2014: 0.9%); “abuse of medication to get high” (2006: 1.9%; 2014: 2.5%) (see Fig. 12).



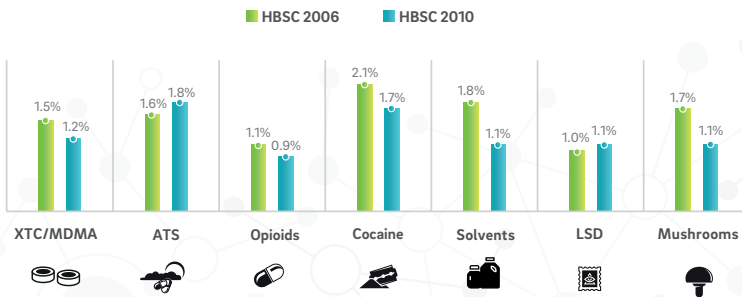
**FIGURE 12.**

Lifetime prevalence of several illicit drugs' use (age group 13-18 years old) (HBSC 2006-2014)



- > Last year use - regarding recent use of other illicit drugs, the data available date only from the 2006 and 2010 HBSC waves:

- o Cocaine was the most prevalent drug used by young scholars (13-18y) (after cannabis) – used by 2.1% of the scholars in 2006 and by 1.7% in 2010. Amphetamines, hallucinogens (such as magic mushrooms), MDMA, solvents and opioids were present, although with lower prevalence rates (Origer et al., 2008; 2012) (see Fig. 13).



**FIGURE 13.**

Last year prevalence of illicit drug use among youngsters aged 13-18 years (HBSC 2006, 2010)

## 2.3. HIGH-RISK DRUG USE

Some drug users develop more severe forms of use, defined by the EMCDDA as 'high-risk drug use'. High-risk drug users (HRDUs) are considered those persons whose recurrent drug use is causing actual harms (negative consequences) to the person (including dependence, but also other health, psychological or social problems) or is placing the person at a high probability/risk of suffering such harms (EMCDDA, 2019). According to the national definition, HRDU is associated to a high probability of intervention or the need of involvement of a third party from the law enforcement or care sectors. Specifically, data on HRDU originates from the national monitoring system RELIS, which encompasses both types of data.

## NATIONAL ESTIMATION OF THE NUMBER OF HRDUS



- > The annual number of HRDU person-contacts indexed by the national institutions (treatment demand and law enforcement) figured 5,787 in 2019 (multiple counts included) (5,154 in 2018; 5,285 in 2017).
- > The latest HRDU estimations were performed on 2018 RELIS data using the incremental OST multiplier method (IOMM) (Origer, 2020):
  - o The national prevalence of HRDUs situates around 2,100 persons (prevalence rate: 5.02 per 1000 inhabitants aged 15-64y), which suggests a decreasing trend compared to the previous estimation based on 2015 data (HRDUs prevalence: 2,257 persons; prevalence rate: 5.79 per 1000 inhabitants aged 15-64y).
  - o Among the HRDU, 1,470 are estimated to be high-risk opioid users (OU) (2015: 1,738) with a prevalence rate of 3.51 per 1000 inhabitants aged 15-64y (2015: prevalence rate of 4.46 per 1000 inhabitants aged 15-64y).
  - o Approximately, 800 are injecting drug users (IDUs) (2015: 1,467) with a prevalence rate of 1.91 per 1,000 inhabitants aged 15-64y (2015: prevalence rate of 3.77 per 1,000 inhabitants aged 15-64y) in Luxembourg.
  - o Although HRDU and IDU prevalence rates appear to follow a decreasing trend, some indicators point at an increasing marginalisation of certain groups of users. Part of the HRDUs may thus not be in contact with treatment centres or low-threshold facilities (and perhaps neither with law enforcement).

## CHARACTERISTICS AND PATTERNS OF USE OF THE HRDUS



- > During the last 15 years, the average age of the HRDUs in Luxembourg has been around 30 years. In 2019 (most recent data) HRDUs were, on average, 35 years of age which indicates an overall aging of the national HRDU population compared to previous years.
- > The majority of the indexed HRDUs were male (77.3%) in 2019. The proportion of female HRDUs is slightly larger (22.7%) compared to previous years.
- > The majority of the HRDUs report a stable residence (63.2%) in 2019, however, a relevant proportion face homeless (13.1%) or instable residency (12.1%) situations.
- > More than half of the HRDUs (51.4%) are professionally inactive - almost one-third of all HRDUs report to be a beneficiary of social aids (31.9%) or employment benefits (3.6%). A smaller proportion reports a stable (11.6%) or unstable job (6.4%), or to be currently studying (19.0%).
- > The majority of HRDUs are born in Luxembourg (67.2%), followed by Portugal (11.7%), France (4.9%), Germany (4.2), Belgium (1.2), and Italy (1.2%). Other countries of birth are negligible.
- > With regard to type of primary drug use among HRDU, it is relevant to note that the 2019 RELIS sample includes more youngsters with high-risk cannabis use (in treatment at the 'Impuls' centre). Consequently, the relative proportions of those HRDU primarily using opioids and/or cocaine tend to be lower compared to previous years.
- > In order to account for the change in the characteristics of the sample, and allow for a comparison with previous years, 2019 data are presented both in- and excluding respondents from the youth treatment service Impuls. When considering the entire RELIS sample, data suggest a decrease in primary opioid and cocaine use:
  - o More specifically, primary use of opioids shows a discontinuous decrease since 2000 (45.9% in 2019 compared to 84% in 2000), which contrasts with a discontinuous increase in use of cocaine as primary drug (7% in 2000 compared to 20.7% in 2019).
  - o However, when Impuls treatment demanders are excluded from the sample analysis, a comparison between 2018 and 2019 data reveal an increase in the primary consumption of both substances (see Fig. 14).
- > Although polydrug use is very high among HRDU, it has been witnessing a discontinuous decreasing trend since 2004. In 2019, 50.2% of the HRDU reported polydrug use (2018: 58.2%; 2017: 72.6%). When excluding the high-risk cannabis users and hence a sample comparable to the precedent years, data suggest an increase in the number of polydrug users (2019: 62.9%; 2018: 58.2%).



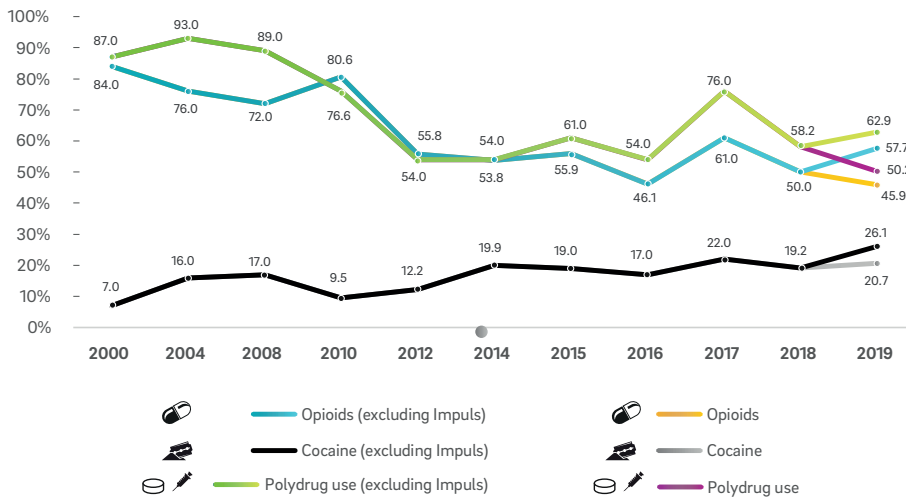


FIGURE 14.

Trends in primary drug use among HRDUs (N=409; % self-reported) (RELIS, 2019)



- > Latest data from the 'Abrigado' supervised drug consumption rooms<sup>7</sup> broadly confirm RELIS data on the changes regarding the primary used drugs: the proportion of consumption episodes per type of drug as reported by the drug consumption rooms is 60% heroin, 26% cocaine, and 14% cocktails ("speedball", mixture of heroin and cocaine).
- > During the last years, a decrease in heroin use and an increase in the use of cocaine and cocktails have been observed:
  - o While in 2013 heroin was used in 93% of the consumption episodes, both in 2018 and 2019, this substance was only used in 60% of the consumptions.
  - o On the contrary, in 2013 only 4% of the consumption episodes involved cocaine and 3% cocktails, while in 2019 cocaine was used in 26% and cocktails in 14% of the consumption episodes, respectively (Fig. 15).

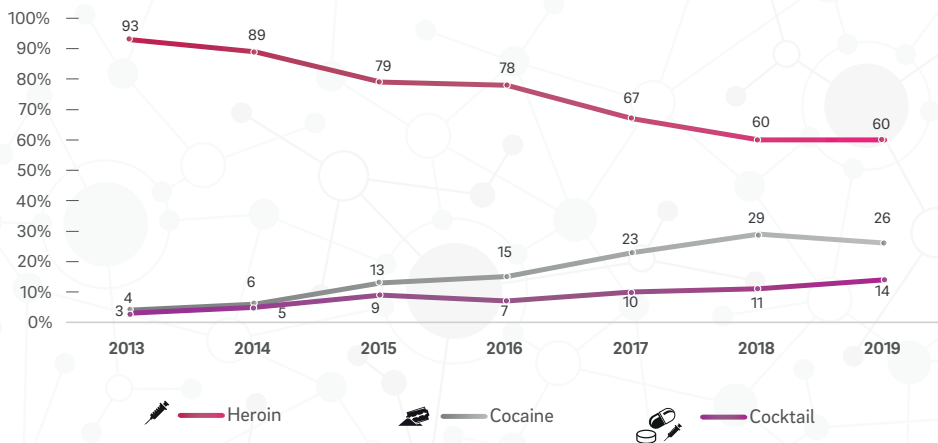


FIGURE 15.

Trends in the proportion of heroin, cocaine and cocktails consumption episodes at the Abrigado drug consumption rooms (%) (Abrigado, 2020)

7 Abrigado is a harm reduction centre and low-threshold centre situated in Luxembourg city managed by the Comité National de Défense Sociale (CNDS): based on a convention with the Ministry of Health, it offers several harm reduction measures and includes a supervised injection facility (since 2005) and a supervised drug inhalation facility (blow room since 2012) allowing for the use of drugs through injection, inhalation/smoking, and sniffing.



- > Slightly different observations have been reported from the supervised drug consumption rooms at the 'Contact Esch'<sup>8</sup>. The 2019 registered consumption episodes at Contact Esch revealed that cocaine accounted for 50%, heroin for 40%, and cocktails ("speedball") for 10% of all consumptions.
- > Inhalation (chasing/blowing) is increasingly frequent and has been the most prevalent route of administration at Abrigado drug consumption rooms since 2018 – it represented 41% of the consumptions in 2014, 51% in 2018 and 53% in 2019. Injection represented 44% of the consumption episodes in 2019 and nasal/sniffing 2% (Fig. 16).

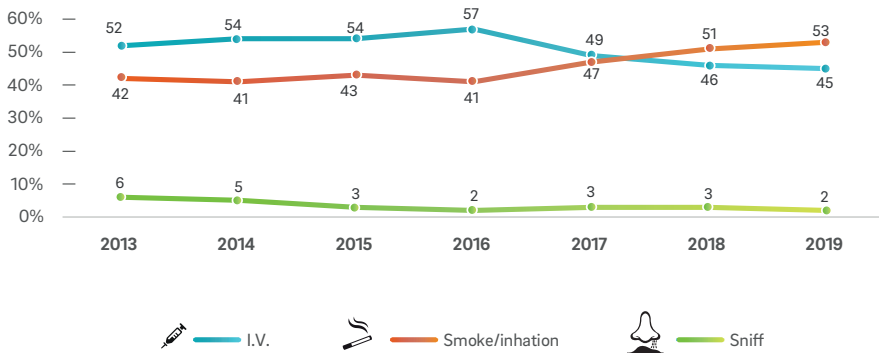


FIGURE 16.

Distribution of consumption episodes according to their routes of administration at Abrigado drug consumption rooms (%) (Abrigado, 2020)



- > At the drug consumption rooms at Contact Esch providing both an injection and blow room facility, 24% of the clients used injection as their mode of administration, compared to 75% who used inhalation, and 1% sniff. This suggests that the HRDU population in the South of the country shows slightly different consumption patterns, compared to Abrigado clients.
- > Overall, data are indicative of a positive shift towards safer consumption modes. The information and prevention work done by the staff from harm reduction centres has contributed largely to this change.

## 2.4. DRUG USE IN SPECIFIC TARGET GROUPS

### DRUG USE IN FESTIVE AND NIGHTLIFE SETTINGS (PIPAPO SURVEY)

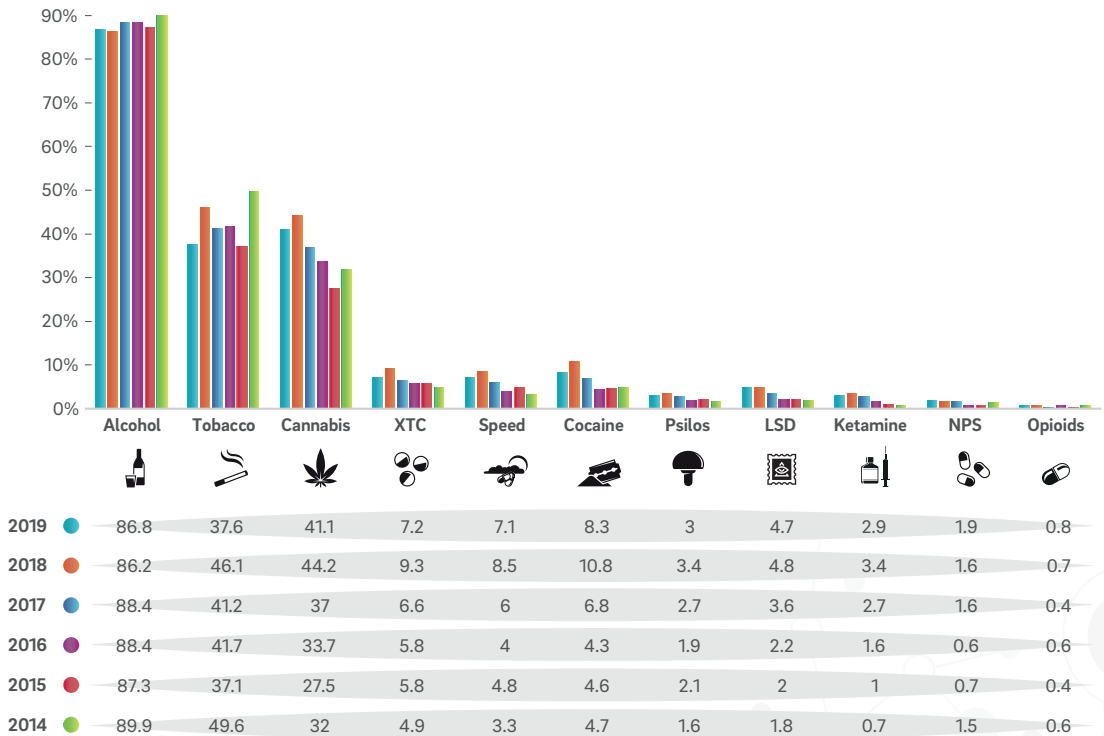


- > Drug use in festive and nightlife settings is analysed yearly by the project 'Pipapo' from 4motion asbl. A rapid assessment survey is implemented at several festive and nightlife venues in Luxembourg. The main goal is to describe the characteristics of this specific group of users attending these events as well as to follow the recreational drug use in festive contexts in Luxembourg.
- > Pipapo uses a survey that is administered by means of a paper-and-pencil questionnaire to visitors at festivals and nightlife events. The questionnaire addresses drug use "in the last 2 weeks".
- > In 2019, the Pipapo team was present at 34 festive events that were attended in total by about 34,000 visitors, of whom 2,147 participated in their anonymous survey. After data validation, 2,082 questionnaires could be analysed. There are no exclusion criteria - the survey inquires all volunteer persons regardless of their drug use.

8 A new drug consumption facility including an injection room and an inhalation room, run by the NGO 'Jugend-an Drogenhëllef' (JDH) opened in 2019 at the main harm reduction centre - Contact Esch - in Esch-sur-Alzette, a city in the South of Luxembourg.



> In 2019, the sample consisted of 1,043 male (50.1%) and 1,026 female (49.3%) respondents. Few respondents (n=13) reported unknown or another gender (0.6%). The median age of respondents was 25 years, the youngest respondent had 12 years and the oldest had 70 years. 75.7% of the respondents reported residency in Luxembourg, whereas 14.9% in Germany, 3.7% in Belgium, and 3.6% in France.



**FIGURE 17.**

Evolution of the proportion (%) of recent (last 2 weeks) drug users among visitors of festive and nightlife events (2014-2019 data) (Pipapo survey – Paulos et al., 2020)



- > Cannabis was the most frequently illicit drug used in festive settings (41.1%) followed by cocaine (8.3%), ecstasy/MDMA (7.2%), and amphetamines (ATS/speed) (7.1%).
- > Between 2014 and 2018, data suggest an increase in the reported recent use of all the substances. However, from 2018 to 2019 a slight decrease was observed regarding the recent use of cannabis, ecstasy, speed, cocaine, mushrooms (psilos), LSD and ketamine (see Fig. 17).
- > Males tend to report higher consumption than females for all substances (see Fig. 18).

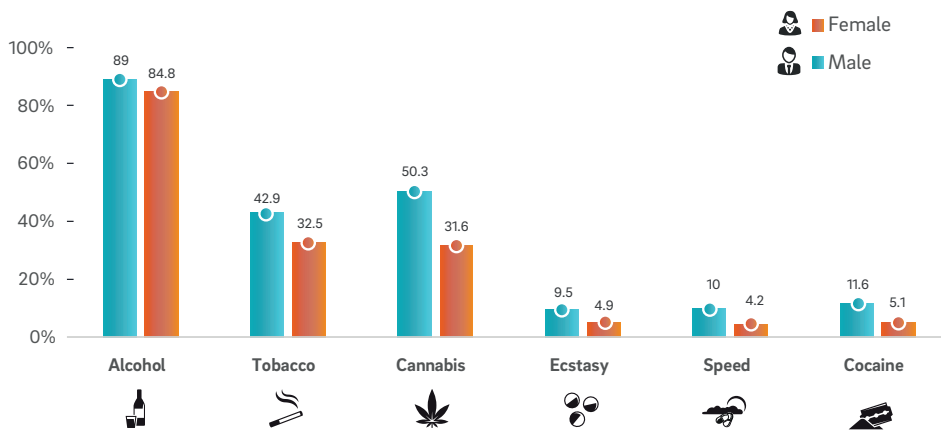


FIGURE 18.

Gender differences in the proportion (%) of recent (last 2 weeks) drug users among visitors of festive and nightlife events (2019 data) (Pipapo survey – Paulos et al., 2020)

#### DRUG USE AMONG RECREATIONAL USERS (EWSD, 2018)

- > In 2018, the PFLDT participated in the EMCDDA pilot project “European Web Survey on Drugs (EWSD)” aiming to investigate recreational users’ consumption habits, attitudes and perceptions towards drug use, as well as to improve knowledge on drug markets at national levels.
- > The study relied on a web-based survey launched in three languages - English, German and French. Data were collected between August and September 2018. Participants were recruited via online promotion (Facebook Ads, Google Display and YouTube), distribution of flyers and posters and by direct personal approach in festive and nightlife events. Respondents were selected based on three inclusion criteria: a) aged 18 years-old or above; b) residency in Luxembourg; c) use of at least one illicit drug during the last year.
- > In total, a non-representative sample of 1,223 recreational drug users were included in the study - mainly young adults between the age of 18-34 years (67.4% aged 18-24y and 20.8% aged 25-34y) (see Fig. 19), the majority male (69.1% males; 30.1% females; 0.8% transgender), and the majority with a secondary or higher education degree (50.1% secondary and 25.2% university). This group of drug users can be described as young recreational users, interested in festivals/nightlife events and connected to online social networks.

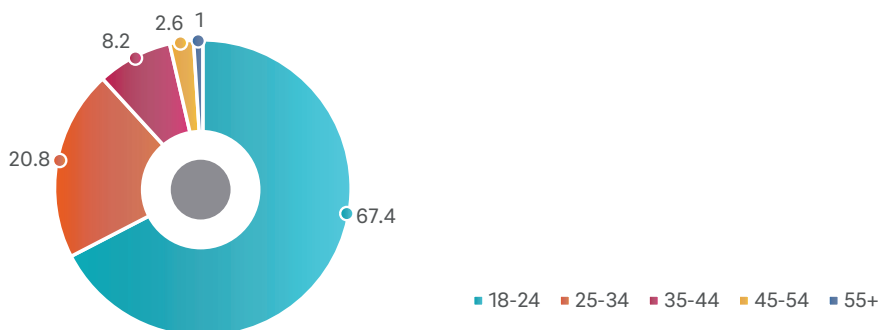


FIGURE 19.

Age categories of the targeted sample of recreational drug users (%) (EWSD, 2018 - Berndt & Seixas, 2019)

PREVALENCE RATES



- > Prevalence rates among this targeted sample of last year drug users are, obviously, much higher than those observed among the general population:
  - o Cannabis and alcohol are the most prevalent substances both in terms of recent and current use.
  - o Cocaine appears as the second most commonly used illicit drug (recently used by 22.4% and currently used by 13.9% of the respondents) followed by ecstasy/MDMA (recently used by 21.1% and currently used by 10% of the respondents).
  - o In terms of recent use, other hallucinogens (17.1%) and amphetamines (15.9%) appear also as relevant drugs, while current use of synthetic cannabinoids (8.6%) deserves further attention (see Fig. 20).
- > Use of synthetic cannabinoids and NPS are not negligible (data from general population surveys and from police seizures suggest only marginal presence of these substances in Luxembourg). Caution is needed when interpreting these findings since bias related to participants' conception of NPS cannot be discarded. Further research is needed in order to improve knowledge on NPS' use in Luxembourg.

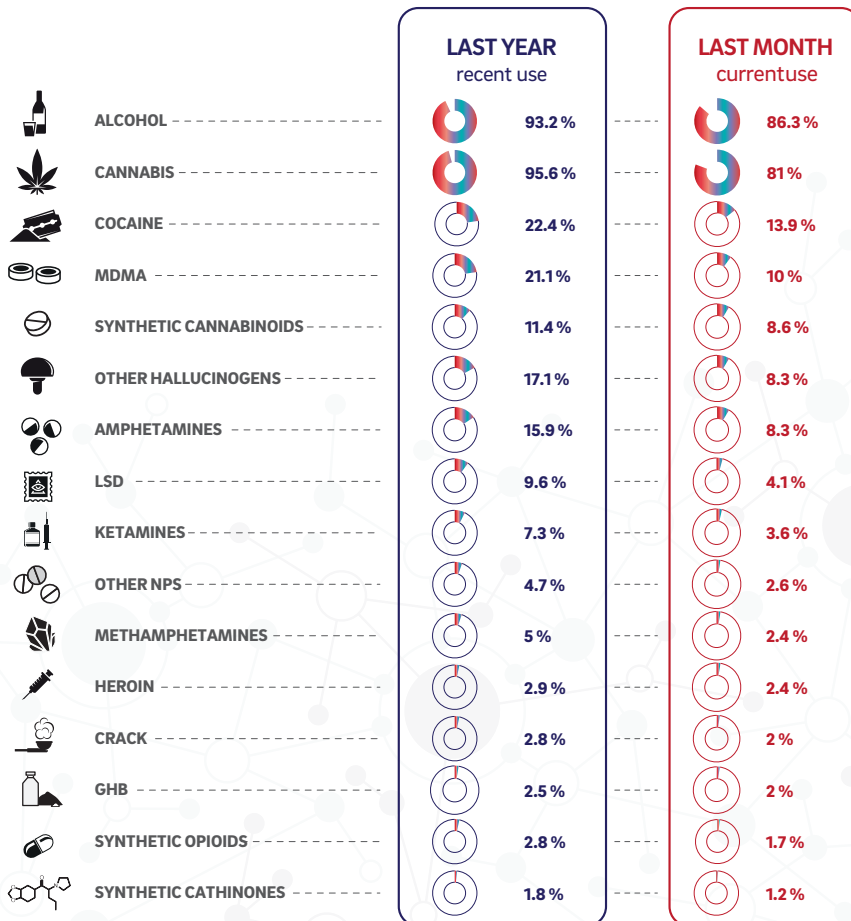


FIGURE 20.

Last year (recent) and last month (current) prevalence rates of drug use among the targeted sample (EWSD, 2018 - Berndt & Seixas, 2019)

## GENDER DIFFERENCES

- Concerning gender differences in recreational drug use, EWSD data point out that, on one hand, current use of cocaine ( $\chi^2(1) = 5.92, p < .05$ ) and cannabis ( $\chi^2(1) = 4.95, p < .05$ ) are significantly more common among men than among women. On the other hand, women tend to use more NPS ( $\chi^2(1) = 4.44, p < .05$ ) and synthetic cannabinoids ( $\chi^2(1) = 4.47, p < .05$ ) than men. These findings deserve further investigation. No other significant gender differences are to be reported (Fig. 21).

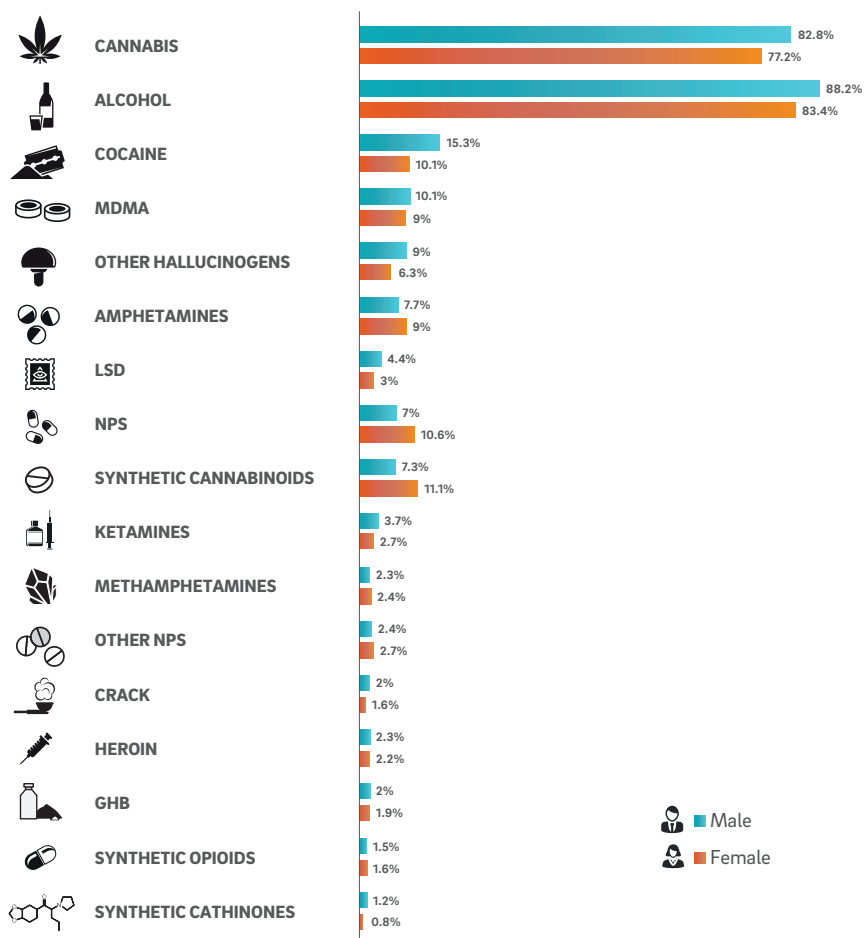


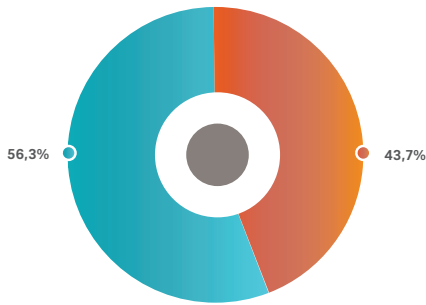
FIGURE 21.

Gender differences in last month prevalence of drug use among the targeted sample (%) (EWSD, 2018 - Berndt & Seixas, 2019)

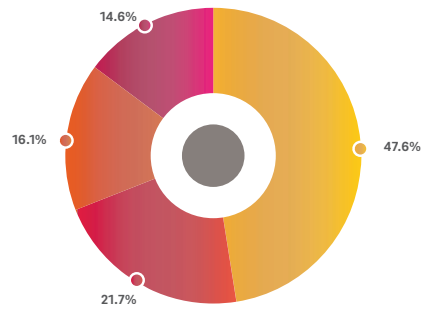
## MULTIPLE DRUG USE



- > Even though single drug use is predominant, multiple drug use is very common – reported by more than 40% of the respondents. The majority of the multiple drugs users (47.6%) used two different drugs during last year, a smaller number used three (21.7%), four (16.1%) or five up to ten (14.6%) different types of drugs (Fig. 22, 23).



■ Reported single drug use  
■ Reported use of multiple drugs



■ Two drugs ■ Three drugs ■ Four drugs ■ Five up to ten drugs

FIGURE 22.

Proportion of multiple drug users among the targeted sample (valid %) (EWSD, 2018 - Berndt & Seixas, 2019)

FIGURE 23.

Distribution of multiple drug users according to the number of drugs used (valid %) (EWSD, 2018 - Berndt & Seixas, 2019)

## MARKET CHARACTERISTICS AND CONSUMPTION HABITS



- > Cannabis is the most frequently used illicit drug – on average herbal cannabis (weed) is used 16 days per month and resin (hashish) is used 12 days per month. Respondents report smoking two to three joints of cannabis (herbal or resin) on average on a typical day and tend to buy four up to 4.6 grams of cannabis (herbal or resin) per purchase.
- > Cocaine is the most expensive drug and amphetamine the cheapest. Users buy on average 2.5 grams of cocaine and nine tablets of amphetamines on a typical purchase.
- > Recreational drug users tend to share with other users almost half of the amount of drugs they buy.
- > Drugs are predominantly obtained through a dealer or for free. Other means of supply are not significantly reported (Fig. 24).

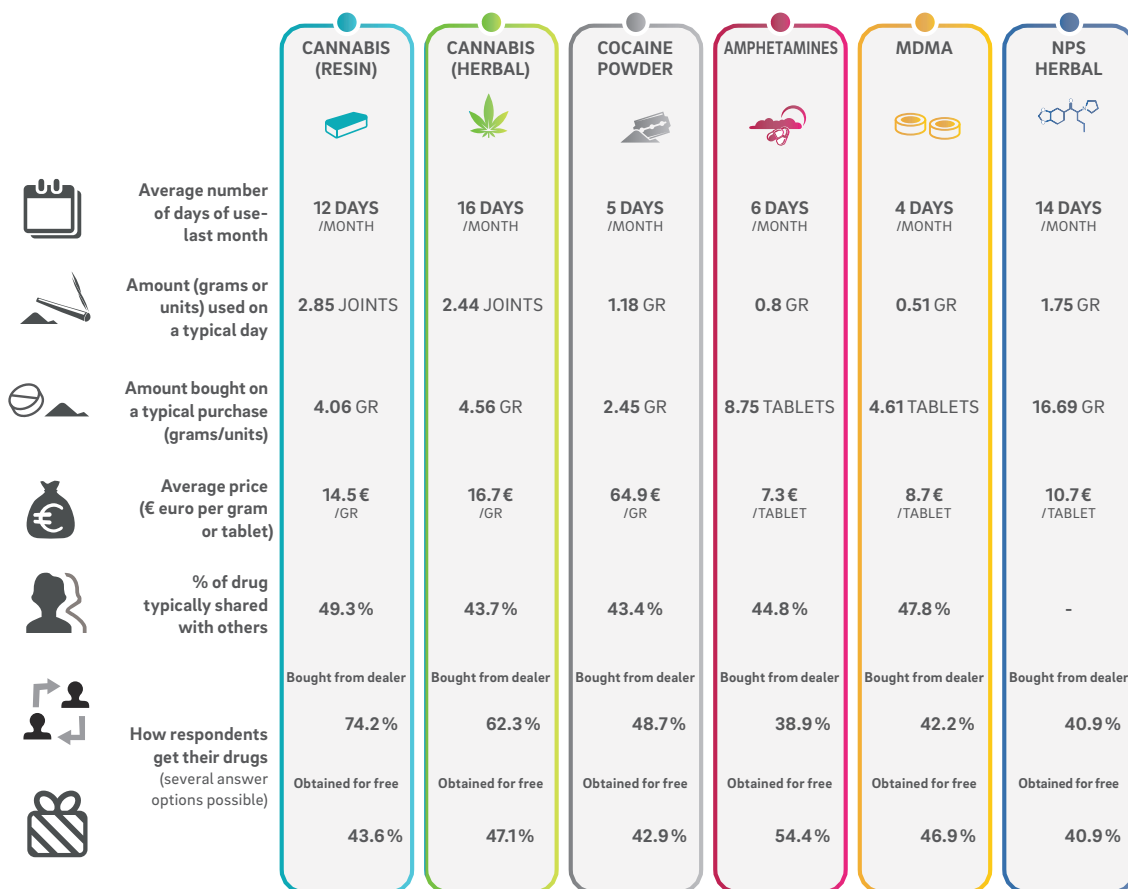


FIGURE 24.

Drug market characteristics and consumption habits among the targeted sample (EWSD, 2018 - Berndt & Seixas, 2019)

#### ASSOCIATIONS BETWEEN CURRENT USE OF DIFFERENT TYPES OF DRUGS

- > The use of cannabis is not related to the use of other drugs (except synthetic cannabinoids to which it is only poorly positively correlated:  $r = .10, p < .05$ ). However, using any other illicit drug increases the likelihood of using other drugs (significant positive correlations across all the other illicit drugs):
  - o Cocaine use is strongly linked to the use of MDMA, amphetamines and ketamine.
  - o MDMA use is strongly linked to the use of amphetamines and LSD.

#### ATTITUDES AND RISK PERCEPTION TOWARDS DRUG USE

- > The majority (92.3%) of the respondents consider that "people should be permitted to use cannabis (herbal (weed) or resin (hashish))".
- > "Smoking marijuana or hashish regularly" is considered less dangerous than "trying cocaine or crack once or twice" or "having five or more drinks (alcohol) each weekend":



- o The majority of the respondents consider that “smoking marijuana or hashish regularly” implies *no risk* or only a *slight risk*. “Trying cocaine or crack once or twice” and “having five or more drinks (alcohol) each weekend” are considered behaviours that imply a *moderate risk* or a *great risk* (see Fig. 25).

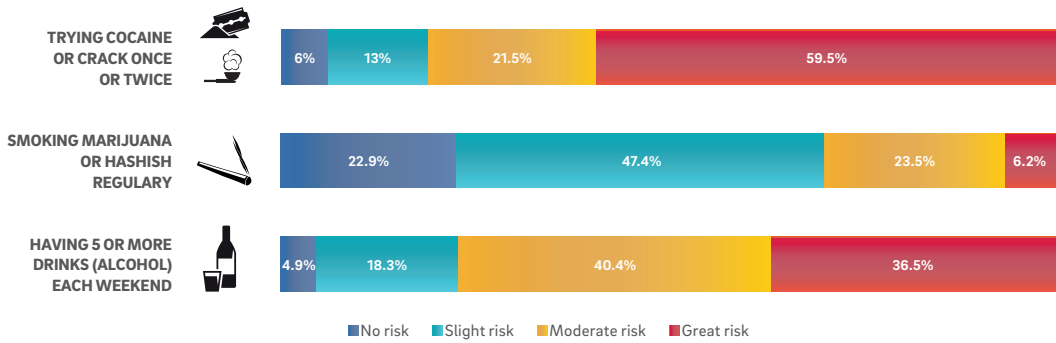


FIGURE 25.

Risk perception associated with the use of cocaine, cannabis and alcohol (EWSD, 2018 - Berndt & Seixas, 2019)

## 2.5. LOOKING AT DRUG USE ACROSS DIFFERENT GROUPS



- > Figure 26 below shows the relative importance of certain drugs among different target groups and settings, each entailing unique characteristics. Globally, while cannabis is the most commonly used substance in festive settings by recreational drug users and by the general population, heroin and cocaine are the primary drugs reported by HRDU and rarely reported among recreational drug users or the general population (see Fig. 26).

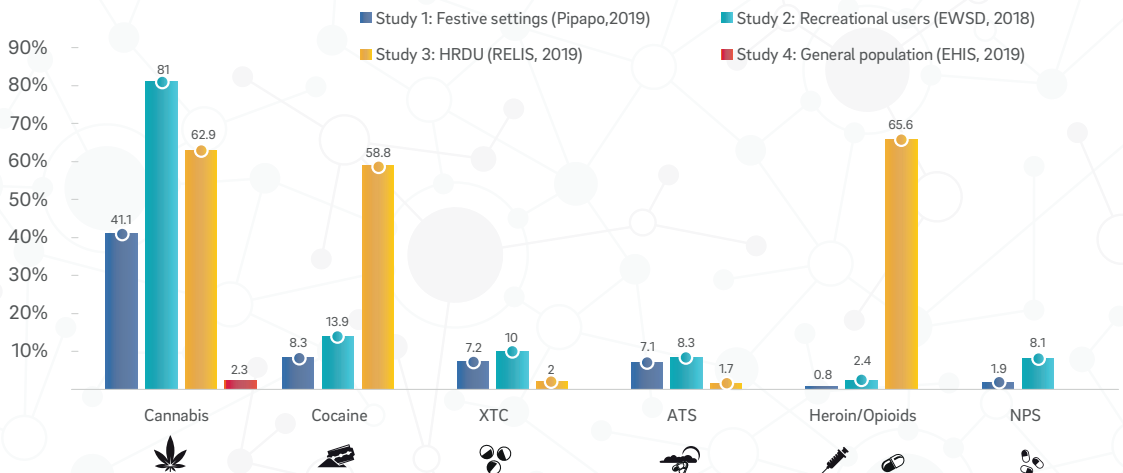


FIGURE 26.

Proportion (%) of current drug use (last 30 days or less) per drug across different user groups



# 3.

## DRUGS AND PRISON



# 3. DRUGS AND PRISON

## 3.1. DRUG-RELATED OFFENCES AMONG PRISONERS

According to the latest annual activity report from the penitentiary administration from 2019, drug-related offences among males (15.9%) that led to imprisonment are slightly decreasing compared to previous years (18.0% in 2018, 22.0% in 2017, 24.9% in 2016, 26.0% in 2015). Offences involving physical violence accounted for 37.5% of all offences, whereas offences of sexual violence accounted for 9.7% of the offences committed by convicted male offenders in 2019 leading to imprisonment.

Regarding females, drug offences that led to prison sentences are on the rise, and evolved from 19% in 2018 to 25% in 2019 (dates of 1 January of each year). Other types of offences leading to imprisonment among females were related to theft/robbery (25% in 2019; 24% in 2018; 22% in 2017) and physical violence (44% in 2019; 19% in 2018) (Ministère de la Justice, 2020).

## 3.2. DRUG USE PRIOR TO AND DURING IMPRISONMENT

Drug use in prison remains a reality with major social and health consequences. However, as its use is strictly prohibited in prisons, the extent of the problem remains largely unknown in most European countries. In 2020, a new study was conducted by the PFLDT in the prison 'Centre Pénitentiaire de Luxembourg (CPL)' (Foulon et al., in preparation) aiming at understanding drug use patterns of the prison population in the Grand Duchy of Luxembourg and their risk behaviours. The cross-sectional and quantitative study used an anonymous, confidential and voluntary paper-pencil questionnaire based on the European Questionnaire on Drug use in Prison (EQDP) of the EMCDDA. The questionnaire was distributed to the entire prison population at the end of August 2020 in four languages (English, French, German and Portuguese) to 488 prisoners. The response rate was 48.8% (n=238). Of these questionnaires, some were either not completed at all, contained refusals to each question, had clear inconsistent responses, or more than 50% of missing values (n=74). These were therefore excluded, leaving 164 questionnaires for statistical analyses.

### SOCIO-DEMOGRAPHIC CHARACTERISTICS



- > Regarding the gender distribution of those questionnaires from respondents included for statistical analyses (n=164), 138 were male (84.1%) and 17 female (10.4%). The gender was missing for nine questionnaires (5.5%). The women's block had 18 prisoners on the day of the distribution of the questionnaire yielding that almost all women (94.4%) completed the questionnaire. Conversely, only 29.4% of the men prisoners (n=470) completed the questionnaire.
- > More than half of the respondents were between 30 and 49 years old (56.7%), 20.1% were below the age of 30 years, a minority of respondents (3.1%) were between 50 and 59 years old, and 20.1% were above the age of 59 years.
- > In total, 34.8% of the respondents declared being of Luxembourgish nationality and 37.8% of European Union nationality, while 17.7% declared a nationality outside the European Union.
- > One-third of the respondents stated that they did not have stable housing prior to their current incarceration (homeless, living in night shelters or in institutions; 32.8%).

### LEGAL SITUATION



- > Regarding the legal situation/status, the study conducted in 2020 yielded that 40.2% of respondents reported being in pre-trial detention and 51.2% reported that they are convicted - according to official figures provided by the prison administration (Ministère de la Justice, 2019), 47.0% of the prison population are in detention and 53.0% have the status of being convicted.



- > With regard to the type of offences, 20.1% of respondents reported having committed an offence against property (theft, burglary, etc.) and 30.5% declared a drug-related offence: 17.7% related to drug possession or use and 12.8% to trafficking.
- > In terms of the length of time currently incarcerated, half of the respondents reported that they had spent less than 1 year in prison, one quarter less than 92 days, and another quarter more than 1095 days, i.e. just a bit less than 3 years. The average number of previous incarcerations was 1.82, with a minimum of zero and a maximum of fourteen previous incarcerations. The rate of recurrent offenders is important among the study population.

#### DRUG USE BEFORE AND DURING PRISON



- > Results (see Table 1 below) show that the illicit drugs most commonly used before imprisonment are, by decreasing order of prevalence, cannabis (42.1%), cocaine powder (37.8%), crack cocaine (28.0%), and heroin (28.0%). Half of the respondents stated that they continue to use drugs during their stay in prison.
- > The psychoactive substances reported to be most consumed remain unchanged after prison entry: tobacco, alcohol and cannabis (respectively by 21.3%, 20.7% and 21.3% of respondents). Heroin, powder cocaine, and crack cocaine are reported to be used by more than 10% of the respondents each (15.9%, 15.2%, and 12.8% respectively).
- > For all other substances, the trends are similar: except for consumption of methadone/buprenorphine and benzodiazepines, the number of respondents reporting substance use inside the prison is about half or less that outside prison. This trend does, however, not apply to substances with low prevalence rates (five users or less), such as volatile substances, synthetic cathinones and other new psychoactive substances (NPSs), and other illicit substances (see Table 1) (Foulon et al., in preparation).

TABLE 1.

Number of persons and prevalence rates in % by substance before and during imprisonment (n=164)

Substance	Before imprisonment n (%)	During imprisonment n (%)
Tobacco	102 (62.2)	89 (21.3)
Alcohol	97 (59.2)	34 (20.7)
Cannabis	69 (42.1)	35 (21.3)
Synthetic cannabinoids (e.g. SPICE)	24 (14.6)	17 (10.4)
Cocaine (powder)	62 (37.8)	25 (15.2)
Cocaine « crack »	46 (28.0)	21 (12.8)
Heroin	46 (28.0)	26 (15.9)
Methadone (Mephenon)/Buprenorphine (Suboxone)	23 (14.0)	13 (7.9)
Other opioids (e.g. tramadol; fentanyl)	11 (6.7)	7 (4.3)
Benzodiazepines	25 (15.2)	15 (9.1)
Ketamine	10 (6.1)	6 (3.7)
Amphetamines (Speed)	25 (15.2)	7 (4.3)
Methamphetamines	12 (7.3)	6 (3.7)
Ecstasy/MDMA	32 (19.5)	8 (4.9)
LSD/ Mescaline/ Champignons	19 (11.6)	5 (3.0)
Volatile substances (e.g. butane; propane)	5 (3.0)	4 (2.4)
Synthetic cathinones	4 (2.4)	3 (1.8)
Other NPS	5 (3.0)	4 (2.4)
Other illicit substance	5 (3.0)	3 (1.8)

Note: Missing values are excluded for the analyses, hence n<164 for certain variables.

### 3.3. RISK BEHAVIOUR AMONG PRISONERS

The national study conducted in 2020, assessing drug use before and during imprisonment, further assessed risk behaviour among prisoners (n=164): history of overdose, sharing of equipment, injecting as a consumption mode.

- > With regard to overdose outside prison, 10.4% of respondents (n=17) reported having suffered an overdose in relation to opioids, and 12.8% (n=21) reported having suffered an overdose in relation to other substances.
- > The figures for overdose in prison are much lower: only four respondents reported having suffered an overdose in prison in relation to opioids and six in relation to other substances (2.4% and 3.7% of respondents, respectively).
- > As regards sharing equipment (ever during lifetime), 24 respondents (14.6%) indicated they had ever shared needles or syringes, 35 (21.3%) straws or equipment for sniffing, 34 (20.7%) spoons or cooking equipment, 54 (32.9%) a pipe or other smoking equipment, and 20 (12.2%) said they had shared a tattoo equipment. As for the consumption mode of injecting, 37 respondents indicated that they had injected in the past, corresponding to 22.5% of the total number of respondents (Foulon et al., in preparation).

### 3.4. KNOWLEDGE OF HARM REDUCTION PROGRAMMES IN PRISON

The 2020 national study on drug use in prison in Luxembourg further assessed knowledge of and participation in two existing harm reduction programmes specific to the CPL: the Safe Tattoo programme and the syringe exchange programme.

- > Of the 164 respondents, 34.1% said they were aware of the Safe Tattoo programme and 9.1% said they participated in it.
- > Similarly, 29.9% said they were aware of the needle exchange programme, but only eleven people said they benefited from it, corresponding to 6.7% of respondents.
- > This reveals that both harm reduction programmes are insufficiently known and participation rates may be improved (Foulon et al., in preparation).

A Safe Tattoo programme was implemented in March 2017 at the CPL. This programme is a peer-to-peer project providing the opportunity to make a tattoo under appropriate hygienic conditions, thus preventing the transmission of communicable diseases such as HIV, hepatitis B and C. The Safe Tattoo project is subject to strict regulations. Interested inmates may apply to become official tattoo artists and undergo specific training. The training on hygiene also includes information on various communicable diseases. After passing the exam, the tattooist can make tattoos with professional equipment made available by the prison in the premises provided for this purpose and under the supervision of a member of the prison nursing staff. In 2018, eleven tattoo artists were trained and 70 persons got a tattoo. In 2019, another thirteen tattoo artists were trained and 40 persons had a tattoo done. To get these tattoos, 74 appointments were made in 2019.



4.

## DRUG-RELATED HARMS AND HEALTH CONSEQUENCES

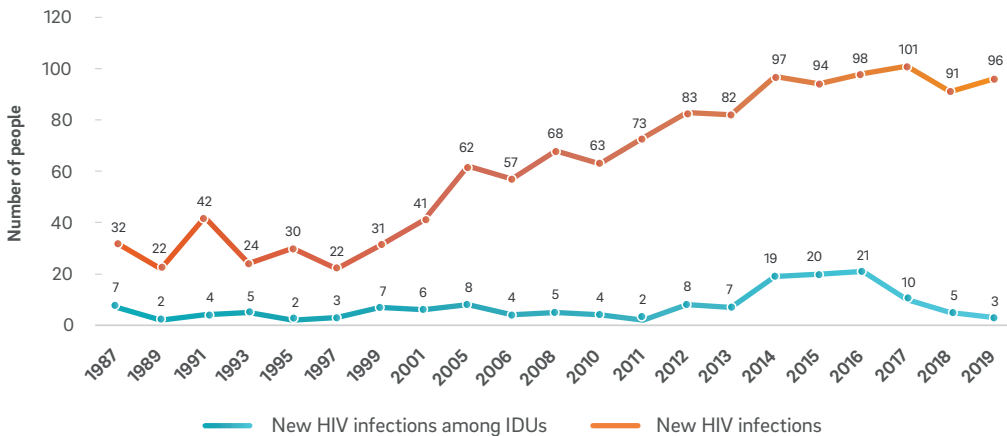


# 4. DRUG-RELATED HARMS AND HEALTH CONSEQUENCES

## 4.1. DRUG-RELATED INFECTIOUS DISEASES – HIV

Data on drug-related infectious diseases are collected at the national level by the National Retrovirology Laboratory and complemented by information obtained through the multi-sector national network RELIS. Moreover, data are collected through national research studies by the Department of Infection and Immunity, Infectious Diseases Research Unit, at the Luxembourg Institute of Health (LIH).

- > Most recent data reveal that injecting drug use is the third most reported transmission mode of new HIV infections since 1989 (homo/bisexual and heterosexual transmission are currently the first and second cause, respectively). The lowest proportion of Injecting Drug User (IDU) transmission mode ever recorded was observed in 2011 (two cases). HIV among IDUs decreased between the late 90's and 2011. The period between 2014 and 2016 was marked by an HIV outbreak among this group – partially explained by an increase in stimulants' injection (mainly cocaine).
- > Following the implementation of supplementary response measures in the framework of the national drug strategy and action plan, the national HIV and hepatitis action plan, and the recommendations formulated by the EMCDDA and the ECDC<sup>9</sup> after their country visit in 2018, the number of new HIV cases among IDUs has been decreasing again: it declined from 21 new cases in 2016 to ten in 2017 and five in 2018. In 2019, there were three new cases, representing the lowest incidence since 2011 (Devaux et al., 2020) (see Fig. 27).



**FIGURE 27.**

Evolution of new HIV infections in the general population and among injecting drug users (IDUs) (1987-2019) according to the Service National des Maladies Infectieuses (Devaux et al., 2020)





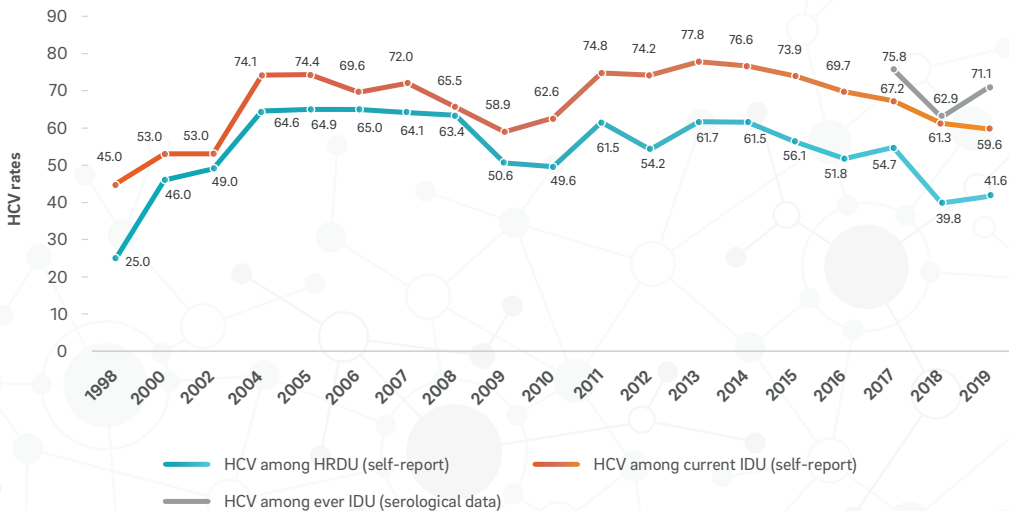
- > With regard to the 90-90-90 objectives from the ECDC, Luxembourg is among the best performing European countries (status 2018), having diagnosed 85% of those infected with HIV. Moreover, 89.2% of those diagnosed received antiretroviral therapy, whilst 88.8% of people on treatment had an undetectable viral load.
- > Despite the decline in new infections, Luxembourg is continuing its prevention efforts by raising awareness of screening tests. To date, there are several ways to get tested for HIV: by a routine blood test in hospital or laboratory of course, but also by a rapid diagnostic test. Since July 2019, an additional tool complements the existing screening options: the HIV self-diagnosis test, on sale in pharmacies and, since 23 November, in various stores across the country.

## 4.2. DRUG-RELATED INFECTIOUS DISEASES – HCV



The HCV prevalence rate among HRDUs and particularly among IDUs has been at a high level since 2004:

- > **RELIS self-reported data:** the HCV prevalence rates among HRDU and IDUs have been fairly stable at high levels since 2004. Between 2017 and 2018, the proportion of HRDU infected by HCV decreased significantly from 54.7% to 39.8% while it remained relatively stable in 2019 (41.6%). Among the IDUs in particular, an identical downward trend has been observed – 67.2% in 2017, 61.3% in 2018 and 59.6% in 2019 (see Fig. 28).
- > **Serology-based data:** in the framework of the national HCV-UD research project<sup>10</sup>, serological data has been collected from a random sample of HRDUs since 2017, recruited at drug treatment centres (outpatient), harm reduction services, needle/syringe programmes, and in prison. Latest data from this study suggest an increase in the number of ever IDUs infected with HCV. Whereas in 2018, among 35 persons tested, 22 (62.9%) presented an HCV positive test result, in 2019, among the 45 persons tested, a total number of 32 individuals presented a positive test result (71.1%) (see Fig. 28).



**FIGURE 28.**

Evolution of HCV rates among HRDUs and IDUs – self-reported and serological data (valid %) (1998-2019) (Devaux et al., 2020; RELIS, 2019)

10 Project HCV-UD « Toxicomanie, hépatite C et substitution: étude épidémiologique, comportementale et clinique au Luxembourg » - <https://www.luxclin.lu/Studies/Details/?c=STP3756SUU>. The project results from a collaboration between the LIH, the CHL and five harm reduction centres in Luxembourg and it is implemented in several low-threshold sites with the purpose of providing testing and treatment while identifying risk factors and the transmission clusters related to the HCV infection.

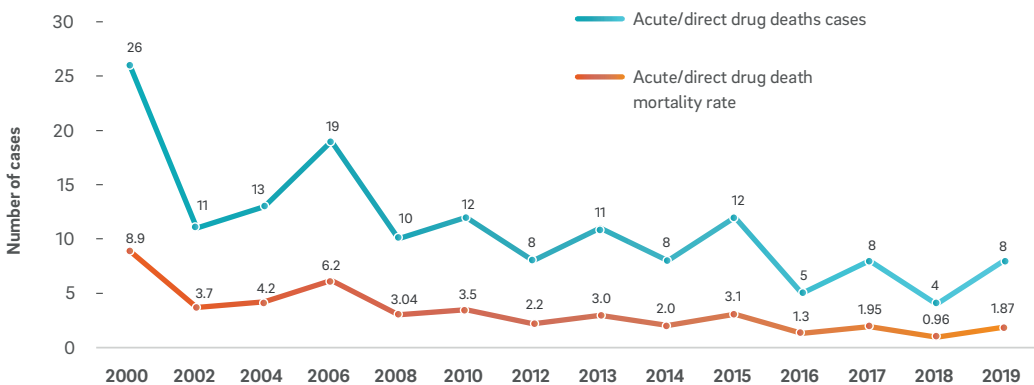
Recent efforts have been made towards improvement in testing and linkage to care through harm reduction programmes in prisons and low-threshold agencies:

- > Needle (and paraphernalia) exchange programmes (contributing to a decrease in direct contamination), availability of Opioid Substitution Treatment (OST) and Heroin Assisted Treatment (HAT) (contributing to the stabilisation of users and to a decrease of high-risk behaviours);
- > Implementation of a new low-threshold medical service and OST programme at the Abrigado centre at the beginning of the COVID-19 pandemic jointly by the Ministry of Health and several specialised NGOs: marginalised drug users experiencing increased social exclusion have currently the possibility towards easy access substitution treatment, regardless of their social security status.
- > Increasing testing and facilitating access to treatment for clients of drug treatment centres (often persons experiencing social exclusion and marginalisation);
- > Besides these efforts, responses directed towards a greater stabilisation of the users (such as further developing Housing First offers) are in preparation (Ministère de la Santé, 2020).

### 4.3. DRUG-RELATED MORTALITY

Anonymised data are available on all direct overdose cases due to illicit drug use documented by contextual and forensic evidence. For each suspected overdose death case, post mortem toxicological evidence is provided by the department of legal medicine from the national health laboratory (Laboratoire national de santé; LNS) confirming or disconfirming the suspected overdose case. Hence, acute drug-related mortality represent death cases attributed directly to the use of an illicit drug, possibly in combination with other types of substances and/or prescribed medicines. These death cases include overdoses and acute intoxications, voluntary, accidental or of undetermined intent.

- > Most recent data available to the PFLDT indicate that drug-related mortality has shown a discontinuous decrease over the last years. Whereas in 2000, 26 acute drug deaths were registered, five cases were reported in 2016, eight in 2017, four in 2018, and eight in 2019. In 2019, a drug-induced mortality rate of approximately 1.87 per 100,000 inhabitants aged 15 to 64 years has been observed (LU 2019 population size 15-64y: 426,959) (Fig. 29).<sup>11</sup> Indirect drug-related deaths have known broad variations in number during the past years.



**FIGURE 29.** Evolution of direct drug-related death cases and mortality rates per 100 000 inhabitants (RELIS, 2019)

<sup>11</sup> As for Luxembourg, the figures for overdoses and infectious diseases are statistically speaking low, positive and negative changes in trends need to be interpreted with caution, as trends are not absolute. To allow more valid trend interpretations, regrouping of data or other methodological standardisation methods may be considered (e.g. regrouping the data by 3 years).

## CHARACTERISTICS OF OVERDOSE VICTIMS

- > Regarding the gender distribution of overdose victims, male death cases have generally outweighed female death cases. In 2019, seven victims were male and one was female.
- > The mean age at the moment of death has generally shown a discontinued increasing tendency over the past 27 years. In 2018, the overall mean age of victims was 41.3 years (min: 37y; max: 45y).
- > Although the mean age of drug overdose victims has been increasing overall, in 2019 a sharp decrease was observed, lowering to a mean age of 34.6 years (min: 16y; max: 50y) (see Fig. 30). This is mainly due to the fact that one case under the age of 20 was reported and absolute figures were low, statistically speaking. Male overdose victims had 33 years and female overdose victims had 49 years on average. Nevertheless, the number of victims aged less than 20 years remains relatively unchanged during the referred observation period.

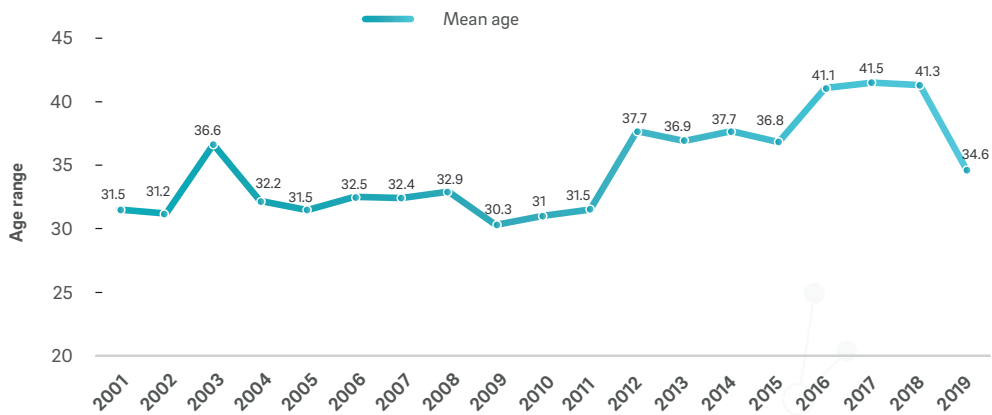


FIGURE 30.

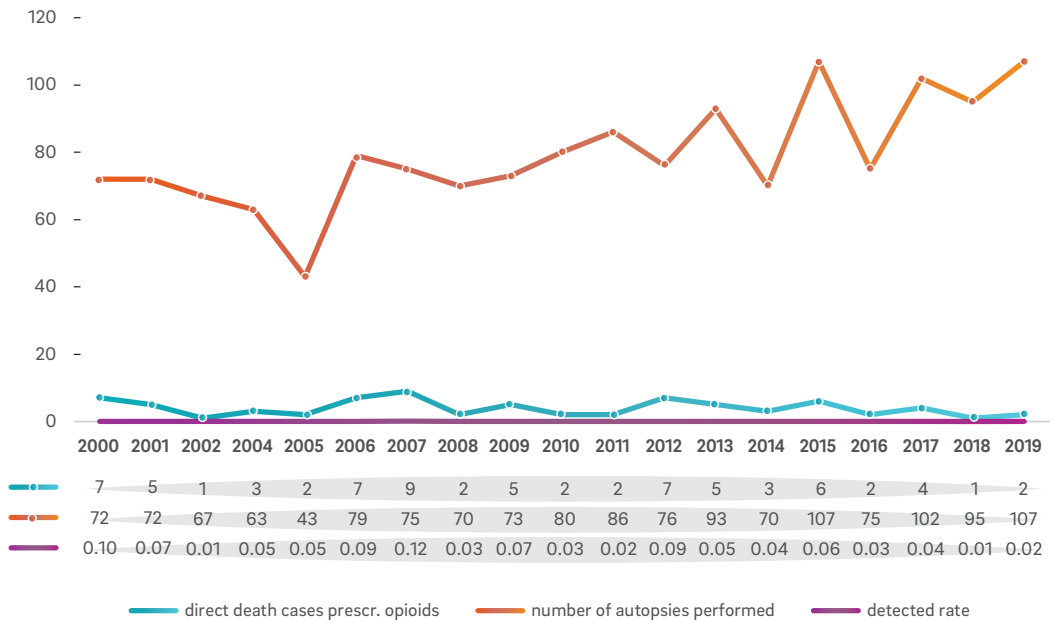
Mean age (in years) of acute drug overdose victims 2001-2019 (RELIS, 2019)

- > Also worth mentioning is that a majority of acute drug death victims are known by law enforcement agencies for their 'career' of drug possession and/or use (50% in 2019). As far as the place of death is concerned, since 2004 approximately 50-65% of overdoses occurred at the victims' homes, followed by public places (such as parking areas, trains or public bathrooms). In 2019, most death cases (37.5%) occurred at home, and for 50% the place of death was unknown (most likely public places). Regarding the nationality of the fatal overdose victims, 63% were natives in 2019.
- > Forensic data by the department of National Toxicology Laboratory on Health<sup>12</sup> show that the most frequently involved substance in overdose cases are opioids (heroin and methadone), followed by cocaine. It is relevant to emphasise that, since 2000, methadone presence in blood samples of overdose victims has been increasing. Regarding 2019 data, heroin was detected in all cases (N=8), cocaine in seven cases, and methadone in five cases. All cases except one showed polydrug use at the time of the overdose, the exception being a fatal overdose due to heroin alone.
- > The decrease of direct drug-related death cases is most likely and primarily due to the regionalisation and extension of the OST programme, as well as to the development of low-threshold facilities, in particular the opening of supervised drug consumption rooms. Since its opening in 2005, more than 2,200 overdose episodes have been assisted at the Abrigado centre in the city of Luxembourg. A second low-threshold centre including

two supervised drug consumption rooms, run by the 'Fondation Jugend- an Drogenhëllef' (JDH), is operational since September 2019 in the southern city of Esch-sur-Alzette. Finally, yet importantly, a HAT programme has been launched in Luxembourg in January 2017.

**ADDITIONAL INFORMATION ON OPIOID-RELATED DEATHS**

Over the past 28 years, the forensic toxicology department of the national health laboratory has investigated the direct death cases related to opioids other than heroin, such as opioid prescription drugs (including OST). Results are presented in Figure 31 below:



**FIGURE 31.** Evolution of direct death cases related to prescription opioids 2000-2019 (LNS, 2019)

These data need to be interpreted in the light of the number of autopsies performed, as these have increased steadily over the years ranging from 72 in 2000, 80 in 2010, and 107 in 2019. Overall, direct death cases related to prescription opioids have remained fairly stable over the years, especially when considering developments of three or four years for more valid trend analysis. A decrease may even have occurred as the number of autopsies increased considerably over the years.

#### 4.4. DRUG-RELATED ACUTE EMERGENCIES AND OVERDOSE INCIDENTS

Drug-related acute emergencies data are reported by the main low-threshold centres, both including two supervised drug consumption rooms (inhalation and injection) in Luxembourg City (Abrigado) and in the South of the country (Contact Esch).

- > In 2019, 41 acute emergencies occurred at the Abrigado centre: fifteen with loss of consciousness classified as non-fatal overdose incidents and 26 without loss of consciousness.
- > At the Contact Esch, five acute emergencies, classified as 'moderate' occurred in the months after its opening, and one severe non-fatal overdose incident.

# 5.

## RESPONSES TO HEALTH CONSEQUENCES



## 5. RESPONSES TO HEALTH CONSEQUENCES

### 5.1. A FOCUS ON PREVENTION OF DRUG USE AND ADDICTIVE BEHAVIOUR

Prevention is a key pillar of the 2020-2024 National Drug Strategy and Action Plan encompassing a wide range of complementary approaches, areas and actors (Ministère de la Santé, 2020). Preventive interventions of drug use and addictive behaviours generally aim at reducing initiation to drugs, delaying the onset of drug use, and encouraging protective actions and healthy lifestyles in the general population and in groups at risk, notably young people and their peers. As such, *environmental* and *universal* strategies target entire populations, *selective* prevention targets vulnerable groups that may be at greater risk of developing substance use problems, and *indicated* prevention focuses on individuals at-risk for developing substance abuse dependency. Selective actions for young people and their peers include prevention measures such as health education and promotion in school settings addressing attitudes and risk perceptions of drug use. The goal of such prevention measures is to increase awareness and critical views among adolescents, particularly regarding cannabis use, while also promoting harm reduction among recreational and high-risk drug users.

#### NEW DEVELOPMENTS, INTERVENTIONS AND EVENTS

The main actor in the field of drugs and addiction prevention is the 'CNAPA', the National Centre on Addiction Prevention, which refers to the centre formerly called 'CePT' (Centre de Prévention des Toxicomanies). The CNAPA intervenes in a wide range of settings such as schools, extra-curricular institutions such as youth centres, or municipalities. Professional training but also teaching materials and projects in the field of addiction prevention targeting different national stakeholders are developed to best fit the needs of the latter, including children and young people. An example of a preventive intervention specifically addressing the prevention of cannabis use as developed by the CNAPA is the "Cannabiskoffer 2.0", which consists of interactive methods to be used in schools and non-formal education institutions among students above the age of 14.

In 2019, a few new developments occurred:

- > One of the latter is the "Rebound Norden" project, a continuation of a school-based project initiated in 2016 between the CNAPA, the FINDER Academy for Prevention and Experience Based Learning (Berlin) and the German association MUDRA focusing on alternative youth and drug care. Furthermore, in 2019, an app called "Suchtberodung Online" was introduced in Luxembourg as a collaborative effort between the CNAPA, the Impuls treatment centre for adolescents and young adults, and the JDH Foundation. The "Suchtberodung Online" is a website/app offering online advice and counselling on addiction and related topics available 24/7. Released in December 2019, the app is considered to be an extension of existing services (i.e. outpatient and stationary treatment centres) providing addiction help. The app is free and allows users to have a professional online consultation, to ask questions regarding addictions and to track their drug use with a daily journal. Moreover, the app offers habit tracking, as well as information on different addictive substances.
- > In 2019, the 'Suchtverband' ("National federation of agencies and services specialised in prevention, treatment and harm reduction in the field of addictions") organised a conference in collaboration with the Ministry of Health addressing the topic of "Prevention in community-based settings: approaches, examples from projects and perspectives" at the University of Luxembourg. Multiple workshops regarding community-based strategies for prevention work were held, notably the CNAPA workshop named "Addiction prevention in municipalities". Speakers from the University of Luxembourg, the CNAPA, the Ministry of Health, the Ministry of Education, the Suchtverband and local communes contributed.

**Universal prevention** is mainly implemented in schools, although drug-related information and prevention modules are not mandatory in school curricula. School-based programmes are usually implemented in cooperation with non-governmental organisations, and seminars, trainings and educational tools on addiction prevention and improving life-skills are offered to school staff (on a voluntary basis). Annual thematic/prevention days or adventure weeks aim to give young people the opportunity to experience group dynamics, conflict management, risk assessment and a feeling of solidarity within a group of socially and culturally diverse people. A toolbox developed by the CNAPA assists schools with the implementation of school-based prevention activities. Moreover, the CNAPA published a guide with recommendations for educational professionals on how to tackle cannabis in the school environment. Training modules for professionals working with young people on how to communicate about psychoactive substances in non-formal environments and educational tools that allow for discussion on substance abuse have also been developed.

Trained police staff members periodically visit schools on demand to inform students on drugs and their risks, reaching around 6,000 students every year. Some manual-based school prevention programmes are implemented in schools. Other universal prevention programmes have been implemented periodically in community settings, while trainings and seminars are offered to staff in youth centres so they are able to reinforce social competences and prevent substance abuse and addiction among adolescents and young adults. There are also basic information sessions/trainings about drugs (use) and their (side-)effects provided to teachers, staff working in the psycho-socio-educational field, but also directly to adolescents. Online counselling, e-health and m-health interventions are developed on the national level to be offered to provide anonymised advice and information regarding drug use, thus functioning as both a universal and selective prevention measure.

**Selective prevention** focuses on crisis interventions in schools for instance and on avoiding social exclusion. Activities are also carried out in recreational settings and with high-risk groups, such as at-risk families, multiple drug users and those who show excessive use of alcohol. "Choice" and "Choice 18+" are early intervention programmes offered by the treatment service Impuls (Solidarité jeunes asbl) for juvenile first-time offenders. The "Choice" programme offers youngsters aged 12 to 17 who entered in conflict with drug laws, mostly due to cannabis possession and/or use, an early and short-term group-based and individual counselling intervention in order to prevent further development of drug abuse. The "Choice18+" targets young adults up to the age of 21 years. Both "Choice" programmes offer an alternative to criminal record registration as a psychoeducational programme is more effective. Young drug users may be referred by police forces or the public prosecutor to this programme. An increase of arrests among young adults for possession and/or use of cannabis has been observed in recent years.

The NGO 4Motion asbl runs a project called 'Pipapo', which operates information points that provide information, earplugs, condoms, alcohol breath testing and drinking water in recreational and festive settings. They also offer DrUg CheCKing (DUCK) to allow for testing of substances, including NPS, used in these settings. For further information on this specific harm reduction service, please see section 5.2 below.

With regard to **indicated prevention**, early detection is a priority for children showing high-risk behaviour in school settings and at home; further interventions are provided by psychiatric care services.

## 5.2. TREATMENT AND HARM REDUCTION RESPONSES AVAILABLE IN LUXEMBOURG

Specialised drug treatment offers in Luxembourg include inpatient and outpatient responses. These responses rely on government support and are provided through specialised harm reduction and low-threshold agencies, hospital-based drug treatment units, outpatient treatment facilities, and an inpatient treatment facility. Treatment units are also available in prisons. Treatment is decentralised and most commonly provided by state-accredited and state-financed non-governmental organisations. Outpatient treatment is provided free of charge, whereas inpatient treatment is covered by the national health insurance. All institutions work in close collaboration and can be viewed as an interconnected therapeutic chain.



- > Currently two agencies offer harm reduction services for HRDU in the Centre of the country (CNDS: Abrigado and JDH: K28). The JDH Foundation further offers harm reduction services in the South (Contact Esch) and in the North (Contact Nord) of the country. Services include offers such as day and night shelter and supervised injection and blow facilities (in the Centre and in the South).
  - o In July 2005, the first supervised drug injection room opened in Luxembourg City. It was integrated into the low-threshold centre Abrigado providing day care, night shelter (42 beds) and low-threshold services to drug users. In 2015, a second supervised drug consumption room specifically for the purpose of inhalation got operational at the Abrigado centre.
  - o Supervised drug consumption rooms, one for injection and one for inhalation, integrated in the harm reduction facility (Contact Esch) in the southern city of the country Esch-sur-Alzette, opened in September 2019 and are run by the JDH Foundation.
  - o Another low-threshold offer run by the JDH Foundation was implemented in the northern city of Ettelbruck in 2014 (Contact Nord).
- > The Pipapo project from the NGO 4Motion asbl acts both on prevention and harm reduction through their DrUg CheCKing (DUCK) project – targeting drug users in recreational/festive settings. The DUCK project allows for testing of substances, including NPS, used in these settings. While users have the opportunity to have a sample of their product analysed anonymously, and express the presumed characteristics and desired effects of the product, the DUCK project provides an opportunity to increase awareness on the risks that are associated with drug use and guide users towards a more responsible use. The samples received by the DUCK service are deposited at the National Health Laboratory for analysis and destroyed afterwards. The expected characteristics of the sample, as expressed by its user(s), are hence compared with the results of the spectrochemical analyses carried out by the national health laboratory.
- > Pipapo has recently expanded its services to online counselling and information provision on drugs. Moreover, following an budgetary increased allocated by the Ministry of Health in 2020, drug users can now also make an appointment on various weekdays at the main location/building of the Pipapo to get their products tested or discuss the results of the laboratory analysis in person with one of the trained psychologists of the Pipapo team.

In 2019, the DUCK team collected 54 samples for the purposes of drug checking. From the 54 samples, 22 (41%) were identified as MDMA. For each analysis, the laboratory results showed an elevated presence of MDMA. The dose of MDMA per pill ranged from 140 mg to 297 mg of MDMA. Of the 54 samples collected, five were tested as suspected substances of cocaine. In most cases, laboratory results showed a very high presence and purity of cocaine. Two samples contained pure cocaine. The cutting agents used in some of the samples were levamisole, hydroxyzine and phenacetin. Moreover, among the 54 samples collected, three amphetamine samples ("Speed") were analysed. The results of the analyses show a random quality. The most widely used cutting agent detected was caffeine. During the year 2019, the DUCK team further observed an increase in demand for testing cannabis samples (n=10). This increase may be explained due to the presence of synthetic cannabinoids and the increase in the supply of CBD cannabis products in the Grand Duchy of Luxembourg. For laboratory analysis were also submitted fifteen NPS samples, including one sample submitted as an unknown substance (Paulos et al., 2020).



#### OUTPATIENT TREATMENT SERVICES

- > The JDH Foundation is the main treatment provider at the national level being created in 1986. It provides various psychosocial, therapeutic and medical care services for consumers of illicit drugs, including high-risk drug users, drug-dependent parents and their children, mothers and pregnant women providing intervention to strengthen the parenting skills, and their relatives. The JDH Foundation runs three regional antennas that are situated in Luxembourg City (Centre), in Esch-sur-Alzette (South), and in Ettelbruck (North).
- > The 'Alternativ Berodungsstell' (Alternative Counselling Centre) is a specialised outpatient service implemented in Luxembourg City. Its main objectives are to establish first contact with the drug-using clients and assist them in the development and organisation of a therapeutic project, detoxification, psychiatric/psychotherapeutic interventions, and the provision of informative or therapeutic sessions.
- > The service 'Quai 57' (Arcus asbl) implemented in Luxembourg City is primarily a social and psychological counselling and referral agency providing help to people who suffer from an addictive disorder (with or without substance abuse) or to family members and/or peers of people with an addictive disorder.
- > The treatment service Impuls (Solidarité Jeunes a.s.b.l.) provides, in the framework of youth protection, psychosocial and therapeutic assistance to young people (generally below the age of 21y) and their families when they are confronted with the consumption of legal and illegal psychoactive substances.

#### HOSPITAL-BASED DRUG TREATMENT UNITS

Detoxification treatment is provided by psychiatric units within the following general hospitals:

- > Centre Hospitalier du Nord – CHdN (Ettelbrück - North);
- > Centre Hospitalier Emile Mayrisch – CHEM (Esch-sur-Alzette - South);
- > Centre Hospitalier de Luxembourg – CHL (Luxembourg city - Centre);
- > Zithaklinik and Hôpital Kirchberg – Fondation Hôpitaux Robert Schuman (Luxembourg - Centre).

#### INPATIENT TREATMENT SERVICES

- > The national residential therapeutic centre at 'Syrdall Schloss' called 'Centre Thérapeutique de Manternach' (CTM-CHNP) is situated in the East of Luxembourg. The CTM is a therapeutic centre for people dependent on illegal substances. The centre is organised as a therapeutic community and can accommodate up to 25 people. Patients are allowed to follow substitution treatment in-house. In some cases, it is possible to take in charge mothers and/or fathers accompanied by their children.
- > The goal of the therapeutic community is to help each individual to allow a life without drugs and to reintegrate into society and work. The therapeutic programme of the CTM is divided into three progressive phases. The duration of a therapeutic stay usually varies from 3 months to 1 year.
- > Before admission to the Syrdall Schloss, it is mandatory to consult first the Alternativ Berodungsstell orientation office in Luxembourg City. All patients have to go through detoxification before entering the therapy.

#### THERAPEUTIC COUNSELLING TREATMENT SERVICES IN PRISON

The TOX-Programme was reorganised and named 'SuchtHëllef' in the beginning of 2020. The programme SuchtHëllef implemented in the closed prison (CPL) and in the semi-open prison site in Givenich (CPG) has established several psycho-educational activities. It is a therapeutic counselling programme of individualised rehabilitation, not time-limited, allowing clients to participate in those activities of the various modules that are in line with their previously established therapeutic plan. The programme allows the clients to combine care and other necessary steps towards socio-professional reintegration.

POST-THERAPY / AFTER-CARE

In 2016, the 'Stëmm vun der Strooss asbl' (Voice of the Street) opened a new post-therapeutic centre in Schoenfels for persons previously treated for addiction. It provides post-therapy, time-limited housing and daytime occupation notably to ex-drug or ex-alcohol dependant adults who intend to lead a life without drugs. A total number of fifteen people who have successfully completed inpatient drug treatment and therapy can be accommodated at once for a limited time in the residential centre. The post-therapy centre has two main aims:

- > To offer professional and social reintegration;
- > To avoid accommodation in emergency care facilities after the end of inpatient therapy and provide follow-up in a protected setting.

During the year 2019, 61 people contacted the post-therapeutic centre either to come and work as volunteers or under a contract of insertion within the framework of the REVIS<sup>13</sup> or to introduce their application for admission to the housing structure. During the year 2019, 25 persons were accommodated at the post-therapeutic centre. At the end of 2019, 21 people who were on the admission list were able to integrate the post-therapeutic centre in 2020. A total number of 79 clients were assisted (25 in the residential sector and 54 in the workshops). There were no new intervention programmes implemented in 2019.

As shown in Figure 32, drug treatment and re-integration facilities are spread over different regions. All listed services are specialised with the exception of regional general hospitals providing detoxification treatment via their respective psychiatric departments.



FIGURE 32. Map of the geographical coverage of specialised drug agencies in the Grand Duchy of Luxembourg (status 2020)

### 5.3. PROVISION OF DRUG TREATMENT

In 2019, 1,632 clients were reported by specialised outpatient drug treatment units, representing 110 clients more than the previous year (2018: 1,522). These include the treatment centres of the JDH Foundation (n=479), Impuls (n=589), Quai 57 (n=450), and the Alternativ Berodungsstell (n=114). The number of clients in other national in- and outpatient therapy therapeutic agencies is depicted in Table 2, whereas Figure 33 shows how the total number of patients has been evolving over the past decade in both in- and outpatient services.

**TABLE 2.**  
Overview of harm reduction services and drug treatment provision in the Grand Duchy of Luxembourg

				Definition	Number of clients in 2019	Total clients in treatment in 2019
<b>Outpatient</b>	Specialised drug treatment centres	Impuls, Quai 57, JDH, Alternativ Berodungsstell	Non-government (non-for-profit)	The patient receives drug treatment without staying overnight and can be pharmacologically assisted	1,632	1,632
	Low-threshold agencies	Abrigado, JDH-K28, JDH-Contact Esch, JDH-Contact Nord		Agencies offering harm reduction services including: night shelter, needle exchange, supervised consumption rooms, education/ counselling, infectious diseases testing	164,420 <sup>14</sup>	
	Outpatient OST	General Practitioners (GPs) and JDH			1,099	1,099
	Mobile outreach unit	MOPUD/X-Change Project		Mobile van promoting "safer use" and "safer sex" with the ultimate goal of harm reduction and reducing risks of infectious diseases transmission	219 <sup>15</sup>	
<b>Inpatient</b>	Hospital-based drug treatment	CHL, CHEM, CHdN, Zithaklinik	Public/ Government	The patient is staying overnight, pharmacologically assisted or not (including detoxification)	392 <sup>16</sup>	392
	Therapeutic communities	Syrdall Schlass - Centre Thérapeutique de Manternach (CTM)		The patient is staying overnight, is provided a psychological, long-term treatment, may be pharmacologically assisted or not (no detoxification). Detoxification is required before entering the community	35	35
	Prisons	Programme SuchtHëllef (CPL, CPG)		The patient incarcerated in prison can submit a demand to enter a specialised drug treatment (SuchtHëllef programme). He/she may be pharmaceutically assisted (no detoxification)	292 <sup>17</sup>	292
		OST treatment in prison (CPL, CPG)		The patient incarcerated in prison can continue a previously prescribed OST treatment or begin OST in prison	146	Included in the 1,099
					<b>3,450<sup>18</sup></b>	

14 Number of client-contacts (the number of individual-clients is not registered)

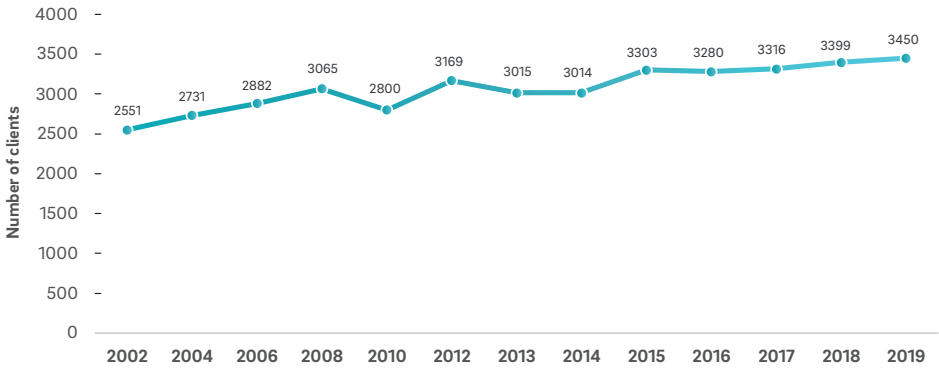
15 Number of client-contacts (the number of individual-clients is not registered): The mobile outreach unit (MOPUD/X-Change) counted 219 client contacts in 2019 (774 in 2018). The MOPUD/X-Change stopped its operations in June 2019 due to major construction roadwork in the parking lot it used to be stationed.

16 Please note that the total number of clients for hospital-based residential drug treatment is an accurate estimate based on exact figures provided by three hospitals (CHL n=200; Zitha n=129; CHEM n=48) and an estimate for one hospital CHdN (n=15) (with a smaller capacity unit for patients with drug addiction).

17 Please note that for prisons, there are two sites: one closed and one semi-open prison. Both offer individual drug counselling therapy (closed site n=209 clients; semi-open site n=83 clients in 2019), whereas the closed site additionally offers group therapy (N=384 clients in 2019). Not known if clients benefit from both individual and group therapy at once, double counting is hence not necessarily excluded.

18 Data provided by the treatment institutions in their annual activities report. Inter-institutional multiple counts are not excluded meaning that a given client could be indexed twice or more in case he/she used several harm reduction and/or treatment services during a given reporting year.

The number of contact-clients visiting specialised treatment services increased steadily until 2012, and then decreased until 2014. In 2015 a new peak in absolute figures was reached. Since 2015, the total number of clients registered in treatment services has been relatively stable. In 2019, however, a slight increase led to a new peak of 3,450 (multiple counts included) registered clients (see Fig. 33).



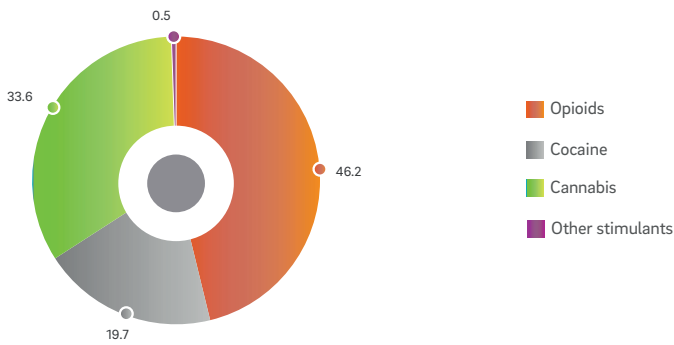
**FIGURE 33.** Trend of total number of contact-clients at in- and outpatient treatment 2002-2019 (RELIS, 2019)

Note: Data provided by the treatment institutions in their annual activities report. Inter-institutional multiple counts are not excluded meaning that a given client could be indexed twice and more in case he/she used several services during a given reporting year.

#### 5.4. PATTERNS OF USE AND CHARACTERISTICS OF TREATMENT DEMANDERS

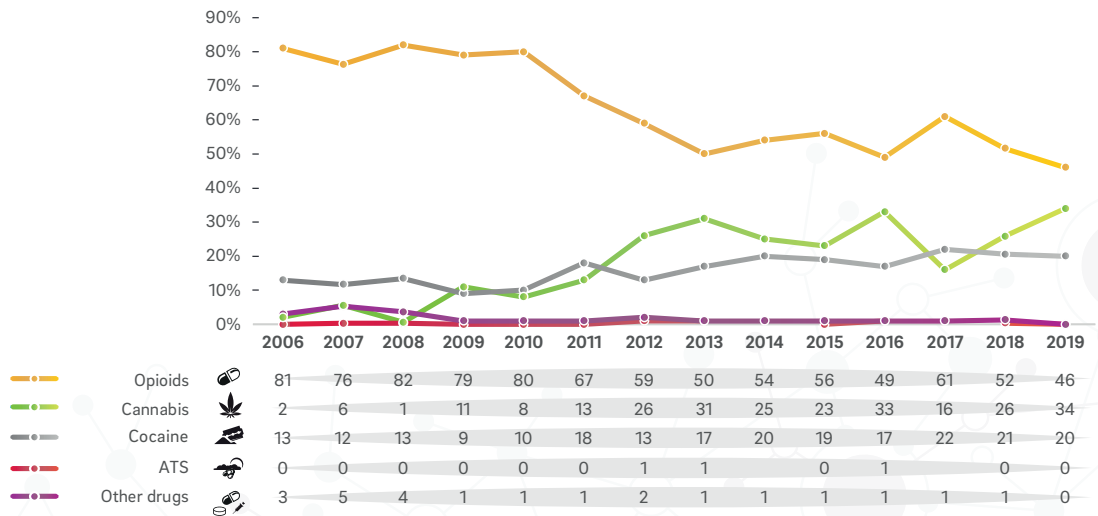
At the national level, treatment demand, characteristics of treatment demanders and their drug use patterns are assessed continuously on an annual basis through the RELIS monitoring routine applied to the majority of national out- and inpatient drug treatment centres participating in the RELIS network.

- > The primary drugs involved in treatment demand in Luxembourg have consistently been opioids. In 2019, slightly less than half of all treatment demands were related to opioid use (46.2%), which is comparable to the proportion of treatment demands in the year before (2018: 51.6%). In 2017, more than half of all treatment demanders (60.9%) were treated for opioids misuse, revealing a decreasing trend of clients in treatment due to primary opioid use (see Fig. 34).



**FIGURE 34.** Proportion of treatment demands by primary drug in 2019 (valid %) (RELIS, 2019)

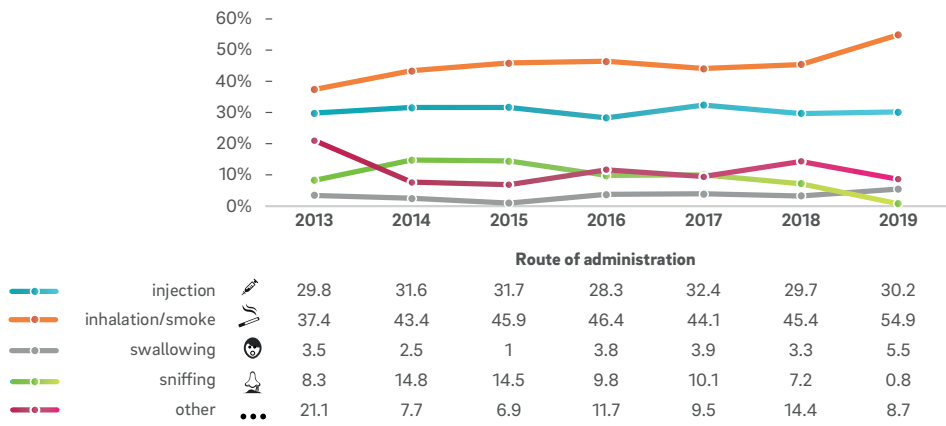
- > With 33.6%, cannabis is now the second most reported drug in treatment demands by specialised treatment facilities. Cannabis as primary drug was mentioned by 16.2% and 25.8% of all treatment demanders in 2017 and 2018, respectively. The increase in cannabis treatment demanders may be due to higher THC levels identified in cannabis products (see also Chapter 6), that have been related to a higher risk of mental health and social problems. However, this finding has to be interpreted with caution as the proportion of data coming from the Impuls service treating adolescents/young adults increased significantly in 2019 compared to previous years. As this institution predominantly receives treatment demands related to cannabis use, the proportions of treatment demanders by primary drug use have consequently been affected, which biases the comparability with previous years.
- > In total, 19.7% of all clients enter treatment for problems related to their cocaine use, revealing cocaine as the third most reported drug in treatment demands. This proportion has remained largely stable with regard to 2018, though with the view of previous years, an increasing trend towards cocaine has generally been reported (see Fig. 34). Cocaine remains highly prevalent on the illicit market.
- > Other illicit drugs represent only a small proportion of treatment demands (less than 2% of all treatment demands concern stimulant drugs such as amphetamines or ecstasy) (see Fig. 34, 35).



**FIGURE 35.** Trends of clients entering treatment by primary drug used 2006-2019 (valid %) (RELIS, 2019)



- > When looking at the primary route of administration of the main drug, the proportion of drug injecting clients in treatment has remained largely stable (about 30%) over the past years.
- > The proportion of clients using smoking/inhaling as main route of administration has nevertheless increased from around 37.4% in 2013 to 54.9% in 2019. However, this increase also has to be seen in the light of the evolution of the characteristics of the sample (i.e. more cannabis users).
- > Other routes of administration are less prominent - sniffing seems to have become less popular over the past years, and there is no consistent trend for swallowing or other routes of administration (see Fig. 36).



**FIGURE 36.**  
Primary route of administration for the main drug of clients in drug treatment (valid %) (RELIS, 2013-2019)



- > With regard to clients entering treatment *for the first time*, this proportion has been increasing over the past years (24.5% in 2016; 2018: 26.8%; 2019: 35.2%).
- > The number of *new* treatment demanders for cannabis reached a peak in 2019 with almost two-third of all new treatment demands being related to the primary use of cannabis (62.7%). However, it should be noted that the relative share of data provided by the Impuls service treating adolescents/young adults mainly for cannabis related problems increased significantly in 2019 compared to previous years.
- > In 2019, the previously observed downward trends for *new* treatment demands for opioid use was further confirmed (25.4%), while a substantial downward trend also applies to cocaine (11.9%).
- > The mean age of all treatment demanders has generally been increasing during the last 20 years (34.6 y in 2019; 28y in 1997).
- > In 2018, 77.2% of all the treatment entrants were male and 22.8% female. A similar proportion has been observed among *new* treatment entrants (76.9% male and 23.1% female).

## 5.5. OPIOID SUBSTITUTION TREATMENT

Opioid Substitution Treatment (OST) is a medical assisted treatment provided to opioid dependant persons primarily based on the delivery of opioids' agonists and antagonists (and antagonistic agonists) as substitutes to the drug normally used. As the primary goals of OST are the psychosocial and medical stabilisation of the patients by replacing "street" drugs by quality-controlled substitution drugs, it is often accompanied by psychosocial care provided at in- and outpatient settings. A structured and multidisciplinary substitution treatment programme is provided at the national level by the JDH Foundation since 1989. Moreover, substitution treatment licenses can be granted to medical doctors, office-based general practitioners and specialised agencies if meeting training requirements and if respecting the obligation to notify substitution treatment demands to the Directorate of Health. The JDH Foundation mainly provides liquid oral methadone whereas freelance state accredited medical doctors may also provide other substitution medications, specified by law. OST medications registered in Luxembourg include methadone, buprenorphine, morphine-based medications and diacetylmorphine (heroin - only in the framework of the national HAT programme). The costs of OST consultations are partly covered by individuals' health insurance, while the government covers pharmaceutical costs and pharmacy fees.

## DEVELOPMENTS IN THE NUMBER OF OST PATIENTS

The number of patients receiving prescribed substitution treatment has known a steep increase between 2008 and 2010 (2010: 1,248 patients; 2008: 1,050 - multiple counts excluded). Since 2013, a stabilisation in the number of OST demanders has been recorded (2019: 1,099; 2016: 1,085; 2011: 1,128) (Fig. 37).

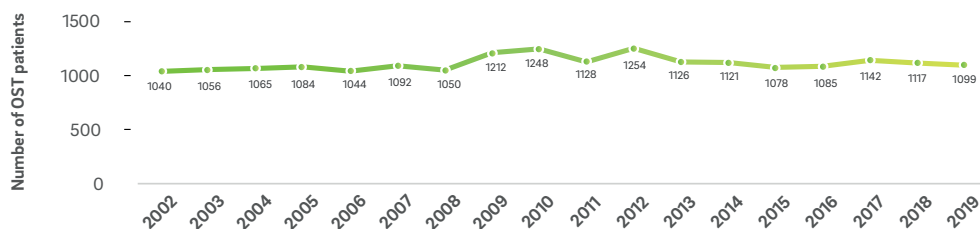


FIGURE 37.

Evolution of the number of opioid substitution treatment (OST) patients 2002-2019 (RELIS, 2019)

The majority of OST patients are men (approximately 75%) and their average age has been increasing over recent years as more than 48% of all patients were above the age of 45 in 2019 (average age 43y in 2017; 38y in 2014). The majority of OST patients receive prescribed methadone (+/- 90% in 2019), followed by buprenorphine and naloxone.

A Heroin Assisted Treatment (HAT) pilot project, coordinated by the Directorate of Health, is run by the JDH Foundation since 2017. The prescription of diacetylmorphine is not to be seen as a low-threshold measure, but as a supplementary form of substitution treatment. In 2018, a proportion of about 75.4% of all clients in the JDH OST programme were prescribed methadone/Mephenon®, and 24.6% were prescribed diacetylmorphine (DIAM), whereas in 2019, 76.8% were prescribed methadone/Mephenon® and 23.2% DIAM.

## 5.6. OST PROVISION IN PRISON

With regard to the provision of OST in prison, official figures show that in 2019, 22.7% of the inmates received OST, representing a total number of 146 persons (see Table 3). In 2019, the average dose of distributed methadone was 27 mg per day (minimal dose 2 mg and maximal dose 100 mg; 26 mg per day in 2018) for methadone, and 9.8 mg per day for distributed Suboxone®. The average duration of treatment episodes in 2018 was 174 days for the methadone and 221 days for the Suboxone®, while the average duration for methadone decreased towards 128 days and increased towards 254 days for Suboxone®, respectively.

TABLE 3.

Number of prisoners receiving opioid substitution treatment (2014-2019)

Year	2014	2015	2016	2017	2018	2019
<b>Methadone</b>	181	165	172	204	159	136
<b>Suboxone®</b>	66	46	33	26	10	10
<b>Total (persons)</b>	247	211	205	230	169	146

Source: Comité de Surveillance SIDA; annual activity reports 2014 – 2020

## 5.7. HARM REDUCTION RESPONSES

The harm reduction responses consist of offers such as needle and syringe exchange programmes, HIV/HCV testing, supervised drug consumption facilities, and outreach offers. The national needle and syringe programme in Luxembourg is decentralised and consists of five fixed sites and a series of vending machines situated in the towns most affected by injecting drug use. Clean syringes are available in drug counselling centres, drop-in centres for sex workers and at-risk populations, and low-threshold centres such as the supervised drug consumption room Abrigado, outreach offers and in prison. In addition to needles and syringes, testing for blood-borne infectious diseases, vaccinations and counselling on safe use practices are also provided. A mobile medical care unit facilitates the provision of primary medical care at low-threshold agencies. A mobile outreach service specifically designed for drug users in an urban environment was launched in September 2017, and a second supervised drug consumption room opened in the most populated city in the South of the country in September 2019.



- > The number of person-contacts indexed by low-threshold facilities has steadily increased since the opening of the first drug consumption rooms in 2005 (2005: 47,739). In 2019, 164,420 contacts in various national harm reduction services were registered; a slightly lower number compared to the previous two years (2018: 166,945; 2017: 164,806) (see Fig. 38).
- > In 2019, all JDH low-threshold services reported a total number of 32,037 client contacts including K28 in Luxembourg City, Contact Nord, and the Contact Esch, which also includes supervised drug consumption facilities. Regarding the JDH low-threshold service K28 in particular, a 25% increase compared to 2018 was reported (2019: 21,598 client contacts; 2018: 17,258 client contacts).
- > The low-threshold harm reduction centre Abrigado reported a total of 126,069 client contacts in 2019, including CAARUD (63,831), the medical service (5,102) and client contacts at the supervised drug consumption facilities (57,136) (N.B. these figures include multiple counting).
- > The DropIn service from the Red Cross counted a total number of 6,314 individual clients and 10,149 client contacts (2018: 13,906), adding up to a total number of client contacts among low-threshold agencies of 164,420 including double counting (2018: 166,945).
- > The mobile outreach unit is one of the main responses to better reach drug users outside the opening hours of the different services participating in the needle exchange programme. In 2019, the mobile outreach service 'MOPUD/X-Change' reported 214 client-contacts (774 in 2018) (includes multiple counting) (Table 3). The MOPUD/X-Change is a cooperation project between JDH, the Abrigado centre and HIV-Berodung of the Red Cross primarily targeting drug users (safer-use and harm-reduction).
- > MOPUD/X-Change has been on hold due to the construction work on the site where it used to be stationed. As of June 2019, a "streetwork" has been set up to analyse the scene and find a new place in Luxembourg City. Numerous construction sites, especially in the station area and the lack of adequate alternatives, have conducted MOPUD/X-Change to stop functioning temporarily in the city centre. Since July 2020, MOPUD/X-Change is stationed at different locations in the southern city of Esch-sur-Alzette.



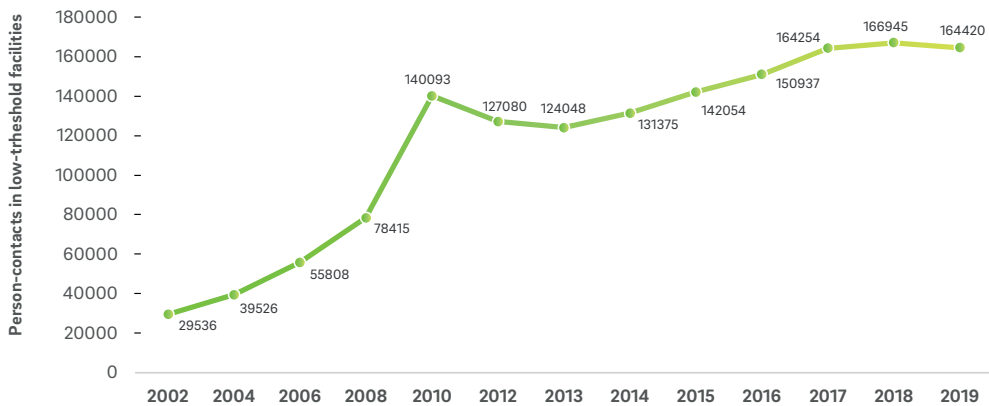


FIGURE 38.

Person-contacts in low-threshold facilities (2002-2019) (RELIS, 2019)

#### SYRINGE AND NEEDLE EXCHANGE PROGRAMME



- > The number of clean syringes distributed in the framework of the national needle exchange programme reached a first peak in 2004 when more than 435,000 syringes were dispensed, and decreased thereafter to less than 200,000 syringes in 2013. Since then, provision has increased again, reaching a historically high level in 2018 with 492,704 distributed syringes.
- > In 2019, the number of syringes distributed decreased slightly towards 430,078 (see Fig. 39).
- > The vast majority of injectors (99.1% 2019; 97.4% in 2018; 57.5% in 2017; 64.0% in 2016) procure their syringes in specialised agencies (predominantly the Abrigado centre) followed by pharmacies and decreasingly via automatic dispensers.
- > Return rates of used syringes had been slightly decreasing in recent years (2018: 89.4%; 2017: 92%; 2016: 94%) – probably related to the higher prevalence and frequency of cocaine injection in national HRDU. From the total number of syringes that were provided in 2019 by special agencies with needle-syringe programmes (426,259), 384,349 were actually returned. Hence, for every 100 sterile syringes provided, 90 used syringes were recollected (exchange rate of 90.2%).
- > In 2019, the JDH Foundation offered new projects such as three “vending” machines delivering sterile syringes, which were made available in outpatient centres in Luxembourg City, Esch-sur-Alzette and Ettelbruck.



**FIGURE 39.**

National distribution of sterile syringes 1996-2019 including specialised agencies, prisons, vending machines and supervised drug consumption rooms (Devaux et al., 2019)



6.

## DRUG MARKETS AND CRIME



# 6. DRUG MARKETS AND CRIME

## 6.1. AVAILABILITY AND SUPPLY

Drug markets are of changing nature. They rely on factors such as supply mechanisms, on the economic situation of the country and on the priorities and efficiency of law enforcement strategies. Availability and supply indicators should be interpreted with caution as they rely on the interplay of all these factors. The Luxembourg Focal Point of the EMCDDA (PFLDT) processes anonymous nation-wide data on drug-related offences, prosecution and seizures of illicit substances provided by the law enforcement agencies in collaboration with the specialised drug unit (section stupéfiants) of the national Judicial Police Service. Important fluctuations have been observed in the quantity of illicit substances seized over the past 2 decades.

### CANNABIS

Cannabis is the most frequently used illicit psychoactive substance:

- > The prevalence of cannabis use among clients in contact with national services (institutional contact indicator) increased steadily since 2012 reaching its highest peak in 2019 with 33.6% of clients reporting cannabis as their primary/preferred drug.
- > A high prevalence of cannabis use is in line with high seizure figures - markedly, the number of cannabis seizures has risen from 167 to 1,315 between 1994 and 2019 and the quantity of cannabis seized achieved a peak in 2019 with 371 kg (2018: 216 kg) (Fig. 40, 41).
- > Overall, seizures of cannabis-based products represented 70.1% of the total number of seizures in Luxembourg in 2019 (1,315 out of 1,856 total seizures).
- > 651 seizures of herbal cannabis were reported by national law enforcement authorities with a total of 98.17 kg (2018: 644 seizures with 34.97 kg).
- > Resin has typically been less represented than herbal cannabis in seizures data. However, the proportion of resin cannabis seized has been increasing over the years. In 2018 and 2019, it represented approximately 30% of the total seizures, with 434 seizures in 2018 and 545 seizures in 2019, respectively. In 2019, a total amount of 272.55 kg was seized (181.31 kg in 2018).
- > Regarding cannabis plants, 22 plants were seized in the framework of three seizures in 2019 (34 plants in 2018).

### HEROIN

Although heroin has a long history of use at the national level, the quantities of heroin seized seem to follow an unstable trend:

- > According to law enforcement data, heroin availability in Luxembourg increased between 2012 (2.65 kg) and 2015 (8.04 kg) while it decreased sharply in 2016 (2.49 kg) and 2017 (1.30 kg). Data from the years 2018 and 2019 show a new increase in the quantity of heroin seized: 2.86 kg in 2018 and 6.4 kg in 2019.
- > Most of other opioids seized are Mephenon® with 580 tablets (2018: 423 tablets) and methadone in liquid form with 95 ml (2018: 1.26 litres and 0.24 gr). Speedballs (mixture of heroin and cocaine) were seized eight times during the past year.

## COCAINE

Cocaine seizures are highly variable since the beginning of the nineties and police data refer to high quantities seized in 2000, 2015, and again in 2018:

- > In 2019, the amount of cocaine seized dropped significantly to 1.75 kg (235 seizures) as compared to 2018 when 216 cocaine seizures were reported, with a record amount of almost 347 kg seized by the national law enforcement authorities.
- > Despite a decrease in the number and quantity of cocaine seized in 2019, the increased proportion of HRDUs but also recreational drug users reporting primarily cocaine use suggest a growing availability of the drug on the market.
- > The average purity of cocaine was slightly inferior in 2019 compared to 2018 (see 6.3.).
- > Crack (cocaine-base) seizures have not been reported to date by national authorities, although freebasing is reported by field agencies.

## OTHER STIMULANTS

Ecstasy-like substances (MDMA) and amphetamine-type substances (ATS) are still popular, particularly in festive settings, and seizure figures suggest a similar trend:

- > The year 2016 stood for a record in MDMA quantities seized, as a total of 17,639 pills were seized in 20 seizures. In 2019, a new historical record was registered with 46,059 XTC/MDMA tablets/pills seized within 32 seizures.
- > Marginal amounts of amphetamine (ATS) and methamphetamine were seized in 2019 (56.80 gr of ATS and 2.44 gr of methamphetamines) (see Fig. 40, 41).

## OTHER SUBSTANCES

- > No reliable evidence exists thus far on the presence of fentanyl or other synthetic opioids on the national street-drug market.
- > It is worth noting that the substance khat has been seized in high quantities in 2018 (78.23 kg), although totalling a lower amount in 2019 (8.5 kg).
- > NPS including synthetic cannabinoids have been identified and seized in Luxembourg, although at a modest level to date. In 2019, there were two seizures of 5-MEO-DMT (Dimethyltryptamin) with minor quantities.



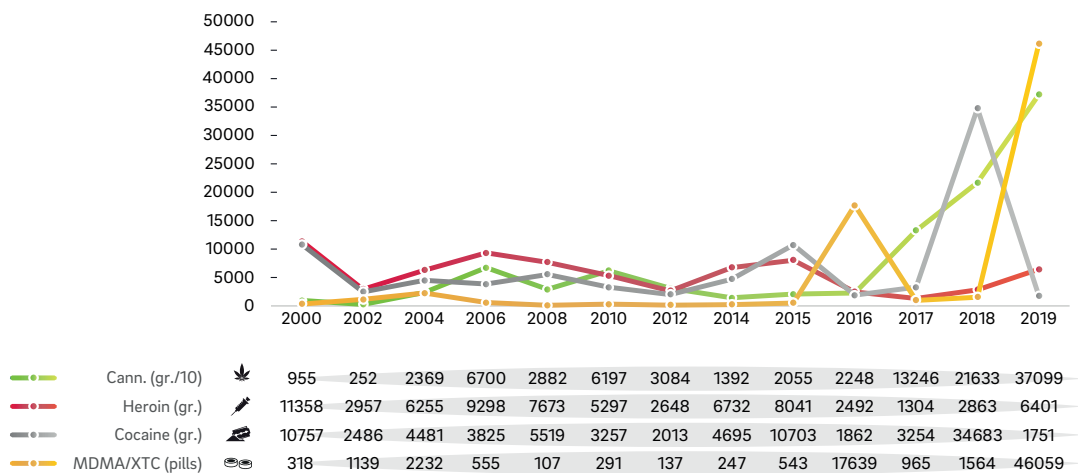


FIGURE 40.

Total quantities of main national yearly seizures: cannabis, heroin, cocaine, MDMA/XTC (1996-2019)  
(Specialised Drug Department of the Judicial Police, 2019)

Note: for 2018, the quantity of cocaine was reported as gr/10 (total seizure 346.828 kg).

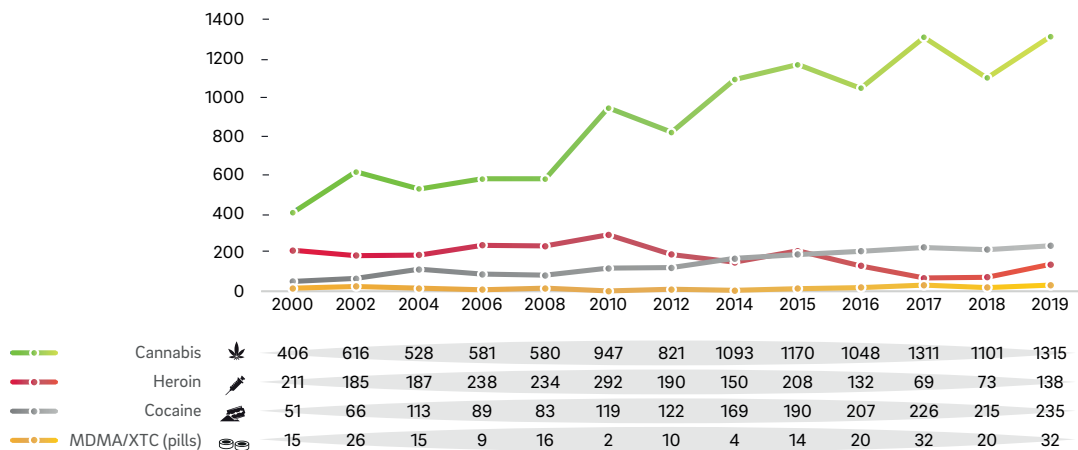


FIGURE 41.

Total number of main national yearly seizures: cannabis, heroin, cocaine, MDMA/XTC (2000-2019)  
(Specialised Drug Department of the Judicial Police, 2019)

## 6.2. TRENDS IN DRUG PRICES

Ad hoc surveys allow for data on the average market price of illicit street drugs. In 2018, these data were collected among two different user groups: HRDUs and recreational drug users. The figures below report the trends regarding average prices of the drugs mainly used by HRDUs (heroin, cocaine, herbal cannabis and cannabis resin) (Fig. 42) and the drugs mainly used by recreational drug users (see Fig. 43). For 2019, there are no updated data on prices of illicit substances.

According to HRDUs (sources: National Judicial Police and Abrigado centre):

- > Prices move within increasingly broader ranges for heroin, cocaine and cannabis, which is partly due to increasing variations in quality levels of street drugs.
- > Average cocaine and heroin prices have been decreasing since 2010 – the price of cocaine dropped most (from 143.7€/gr in 2010 to 76.29€/gr in 2018), which might be linked to a higher availability on the illicit market.
- > The average prices of cannabis products on the illicit domestic market (herbal cannabis and resin) have been relatively stable over the last decade (see Fig. 42).

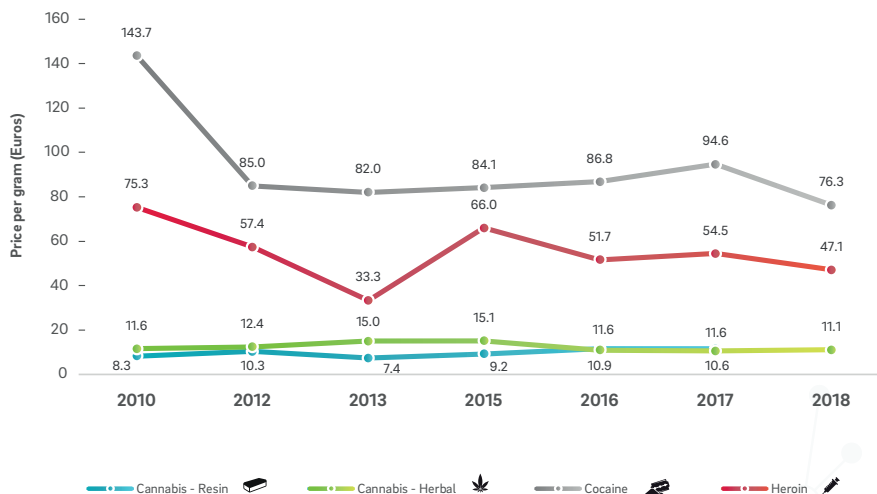


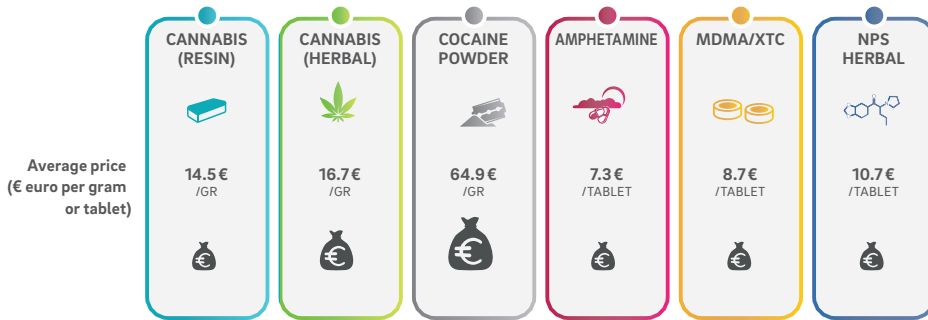
FIGURE 42.

Trends on the price of illicit drugs assessed among HRDUs in Luxembourg (2010-2018)  
(Specialised drug department of the judicial police; CNDS Abrigado, 2018)

According to a targeted group of recreational drug users as assessed by the European Web Survey on Drugs (EWSD)<sup>18</sup> implemented in Luxembourg in 2018:

- > Cocaine is more expensive (on average 65€/gr) than all other drugs consumed by recreational users.
- > Cannabis prices are on average 14.5€/gr for resin and 16.7€/gr for herbal cannabis. Herbal forms of NPS are cheaper (on average 10.7€/gr) than cannabis. Lower prices linked with their promotion as “legal highs” might represent a risk factor for an increase in its consumption.
- > MDMA/XTC (on average 8.7€/tablet) and amphetamines (on average 7.3€/tablet) are the cheapest controlled illicit drugs on the national market (see Fig. 43).

18 Trends data are not available since the EWSD study was implemented punctually.

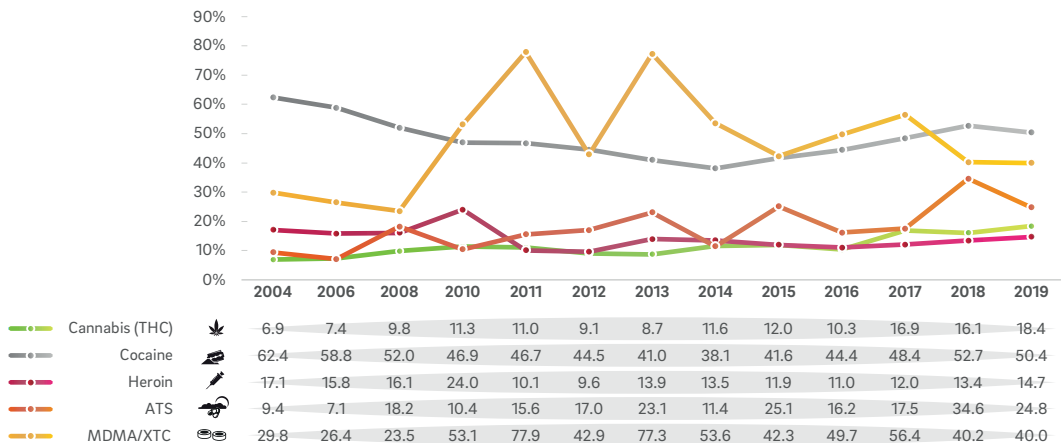


**FIGURE 43.**  
Prices of illicit substances according to respondents of the EWSD, 2018

### 6.3. TRENDS IN DRUG PURITY

The National Health Laboratory (LNS) provides purity data and toxicological analysis of psychoactive substances. This allows for trend analysis on the purity of drugs at the street level in Luxembourg.

- > The purity of the illicit drugs obtained in Luxembourg is following an increasing trend. The exception is heroin, which average purity remained fairly stable over the past 5 years.
- > Even though the average purity of THC products has been increasing at a moderate pace, cannabis with remarkably high THC concentrations has been seized on the national market in recent years. In 2019, the average concentration of THC in herbal cannabis increased towards 12.8% (2018: 11.7%) with a maximum concentration of 44.5%. The average concentration of THC in resin cannabis has been increasing towards 27.8% (2018: 26.9%) with a maximum concentration of 60.1%.
- > Between 2004 and 2014, the purity of cocaine decreased. However, since 2014 cocaine purity is on the rise, though its purity slightly dropped in 2019 compared to the year before (on average 50.4% in 2019 compared to 52.7% in 2018).
- > The purity of other stimulants such as amphetamines or XTC/MDMA generally seems to be increasing but discontinuously. Compared to 2018, 2019 data show that the average purity of amphetamines (ATS) dropped by 9.8% while the average purity of XTC/MDMA remained stable (Fig. 44).



**FIGURE 44.**  
Trends on average purity of illicit drugs at street level (2004-2019) (LNS, 2019)



## 6.4. DRUG-RELATED CRIME

The number of police records for presumed offences against the modified 1973 drug law stabilised between 2001 and 2008. Even though from 2012 to 2015 the number of referred police records increased (1,802 and 3,385 records, respectively), since 2017 police records follow an unstable trend - 2,525 records in 2017, 2,284 in 2018, and 2,994 records in 2019.

In 2019, the specialised drug unit of the Judicial Police reported 1,952 offenders involved in traffic and/or use of illicit substances, a higher number compared to the previous year (see Table 4). The majority of the offenders have been involved in personal possession or use (approximately 95%), whereas only a small proportion of the offenders has been involved in supply or trafficking of drugs.

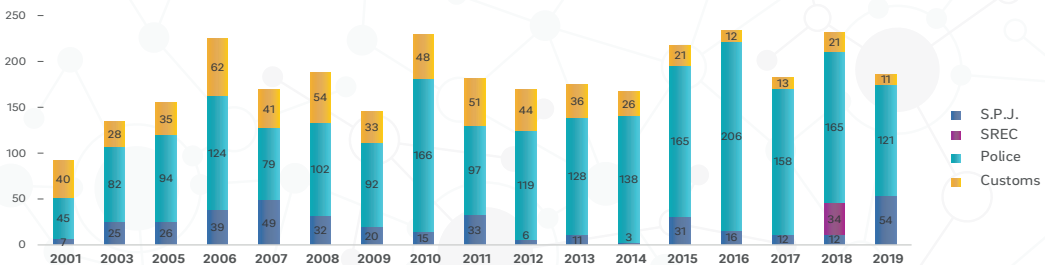
**TABLE 4.**

Number of national law enforcement interventions (2001-2019)

Year	2001	2003	2006	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	
<b>Drug Law Enforcement Records:</b>																
S.P.J.	216	239	190	110	121	134	165	44	17	9	80	45	21	51	212	
Police <sup>19</sup>	1,126	1,326	824	881	1,465	1,969	1,643	1,526	1,849	2,651	3,192	2,531	2,358	2,066	2,647	
Customs <sup>20</sup>	113	95	186	228	328	443	477	232	203	156	113	48	146	167	135	
<b>Total</b>	<b>1,455</b>	<b>1,660</b>	<b>1,200</b>	<b>1,219</b>	<b>1,914</b>	<b>2,546</b>	<b>2,225</b>	<b>1,802</b>	<b>2,069</b>	<b>2,816</b>	<b>3,385</b>	<b>2,624</b>	<b>2,525</b>	<b>2,284</b>	<b>2,994</b>	
<b>Offenders:</b>																
S.P.J.	321	369	248	128	121	131	164	44	17	9	77	44	14	27	127	
Police	1,272	1,753	1,007	1,009	1,459	1,960	1,632	1,517	1,846	2,623	3,158	2,481	1,825	1,583	1,719	
Customs	182	148	320	350	325	439	407	221	200	147	110	41	130	145	106	
<b>Total</b>	<b>1,776</b>	<b>2,270</b>	<b>1,575</b>	<b>1,487</b>	<b>1,963</b>	<b>2,530</b>	<b>2,210</b>	<b>1,782</b>	<b>2,066</b>	<b>2,779</b>	<b>3,345</b>	<b>2,566</b>	<b>1,969</b>	<b>1,755</b>	<b>1,952</b>	

Source: Specialised drug unit of the Judicial Police, 2019

Although the number of arrests for drug-related offences increased between 2017 (183) and 2018 (232), it decreased again in 2019 (186) (see Fig. 45). Similar to previous years, cannabis was the most frequent substance involved in drug-related arrests, followed by cocaine and heroin.



**FIGURE 45.**

Number of drug law offences related arrests (2001-2019) (Specialised drug unit of the Judicial Police, 2019)

Note: SREC = Service de Recherche et d'Enquête Criminelle (Luxembourg ville, Esch-sur-Alzette, Diekirch, Grevenmacher).

19 Includes the « Service de Recherche et d'Enquête Criminelle » (Luxembourg ville, Esch-sur-Alzette, Diekirch, Grevenmacher)

20 The original report can be downloaded from : <https://gouvernement.lu/fr/publications.html?b=0>

## CHARACTERISTICS OF DRUG LAW OFFENDERS

- > In 2019, the population of drug law offenders was composed of 87.8% males (89% in 2018; 85.8% in 2017), a proportion that has generally been varying between 79% and 90% during the past decade.
- > Since 1997, non-natives have been representing the majority of drug law offenders (52.6% in 2019; 56.9% in 2018), natives a bit less than half of the drug law offenders (46.5% in 2019; 37.9% in 2018), and those with unknown nationality a minority (0.9% in 2019; 5.2% in 2018).
- > In 2019, the percentage of minors (< 18y) among drug law offenders decreased towards 8.4% (14.1% in 2018).
- > In 2019, 18.9% of offenders were below the age of 19 years (2018: 26.2%), 42.7% between the age of 20 and 29 years (2018: 39.6%), 22.5% between 30 and 39 years (22.2% in 2018), 11.3% above the age of 40 years (12% in 2018), whereas for 4.7% the age was not reported. These figures are comparable to previous years.

Moreover, the routine data protocol of the national drug monitoring system (RELIS) that records all treatment entrants in a given year includes a series of drug-related offences' items based on self-report. The following results summarise the situation observed in the past years:

- > 74.5% of drug users indexed by specialised harm reduction or treatment services had already been in conflict with law enforcement agencies during their lifetime in 2019 (68.1% in 2018).
- > 70.6% of the 2019 RELIS population has shown one or more law enforcement contacts for whom the reason of the law offence is known and 49.5% of the total RELIS population from 2019 show multiple law enforcement contacts (45.8% in 2018).
- > The proportion of records for other reasons than presumed offences against the drug law (e.g. petty crime such as criminality linked to drug supply or fights) lies between 21% and 44.2% for the past 8 years (2019: 23.5%; 2018: 39.5%; 2012: 28%).
- > 17.5% of indexed RELIS population already served one single prison sentence during lifetime (2018: 20.5%) whereas the proportion of the RELIS population having served more than one prison sentence at the time of reporting reached 25% in 2019 (26.1% in 2018), while 44.2% reported to have never been in prison (2018: 31.3%).

## 6.5. DRUGS AND DRIVING

In Luxembourg driving, operating, or being in control of a motor vehicle while impaired by alcohol or other drugs (including those prescribed by physicians), to a level that renders the driver incapable of operating a motor vehicle safely in traffic, is considered a criminal law offence (Ministère d'Etat, 2011). In collaboration with the national judicial police, the forensic toxicology department of the national health laboratory in Luxembourg has been investigating the presence of drugs among (suspicious) driving law offenders in traffic over the past years.

- > Results from the years 2012 onwards reveal that among those tests that were performed on delivered samples from the judicial police to detect the presence of drugs when driving, cannabis was mostly detected, followed by cocaine, prescription drugs and amphetamine-type substances (ATS).
- > Data from the latest year available (2019) reveal that among the 270 examinations performed, 63 (68.1%) were tested positive for cannabis, 45 (16.7%) for cocaine, 16 (5.9%) for morphine, and eight (3%) for ATS (see Fig. 46, 47).
- > With the introduction of a new drug-test to detect controlled drugs or alcohol by saliva samples among drivers of motor vehicles in traffic by mid-2012 ("Drugwipe 5S"), accompanied by a respective law change (Ministère d'Etat, 2015), the validity of the testing and number of tests increased (therefore comparisons to data from previous years are to be avoided).

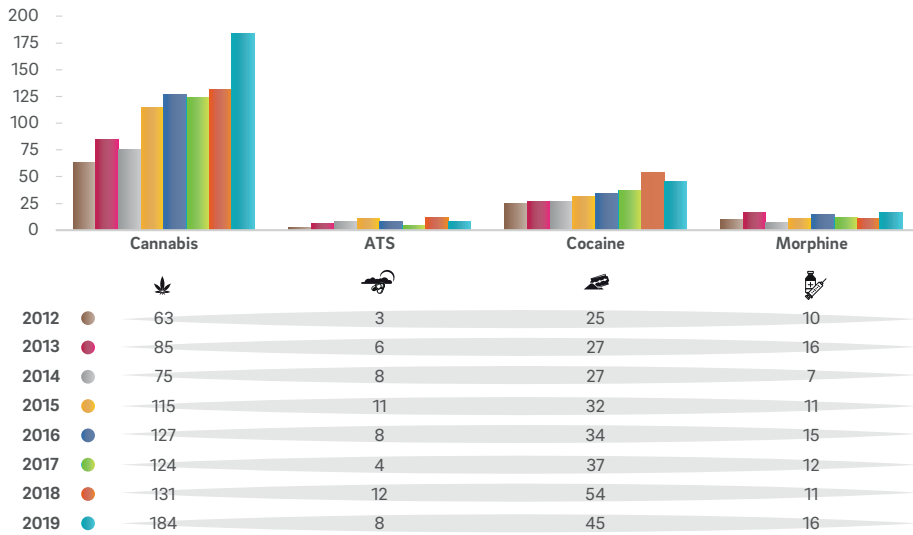


FIGURE 46.

Number of cases tested positive for the presence of controlled drugs when driving 2012-2019 (Service de Toxicologie médico-légale, LNS)



FIGURE 47.

Percentage % of the cases tested positive for drugs among the samples tested for presence of controlled drugs when driving 2012-2019 (Service de Toxicologie médico-légale, LNS)

These figures hence need to be interpreted in the light of the number of tests performed that have been varying, though generally increased, over the past years (see Table 5).

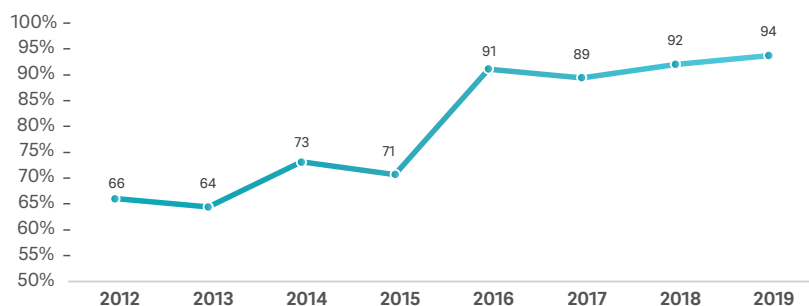
**TABLE 5.**

Number of examinations for driving under the influence of controlled drugs in road traffic per year

Year	2012	2013	2014	2015	2016	2017	2018	2019
<b>Number of tests</b>	<b>153</b>	<b>208</b>	<b>160</b>	<b>239</b>	<b>202</b>	<b>198</b>	<b>226</b>	<b>270</b>

Source: Service de Toxicologie médico-légale, LNS

Figure 48 depicts an increasing trend for the proportion of positive cases detected for driving under the influence of drugs from 2012 onwards. For proper interpretation, it needs to be considered, however, that on one hand the number of people in traffic has increased due to a general increase of the population, while on the other hand the driving license applications and the new registrations of motor vehicles in road traffic also increased significantly in the Grand Duchy of Luxembourg (STATEC, 2020).



**FIGURE 48.**

Evolution of driving under the influence of drugs: rate of positive cases (%) among the total number of tests performed (2012-2019) (Service de Toxicologie médico-légale, LNS)

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## CONFLICT OF INTEREST

No conflict of interest has been declared by the authors.

## LIST OF ABBREVIATIONS

<b>ATS</b>	Amphetamine-type stimulants
<b>CAARUD</b>	Centre d'accueil et d'accompagnement à la réduction des risques pour usagers de drogues
<b>CePT</b>	Centre de Prévention des Toxicomanies
<b>CHNP</b>	Centre Hospitalier Neuro-Psychiatrique
<b>CNAPA</b>	Centre National de Prévention des Addictions
<b>CNDS</b>	Comité National de Défense Sociale
<b>CNS</b>	Caisse Nationale de Santé
<b>COVID-19</b>	Coronavirus Sars-CoV-2 2019 disease
<b>CPG</b>	Centre Pénitentiaire de Givenich
<b>CPL</b>	Centre Pénitentiaire de Luxembourg
<b>CTM</b>	Centre Thérapeutique de Manternach
<b>ECDC</b>	European Centre for Disease Prevention and Control
<b>EWS</b>	Early Warning System on New Synthetic Drugs
<b>EWSD</b>	European Web Survey on Drugs
<b>EMCDDA</b>	European Monitoring Centre for Drugs and Drug Addiction
<b>HAT</b>	Heroin Assisted Treatment
<b>HRDU</b>	High-risk drug use/user
<b>ICD</b>	Interministerial Commission on Drugs
<b>IDU</b>	Injecting drug user
<b>JDH</b>	Fondation Jugend- an Drogenhëllef
<b>LIH</b>	Luxembourg Institute of Health
<b>LNS</b>	Laboratoire national de santé
<b>NPS</b>	New Psychoactive Substance
<b>PFLDT</b>	Point Focal Luxembourgeois de l'Observatoire Européen des Drogues et des Toxicomanies (OEDT) (Luxembourg Focal Point of the EMCDDA)
<b>RELIS</b>	Réseau Luxembourgeois d'Information sur les Stupéfiants et les Toxicomanies
<b>REVIS</b>	Revenu d'inclusion sociale
<b>REITOX</b>	Réseau Européen d'Information sur les Drogues et les Toxicomanies/European Information Network on Drugs and Drug Addiction
<b>XTC</b>	Ecstasy (MDMA)

## REFERENCES

- Alternativ Berodungsstell. (2020). *Rapport annuel. Jahresbericht und Statistik [2019]*. Luxembourg: CHNP.
- Berndt, N., Seixas, R., & Origer, A. (2018). *National Drug Report 2018 (Rapport RELIS) – Grand Duchy of Luxembourg. New developments, trends and in-depth information on selected issues*. Luxembourg: EMCDDA Luxembourg Focal Point – Point Focal Luxembourgeois de l'OEDT, Service épidémiologie et statistique, Direction de la Santé.
- Berndt, N., & Seixas, R. (2019). *European Web Survey on Drugs: national implementation among a targeted sample of recreational drug users in Luxembourg 2018 [Enquête Européen sur les Drogues au G.D. de Luxembourg 2018]*. Luxembourg: EMCDDA Luxembourg Focal Point – Point Focal Luxembourgeois de l'OEDT, Service épidémiologie et statistique, Direction de la santé.
- Berndt, N., Seixas, R., & Origer, A. (2020). *National Drug Report 2019 (Rapport RELIS - overview) – The drug phenomenon in the Grand Duchy of Luxembourg: Trends and developments*. Luxembourg: EMCDDA Luxembourg Focal Point – Point Focal Luxembourgeois de l'OEDT, Service épidémiologie et statistique, Direction de la Santé.
- Centre National de Prévention des Addictions. (2020). *Rapport d'activités synthétisé 2019*. Retrieved 24.07.2020 from <http://CNAPA.lu/>.
- Centre Pénitentiaire de Luxembourg et de Givenich. (2020). *Rapport d'activité 2019 : Programme TOX/Suchthëllef – Rehaklinik*. Luxembourg : Centre Pénitentiaire de Luxembourg et de Givenich.
- Devaux, C., Antony, R., Arendt, V., Bwersi, G., Flies, P., Goedertz, H., Hoffman, P., et al. (2020). *Rapport d'activité 2019*. Luxembourg: Comité de surveillance du SIDA, des hépatites infectieuses et des maladies sexuellement transmissibles. Retrieved 23.11.2020 from <https://sante.public.lu/fr/publications/c/comite-surveillance-sida-2019/comite-surveillance-sida-2019.pdf>
- European Health Interview Survey. (2014). *Données EHIS 2014 traitées par le Point Focal Luxembourgeois de l'OEDT*. Luxembourg: EMCDDA Luxembourg Focal Point – Point Focal Luxembourgeois de l'OEDT, Service épidémiologie et statistique, Direction de la santé.
- European Health Interview Survey. (2020). *Données EHIS 2019 traitées par le Point Focal Luxembourgeois de l'OEDT*. Luxembourg: EMCDDA Luxembourg Focal Point – Point Focal Luxembourgeois de l'OEDT, Service épidémiologie et statistique, Direction de la santé.
- European Monitoring Centre for Drugs and Drug Addiction & Luxembourg Focal Point of the EMCDDA. (2019). *Luxembourg Country Drug Report 2019*. Retrieved 14.06.2019 from [https://www.emcdda.europa.eu/publications/country-drug-reports/2019/luxembourg\\_en](https://www.emcdda.europa.eu/publications/country-drug-reports/2019/luxembourg_en)
- European Monitoring Centre for Drugs and Drug Addiction. (2020). *European Drug Report 2020: Key Issues*. Luxembourg: Publications Office of the European Union.
- European Monitoring Centre for Drugs and Drug Addiction. (2019). *Key epidemiological indicator: Problem drug use*. Retrieved 24.10.2019 from [http://www.emcdda.europa.eu/topics/problem-drug-use\\_en](http://www.emcdda.europa.eu/topics/problem-drug-use_en)
- Impuls (2019). *IMPULS - Aide aux jeunes consommateurs de drogues (Solidarité Jeunes a.s.b.l.)*. Retrieved 19.10.2019, from <http://www.im-puls.lu/>.
- Fondation Jugend- an Drogenhëllef. (2020). *DKR Esch - Statistik allgemein*. Luxembourg: Fondation Jugend- an Drogenhëllef.
- Fondation Jugend- an Drogenhëllef. (2020). *Rapport d'activité 2019*. Luxembourg: Fondation Jugend- an Drogenhëllef.
- Foulon, M., Teyssier, E., Seixas, R. & Berndt., N. (2020). *Etude sur la consommation de drogues en prison au Grand-Duché de Luxembourg*. In preparation.

Heinz, A., van Duin, C., Kern, M. R., Catunda, C., & Willems, H. (2020). *Trends from 2006 - 2018 in Health Behaviour, Health Outcomes and Social Context of Adolescents in Luxembourg*. HBSC Luxembourg Trends Report – Health Behaviour in School-Aged Children: World Health Organization collaborative cross-national study. Esch-sur-Alzette, Luxembourg: University of Luxembourg.

Kools, J.-P., van der Gouwe, D. & Strada, L. (2019). *Evaluation of the governmental strategy and action plan 2015-2019 of Luxembourg regarding the fight against drugs and addictions*. Utrecht, The Netherlands: Trimbos Instituut.

Ministère d'Etat. (2011). *Memorial : Journal Officiel du Grand-Duché de Luxembourg : recueil de législation -- A N° 246, 1 décembre 2011. Sommaire : alcool et stupéfiants dans la circulation routière*. Luxembourg : Ministère de l'Etat. Available from: <http://legilux.public.lu/>

Ministère d'Etat. (2015). *Memorial : Journal Officiel du Grand-Duché de Luxembourg : recueil de législation -- N° 92, 28 mai 2015. Sommaire : circulation sur toutes les voies publiques*. Luxembourg : Ministère de l'Etat. Available from: <http://data.legilux.public.lu/file/eli-etat-leg-memorial-2015-92-fr-pdf.pdf>

Ministère de la Justice. (2020). *Rapport d'activité 2019 du Ministère de la Justice - Partie IV : Rapport d'activité de l'Administration Pénitentiaire*. Luxembourg : Le gouvernement du Grand-Duché de Luxembourg, Ministère de la Justice. Retrieved 23.11.2020 from: <https://gouvernement.lu/de/publications/rapport-activite/minist-justice/mjust/2019-rapport-activite-mjust.html>

Ministère de la Santé. (2020). *Stratégie nationale en matière d'addictions et plan d'action gouvernemental 2020-2024 en matière de drogues d'acquisition illicite et de leurs corollaires*. Luxembourg: Ministère de la Santé.

Origer, A. (2010). *Update of direct economic costs of national drug policies in 2009. National Report on the state of the drugs problem in the Grand Duchy of Luxembourg*. Luxembourg: Point focal OEDT Luxembourg – CRP-Santé.

Origer, A., Lopes da Costa, S., & Diederich, C. (2016). *National drug report 2016. The state of the drugs problem in the Grand Duchy of Luxembourg*. Luxembourg: EMCDDA Luxembourg Focal Point – Point Focal Luxembourgeois de l'OEDT, Luxembourg Institute of Health.

Origer, A. (2017). *A methodological inventory for the assessment of selected, unlabelled direct public expenditure in the field of reducing drug demand, in EMCDDA Insights: Drug treatment expenditure: a methodological overview*. EMCDDA Insights 24. Luxembourg: Publications Office of the European.

Origer, A., Lopes da Costa, S., & Diederich, C. (2017). *National drug report 2016. The state of the drugs problem in the Grand Duchy of Luxembourg*. Luxembourg: EMCDDA Luxembourg Focal Point – Point Focal Luxembourgeois de l'OEDT, Luxembourg Institute of Health.

Origer, A. (2020). *Estimation of number of high-risk drug users in the Grand Duchy of Luxembourg: update with 2018 data*. Luxembourg: Direction de la santé.

Paulos, C., Loverre, A. & Hagen, L. (2020). *Enquête PIPAPO 2019. La consommation récréative de drogues au Grand-Duché de Luxembourg*. Luxembourg: 4motion a.s.b.l.

STATEC. (2020). *New registrations of new motor vehicles by vehicle type 1965 – 2019: Table summary*. Luxembourg : STATEC, le portail des Statistiques de Grand-Duché de Luxembourg. Available from: [https://statistiques.public.lu/stat/TableViewer/tableView.aspx?ReportId=13497&IF\\_Language=eng&MainTheme=4&FldrName=7&RFPath=7049%2c13899%2c13898%2c13901](https://statistiques.public.lu/stat/TableViewer/tableView.aspx?ReportId=13497&IF_Language=eng&MainTheme=4&FldrName=7&RFPath=7049%2c13899%2c13898%2c13901)

STATEC.(2020).*Driving license applications 1991- 2019*. Luxembourg :STATEC, le portail des Statistiques de Grand-Duché de Luxembourg. Available from: [https://statistiques.public.lu/stat/TableViewer/tableView.aspx?ReportId=13513&IF\\_Language=eng&MainTheme=4&FldrName=7&RFPath=7049%2c13899%2c13898%2c13901](https://statistiques.public.lu/stat/TableViewer/tableView.aspx?ReportId=13513&IF_Language=eng&MainTheme=4&FldrName=7&RFPath=7049%2c13899%2c13898%2c13901)

Suchthëllef. (2020). *Rapport annuel Suchthëllef 2019 de Centre Pénitentiaire de Luxembourg et de Givenich*. Luxembourg: CHNP.

Quai 57. (2020). *Rapport d'activité 2019*. Luxembourg: ARCUS asbl.

