

European Monitoring Centre for Drugs and Drug Addiction



# 2013 NATIONAL REPORT (2012 data) to the EMCDDA by the REITOX National Drug Information Centre

# **ESTONIA**

# New developments, trends and in-depth information on selected issues

REITOX

# **REPORT ON DRUG SITUATION IN ESTONIA IN 2013 (2012 data)**

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# Abbreviations

AIDS	HIV disease
ANDPS	Act on Narcotic Drugs and Psychotropic Substances and Precursors thereof
ARV	antiretrovirus
EFSI	Estonian Forensic Science Institute
EMCDDA	European Monitoring Centre for Drugs and Drug Addiction
ESPAD	European School Survey Project on Alcohol and Other Drugs
GBL	gamma-butyrolactone
GHB	gamma-hydroxybutyrate
GR	Government of the Republic of Estonia
HCV	hepatitis C virus
HIV	human immunodeficiency virus
ICD	International Classification of Diseases
MDMA	3,4-methylenedioxy-n-methylamphetamine
MDR-TB	multidrug-resistant tuberculosis
MER	Ministry of Education and Research
MSA	Ministry of Social Affairs
NHP	National Health Plan
NIHD	National Institute for Health Development
NSPD	National Strategy for Prevention of Drug Addiction
PenC	Penal Code
RDS	respondent driven sample
STI	sexually transmitted infection
ТВ	tuberculosis
THC	tetrahydrocannabinol

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# Summary

#### Drug policy, legislation and economic analysis

The Estonian National Strategy for Prevention of Drug Addiction (NSPD) expired in 2012 and the responsibility for coordinating drug policy was transferred from the Ministry of Social Affairs to the Ministry of the Interior. The government established a committee on drug prevention, and the base document on the prevention of drug addiction become the National Health Plan 2009–2020. The Ministry of the Interior has initiated, in 2013, drafting of a new strategy document for reduction of drug use.

The field of narcotic and psychotropic substances is regulated in Estonia by the Act on Narcotic Drugs and Psychotropic Substances and Precursors thereof. No new psychoactive substances were added to the schedule of narcotic drugs and psychotropic substances in 2012.

The evaluation report of the National Strategy for Prevention of Drug Addiction was completed in the beginning of 2013. The review indicated that, despite the achievement of several sub-objectives, the overall strategic objective – to reduce the supply of and demand for drugs and to create a treatment and rehabilitation system for drug users – was not achieved.

The financial resources allocated for the implementation of the NSPD increased from 1.9 million in 2011 to 2.3 million in 2012. In addition to the state budget, ESF resources were used, mainly for the development and provision of counselling services for addicts.

#### Drug use in the general population and specific groups

No detailed studies on drug use in the general population or specific groups were conducted during the period. The results of the 2012 survey of Health Behaviour among Estonian Adult Population indicated that 15% of Estonian adult population have tried a narcotic substance.

#### Prevention

2012 was the last year when universal prevention constituted a separate part of the National Strategy for Prevention of Drug Addiction. From 2013 onwards, prevention is included as an activity of Measure five of the National Health Plan: Prevention and reducing of the consumption of narcotic substances and decreasing of damage to health and society.

Alcohol and tobacco policy is still an area of focused attention in Estonia. The government has prepared a four-year programme for early detection of excessive alcohol use among young people, establishment of a counselling system, and development of treatment and rehabilitation services. Green papers on tobacco and alcohol policy were published in 2013 in the framework of the programme, presenting recommendations from experts and stakeholders on how to reduce excessive alcohol and tobacco use in Estonia and to compile a coherent plan of measures.

Lessons on drug prevention were integrated, in 2012, in the subject syllabi of personal, social and health education for all ages (grades 2–12). Information on drug prevention is distributed mainly through publications and the narko.ee website. In addition to schools, young people can receive information on prevention from information and counselling centres established in the larger urban settlements. There were 19 such centres in Estonia in 2012. In the same year, specialists working with young people were presented a study film "Mõtteaine" (*Food for Thought*), created as a resource for schools and youth centres. Furthermore, specialists were provided training on approaching and presenting drug-related issues to young people in the framework of the ESF program "Developing youth work quality".

Selective prevention was used to provide drug-related counselling to children at risk and to their parents at SA Tallinna Lastehaigla and OÜ Corrigo in Jõhvi. Various courses on drug prevention were also offered to the students of special education schools and the members of the juvenile committees.

#### Problem drug use

Conclusions of the study on the size of the population of injecting drug users (IDUs) were completed in 2012. The results indicate a decrease in the number of IDUs, from 14,262 persons in 2004 to 6,266 persons in 2009.

Studies for assessment of risk behaviour and infectious diseases among IDUs have been conducted in Estonia since 2003. A comparison of different studies indicates a slight decrease in the percentage of men and an increase in the mean age. A major change has occurred with regard to the main drug used for injecting, with fentanyl replacing heroin and poppy liquid. We also have an overview of the results of the survey conducted in 2012 in Kohtla-Järve.

#### **Drug-related treatment**

The data on drug-related treatment were obtained from the respective database of the NIHD and from the reports on the implementation of the national strategy for prevention of HIV/AIDS and drug addiction. Nearly 1,000 entries pertaining to the start or completion of

treatment were made in 2012 in the Estonian drug treatment database. A third of those who sought treatment were first-time patients. The majority of them were ethnic Russians over 25 years of age. As the number of inpatient places for drug treatment is limited in Estonia, more than 90% of those who have sought treatment are treated as outpatients. A large portion of them uses fentanyl for injecting and receives methadone substitution treatment. This imbalance is caused by the situation that opportunities for treating addiction to other narcotic drugs are currently relatively limited in Estonia.

Non-appearance of the patient was the main reason for termination of drug addiction treatment. Recovery from addiction was noted as the reason for termination of treatment in 7% of the cases.

#### Health correlates and consequences of drug use

In Estonia, the Health Board is responsible for the monitoring of infectious diseases. All doctors and laboratories have to report discovered cases of infectious diseases to the Health Board on an electronic or paper form. Data on drug-related infectious diseases are also collected with cross-sectional studies and surveys among syringe exchange clients. Information on cases and treatment of tuberculosis is collected by the Tuberculosis Register.

The number of new cases of HIV infection has decreased in recent years. However, the number of new cases per 100,000 population is still high, with 235 cases per 100,000 population in 2012. The average age of new HIV patients has increased, which is also evident in the increased percentage of people aged 30 years or more. The majority of the new cases were diagnosed in Tallinn and Northeastern Estonia. According to the Health Board, the route of infection was known in 64% of the cases. In 63% of those cases infection was transmitted by sexual route and in 35% of the cases by parenteral route (injecting drug users). A 2012 study among IDUs in Kohtla-Järve indicated that the prevalence of HIV was 62% and the prevalence of hepatitis C was 75%. The prevalence levels of hepatitis B and C have been stable. There was an outbreak of hepatitis A in the second half of 2011, but no links with IDUs were discovered.

Prevalence of sexually transmitted infections has decreased in recent years. STIs are more common among women in the age group of 20–29 years. The incidence of new tuberculosis cases in 2012 was 18.5 cases per 100,000 population. No cases of tetanus or botulism were diagnosed in 2012. There was no data available on abscesses, endocarditis and sepsis.

HIV tests were performed on 60,000 persons in 2012. IDUs have an improved awareness of their HIV status and the frequency of tests has increased. According to the latest study of IDUs, 90% of them had been tested at least once. The main locations of testing included

hospitals, family medicine centres, anonymous HIV counselling and testing sites, and prisons.

Data on the provision of emergency medical care due to drug overdose are only limited to Tallinn, where the number of overdose-related care cases was higher in 2012 than in 2011 (1,054 cases in 2012 and 952 cases in 2011). According to the register of causes of death, 170 persons died as a result of drug use. They were mainly ethnic Russian males, from 25 to 34 years of age, living in Harju or Ida-Viru County. The majority of drug-related deaths were associated with fentanyl.

#### Responses to health correlates and consequences

The total expenditure on HIV/AIDS prevention in 2012 amounted to 2,599,003 euros. Methadone treatment and syringe exchange programmes are the two main harm reduction services targeted at IDUs in Estonia. The syringe exchange and counselling service is provided by 9 organisation that operated a total of 37 syringe exchange points in 2012, including 13 stationary centres. They received a total of 1,319 first-time and 6,713 recurrent visitors. In total there were 150,427 visits to syringe exchange points, during which 2,228,082 syringes, 461,762 condoms and 56,319 information booklets were distributed. A new syringe exchange point was opened in 2012 in Maardu.

A workshop on prevention of deaths and overdoses was held in the beginning of 2012 to provide the organisations offering harm reduction and treatment services in Estonia with an overview of the different models of overdose prevention and to present the experiences from other countries. The workshop also included a practical discussion to identify the most suitable model of overdose prevention for Estonia. A preliminary description and an action plan of the programme "Using naloxone to prevent deaths from drug overdose" were completed at the end of 2012. The corresponding pilot project was to be launched in 2013.

#### Drug-related crime, prevention of drug-related crime, and prison

The data on drug-related criminal and misdemeanour offences were received from the Ministry of Justice. An overview of the substances used is not available in case of misdemeanours associated with drug use or possession of small quantities. A total of 866 drug-related crimes were registered in 2012, which is somewhat fewer than in previous years. 81% (n=702) of all drug-related crimes registered in 2012 were cases of unlawful handling of large quantities of narcotic drugs. Offences associated with unlawful handling of small quantities of narcotic drugs constituted 11% of all registered drug-related criminal offences.

3,750 misdemeanours related to consumption or possession of small quantities of narcotic drugs were registered in 2012.

# Drug market

The data on the quantities and purity of confiscated drugs were received from the Estonian Forensic Science Institute. The overview of drug prices is based on the data from the Police and Border Guard Board. The presented data on drug transit were collected by the Tax and Customs Board.

As the use of fentanyl causes a number of serious problems, it has been the main focus of police work, with additional resources allocated for this purpose in 2012. The total amount of illegal income confiscated in 2012 was 1.5 million euros, i.e., almost double the amount of 2011.

The seized quantities of cannabis products, ecstasy tablets and amphetamine decreased, while the seized quantities of cocaine and methamphetamine increased during the period. Of the new psychoactive substances, synthetic cannabinoids, "Spice", the related components and cathinones comprised the largest seized quantities.

The purity of confiscated narcotic substances has increased compared to the preceding reporting period. A drop in purity was only observed in case of ecstasy and amphetamine. The prices remained on the level of 2011.

# Part A: New developments and trends

# Chapter 1. Drug policy, legislation, strategies and economic analyses

# Introduction

The major changes in 2012 included the expiry of the long-term National Strategy for Prevention of Drug Addiction (NSPD) and the transfer of the responsibility for overseeing drug policy measures from the Minister of Social Affairs to the Minister of the Interior. The Ministry of the Interior established a committee on drug prevention, charged with the task of steering the public debate on drug use reduction in Estonia and establishing guidelines for this field. The new base document on prevention of drug addiction is, after expiry of the NSPD, is the National Health Plan 2009–2020 (NHP) managed by the Ministry of Social Affairs.

The information used for writing this chapter was derived from various legislative instruments published in Riigi Teataja and from the 2012 report on the implementation of the NSPD.

# 1.1 Legal framework

The field of narcotic and psychotropic substances is still regulated in Estonia by the Act on Narcotic Drugs and Psychotropic Substances and Precursors thereof (ANDPS) (RT I 17.04.2013, 11).

The Act regulates the following:

- the procedure for preparation and approval of schedules of narcotic drugs and psychotropic substances;
- the procedure for handling narcotic drugs and psychotropic substances and precursors thereof (hereinafter *precursors*);
- the procedure for inspection and identification of narcotic drugs, psychotropic substances and precursors, the procedure for issue of permits required for the handling of narcotic drugs, psychotropic substances and precursors, and supervision over the implementation of such procedure;

- the procedure regarding information and reporting on narcotic drugs, psychotropic substances and precursors;
- 5) the procedure for prevention of the spread of drug addiction, and treatment and rehabilitation of drug addicts.

No new psychoactive substances were added to the schedule of narcotic drugs and psychotropic substances in 2012. An important change in the schedules of narcotic and psychotropic substances occurred in the beginning of 2013 when a fifth schedule as added to the original four (RT I, 05.03.2013, 1). The handling of the substances in Schedule V is prohibited only in case the purpose thereof is causing drug intoxication to a person. This amendment was required due to the addition of GBL and 1,4-BD to the schedule of narcotic substances. As both substances also have legal applications beyond illegal use and adding them to schedules I–IV would have been in conflict of the EU principle of free movement of goods, these substances were added to the new Schedule V in 2013.

#### 1.2 National action plan, strategy, assessment and coordination

The NSPD expired at the end of 2012. An evaluation report on the implementation of the NSPD was completed in the beginning of 2013 and it highlighted that, while several strategic sub-objectives of the NSPD were achieved, the overall objective of the strategy – *reduced supply of and demand for narcotic drugs and a functioning system of treatment and rehabilitation* – was not met. The reasons for the failure to achieve the objectives included shortage of human and financial resources on the one hand and problems with strategic coordination and cooperation of different parties on the other hand. Despite the failure to meet the main objective, the actions completed and services developed in the framework of the NSPD constitute a significant step towards alleviating the drug problem in Estonia.

After expiry of the NSPD in 2012, the task of planning actions for reduction of drug use was included among the measures of the NHP, managed by the Ministry of Social Affairs. The general objective of the NHP is to extend the life expectancy and healthy life expectancy of the people living in Estonia. From 2013 onwards, the NHP and its implementation plan for 2013–2016 serve as the base documents for reduction of drug use in Estonia. The fourth sub-objective of the implementation plan, "Physical activity of the population has increased, nutrition is more balanced and the level of risk behaviour has decreased", includes Measure five: Prevention and reducing of the consumption of narcotic substances and decreasing of damage to health and society.

The responsibility for coordinating measures against drug use under the NHP was transferred to the Ministry of the Interior at the end of 2012. The Minister of the Interior initiated establishment of a governmental committee on drug prevention to attract more attention to the problem of drug addiction. On 5 April 2012, the Government of the Republic adopted an order establishing a new governmental committee on drug prevention (RT III, 10.04.2012, 11). The Minister of the Interior was appointed to chair the committee. This is a ministerial-level committee that includes representatives from all organisations dealing with the issues of drug use.

The governmental committee was assigned the following duties:

- establishing strategic goals and priorities in the field of drug prevention;
- consistent monitoring and assessment of actions related to prevention and reduction of drug addiction;
- submission of proposals to the Government of the Republic on solving problems associated with prevention and reduction of drug addiction;
- coordination of measures and actions to reduce drug use and approval of implementation plans under the fourth priority field "Healthy lifestyle" of the National Health Plan 2009–2020;
- providing the Government of the Republic with advice on solving any issues associated with prevention and reduction of drug addiction.

In addition to the establishment of the committee, the Ministry of the Interior has initiated, in 2013, drafting of a policy document on reduction of drug use in the coming years. This will be a knowledge-based document, relying on main research findings and literature in the field. The wider aim of the programme is to implement a social change – to achieve a permanent decrease in drug use and in the related harmful social consequences.

# **1.3 Economic analysis**

Financial resources allocated for implementation of the NSPD increased compared to 2011. While 1,958,674 euros were used for implementing the NSPD in 2011, the total expenditure on the NSPD was 2,322,755 euros (Table 1). The funding increase was highest in the administrative areas of the Ministry of Education and Research (MER) and the Ministry of Social Affairs (MSA). The MER spent 72,859 euros and the MSA spent 1,101,027 euros on implementing the NSPD in 2011.

Unfortunately, the exact distribution of the allocated funds cannot be shown in all cases, because the actions related to drug use are often integrated in a larger package of actions or constitute a part of general operating costs of the institutions.

In addition to the state budget, financing from the ESF was used for funding the actions under the NSPD in 2012. These actions were mainly targeted at development and provision of counselling services to persons with addiction problems. The total funding from the ESF amounted to 213,412.55 euros.

Budget implementation by	Budget (€)	Actual (€)
institutions		
Ministry of Social Affairs	1,386,852	1,342,814
incl. NIHD	1,385,852.00	1,341,478.73
incl. Department of Families	1 000 00	1 335 00
and Children	1,000.00	1,555.00
incl. MSA	0.00	0.00
Ministry of Education and	332 1/7 00	232 1/7 00
Research	552,147.00	552,147.00
Ministry of the Interior	512,178.57	460,646.70
incl. Police and Border Guard	512 178 57	460 646 70
Board	512,170.07	400,040.70
incl. Ministry of the Interior	0.00	0.00
Tax and Customs Board	277,550.00	163,450.00
Ministry of Justice	12,700.00	23,698.00
TOTAL	2,521,427.57	2,322,755.43

**Table 1.** The 2012 budget of the NSPD and its implementation by institutions.

Source: 2012 report on the NSPD, MSA 2013.

# Chapter 2. Drug use in the general population and specific groups

# Introduction

No new studies on drug use in the general population or specific target groups were conducted during the period. The next population survey, which will include questions on drug use, will be conducted in 2014. Drug use among school students is covered by the European School Survey Project on Alcohol and Other Drugs (ESPAD), which will be conducted in 2015. The section on drug use among specific groups presents a study of the prevalence of risk behaviour and infectious diseases among IDUs in Kohtla-Järve in 2012.

# 2.1 Drug use in the general population

No surveys focusing on drug use in the general population were conducted in Estonia during the period and no new information is available. The drug use indicators from the latest survey, Estonia 2008, were presented in the 2009 report. The next survey will be conducted in 2014.

The 2012 mail survey of Health Behaviour among Estonian Adult Population included a question on life-time prevalence of drug use. 15% of the 16–64-year-old persons, 21% of men and 10% of women, reported lifetime drug use. Repeated use of drugs was reported by 1% of the respondents. Previously, 13% and 10% of the respondents had had experiences with drugs according to the 2008 and 2004 surveys, respectively. A comparison of the surveys shows that the percentage of those, who have tried any illicit drug, has increased in the general population.

# 2.2 Drug use in the school and youth population

The most recent data on drug use among school students were covered in the 2012 report, which presented the results of the 2011 European School Survey Project on Alcohol and Other Drugs (ESPAD). The next ESPAD survey will be conducted in 2015.

# 2.3 Drug use among targeted groups and settings at the national and local levels

No separate surveys have been conducted on drug use among specific targeted groups and settings.

Since 2005, studies of the prevalence of risk behaviour and infectious diseases among IDUs have been conducted in Tallinn (2005, 2007, 2009), Narva (2010) and Kohtla-Järve (2005, 2007, 2012). The main results of the studies are presented in Chapter 4 on problem drug use. A more detailed overview is given of the results of the latest study, conducted in 2012 in Kohtla-Järve.

# **Chapter 3. Prevention**

#### Introduction

2012 was the final year of the implementation of the NSPD, which included a separate section on universal prevention. The strategy document and its annual implementation plans established specific targets and action plans for drug use prevention. From 2013 onwards, there is no longer a separate strategy document on drug addiction and the issues are included among the measures of the NHP (Measure five). The drug use prevention measure of the NHP includes one universal prevention action: increasing awareness of drug use and narcotic drugs in society as a whole and in risk groups.

The information on prevention in 2012 was obtained from the reports on the implementation of the NSPD and from the health promotion reviews of the NIHD. The overview of legislation was based on the websites of Riigi Teataja and the Ministry of Social Affairs.

#### 3.1 Environmental prevention

#### Alcohol and tobacco policies in Estonia

The issues associated with adjusting alcohol and tobacco policies have been consistently on the public agenda in recent years. The Government of the Republic (GR), elected in the spring of 2011, adopted a four-year programme, which included the objectives of updating public alcohol and tobacco policies and establishing stricter punishments for those who make these substances available to minors. The goal was to develop a system for early detection and counselling in case of excessive alcohol use and to develop treatment and rehabilitation services in Estonia. The actions envisaged for reaching the goals of the GR included development of a concept of public alcohol and tobacco policy, or drafting of green papers on alcohol and tobacco policy. It was decided during the planning stage that the green papers on alcohol and tobacco policies should be created separately, as different legislative requirements apply to both substances in Estonia and at the international level. The alcohol policy green paper was completed in 2013.

The 2013 versions of the Alcohol Act and Tobacco Act stipulate that minors (under 18 years of age) are prohibited from owning tobacco products and alcoholic beverages. It is also prohibited to sell tobacco products and alcoholic beverages to minors. Furthermore, adults may not offer, buy or hand over tobacco products and alcoholic beverages to

minors. Minors are prohibited from using products that are similar to tobacco products and they may not be employed for work related to the handling of tobacco or open bottles of alcoholic beverages. The use of tobacco products and alcoholic beverages by a minor is punishable in Estonia by a fine of up to ten fine units (40 euros). Purchase of alcoholic beverage by a minor is punishable by a fine of up to 20 fine units.

The Tobacco Act specifies places where smoking is prohibited. Generally, in the interests of public health, smoking is banned in rooms and designated territories used by minors and in all public facilities (shops, public transport shelters, vehicles, catering establishments, clubs) where a separate smoking room is not available.

# 3.2 Universal prevention

#### School-based prevention

All general and vocational education schools are involved in school-based prevention of drug use. Life skills education is integrated in the subject syllabus of personal, social and health education. In 2012, the new national curriculum became applicable to grades 2, 5 and 8 of the basic school. The curriculum preserved personal, social and health education as a separate subject at all age levels. The final term for the application of the curriculum will be the beginning of the academic year 2013/2014. The subject syllabus of personal, social and health education was prepared in the light of modern trends and theories on risk behaviour prevention and preventive activities are integrated in the subject syllabus of personal, social and health education from grades 2 to 12. The textbook of personal, social and health education for grade 8 was completed in 2012. However, the state does not organise separate procurements of literature required for personal, social and health education in accordance with the national curriculum. The state allocates an annual subsidy to local governments for buying textbooks, which are then procured according to the needs and means of each particular school.

Everybody who has completed teacher training is required to have the necessary knowledge and skills for implementing the curriculum, and this includes competencies for discussing the issues of HIV and drug use. In-service training is available at all those institutions of higher education that educate teachers. The in-service training courses are designed for the teachers of personal, social and health education.

#### Provision of information on drug use

Preventive information was made available to the public through the narko.ee website and various publications. The contents and design of narko.ee were updated in 2012.

Questions on drugs, submitted through the website, were answered on a regular basis. No new publications were printed in 2012. All published materials were reprints of existing resources on drugs and on other mental health issues of young people.

Information and counselling centres established in counties and larger cities are still the main locations for providing young people with preventive information. The centres include visual displays on the effects of addictive substances and primary means of protection, as well as contact details of counsellors. There were 19 youth information and counselling centres in Estonia in 2012.

The national report on "Drug use among school youth: Use of legal and illegal drugs by 15–16-year-old students in Estonia", based on the 2011 ESPAD survey, was published in 2012. The report provides an extensive overview of the scope of drug use problems in Estonia. The survey was presented to policy- and decision-makers to provide them with an adequate picture of the situation, as well as to people working on prevention at the local level.

# Development of instructions and training resources

The four video clips on different aspects of drug use, mentioned in the previous report, with the general title "Mõtteaine" (*Food for Thought*), were distributed and presented to teachers of personal, social and health education in 2012. The clips were distributed to basic schools, upper secondary schools. vocational schools and youth centres. The video clips are accompanied by guidelines for students and teachers. Both types of guidelines have been published in both Estonian and Russian. In total, 33,636 guidelines in Estonian and 4,928 in Russian were distributed to students and 1,253 guidelines in Estonian and 270 in Russian were distributed to teachers.

#### Training of youth specialists

Training courses for 1,034 young people and youth workers were organised in the framework of the ESF program "Developing youth work quality". This included training on working with target groups requiring specific knowledge (incl. drug users). 528 specialists attended these specific courses.

Youth work specialists were offered training based on the instruction material "Räägime tervisest" (*Let's Talk about Health*). One of the six chapters in this instruction materials covers the issue of drugs. Each chapter includes a theoretical section and a selection of active teaching methods, suitable for young people. The use of such active teaching methods was also practiced during the training.

# 3.3 Selective prevention in at-risk groups

As in the previous year, SA Tallinna Lastehaigla and OÜ Corrigo in Jõhvi provided the drug counselling service for at-risk children. SA Tallinna Lastehaigla conducted therapy group sessions with minors and parents in at-risk groups. They also provided telephone counselling (211 counselling cases in 2012). In addition to outpatient counselling and family therapy for at-risk children, Corrigo also organised 31 interactive drug prevention training sessions for 473 young people.

In the schools of students requiring special education conditions, drug prevention covers all students. Relevant programmes are implemented in the framework of general education activities. Students mainly learn about addictions and improve their social skills. Preventive work also covered all students of special education schools (80 students in 2012). To supplement regular education, the NIHD organised in 2012 four special training sessions on HIV and drugs for the students of special education schools.

In-service training was provided in 2012 to 30 members of juvenile committees. In addition to basic in-service training, several committee members also participated in training on drug use prevention.

# 3.4 Indicative prevention

No activities took place in the reporting period.

# 3.5 National media campaigns

No activities took place in the reporting period.

# Chapter 4. Problem drug use

### Introduction

A study to estimate the size and prevalence of the population group of IDUs in 2005–2009 was conducted in 2010 in cooperation with the NIHD and the Department of Public Health, University of Tartu. The results of the study indicate a decrease in the number of IDUs by almost 56% during the study period (from 14,262 in 2004 to 6,266 in 2009).

Studies for assessment of risk behaviour and infectious diseases among IDUs have been conducted in Estonia since 2003. The share of men among IDUs has somewhat decreased over the years, from 88% to 74%. The mean age of IDUs has increased from 23 years in 2003 to 30 years in 2012. There are also changes in injection behaviour and in the main drug injected. Unfortunately, the prevalence of HIV is still high among IDUs, being at 57% according to the study conducted in 2012 in Kohtla-Järve. The results of the latest study are presented in more detail.

#### 4.1 Prevalence of problem drug users and new cases

#### Study to estimate the size of the population group of IDUs

The first study to estimate the size and prevalence of the population group of IDUs was conducted in 2005. It indicated that the number of 15–44–year-old IDUs was 13,886 (confidence interval (CI) 95%: 8,132–34,443) (Uusküla *et al.* 2007). We now have a new estimate, based on the data from 2005–2009. The study was conducted in cooperation with the Department of Public Health of the University of Tartu and the Drug Monitoring Centre of the NIHD. The data were collected from three administrative databases: the register of the causes of death, the Estonian Health Insurance Fund, and the POLIS database of the Police and Border Guard Board. The register of the causes of death enabled to establish the number of people who died as a result of drug use in 2005–2009. The database of the Health Insurance Fund was queried for persons who were treated due to opioid use (ICD-10 codes F11.0–F11.9) in the same period, as well as for persons who required emergency medical care due to drug overdose. The database of the Police and Border Guard Board service. The database of the Police and Border Guard Board use in the same period. The register of the cause analysed using the capture–recapture method.

The results of the study reveal that the number of IDUs in Estonia in 2005, 2008 and 2009 was 15,675, 11,493 and 5,362, respectively, indicating a decrease in the number of IDUs.

Based on this estimate, the prevalence of IDUs in the Estonian total population of 15–44year-olds was 2.7% in 2005, 2.0% in 2008 and 0.9% in 2009. The estimated size of the population of IDUs, including a 95% CI, from 2004–2009 is shown on Figure 1.



**Figure 1.** Estimated prevalence (%) of IDUs in Estonia's population of 15–44-year-olds (Uusküla *et al.* 2013).

Studies of prevalence of risk behaviour and infectious diseases among IDUs In Estonia, the majority of IDUs are men, even though the percentage of women has increased according to the latest studies (see Figure 2).



Figure 2. Distribution of IDUs by gender according to different studies.

The studies reveal a cohort effect: IDUs are growing older and the number of younger additions decreases (see Figure 3).



Figure 3. Mean age and age range of IDUs according to different studies.



Figure 4. The drugs mainly used by IDUs according to different studies.

Heroin and poppy were the main drugs used during the 2003 and 2004 study. Fentanyl appeared on the drug market in 2005. Nearly a third of drug users used amphetamine as the main substance, except in Narva, where 71% of IDUs used amphetamine. However, mixed use of multiple drugs is also very common (see Figure 4).

The studies indicate that almost a third of IDUs have shared a syringe at least once, which has caused high incidence of HCV (almost 90%) and HIV (almost 50%) among IDUs. Figure 5 shows the prevalence of HIV according to different studies and according to the statements of the respondents. The gap between actual prevalence and self-reported prevalence has been decreasing over time.



Figure 5. Prevalence of HIV among IDUs.

Next, we present an overview of the latest study of prevalence of risk behaviour and infectious diseases among IDUs, which was conducted in the spring and summer of 2012 in Kohtla-Järve, Ida-Viru County. 599 IDUs were recruited for the study; 74% of them were men and 24% were women. The mean age of the participants was 30 years (from 18 to 54 years of age). 81% of them were ethnic Russians and 11% were Estonians. 49% had basic education, 31% had vocational education and 20% had secondary education.

The mean length of injecting career was 11 years (ranging from 0 to 39 years). Over one half (61%) had been injecting for 10 years or more and about 8% had been injecting for less than three years. The mean age at the start of injecting was 19 years and slightly less than half (41%) had started at 17 years of age or before.

The main drugs injected in the last month were fentanyl (64%) and amphetamine (34%). Fentanyl users were statistically significantly older than amphetamine users (30 years vs. 28 years), had a longer injecting career (12 years vs. 9 years), had started injecting at a younger age (18 years vs. 20 years) and included more HIV positive persons (69% vs. 51%). Nearly a quarter (24%) of the participants injected on a daily basis, with fentanyl users injecting more frequently than amphetamine users (32% vs. 10%). The use of several substances is still quite common. More than one third (36%) injected two or more drugs and 42% had used other routes of administration in addition to injecting in the last month.

A large percentage (67%) reported that they had shared syringes and/or needles at least once in their lifetime; 6% had done so in the last month. Syringe exchange program was the main source of clean syringes (78%), with pharmacies ranked at the second place (13%).

62% of the participants were HIV positive, which indicates that the prevalence of HIV among IDUs in Ida-Viru County is likely to be between 58 and 66 per cent.

# Chapter 5. Drug-related treatment: treatment demand and treatment availability

# Introduction

The data presented in subchapters 5.1 and 5.2 of this chapter originate from two main sources: the NSPD 2012 and the National HIV and AIDS Prevention Strategy 2006–2015 (2012 reports). Table reports describing detailed distribution of the costs and activities of the implementation plans of both national strategies have been used: 2012 report of the HIV/AIDS strategy and the NSPD 2012 (2011 reports).

Subchapter 5.3 presents data of the drug addiction treatment database of the NIHD, providing an overview of the socio-demographic and treatment-related data of the persons who sought treatment for drug addiction in the last two years (2011 and 2012). The drug treatment database, using an online data collection system, has been operating since 2008 and it includes the persons who have sought treatment for drug addiction and who have been given a diagnosis of F11–F16.9, F18–F19.9 by their attending physician. When interpreting the data presented in the chapter, one should take into account the fact that, due to the difference of the registration system, the number of persons who sought treatment and were registered in the database from 1 January 2012 to 31 December 2012 differs from the number of treated persons shown in the reports of the national strategies (HIV/AIDS strategy and the NSPD). The drug treatment database also receives data from the medical departments of prisons, while the reports of the HIV/AIDS strategy reflect the total number of persons treated in the treatment centres financed by the NIHD during a year and as of the end of a year.

#### 5.1 Strategy, policy

No major legal amendments related to drug treatment were adopted in 2012.

### 5.2 Treatment system

In Estonia, treatment for drug addiction is available at health care providers possessing an activity licence in psychiatry. Drug addiction treatment is funded from various sources. In 2012, funding was based on the national HIV/AIDS strategy 2006–2015 and the NSPD

2012, as well as the budgets of major local governments. A client can also seek treatment on his/her own expense. The Estonian Health Insurance Fund does not provide specific financing for drug addiction treatment. Like in 2011, the field of drug addiction treatment was one of the few budget items, in which funding did not decrease. However, this stable level of funding did not enable increasing the volume of services and development of important new services, incl. drug treatment service for amphetamine addicts. Currently, the majority of the persons seeking treatment for drug addiction are opioid addicts. This situation has been caused by the fact that most treatment providers in Estonia provide opioid substitution treatment, while the provision of other types of treatment is limited.

Six of seven Estonian health care institutions providing drug addiction treatment only provide outpatient treatment. Inpatient treatment service for drug users is provided by Wismari Hospital, which offers detoxification treatment financed by the patients themselves in addition to the service financed under the national drug use prevention strategy. Of the treatment facilities financed by the City of Tallinn, one (treatment centre for opioid addicts at Western Tallinn Central Hospital) provides outpatient treatment.

### 5.2.1. Substitution treatment

Like in previous years, methadone substitution treatment was financed in 2012 from the budget of the national HIV/AIDS strategy. 842,996 euros were used for the provision of the treatment service, which is about 113,650 euros more than in 2011. 82,377 euros of this sum were used for buying methadone. In 2012 the NIHD concluded year-long agreements for the provision of methadone substitution treatment with seven service providers, who provided the service in eight treatment centres (see Table 2). The Department of Psychiatry of the University of Tartu was added in March 2012 to the previous six service providers from 2011.

The number of clients, who have received methadone substitution treatment, has increased over the past four years. Substitution treatment was provided to 1,008 drug users in 2008, to 1,012 in 2009, to 1,064 in 2010, to 1,076 in 2011 and to 1,157 in 2012. 687 clients were receiving methadone substitution treatment at the end of the year (660 in 2009, 662 in 2010 and 717 in 2011). 346 clients terminated participation in the treatment program, while 90 clients successfully completed the program (see Table 2).

Name of health care institution	Number of clients at the end of 2012	Number of clients who joined the treatment program	Number of clients who successfully completed the program	Number of clients who terminated the program
OÜ Tervisekeskus Elulootus	158	41	33	28
Wismari Haigla AS	122	122	12	82
OÜ Sõltuvuste Ravikeskus	117	101	30	96
AS Lääne-Tallinna		-		
Keskhaigla, Infection Centre	35	25	0	20
AS Lääne-Tallinna Keskhaigla, Psychiatry Centre	15	4	0	4
OÜ Corrigo (Jõhvi+Kiviõli centres)	189	90	15	93
OÜ Aasa Kliinik	50	21	0	21
Department of Psychiatry, University of Tartu	1	2	0	2
Total	687	406	90	346

 Table 2. State-funded methadone substitution treatment for IDUs in 2012.

Source: 2012 report of the national HIV/AIDS strategy

The mean daily dose of methadone administered to the clients varied in different centres from 47 mg to 66 mg. While the mean dose of methadone had been increasing year by year, rising from 37 mg in 2005 to 63 mg in 2011, it fell to 57 mg in 2012. The minimum and maximum dose given in a centre could differ by up to a hundred times (see Table 3).

In addition to state budget funds, methadone substitution treatment was financed in 2012 also by the City of Tallinn. The Tallinn Social Welfare and Health Care Department financed the addiction treatment unit of the Psychiatry Centre of the Western Tallinn Central Hospital, providing outpatient substitution treatment to adult drug addicts. Together with state-funding, Western Tallinn Central Hospital provided the service in 2012 to 24 persons who started the treatment. Three persons successfully completed the program and 18 terminated the treatment (Western Tallinn Central Hospital, personal communication).

Total quantity of methadone used	Mean dose per client	Minimum dose	Maximum dose
3,540,900	56	5	0
2,599,435	65	2	170
2,035,126	45	1	150
3,914,049	66	2	256
987,081	61	3	225
254,120	47	15	190
759,860	68	10	205
0.010	10	20	80
8,016	49	20	80
	Total quantity of methadone used 3,540,900 2,599,435 2,035,126 3,914,049 987,081 254,120 759,860 8,016 14,098,587	Total quantity of methadone usedMean dose per client3,540,900562,599,435652,035,126453,914,04966987,08161254,12047759,860688,0164914,098,58757	Total quantity of methadone usedMean dose per clientMinimum dose3,540,9005652,599,43565522,035,12645513,914,049662987,0816113254,12047715759,86068108,016492014,098,587571

**Table 3.** Quantities of methadone administered in state-funded methadone substitution treatment centres in 2012.

Source: 2012 report of the national HIV/AIDS strategy

#### **5.2.2 Detoxification treatment**

According to the data of the Estonian drug treatment database, detoxification treatment was provided in 2012 in nine treatment centres (including three prisons) to a total of 74 persons (incl. 36 clients who were treated without medication).

The report of the NSPD indicates that a contract with a value of 102,785 euros was concluded in 2012 with Wismari Hospital for the provision of short-term detoxification treatment based on non-opioid medicinal products. The actual performance of the contract amounted to 48,522 euros. The expenditure did not reach the budgeted level because many patients opted for early termination of the inpatient detoxification treatment. The service enabled patients to be institutionalised for short-term (up to one month) detoxification treatment, based on non-opioid medicinal products, with the option of up to three months of outpatient follow-up treatment. The detoxification service was provided for the aforementioned amount to 29 patients.

In addition to the detoxification treatment for adults, the City of Tallinn also financed detoxification treatment for children and adolescents in 2012. The department of addiction disorders of Tallinn Children's Hospital was allocated 26,015 euros for this service (furthermore, the City of Tallinn assigned 5,866 euros to the department of psychiatry of Tallinn Children's Hospital for the provision of counselling service to children and families in psychological crisis, and 37,133 for psychological counselling of children and adolescents). 122 patients were admitted as inpatients in 2011 and addiction to narcotic substances was established as the main diagnosis in 30% of these cases. Further 53,105 euros were allocated to Tallinn Children's Hospital from the NSPD budget for funding the educational

activities at the children's and adolescents' unit of the hospital, which are not included in the price list of the Estonian Health Insurance Fund but are required for successful treatment.

# 5.2.3. Rehabilitation

378,481 euros – 12,577 euros less than in 2011 – were allocated in 2012 from the resources of the NSPD for the provision of the rehabilitation service for adults. A further 92,281 euros were allocated from the same source for the provision of counselling and support services to addicts with dual diagnosis. The provision of the rehabilitation service for minors was financed with 448,228 euros, incl. 403,850 euros for OÜ Corrigo, used to provide the rehabilitation service to 30 minors (21 boys and 9 girls). A contract with the value of 44,377 euros was concluded with OÜ Corrigo and Tallinn Children's Hospital. This amount was used to fund psychological counselling and therapy groups for minors and their families.

In total, four rehabilitation centres received public funding for the provision of the rehabilitation service. Two state-funded rehabilitation centres provided the service only to adult clients, one to children, and one centre provided counselling and support services to addicts with dual diagnosis (Table 4).

Unlike in previous years, when adult males were the main clients of the rehabilitation services, the rehabilitation centre of SA Viljandi Haigla provided the service only to women and the rehabilitation centre for addicts with a dial diagnosis provided the service to both genders. Rehabilitation for minors (provided at the Jõhvi Rehabilitation Centre for Children and Adolescents of OÜ Corrigo) was provided to both boys and girls. Irrespective of the type of rehabilitation service, the aim was to offer psycho-social support and counselling to the clients and to provide them with the skills needed for integration into everyday life (discipline, learning and work habits).

Name of health care institution	Number of clients at the end of 2012	Number of clients who joined the program	Number of clients who successfully completed the program	Number of clients who terminated the program
SA Viljandi Haigla	5	17	2	10
SA Sillamäe Narkorehabilitatsioonikeskus (inpatient rehab centre)	21	62	13	48
OÜ Corrigo inpatient rehab centre for minors	24	48	51	4
MTÜ Eesti abikeskused (day centre for addicts with dual diagnosis)	37	28	0	3
Total	87	155	66	65

**Table 4.** Rehabilitation services for drug addicts in 2012.

Source: 2012 report on the NSDP action plan

# 5.3 Background information on the clients who sought treatment

A total of 973 entries were made in the Estonian drug treatment database in 2012 (546 entries on starting and 427 entries on stopping the treatment). The number of entries increased by 106 from 2011, but it was not caused by an increase in the number of available treatment places. Instead, it can be explained by the fact that there were no technical interruptions in the work of the register as was the case in 2011.

The percentage of first-time patients among those who sought treatment for drug addiction constituted 30% of all patients in 2011 and 28% in 2012 (based on their own statements), with the rest being recurrent patients. Most persons who sought treatment were male (78%) and females constituted less than a quarter (see Table 5).

	2011						2012					
	Male		Female		Total		Male		Female		Total	
	n	%	n	%	n	%	n	%	n	%	n	%
First-time patients	120	30.2	43	32.1	163	30.6	90	21.3	35	28.5	125	22.9
Recurrent patients	258	64.8	87	64.9	345	64.9	307	72.6	84	68.3	391	71.6
Unknown	20	5.0	4	3.0	24	4.5	26	6.2	4	3.3	30	5.5
Total	398	74.8	134	25.2	532	100	423	77.5	123	22.5	546	100
Source: Estonian dr	ug tre	atmer	nt dat	abase	of the	Drug	g Mor	nitorin	q Cel	ntre o	f the	NIHD

**Table 5.** First-time and recurrent patients by gender in 2011 and 2012.

The 2012 data indicate a slight change in the age structure, compared to previous years. While 25–34-year olds constituted 66% of the patients admitted to treatment in 2010 and 67% in 2011, this percentage dropped to 62% in 2012. The number of patients over 35 years of age increased by a few percentage points (see Table 6). The youngest patient was 11 years and the oldest was 57 years old. Minors (under 18 years of age) constituted 4% of all patients treated for addiction and 14% of first-time patients.

		<b>201</b> <sup>·</sup>	1		2012					
	All patients		patients patients		All pa	tients	First-time patients			
	n	%	n	%	n	%	n	%		
<24	98	18.4	61	37.4	99	18.1	49	39.2		
25–34	360	67.7	85	52.2	341	62.5	54	43.2		
35<	74	13.9	17	10.4	106	19.4	22	17.6		
Total	532	100.0	163	100.0	546	100.0	125	100.0		

**Table 6.** Distribution of addiction patients by age and treatment status in 2011 and 2012.

Source: Estonian drug treatment database of the Drug Monitoring Centre of the NIHD, 2012

The mean age of the patients who were admitted to treatment for the first time has gradually increased: from 27 in 2008 to 30 in 2012. It was found that women seek treatment earlier than men. The mean age of women who sought treatment in 2012 was 27 years (95% CI: 26–28) and the mean age of men was 31 years (95% CI: 30–31). The mean age of first-time patients was 25 years (95% CI: 22–28) in the case of women and 28 years (95% CI: 26–30) in the case of men (see Figure 6).



**Figure 6.** Change in the mean age of patients from 2008–2012. Source: Estonian drug treatment database of the Drug Monitoring Centre of the NIHD, 2012

As in previous years, most of the patients receiving drug addiction treatment (over 79%) were ethnic Russians. Estonians constituted less than 14% and other ethnicities less than 10%. The percentage of Estonians was somewhat higher among first-time patients, being at 20% in 2012. Half of the persons who sought treatment lived in Tallinn and Harju County and 47% lived in Ida-Viru County. Among first-time patients, the percentage of the residents of Tallinn and Harju County was even higher with 74% (see Table 7).

Most of the persons receiving drug addiction treatment were unemployed; regular jobs were held only by 20% in 2011 and 18% in 2012.

Imprisoned persons constituted 7% of the patients in 2011 and 8% in 2012. In 2011, slightly over half of the patients had basic education, but the percentage of patients with basic education decreased to 46% in 2012, while the percentage of patients with secondary education increased from 43% in 2011 to 46% in 2012 (see Table 7).

	2011				2012			
	All patie	ents	First-time pa	tients	All patie	ents	First-time	patients
	n	%	n	%	n	%	n	%
Ethnicity								
Estonian	76	14.3	31	19.0	74	13.6	25	20.0
Russian	429	80.6	122	74.9	433	79.3	91	72.8
Other	27	5.1	10	6.1	39	7.1	9	7.2
Place of residence								
Tallinn/Harju County	338	63.5	116	71.2	274	50.3	92	73.6
Ida-Viru County	165	31.0	31	19.0	255	46.7	26	20.8
Other	27	5.1	15	9.2	16	2.9	7	5.6
Unknown/not available	2	0.4	1	0.6	1	0.1	0	0.0
Employment status								
Employed (regular								
job)	108	20.3	34	20.9	100	18.3	29	23.2
Unemployed	264	49.6	81	49.7	291	53.3	64	51.2
Student	40	7.5	37	22.7	25	4.6	21	16.8
Dependant*	82	15.4	11	6.8	84	15.4	9	7.2
Other**	38	7.2	0	0.0	46	8.4	2	1.6
Education								
No primary education	0	0.0	0	0.0	2	0.4	0	0.0
Primary education	23	4.3	12	7.4	25	4.6	12	9.6
Basic education***	267	50.2	91	55.8	249	45.6	55	44.0
Secondary								
education****	232	43.6	60	36.8	253	46.3	57	45.6
Higher education	4	0.8	0	0.0	3	0.6	1	0.8
Unknown/not available	6	1.1	0	0.0	14	2.5	0	0.0

 Table 7. Socio-economic background of patients in 2011 and 2012.

Source: Estonian drug treatment database of the Drug Monitoring Centre of the NIHD, 2012

\* 'Dependant' includes homemakers, pensioners and persons receiving pension for incapacity for work.

\*\* 'Other' includes prisoners and conscripts.
 \*\*\* Basic education includes pre-secondary vocational education on the basis of primary or basic education.

\*\*\*\* Secondary education includes vocational education on the basis of secondary education (without the level of applied higher education) and secondary vocational on the basis of basic education.

Most of the persons who sought treatment (94%) were treated as outpatients, because the number of inpatient drug addiction treatment places is limited in Estonia. Consequently, the number of hospitalised patients is very low (33 persons in 2011 and 29 in 2012). A large portion of the patients received substitution treatment. Detoxification treatment was provided in to 12% of all patients in 2011 and to 7% in 2012 (see Table 8). Other treatment methods (treatment without medication and mitigation of symptoms) were provided in to 12% of patients in 2011 and 14% in 2012. 94% of the patients received treatment due to mental and behavioural disorders caused by opioid use.

		20	11		2012				
	All patients		First-time patients		All patients		First-time patients		
	n	%	n	%	n	%	n	%	
Substitution									
treatment	407	76.5	104	63.8	427	78.2	88	70.4	
Detoxification									
treatment	62	11.7	21	12.9	38	7.0	6	4.8	
Other*	63	11.8	38	23.3	81	14.8	31	24.8	
Total	532	100	163	100	546	100	125	100	

**Table 8.** Type of drug addiction treatment by treatment status in 2011 and 2012.

Source: Estonian drug treatment database of the Drug Monitoring Centre of the NIHD, 2012

\* Mitigation of symptoms and treatment without medication.

Compared to 2011 the percentage of fentanyl/3-methylfentanyl users increased in 2012. While fentanyl/3-methylfentanyl was used as the primary drug by 76% of the patients in 2011, it was used by 79% in 2012. The percentage heroin users decreased from 10% in 2011 to 5% in 2012. In general it can be said that more than 90% of the persons seeking drug addiction treatment used opioids as the main drug. Amphetamine and cannabis were much less frequently mentioned as the main drug (see Table 9).

**Table 9.** Risk behaviour of patients in 2011 and 2012.

		2011				2012		
	All patien	its	First-time patients		All patients		First-time patients	
	n	%	n	%	n	%	n	%
Main addictive substance used								
Heroin	54	10.2	10	6.1	29	5.3	0	0.0
Methadone	9	1.7	3	1.8	32	5.9	0	0.0
Fentanyl/TMF	407	76.5	118	72.4	432	79.1	104	83.2
Amphetamine	13	2.4	8	4.9	13	2.4	3	2.4
Cannabis	28	5.3	19	11.7	16	2.9	10	8.0
Other	21	4.0	5	3.1	24	4.4	8	6.4
Injection status Has injected in the past, not								
presently Injected during the last 30	225	42.3	62	38.0	99	18.1	19	15.2
davs	233	43.8	64	39.3	350	64.1	74	59.2
Never injected	55	10.3	36	22.1	44	8.1	25	20.0
Unknown/not available	19	3.6	1	0.6	53	9.7	7	5.6
Syringe sharing								
Has shared the syringe, but not during the last 30 days	267	50.2	65	39.9	268	49.1	48	38.4
Shared the syringe during the last 30 days	43	8.1	17	10.4	29	5.3	6	4.8
Never shared a syringe	188	35.3	76	46.6	173	31.7	62	49.6
Unknown	34	6.4	5	3.1	76	13.9	9	7.2

Source: Estonian drug treatment database of the Drug Monitoring Centre of the NIHD, 2

The majority of the persons seeking treatment used their main drugs by injecting (79% in 2011 and 76% in 2012), only 19% in 2011 and 15% in 2012 used their main drug by smoking or inhaling, while the rest used it by oral or other administration. Almost 74% used their main drug on a daily basis and 19% said that they used the main drug at least once a week. Only a quarter of the respondents said that they also used other drugs in addition to the main drug, most frequently fentanyl/3-methylfentanyl, amphetamine, cannabis and alcohol. The low percentage of users of secondary drugs may be caused by the data collection method; namely, the questions about secondary drug can be left unanswered in the IT system of the database. Over half of the persons seeking treatment were active IDUs, i.e. had injected themselves within the last 30 days. While the percentage of active IDUs decreased somewhat in 2010 and 2011, it returned to the level of 2009 in 2012 (2009 - 65%, 2010 - 54%, 2011 - 44%, 2012 - 64%) (see Table 9).

No major changes took place in 2012 in the risk behaviour of IDUs. Like in 2011, approximately 55% of treated addicts admitted sharing a syringe. The percentage of persons who had shared a syringe within the last 30 days has somewhat decreased (from 8% in 2011 to 5% in 2012) (see Table 9).

Non-appearance is still the main reason for termination of drug addiction treatment, but the percentage has decreased compared to 2010 and 2011 (63% of the cases in 2010, 53% in 2011 and 36% in 2012). Other reasons for termination of treatment, in addition to non-appearance, included: imprisonment or release of the patient from a custodial institution, voluntary leave agreed with the physician, transfer to another attending physician and other causes (e.g., death of the patient). Recovery of the drug addict was noted as the reason for termination of treatment in 2% of the cases in 2011 and approximately 7% in 2012.

# Chapter 6. Health correlates and consequences of drug use

### Introduction

The information on the prevalence of infectious diseases was received from the Health Board. Furthermore, data on infectious diseases and risk behaviours are collected in cross-sectional studies, from the clients of syringe exchange centres and during treatment for STIs, provided specifically for IDUs and their partners in Ida-Viru County. Information on tuberculosis cases and treatment outcomes is collected by the Tuberculosis Register. Even though the incidence of HIV and hepatitis C is stabilising, it remains high compared to other countries. However, the latest data indicate that HIV testing has become more frequent among IDUs and they have better awareness of their HIV status.

The information on the provision of emergency medical care in case of drug overdoses was received from the Tallinn Emergency Medical Service. The data from the register of the causes of death and the emergency medical care data both confirm that the number of drug overdose cases has increased.

#### 6.1 Drug-related infectious diseases

#### Monitoring of infectious diseases

In Estonia, the Health Board (named Health Protection Inspectorate until 2010) is responsible for the monitoring of infectious diseases. It is based on the government regulation no. 134 (Riigi Teataja reference number <u>RT I 2009, 41, 279</u>), which lists 56 notifiable communicable diseases and conditions, including HIV (Z21), AIDS (B20–B24), viral hepatitis (B15–B19), and major STIs (syphilis, sexually transmitted Chlamydia, and gonorrhoea). Since the implementation of the new communicable diseases information system in October 2009, physicians (both family physicians and specialist physicians) who diagnose infections, as well as laboratories, are required to report directly to the Health Board, either through a web-based system, or on paper. HIV is the only infection for which web-based reporting is mandatory.

Until the end of 2008, anonymously diagnosed HIV cases were also included in national reporting, which may have caused some double reporting. From 2000–2008 approximately 30% of new cases were diagnosed anonymously in AIDS counselling centres (currently called anonymous HIV counselling and testing sites). Since January 2009, no preliminarily

positive HIV cases without personal data are confirmed or included in the total number of HIV cases.

Behavioural surveillance data among IDUs is collected through different knowledge, attitude and behaviour surveys (mostly RDS – respondent-driven sampling – studies in three sites: the capital city Tallinn, Kohtla-Järve and Narva in Ida-Viru County).

In addition to case reports and cross-sectional studies, some behavioural and prevalence data are also collected from the clients of syringe exchange programs and STI services which specifically target IDUs and their sexual partners (provided in two sites in Ida-Viru County: Jõhvi and Narva).

Data on TB cases and treatment outcomes (including personal identifiers) are collected by the national TB register, operated by the NIHD.

### HIV epidemiological status

Even though the number of newly diagnosed HIV cases has decreased considerably in the last ten years (by 79% in between 2001 and 2012), the rate still remains high (235 cases per 100,000 population 2012; n=315). The number of AIDS cases was 36 in 2012. A total of 8,377 people with HIV had been registered by the end of 2012 (5,661 men and 2,716 women; percentage of women 32%).

In general, the mean age of newly diagnosed HIV cases has increased year by year. The proportion of people of at least 30 years of age has increased but the absolute number of cases among them has been stable since 2006. While 78% of all new cases were diagnosed among 15–24-year-olds in 2000–2001, the corresponding percentage in 2011–2012 was 17%. In 2012 only 7 cases were diagnosed among 15–19-year-olds (compared to 560 cases diagnosed among this group in 2001).

Close to 70% of all HIV cases in 2000–2012 have been diagnosed among men. In recent years the proportion of women among new cases has increased in all age groups, mostly because of the decrease in the absolute number of men being diagnosed with HIV. In 2011 the percentage of women was 38% (n=142) and in 2012 - 34% (n=106) of all new cases. In the last four years the percentage of women has been higher than that of men among 15–24-year-olds (69% in 2011 and 60% in 2012).

In 2012 the majority of new cases were diagnosed in Northeastern Estonia and Tallinn, with 42% (n=131; 79 cases per 100,000) and 47% (n=148; 37 cases per 100,000), respectively. Compared to 2011 the rate of new cases has decreased by 17 per 100,000 in Tallinn and by 2 per 100,000 in Northeastern Estonia. The absolute number of newly diagnosed HIV cases in Northeastern Estonia has also been stable (135 cases in 2011 and 131 cases in 2012). In other regions of Estonia 36 HIV-cases were diagnosed in 2012 (5

per 100,000 population) and this number, as well as the incidence rate, have been stable in the recent years.

According to the Health Board, the route of infection was known in 64% of the cases (n=203). Out of them 35% had been infected via parenteral (IDUs), 63% via sexual and 2% via vertical route. The percentage of vertical transmission cases among all newly diagnosed cases was 1% (n=4; two cases in Tallinn and two cases in Northeastern Estonia), and the rate of mother-to-child transmission was 1% in 2012 (MSA 2012).

In anonymous HIV counselling and testing sites (where approximately 65% of all new cases were diagnosed in 2012), 39% of all new cases reported having injected drugs. The percentage of IDUs was the highest in Narva (Northeastern Estonia) – 50%. In general, the absolute number of non-IDU cases has not increased, and the increase in proportion of sexual transmission is related to the decrease in the diagnosed IDU cases. This may be related to the increasing HIV-testing and awareness among IDUs (see below).

#### **HIV among IDUs**

In a cross-sectional study (RDS) among IDUs in Kohtla-Järve, Northeastern Estonia (n=599), in 2012, 62% (n=370) were tested HIV-positive (Abbott IMx HIV-1/HIV-2 III Plus test). Prevalence was the same among male and female. In a previous study in the same site, conducted in 2007, HIV prevalence was 69% (among 350 IDUs) (Lõhmus 2008).

#### Viral hepatitis

The overall rates of acute hepatitis B and C have been relatively stable. The incidence rate of acute hepatitis B has decreased from 1.2 per 100,000 population (n=16) in 2011 to 0.7 per 100,000 population (n=9) in 2012. The incidence rate of acute hepatitis C has increased from 1.3 per 100,000 population (n=17) in 2011 to 1.8 per 100,000 population (n=24) in 2012.

The outbreak of hepatitis A detected in the second half of the 2011 has now subsided. In 2011, 12 cases per 100,000 population were diagnosed (n=154), and five cases (n=63) were diagnosed in 2012. No links of the cases with injecting drug use have been found. A more detailed analysis of the outbreak can be found in Eurosurveillance (Dontšenko 2011).

#### Viral heaptitis among IDUs

In a cross-sectional study (RDS) among IDUs in Kohtla-Järve, Northeastern Estonia (n=599), in 2012:

- 75% (n=447) were tested HCV-antibody positive (Murex anti-HCV v 4.0);

 - 4% (n=25) were tested HBsAg positive (Murex HBSAG v 3.0), which reflects either acute or chronic hepatitis B; 25% (n=149) were positive for both anti-HBc IgG and anti-HBsAb (immune due to natural infection).

In a previous study in the same site, conducted in 2007 (among 350 IDUs), HCV-antibody prevalence was 76% and HBsAg prevalence 1% (Lõhmus 2008).

# STIs and tuberculosis

In general, the rate of major STIs in Estonia has decreased in recent years, except for the gonorrhoea (incidence was 8 cases per 100,000 population in 2010, 13 in 2011, and 16 in 2012). The incidence has been the highest among 20–29-year-olds, and higher among females compared to males. STI case reports do not include data on drug injection status, thus there is no information about STI rates among IDUs.

The incidence of TB was 18.5 cases per 100,000 population in 2012. A total of 290 TB cases were reporter in 2012: 234 incident cases, 35 relapses and 21 re-treatment cases. Out of the incident cases and relapses, 18% (47 cases) were multi-drug resistant (MDR-TB) and out of these 2% (1 case) were extensively drug-resistant (XDR-TB).

The percentage of HIV-infected TB patients was 16% in 2012 (n=42). In total, 370 HIV-infected TB cases have been diagnosed since the first case in 2000.

# STIs and tuberculosis among IDUs

In a cross-sectional study (RDS) among IDUs in Kohtla-Järve, Northeastern Estonia (n=599), in 2012, 2% were positive for syphilis (antibody testing) and 32% for HSV-2 antibodies (IBL International GmbH). In the 2007 study in the same site, 9% were found positive for syphilis (RPR methodology; n=350) (Lõhmus 2008).

In STI services provided to IDUs and their sexual partners, the number of gonorrhoea cases has not increased. However, the number of trichomoniasis cases has risen 2.5 times in 2012 compared to 2010 and 2011, and the number of Chlamydia cases by one third in the same period (NIHD reports).

In the 2012 RDS study 1.5% of participants (nine out of 595) reported ever having had TB. In the 2007 study in the same region nobody out of 350 participants reported ever having had TB (Lõhmus 2008).

# Other infectious morbidity (abscesses, sepses, endocarditis, tetanus, wound botulism)

Two cases of tetanus were registered in 2011 and none in 2012. Data is not collected about the IDU status of these patients. No cases of botulism have been diagnosed in 2011–2012.

Data is routinely reported only on *Streptococcus pneumoniae* and *Haemophilus influenzae* sepses, but there is no data available on the risk factors of these cases (e.g., IDU status). The rate of these cases in the last two years has been low – around 0.9 per 100,000 population for *S.pneumoniae* sepses and 0.0 per 100,000 for *H.influenzae* sepses.

Cross-sectional studies among IDUs have not extracted information on abscesses, sepses, endocarditis, etc. Consequently, no information is available on the scope of these problems.

# **HIV testing**

In Estonia any physician (both family physicians and specialists) can recommend and perform HIV tests based on clinical indications, risk assessment or patient requests. New guidance for HIV testing in both in- and outpatient settings was developed and approved by the Ministry of Social Affairs in 2012. Testing is recommended based on clinical indications and risk behaviour assessment. Furthermore, testing is recommended for all pregnant women and prisoners. In HIV-epidemic areas – capital city Tallinn and Northeastern Estonia – testing is recommended to all people aged 16–49.

HIV testing is provided only in health care institutions (including family medicine centres and prison health services). Non-medical personnel are not allowed to perform HIV testing, but they can be involved in counselling.

Besides testing in general health care system (where national health insurance is required for free of charge testing), there is also a special government funded network of anonymous HIV counselling and testing sites (previously called Anonymous AIDS Counselling Centres) where anonymous and free of charge testing of HIV and viral hepatitis is available to all people, including those who are not citizens of Estonia.

58,000 people were tested for HIV (44 per 1,000 population) in 2012. This does not include blood and organ donors, and pregnant women, among whom the testing rates have been high for many years.

For IDUs, HIV testing is also offered at special STI services in Northeastern Estonia (Narva and Jõhvi) and at substitution treatment centres. Syringe exchange programs (SEPs) do not offer routine HIV testing but local HIV counselling and testing sites in Tallinn and Northeastern Estonia provide HIV testing a couple of hours per week in SEPs.

The latest data indicate that HIV testing has become more frequent among IDUs and they have better awareness of their HIV status. For instance, the percentage of people have ever been tested for HIV has increased from 76% in 2007 to 90% in 2012 in Kohtla-Järve and the percentage of those aware that they have HIV has increased from 67% to 84% in the same period (Lõhmus 2008). The main sites for the last test included hospitals and family physicians (reported by almost half of the tested study participants), anonymous HIV counselling and testing sites (19%) and prisons (16%).

# 6.2 Other drug-related health correlates and consequences

The information on the provision of emergency medical care in case of drug overdoses is only available for Tallinn. The number of overdose cases increased somewhat in 2012 compared to 2011 (see Table 10). According to the Tallinn Emergency Medical Services, emergency medical care was provided to drug users due to overdose in 1,054 cases compared to 952 cases in 2011. Hospitalisation was required for 106 of the 1,054 drug users who required emergency medical care due to overdose and drug use was the suspected cause of death in 67 cases (TEMS 2012).

**Table 10.** Provision of emergency medical care to drug users due to overdose in2009–2012.

	2009	2010	2011	2012
Cases of emergency medical care due to narcotic	1,399	930	952	1,054
intoxication				
incl. hospitalisations	96	75	84	106
Narcotic intoxication as the suspected cause of death	76	53	56	67

Source: Tallinn Emergency Medical Services 2012, http://www.tems.ee

# 6.3 Drug-related deaths and mortality

According to the register of the causes of death, a total of 1,118 persons died in Estonia in 1999–2012 as a result of drug overdose. Most of them (89%) were male (n = 996) (see Table 12). The mean age of the persons who died in 2012 as a result of drug overdose was 31 years. Over the period 1999–2012, the majority of drug-related deaths (80%) occurred in the age group of 20–32-year-olds (see Table 13).

The number of drug-related deaths in 2012 exceeded the corresponding number of 2011 by 47 cases. Accidental drug poisoning was the cause of death in 170 cases in 2012, most

of them male (n=152) (see Table 11). According to the 2012 data from the register of the causes of death, the mean age of persons who died due to drug overdose was 31 years (31 years for males and 29 years for females. Out of the total 170, 157 died due to opioid use. In 2012, 74% (n=126) of the persons who died as a consequence of drug use were in the age group of 20–34-year olds (82% in 2011) and 12% (n=20) were in the age group of 35–39-year-olds (see Table 11).

	2012								
Age group	Male	Female	Total						
<15	0	0	0						
15–19	2	0	2						
20–24	21	6	27						
25–29	43	5	48						
30–34	46	5	51						
35–39	19	1	20						
40–44	12	0	12						
45–49	7	1	8						
50–54	1	0	1						
55–59	1	0	1						
60–64	0	0	0						
>=65	0	0	0						
Total	152	18	170						
Mean age	31.4	28.7	31.1						

**Table 11.** Deaths related to drug poisoning by gender and age group in 2012.

Source: the register of the causes of death, NIHD 2012, EMCDDA standard table 5

72% (n=123) of the persons who died in 2012 as a result of drug use were ethnic Russians and 21% were Estonians; 59% (n=101) lived in Harju County and 30% in Ida-Viru County. In 2011, Russians constituted 71% (n=87) and Estonians 16.2% of drug-related death cases; 59% (n=72) lived in Harju County and 33% (n=41) in Ida-Viru County. The high number of drug-related deaths in Harju and Ida-Viru counties can be explained by the fact that the number and population prevalence of IDUs is high in both counties (Uusküla *et al.* 2007).

The main cause of death of most persons who died in 2012 as a result of drug use (n=150) was accidental poisoning with non-classified drugs or psychodysleptics and their effects (X42) (n=116 in 2011) (see Table 14). The majority of drug-related deaths were associated with synthetic drugs (T40.4), in particular fentanyl and 3-methylfentanyl.

There are minor discrepancies in the 2012 data on drug-related deaths as collected in the register of the causes of death and by the Estonian Forensic Science Institute (EFSI) (the

same applied to the 2011 data). According to the EFSI, 178 persons died in 2012 due to drug poisoning (125 persons in 2011 according to the EFSI), 85% of whom (n=152) died as a result of fentanyl use (EFSI, M. Tõnisson, personal communication 2012). The discrepancy between the EFSI and register data could have been caused by the fact that, in some cases, where death occurred as a result of drug overdose according the EFSI, the physician has noted 'drug poisoning' as the cause of death on the death certificate.

	1999	2000	2001	2002	2003	2004	2005	2006*	2007	2008	2009	2010	2011	2012	Total
Male	18	25	39	81	31	88	52	59	74	60	120	89	108	152	996
Female	4	6	6	5	5	10	5	9	7	7	13	12	15	18	122
Total	22	31	45	86	36	98	57	68	81	67	133	101	123	170	1118
Mean age	29	28	25	24	28	26	26	26	28	29	29	29	30	31	

Table 12. Gender distribution of individuals who died of a drug-related death in 1999–2012.

Source: the register of the causes of death, NIHD 2012, EMCDDA standard table 6

**Table 13.** Age distribution of individuals who died of a drug-related death in 1999–2012.

	1999	2000	2001	2002	2003	2004	2005	2006*	2007	2008	2009	2010	2011	2012	Total
<15	0	0	1	0	0	1	0	0	0	0	0	0	0	0	2
15–19	5	2	7	18	6	11	5	6	2	0	3	1	2	2	70
20–24	8	13	18	39	10	36	21	24	22	14	23	17	14	27	286
25–29	3	8	10	16	9	24	22	25	34	27	54	43	41	48	364
30-34	1	4	3	8	3	18	4	10	13	18	40	25	46	51	244
35–39	0	1	4	3	3	3	3	1	6	3	5	11	14	20	77
40-44	1	0	1	0	1	3	1	2	1	3	3	4	4	12	36
45–49	1	2	0	1	3	1	1	0	2	1	2	0	0	8	22
50-54	1	0	1	1	0	0	0	0	1	0	1	0	1	1	7
55–59	1	0	0	0	0	1	0	0	0	1	2	0	0	1	6
60–64	0	0	0	0	1	0	0	0	0	0	0	0	1	0	2
>=65	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2
Total	22	31	45	86	36	98	57	68	81	67	133	101	123	170	1118

Source: the register of the causes of death, NIHD 2012, EMCDDA standard table 6

**Table 14.** Deaths due to drug-related poisoning by gender and cause of death in 2009–2012.

			200	9		20′	10	2011			2012		
Main cause of death	Substance*	Μ	F	Total	М	F	Total	Μ	F	Total	М	F	Total
F112 Opioid dependence		1	0	1									
X41 Accidental poisoning by and exposure to antiepileptic, sedative-hypnotic, antiparkinsonism and psychotropic drugs, not elsewhere classified	T43.6				7	1	8	4		4	17	2	19
X42 Accidental poisoning by and exposure	T40.0	1	0	1									
(hallucinogens), not elsewhere classified	T40.1							2		2	2		2
	T40.2	2	0	2	1	1	2	1	1	2			
	T40.3	2	1	3	3	1	4	10	1	11	11	1	12
	T40.4	14	0	14	71	9	80	87	12	99	112	14	126
	T40.5							1		1	3		3
	T40.6	88	11	99	5		5		1	1	5	1	6
	T40.9	3	0	3							1		1
X62 Intentional self-poisoning by and	T40.2	1	0	1									
(hallucinogens), not elsewhere classified	T40.9	1	0	1									
Y11 Poisoning by and exposure to antiepileptic, sedative-hypnotic, antiparkinsonism and psychotropic drugs, not elsewhere classified, undetermined intent	T43.6										1		1
Y12 Poisoning by and exposure to narcotics	T40.3				1		1						
elsewhere classified, undetermined intent	T40.4	1	0	1	1		1	3		3			
	T40.6	6	1	7									
Total		120	13	133	89	12	101	108	15	123	152	18	170

Source: the register of the causes of death, NIHD 2012, EMCDDA standard table 5

\* Opium (T40.0), heroin (T40.1), other opioids (T40.2), methadone (T40.3), other synthetic narcotics (T40.4), cocaine (T40.5), other and unspecified narcotics

(T40.6), other and unspecified psychodysleptics (T40.9), psychostimulants with abuse potential (T43.6)

# Chapter 7. Drug-related health consequences and responses

#### Introduction

Information on prevention and treatment of drug-related infectious diseases is based on the NIHD reports.

#### 7.1 Prevention of drug-related accidents and reduction of drug-related deaths

No prevention programs on drug-related deaths and overdoses have been implemented in Estonia for IDUs or other drug users. A workshop on prevention of deaths and overdoses was conducted in the beginning of 2012 by the experts from the Eurasian Harm Reduction Network and from Scotland. The aim of the workshop was to provide the organisations offering harm reduction and treatment services in Estonia with an overview of the different models of overdose prevention and to present the experiences from other countries. The workshop also included a practical discussion to identify the most suitable model of overdose prevention for Estonia. A preliminary description and an action plan of the programme "Using naloxone to prevent deaths from drug overdose" was completed at the end of 2012. The corresponding pilot project was to be launched in 2013.

#### 7.2 Harm reduction services targeted at IDUs

The total expenditure on HIV/AIDS prevention in 2012 amounted to 2,599,003.30 euros. Methadone treatment and syringe exchange programmes are the two main harm reduction services targeted at IDUs in Estonia. The syringe exchange and counselling service is provided by nine organisations that operated a total of 37 syringe exchange points in 2012, including 13 stationary centres. They received a total of 1,319 first-time and 6,713 recurrent visitors. In total there were about 150,427 visits to syringe exchange points (SEPs), during which 2,228,082 syringes, 461,762 condoms and 56,319 information booklets were distributed. A new syringe exchange point was opened in 2012 in Maardu.

Approximately two thirds of the syringes (66%) were distributed in Ida-Viru County, one third (33%) in Tallinn, and 0.5% elsewhere in Estonia. The average number of syringes issued per visit was 14.1 in Ida-Viru County, 18.6 in Tallinn/Harju County and 1.8 in the

remaining part of Estonia. About 65% of the distributed syringes were returned to the syringe exchange points after use in 2012.

The mean age of SEP clients has increased over the years, rising from 24.3 years in 2009 to 28 years in 2012. The mean injecting career of SEP clients was 5.3 years. The SEP clients in Tallinn/Harju County had the longest injecting career (6 years), followed by Ida-Viru County (5 years) and other regions (4 years). The injecting career of first-time clients has increased compared to 2008. While 38% of the first-time clients in 2008 had injected drugs for up to one year, the corresponding indicator in 2012 was 19%.

# 7.3 Other support services for IDUs

#### HIV counselling and testing

A total of 11 counselling sites operated in Estonia during the reporting period, providing counselling to 12,652 and testing to 12,037 persons. They discovered 130 cases of HIV infection and 32 of those had a history of drug injection (25%). The cost of all verification tests in Estonia and the transport of samples from initial testing laboratories to reference laboratories was funded from the budget of the national HIV/AIDS strategy.

#### Anonymous STI diagnosis and treatment service

The option of free and anonymous diagnosis and treatment of STIs continued to be provided in 2012 to IDUs and their sexual partners in Narva and Jõhvi. There were 951 treatment cases in total during the year.

#### Pregnant drug users

Pregnant opioid addicts have access to drug addiction treatment at the sites of existing treatment services. Free breast milk substitute is provided to infants, born to HIV positive mothers, until their first birthday to prevent vertical transmission of the HIV infection; 199 infants received the breast milk substitute in 2012.

#### Case management

Case management teams for HIV positive persons are available in the outpatient facilities of infectious diseases at three major health care institutions (in Tallinn, Narva and Kohtla-Järve); combined, they received 1,367 first-time clients and a total of 12,289 visits. A team consists of nurses and social workers to assist in solving both health and social problems. Furthermore, addicts with dual diagnosis can receive a counselling and support service from MTÜ Eesti Abikeskus, the only organisation in Estonia specialising in improving the

coping ability of people with sever mental disorders and drug addiction. They provided the service to 37 clients during the year.

Individual psychological counselling and family therapy was provided in 2012 to adolescents and parents. A total of 473 young people participated in the 31 interactive drug prevention sessions organised during the year. Therapy groups were arranged for at-risk minors and parents with addiction problems. There were also 211 telephone counselling sessions.

#### Prevention and treatment of tuberculosis

Prevention and treatment of TB in Estonia is based on the National Tuberculosis Control Strategy 2008–2012, approved in 2008 by the GR. The general objective of the strategy is to reduce the number of new TB cases to 20 per 100,000 population by 2012. 321,392 euros were allocated for the implementation of the TB control strategy in 2012. Persons at risk, incl. HIV positive, are guaranteed health care and social services to prevent infection with TB and the subject of TB is integrated in the respective in-service training programmes of health care and social workers. For early detection of TB, regular preventive laboratory tests are performed among HIV positive persons and at-risk groups not covered by health insurance. Information booklets are also distributed in the course of this process, with 1,540 booklets distributed in 2012. Two guidance resources were developed in 2012 and 673 specialists participated in training sessions.

This programme ensures availability of preventive health care and social services to HIV positive persons and other groups at risk of TB. For early detection of TB, regular preventive laboratory tests are performed among HIV positive persons and at-risk groups not covered by health insurance. All residents of shelters and prisons are also regularly screened for TB.

Treatment of TB in Estonia is a directly observed therapy. The table below shows treatment results of patients with TB/HIV+ co-infection. The treatment outcomes of 2011 and 2012 are not yet final, because the period of treatment can be over two years in the case of MDR-TB and some of the patients are in treatment.

Methadone substitution treatment is available to opioid addicts in three of the five inpatient facilities for TB treatment. Of the other two facilities, one hospital has never had a situation where methadone treatment was needed and the other hospital with a TB facility shares its building with a methadone treatment centre, which ensures availability of methadone to those patients. Furthermore, in order to reduce cases of termination of treatment among the persons released from prison, an agreement was concluded with the Ministry of Justice in May 2010, stipulating that prisons shall transport released prisoners with infectious and/or multi-resistant TB, whose treatment has not yet been completed at the moment of

release, to Kose TB facility of SA Põhja-Eesti Regionaalhaigla or to outpatient visit in order to continue the treatment.

Outpatient treatment is a problem area, with methadone treatment available only in two DB facilities (four facilities are unable to provide outpatients with methadone treatment).

Table	15.	Treatment	outcomes	on	patients	with	TB/HIV+	co-infection	from	2003	to	23
Septer	nber	2012.										

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
TB/HIV+ first cases and relapses	13	22	33	38	47	37	36	31	41	42
Died before TB treatment started or during the first month of treatment	1	4	5	8	9	7	6	6	6	6
Died before TB treatment started or during the first month of treatment (%)	7.7	18.2	15.2	21.1	19.1	18.9	19.4	16.1	14.6	14.6
Started TB treatment	15	18	27	31	38	30	29	24	35	36
Recovered from TB	8	11	20	20	25	25	26	20	25*	10*
Recovered from TB (%)	53.3	61.1	74.1	64.5	65.8	83.3	89.7	83.3	-*	-*
Received ARV co- treatment						13	20	17	24	25
Refused or terminated ARV treatment						1	2	2	2	1
Did not need ARV**						1	5	3	6	1
Data not available or did not receive ARV treatment						16	2	2	3	9

Source: NIHD, TB register 2013

\* The treatment outcomes of 2011 and 2012 are not yet final, because the period of treatment can be over two years in the case of MDR-TB and some of the patients are still in treatment.

\*\* Pursuant to Estonian treatment guidelines, ARV treatment is started when the number of CD4 cells is below 350.

\*\*\* Data are collected since 2008 during TB/HIV+ consultations.

# Chapter 8. Social correlates and social reintegration

No separate studies on drug use were conducted in 2012 in at-risk social groups. There are so far no dedicated services for dealing with the problems of housing, training/education and employment of drug users. Such services are organised by the centres working with drug addicts in the course of their regular operations. The social workers at the centres are usually handling the social and employment issues.

# Chapter 9. Drug-related crime

# Introduction

The information on drug-related criminal and misdemeanour offences, presented in this chapter, originates from the EMCDDA standard table no. 11, filled out by the Ministry of Justice. An overview of all the substances is not available in case of misdemeanours associated with drug use or possession of small quantities.

Information on the services provided to drug users, particularly IDUs, were derived from the reports on the NSPD and on the national HIV/AIDS strategy and from the Ministry of Justice.

#### 9.1 Drug-related offences

A total of 866 drug-related offences (regulated by §§ 183–190 of the Penal Code) were registered in 2012, which is somewhat fewer than in previous years (see Table 16). Of all drug-related offences registered, 81% (n=702) were cases of unlawful handling of large quantities of narcotic drugs (§ 184). Offences associated with unlawful handling of small quantities of narcotic drugs (§ 183) constituted 11% of registered drug-related offences.

A further 3,750 misdemeanours associated with drug use or possession of small quantities (§ 15<sup>1</sup> of the Act on Narcotic Drugs and Psychotropic Substances and Precursors thereof) were also registered in 2012 (see Table 17).

Registration of the number of drug-related criminal offences and misdemeanours in recent years has been contingent on the available resources of investigation institutions and the consequent establishment of priorities. The main focus in recent years has been on apprehending criminal groups trading in large quantities of narcotic substances. The statistics of crimes associated with large quantities have been somewhat affected by a methodological modification, after which cases that were previously registered as multiple crimes are registered as a single continuous offence.

Type of	offence ( PenC §)	2007	2008	2009	2010	2011	2012
§ 183	Unlawful handling of small quantities of narcotic drugs or psychotropic substances	297	301	153	138	91	92
§ 184	Unlawful handling of large quantities of narcotic drugs or psychotropic substances	1,048	1,143	789	699	745	702
	Total of 183–184	1,345	1,444	942	837	836	794
§ 185	Provision of narcotic drugs or psychotropic substances to persons less than 18 years of age	79	65	63	26	24	29
§ 186	Inducing persons to engage in illegal use of narcotic drugs or psychotropic substances						
§ 187	Inducing minors to illegally consume narcotic drugs or psychotropic substances or other narcotic substances	3	6				4
§ 188	Illegal cultivation of opium poppy, cannabis or cocaine shrubs	19	37	32	32	45	27
§ 189	Preparation for distribution of narcotic drugs or psychotropic substances	2	6	4	6	8	12
§ 190	Violation of requirements for handling narcotic drugs or psychotropic substances or precursors thereof or of requirements for related record-keeping or reporting	1		1			
	Total of 185–190	104	114	100	64	77	72

 Table 16. Registered drug-related offences in 2007–2012.

Source: Ministry of Justice 2013

Tahla 1 <sup>°</sup>	7 Registered	drug-related	misdemeanours	in	2007_2	2012
	. Registereu	uluy-leialeu	misuemeanours		2001-2	2012.

	2007	2008	2009	2010	2011	2012
Unlawful handling of small quantities of narcotic drugs or psychotropic substances (§ 15 <sup>1</sup> of the ANDPS)	5,991	6,113	3,205	2,140	2,908	3,750

Source: Ministry of Justice 2013

The courts convicted 42 persons under § 183 of the PenC, 442 persons under § 184 of the PenC and 44 persons for other drug-related offences (§§ 185–189). The majority of drug offenders are convicted via a settlement procedure, which usually results in the imprisonment of the offender. 87% of the convicted offenders were male and 13% were female.

In terms of counties, the majority of drug-related offences were registered in Harju County (57%), followed by Ida-Viru County (11%) and Tartu County (10%).

### 9.2 Drug use in prison

In 2011, the NIHD conducted a survey of the knowledge, attitudes and behaviour related to HIV and drug addiction among convicted offenders. The results indicated that 2% of the participants had used drugs within the past 12 months. 2% of the sample had injected drugs in a custodial institution within the past 12 months.

Prisons are increasingly focusing on discovering prohibited items and substances and preventing such items and substances from entering the prison territory. The efficiency of the regular inspections for discovering prohibited items and substances has been improved, supported by the availability of the respective technological equipment in prisons. Since 2010, all premises used by prisoners are searched at least once every two months. Compliance with this schedule is regularly monitored. Regular searches are supplemented by extensive video surveillance, body scanners, X-ray equipment, enhanced security efforts, etc.

Prisoners are tested in case of suspected drug use. The tests and the criminal proceedings commenced on the basis of those tests provide an overview of drug use in prisons. A total of 3,508 body fluid tests for narcotic substances were performed in prisons in 2012, with 124 (4%) preliminary positive results. Some positive or false positive tests were not caused by illegal drug use but by the effects of pharmaceuticals prescribed by a physician. Criminal proceedings under § 331 of the PenC (preparation, acquisition and possession of narcotic drugs or psychotropic substances by prisoner or person in detention or custody, and consumption without prescription) were initiated in 2012 in one instance in chamber-type prisons and in 34 instances in camp-type prisons. In the latter cases, many instances were associated with the use of methadone without prescription. This accounts for 1% of all tests, incl. 27% of preliminary positive tests. The quantity of drugs discovered in prisons in 2012 was significantly lower than in the past. 12 criminal proceedings were commenced under § 183/184 of the PenC (unlawful handling of small/large guantities of narcotic drugs or psychotropic substances by prisoner or person in detention or custody). Nine criminal proceedings were terminated during the year due to the lack of necessary elements of a criminal offence. The number of drug discoveries in prisons was 281 in 2007, 99 in 2008, 31 in 2009 and 35 in 2010. The availability of drugs in prisons has decreased as a result of the replacement of camp-type prisons with chamber-type prisons.

#### 9.3 Responses to drug-related health issues in prison

Prevention of drug use and HIV/AIDS in Estonian prisons is based on the NHP and its implementation plan for 2013–2016, as well as on the national HIV/AIDS strategy 2006–2015.

#### Addiction rehabilitation departments and drug addiction treatment in prisons

Special departments of addiction rehabilitation have been established in three Estonian prisons for social reintegration of drug addicts: Tartu Prison (174 places in total), Viru Prison (20 places for young offenders and 20 places for adults) and Harku Prison (8 places). The department in Tartu Prison is divided into four sections, with active rehabilitation taking place in the third section (44 places). The fourth section, created in 2010, includes a post-rehabilitation unit for prisoners who have completed the active rehabilitation phase (44 places). The rehabilitation of the remaining addicts is organised pursuant social programmes. In the last quarter of 2012, there were 906 persons with drug addiction diagnosis in Estonian prisons, constituting 29% of the total number of prisoners (870 persons in 2009, 877 persons in 2010). Addicts are treated with non-opioid medicinal products, but methadone substitute treatment is available in some prisons. Methadone detoxification treatment was used in 61 instances in 2012 and methadone substitution treatment was provided to 50 prisoners in the first quarter, 45 prisoners in the second quarter, 69 prisoners in the third quarter and 62 prisoners in the fourth quarter. To ensure continuation of the treatment prescribed before detention, the Ministry of Justice has ensured availability of methadone treatment also in Viru Detention House.

# Training for prison staff and probation supervisors

Several training courses have been organised for prison officers in 2007–2012 in a variety of fields: basic drug training, motivational counselling techniques, opioid addiction treatment, in-service training for guards/dog handlers.

In 2012, training was provided to 20 officers who are responsible for implementing the social programme "Lifestyle training for offenders"; it is designed for addicts whose addiction causes unlawful behaviour. Eight training sessions on motivational counselling were organised in 2012, with 85 officers participating. In addition, three sessions of the "Right moment" programme were organised for 20 officers. This is an individual programme with the aim of assisting the convicted offenders in the development and application of various skills for solving social problems to facilitate handling of problematic situations. There was one introductory training for a newly recruited sniffer dog and dog handler, and seven dog handlers were provided in-service training.

Theological training was provided to eight prison chaplains, with a further 12 religious volunteers and theology students also participating.

# 9.4 Reintegration of drug users after release from prison

In the reporting period, reintegration of drug users after release from prison was conducted in the framework of the general social service designed to facilitate re-socialisation of released prisoners. As a new option added in 2012, it is now possible for those, who are released early, to opt for addiction treatment as a substitute punishment. This option was used in 2012 in one instance of an early release from prison.

# Chapter 10. Drug market

# Introduction

The data in the chapter covering the changes on the drug market have been compiled on the basis of EMCDDA standard tables 13, 14 and 16. The data on the quantities and purity of confiscated drugs were received from the Estonian Forensic Science Institute. The overview of drug prices is based on the expert assessment of the surveillance data from the Police and Border Guard Board. The presented data on drug transit were collected by the Tax and Customs Board.

#### 10.1 Availability and supply

Availability of drugs has been studied in the 2011 ESPAD survey in which 15–16-year-old school students were asked to assess the availability of four drugs: cannabis, ecstasy, amphetamines and tranquillisers or sedatives (received without prescription). Cannabis was said to be fairly or very easily available by 32% of the students, incl. 34% of the boys and 30% of the girls. The high availability of cannabis is also confirmed by the fact that 31% of the young people, who had not tried cannabis, had been in a situation where they had the possibility to do so.

Tranquillisers or sedatives were thought to be easily available without prescription by 18% of the students. The perceived availability of synthetic substances (ecstasy and amphetamines) was even lower (14% and 11%, respectively). Easy availability of marijuana/hashish was mentioned more frequently by boys, while the estimated availability of tranquillisers/sedatives and ecstasy was higher in the girls' responses.

The results of this survey indicate a decrease in the availability of drugs. The number of young people, who believe that tranquillisers/sedatives, ecstasy, amphetamines and cannabis products are easily available, was lower than in the survey of 2007 (see Figure 7).



**Figure 7.** Proportion of students who reported drugs were easily available (%). *Source: ESPAD 2011.* 

For the police, the main priority in 2012 was reducing the supply of fentanyl as the narcotic substance that causes the highest number of drug-related deaths. Additional resources were allocated to the police specifically for apprehending street dealers selling fentanyl. This means that, in addition to the priority of exposing large criminal groups, the police is now increasingly focusing on confiscating fentanyl on the streets. The same actions and priorities continue in 2013 due to the high number of drug-related deaths from fentanyl use. A total of 69 domestic and 10 international joint operations were carried out in 2012 to reduce the supply of drugs. The total amount of illegal income confiscated in 2012 was 1.5 million euros, i.e., almost double the amount of 2011.

Most drugs arrive in Estonia over state borders. The types of narcotic substances smuggled through the border have generally stayed the same, but there are some changes in the methods of drug smuggling compared to previous periods. In the period considered, the groups engaged in illegal trafficking of narcotic substances have started to use the 'green border' and have changed their preferred means of transportation from small cars to coaches and trucks that have more hiding places and tend to be inspected with lower frequency. The Tax and Customs Board has 19 sniffer dogs for discovering drugs. There were 698 responses with sniffer dogs in total in 2012, with 71 actual drug findings.

Compared to 2011, the confiscated amounts of cannabis products and ecstasy tablets decreased in 2012 – from 128.4 kg to 36.5 kg and from 11,496 tablets to 9,210 tablets, respectively. The number of cocaine seizures increased and the confiscated amount increased from 0.8 kg to 3.4 kg(see Table 18). The number of cocaine seizures rose from 34 instances in 2011 to 49 instances in 2012.

	2007	2008	2009	2010	2011	2012
Cannabis resin (hashish)	155.4	48.5	19.2	14.6	45.6	4.7
Cannabis leaf (marijuana)	8.1	24.2	7.1	14.8	53.5	25.1
Cannabis plants	8.1	23.2	17.2	10.8	29.3	6.6
Heroin	5.7	0.1	3.9	0.004	0.05	0.0004
Cocaine	13.0	3.6	5.0	217.7	0.8	3.4
Amphetamine	56.3	23.3	55.9	47.7	41.6	14.2
Methamphetamine	0.02	37.7	0.001	0.5	1.5	27.1
GHB	26.4	7.7	25.1	16.1	13.5	28.9
Fentanyl/3-methylfentanyl	1.3	1	1.8	0.5	0.9	1.7

Table 18. Amounts of confiscated narcotic substances in 2007–2012 (kg).

Source: EMCDDA standard table 13, Estonian Forensic Science Institute 2013

The confiscated quantities have increased the most in the case of methamphetamine (from 1.5 kg to 27.1 kg), with the number of seizures increasing from 57 to 110. The confiscated amounts of amphetamine continued to decrease (from 42 kg in 2011 to 14 kg).

Heroin remains a rare drug on the Estonian market, with only one confiscation of 0.4 g. Fentanyl is the most commonly used opioid, with 1.7 kg confiscated in 2012. No confiscations of poppy/opium poppy products have been made in recent years. The amount of GHB confiscated in 2012 was 28 kg, i.e., 15 kg more than in 2011. The confiscated amount of GBL rose steeply as well (from 2.3 kg to 197.2 kg). Of the new psychoactive substances, cannabinoids were confiscated most frequently in 2012 (33 instances in total). A total of 12.6 kg of "Spice" and the associated components (JWH-122, JWH-210, etc.) were confiscated. Other seized substances included cathinones (533 g of MDPV and 14 g of 4-MEC), some phenthylamines (3-FA, 2C-I and 2C-E) and AMT of the tryptamine class on a couple of occasions.

#### 10.3 Purity and price

Compared to previous years, the purity of almost all main confiscated drugs improved in 2011. A drop in purity was only observed in case of ecstasy and amphetamine. Drug prices remained almost at the same level as in 2011. There was some increase in the street prices of cocaine and amphetamine.

The purity if cannabis has increased since 2010. While the most common THC content in hashish was 5% in 2011, it rose to 11% in 2012 (typical THC content 2–20%). The purity of marijuana improved in 2012. While the average THC content in marijuana was 11% in 2011, it increased to 13% in 2012. The price of cannabis products has remained almost the same as in 2010. The mean price of marijuana was 20 euros for a gram in both 2011 and 2012. The mean price of hashish in 2012 was 7 euros.

The estimate street price of a heroin dose was between 10 and 15 euros in 2012, which is cheaper than in 2011 (about 20 euros). Even though the amount of heroin is low on the Estonian market, the one instance of heroin confiscation in 2012 revealed that the substances was purer and cheaper than in the year before. In 2010, for instance, heroin purity ranged from 0.2% and 5%. Fentanyl remains the most widely used opioid in Estonia and its street price was 7–10 euros per dose as in 2011. The most common purity level of fentanyl in 2012 was 6% of pure substance per gram (variability range 0.2–10 per cent). The most common purity of fentanyl has increased 3% from 2011.

The purity of amphetamine and ecstasy has decreased compared to the previous reporting period. While the mean purity of a confiscated ecstasy tablet was 91% in 2011, it fell to 79% in 2012. The purity of amphetamine ranged from 0.5% to 59% (from 1% to 65% in 2011). The mean purity level of amphetamine was close to the 2011 level, but the most common purity was 10% of pure substance per gram, which was 4% lower than in the previous year. The estimated price of amphetamine ranged from 10 to 20 euros. The street price of an ecstasy tablet was between 6 and 10 euros. Unlike other confiscated stimulants, the purity of methamphetamine increased in 2012. While the most common purity of methamphetamine in 2011 was 11%, it rose to 14% in 2012 (ranging from 0.8 to 40 per cent). The price of a gram of methamphetamine was between 10 and 20 euros (see Figure 8).

The price of cocaine increased a little in 2012 compared to 2011. While the street price of cocaine was 90–110 euros in 2011, it ranged from 80 to 120 euros in 2012. The most common purity of cocaine increased as well, from 26% to 36% of pure substance per gram. The range of cocaine purity was 7–83 per cent.

The purity of GHB, an increasingly popular drug in Estonia, varied from 5 to 64 per cent of pure substance per dose. The most common purity level of GHB was almost the same as in 2011, with 51% of pure substance per dose. The street price of a GHB dose was 3 or 4 euros.





# **Part B: Appendices**

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# EMCDDA standard tables, 2012

Standard Table 05: Direct drug related deaths/Drug-induced deaths Standard Table 09–4: Notified cases of hepatitis C and B in injecting drug users Standard Table 11: Reports on drug law offences Standard Table 13: Number and quantity of seizures of illicit drugs Standard Table 14: Purity/Potency at street level of some illicit substances Standard Table 16: Price at street level of some illicit substances Standard Table 34: TDI data

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