



European Monitoring Centre  
for Drugs and Drug Addiction



**2012 NATIONAL REPORT  
(2011 data) to EMCDDA from REITOX  
National Drug Information Centre**

**ESTONIA**

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

**REITOX**

## **REPORT ON DRUG SITUATION IN ESTONIA IN 2012 (2011 data)**

**AVE TALU<sup>1</sup>**

**KATRI ABEL-OLLO <sup>1</sup>**

**SIGRID VOROBJOV<sup>1</sup>**

**KAIRE VALS<sup>1</sup>**

**MARIS SALEKEŠIN<sup>1</sup>**

**ANDRI AHVEN<sup>2</sup>**

**GLEB DENISSOV<sup>3</sup>**

**PIREK VIKLEPP<sup>1</sup>**

<sup>1</sup>Estonian National Institute for Health Development, Estonian Drug Monitoring Centre/REITOX Estonian Drug Information Centre

<sup>2</sup> Ministry of Justice

<sup>3</sup> National Institute for Health Development, The database of causes of death

### **2012**

Copyright © National Institute for Health Development

National Institute for Health Development

Estonian Drug Monitoring Centre

Hiiu 42, Tallinn 11619, Estonia

Telephone +372 6593 997

Fax +372 6593 998

email: ave.talu@tai.ee; katri.abel-ollo@tai.ee

Homepage <http://eusk.NIHD.ee>

Content of the report may not always reflect the opinions of the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA).

Authors of the respective chapters are responsible for the views reflected. Preparation of this report was co-funded by the European Monitoring Centre for Drugs and Drug Addiction (grant contract identification number GA.12.RTX.007.1.0).

## **Acknowledgements**

We wish to thank our colleagues Aljona Kurbatova and Margit Kuus from the National Institute for Health Development, whose relevant explanations contributed to the drafting of this report. We thank Dr Kuulo Kutsar, the epidemiology adviser of the Health Board, and Dr Jevgenia Epshtein, the chief specialist of the department of communicable disease monitoring and epidemic control, for the data used in the chapter of drug-related communicable diseases.

We thank sincerely the Police Major Risto Kasemäe from the Police and Border Guard Board and Peep Rausberg from the Estonian Forensic Science Institute.

## **Abbreviations**

AIDS – HIV disease

ARV – antiretrovirus

AS – aktsiaselts (Stock Corporation)

CI – confidence interval

EFSI – Estonian Forensic Science Institute

EMCDDA – European Monitoring Centre for Drugs and Drug Addiction

ESF – European Social Fund

ESPAD – European School Survey Project on Alcohol and Other Drugs

GBL – gamma-butyrolactone

GHB – gammahydroxybutyrate

HIV – Human Immunodeficiency Virus

ICD-International Classification of Diseases

IDU – Injecting Drug User

MDMA - 3,4-methylenedioxy-N-methylamphetamine

MDR-TB – multidrug-resistant tuberculosis

MER – Ministry of Education and Research

MSA – Ministry of Social Affairs

MTÜ – mittetulundusühing (Non-Governmental Organization)

NIHD – National Institute for Health Development

NSPD – National Strategy for Prevention of Drug Addiction;

OÜ – osaühing (Limited Liability Company)

PBGB – Police and Border Guard Board

RDS – respondent driven Sample

SA – sihtasutus (Foundation)

TB – Tuberculosis

THC - Tetrahydrocannabinol

UNODC – United Nations Office for Drugs and Crime

UNICEF - United Nations Children's Fund

WHO – World Health Organization

## Table of contents

<b>Summary</b> .....	<b>7</b>
<b>Section A: New developments and trends</b> .....	<b>13</b>
Chapter 1. Drug policy, legislation, strategies and economic analyses .....	13
1.1 Legal framework.....	13
1.2 National action plan, strategy, assessment and coordination .....	14
1.3 Economic analysis.....	14
Chapter 2. Drug use in the general population and specific targeted groups .....	16
2.1 Drug use in the general population.....	16
2.2 Drug use in the school and youth population.....	16
2.3 Drug use among specific groups and locations at the national and local levels .....	17
Chapter 3. Prevention.....	19
3.1 Universal prevention.....	19
3.2 Selective prevention .....	21
3.3 Indicative prevention .....	21
3.4 National and local media campaigns .....	21
Chapter 4. Problematic use of drugs .....	22
Chapter 5. Drug related treatment: treatment demand and treatment availability.....	23
5.1 Strategy, policy.....	23
5.2 Treatment system.....	24
5.3 Background information of the clients having sought treatment .....	29
Chapter 6. Health correlates and consequences of drug use.....	36
6.1 Introduction .....	36
6.2 Drug-related infectious diseases .....	36
6.3 Other drug-related health correlates and consequences .....	41
6.4 Drug-related deaths and mortality .....	42
Chapter 7. Responses to drug-related health correlates and consequences .....	47
7.1 Introduction .....	47
7.2 Prevention of drug-related accidents and decrease of drug-related deaths .....	47
7.3 Harm reduction services targeted to IDUs .....	47
7.4 Other support services to IDUs.....	47
Diagnostics of sexually transmitted infections.....	48
Chapter 8. Social indicators and social reintegration .....	51
8.1 Social exclusion and drug use.....	51
8.2 Social reintegration.....	51
Chapter 9. Drug-related crime .....	55

9.1. Introduction .....	55
9.2/9.3 Drug-related crime.....	55
9.4 Other drug-related crimes.....	57
9.5 Prevention of drug-related crimes.....	57
9.6 Activities of the legal protection system .....	57
9.7 Drug use in prisons .....	57
9.8 Addressing drug related health problems in prison .....	58
9.9 Reintegration of drug users after release from prison .....	59
Chapter 10. Market in drugs .....	60
10.1 Availability and supply .....	60
10.2 Seizures .....	60
10.3 Price and purity .....	62
<b>Part B: Selected Issues .....</b>	<b>64</b>
Chapter 11. Residential treatment for drug users in Estonia .....	64
11.1 History and legislative framework .....	64
11.2 Availability and characteristics of treatment .....	65
11.3 Quality of treatment .....	67
11.4 Discussion and summary .....	68
Chapter 12. Recent trends of drug-related public expenditures and drug services .....	69
<b>Section C. Appendix .....</b>	<b>76</b>
References.....	76
EMCDDA standard tables, 2012.....	77
Tables and figures.....	78

## Summary

### Legislation, strategies and economic analysis

In 2011 the base document for the prevention of drug addiction was still the multidisciplinary National Strategy for Prevention of Drug Addiction, which was until 2012 (NSPD) coordinated by the Ministry of Social Affairs (MSA). Financial resources allocated for realisation of the strategy in 2011 increased compared with 2010. 1 958 674 Euros in total were allocated in 2011 for realisation of the NSPD. In addition to the NSPD, funds were also allocated to harm reduction services (syringe exchange, substitution treatment etc.) from the national HIV and AIDS prevention strategy 2006-2015.

A major legislative change in 2011 was the addition of 11 new psychoactive substances to List I of narcotic drugs and psychotropic substances. The following substances were added: Butylone (bk-MBDB); 3-fluoromethcathinone (3-FMC); JWH-019; JWH-081; JWH-200; JWH-250; Naphyrone; 3-trifluoromethylphenylpiperazine (TFMPP), Tapentadol, 4-methylethcathinone (4-MEC) and RCS-4; (4-methoxyphenyl)(1-pentyl-1H-indol-3-yl) methanone.

### Drug use in the school and youth population

The administration of illegal drugs has increased over the years; whereas in 1995, 7% of 15-16 years old students had tried some type of illegal drug, the corresponding figure for 2011 was 32%. From the various drugs, cannabis was the most commonly used among young people. According to the 2011 survey it had been tried by 24% of the students surveyed. 17% had used cannabis in the last 12 months and 6% in the last 30 days. According to the 2011 survey, 18% of students had used an illegal drug other than cannabis. In addition to cannabis, the most common substances were inhalants, which 15% of the students had used during the course of their life, and tranquillizers or opiates used without prescription (8%). Compared with the 2007 survey the use of amphetamines and ecstasy had decreased; 3% of students had tried these drugs.

According to the 2011 survey, boys studying in schools where the language of study is Russian had tried drugs most frequently. Comparing different regions of Estonia, the number of school youth having tried illegal drugs was highest in Ida-Viru County (41%), and the lowest in South Estonia and the islands.

## **Risk behaviour of injecting drug users with prison experience**

Based on the 2009 study of risk behaviour of injecting drug users (IDUs) and the spread of communicable diseases in Tallinn, we can say that more than half of all drug users have been in prison during the course of their life. Thirty per cent of drug users with prison experience had injected drugs in prison, 75% of them had done it during their last stay in prison with a used syringe. Compared with the injecting drug users without prison experience, more injecting drug users with prison experience had started drug use by injection (45% vs 34%), injected more frequently and had longer injection experience. Average injection experience among injecting drug users with prison experience was 9.6 years, among drug users without prison experience it stood at 8.4 years.

## **Prevention**

The primary prevention measures in the reported period were distribution of information in the society, development of methodological materials and specialist training. Specifically, the instruction material „Let's speak about health“ targeted at youth professionals was published in 2011, which contains a thorough overview of drugs, while information materials related to study films were also drafted. Information materials are targeted at teachers and youth professionals as well as students. In 2011, work was also continued in educational systems on drafting new curricula and study materials, the final result of which should be the integration of drug prevention in the human study lessons of all age levels (grades 2-12). Selective drug prevention was mainly included in the study programme of specialised schools in 2011. No indicative drug prevention or national media campaigns were conducted in 2011.

## **Drug related treatment: treatment demand and treatment availability**

Six health care institutions provide drug related treatment at a national level in Estonia, of which five provide outpatient services and one also inpatient services, namely detoxification treatment. The number of clients receiving methadone substitution treatment has increased over the last four years. While in 2008 the number of drug users who received substitution treatment was 1008, in 2011 the number of clients stood at 1076. By the end of the year, 717 clients were receiving methadone substitution treatment. 293 clients interrupted the treatment programme and 64 completed it successfully. The average daily dose of methadone administered to the clients varied from 48 mg to 81 mg in different centres. Since 2011 short-term detoxification treatment basing on non-opiate pharmaceuticals has

been financed at a national level in addition to the treatment of opiate addiction. In total, 46 patients received such treatment in 2011, all of whom also received outpatient follow-up treatment after detoxification.

Funds were allocated from national resources for the provision of rehabilitation service to five rehabilitation centres and one treatment centre for post-treatment counselling and therapy. Three funded rehabilitation services were targeted at adults, one at children and one at clients with dual diagnosis. The rehabilitation service for adults is targeted at male clients, and the service for children at girls as well as boys. In total, rehabilitation services were provided to 52 children (37 boys and 15 girls). Services were provided to 113 adult clients in total in 2011, of whom 45 completed successfully, and 62 terminated, rehabilitation.

An overview of the clients who have sought treatment is provided in the Estonian Drug treatment database, where 867 entries pertaining to starting and completion of treatment were made in 2011. Many of the clients having sought treatment were recurrent patients. Men formed the majority of the clients having sought treatment (75%). More than half of the clients having sought treatment were 25-34 years of age. More than half of the clients having sought treatment lived in Tallinn and Harju County, with 31% living in Ida-Viru County. Compared with 2010, the number of persons using fentanyl/3-methylfentanyl among the clients having sought treatment had decreased. In 2011, 76% of the patients had used fentanyl/3-methylfentanyl. In general it can be said that over 90% of the clients having sought treatment used opiates as the main drug. Cocaine, cannabis and amphetamine were mentioned significantly less frequently as the main drug. Daily injectors comprise the majority of the clients who have sought treatment.

### **Drug-related infectious diseases**

As of 31.12.2011, HIV infection had been diagnosed in 8062 persons in total, with most cases registered in Harju and Ida-Viru Counties. According to the data of the Health Board, 370 new HIV cases were registered in 2011. As of 31.12.2011, HIV disease (AIDS) had been registered in 354 persons in Estonia (Health Board 2012).

Among the persons infected with HIV, whose HIV infection route is known (36%), almost half (48%) are injecting drug users. A better overview of the spread of HIV in the target group of drug users is provided in respondent driven sample (RDS) studies. A cross-sectional study conducted among injecting drug users of Narva in 2010 showed that 52.4% of the studied injecting drug users were infected with HIV, 75.8% had C viral hepatitis and 5.7% had HBV antigen.

Acute B viral hepatitis was diagnosed in 2011 in 16 persons. In 9 cases also the transmission route is known. 5 persons with acute B viral hepatitis were known to be injecting drug users. Chronic B viral hepatitis was registered in 2011 in Estonia in 29 persons in total, while the infection route was known in 13 cases (9 drug users).

Acute B viral hepatitis was registered in 2011 in 17 persons. In four cases the infection route was known. All four persons, whose infection route was known, were injecting drug users, one of them under 25 years of age. 190 cases of chronic C viral hepatitis were registered in 2011. In 94 cases the infection route was known; 72% of respondents were injecting drug users.

HIV-infected persons with tuberculosis (TB) formed 13.5% of all cases of TB registered in 2011. Furthermore, 32.6% of the persons with registered co-infection of TB and HIV had multiple drug resistant pathogens in 2011 and 40.5% of all persons with co-infection of TB and HIV were drug users.

### **Overdoses and deaths related to drugs**

According to Tallinn Emergency Medical Services, emergency medical care was provided to drug users due to overdose in 952 cases in 2011. 85 out of 952 drug users who received emergency medical care due to overdose in 2011 needed hospitalisation and in 52 cases drug use was the supposed cause of death.

The number of drug-related deaths increased in 2011. 123 persons, mostly male, died as the result of accidental drug poisoning. Average age of the persons having died in result of drug overdose was 30.1 years. 117 persons out of 123 died in result of opiate use. Compared with 2010, in 2011 the percentage of persons having died in result of accidental drug poisoning has significantly increased in Ida-Viru County and decreased in Harju County (including Tallinn). In 2011 the main cause of death of most persons having died as the result of drug use was accidental poisoning with non-classified drugs or psychodysleptics and their effects (X42). The majority of drug-related deaths were related to synthetic drugs (T40.4), namely fentanyl and 3-methylfentanyl.

### **Harm reduction services targeted at IDUs**

The main harm reduction services in Estonia are syringe exchanges for injecting drug users and methadone treatment for opioid addicts. Thirty six syringe exchange and counselling points in total operated in nine organisations in 2011. Syringe exchange points were visited for the first time by 1 289 people and recurrently by 6 910 people. In total there

were 154 745 visits, during which 2 130 306 syringes, 493 065 condoms and 68 498 information materials were distributed.

### **Social correlates and social reintegration**

Separate and discrete services facilitating the social reintegration of former patients of drug treatment are lacking in Estonia. Addicts can get general social and health services targeted at socially vulnerable groups, but a relevant separate reintegration system is lacking in Estonia. This year's report includes data from the focus groups of drug addict reintegration held within the framework of the mapping of health and support services for adult drug addicts conducted in 2011. More specifically the focus groups concentrated on the problems of drug addict related education, employment and accommodation in Estonia. Major recommendations of the study included the need for establishment of educational programs and work practice centres, the availability of practice places and social jobs, and provision of accommodation and social housing for the addicts having passed rehabilitation.

### **Prevention of drug-related crime**

913 drug-related crimes were registered in Estonia in 2011 (KarS §§ 183–190), which is one percent more than in 2010. Of all drug-related crimes recorded in 2011, cases of unlawful handling of large quantities of narcotic drugs or psychotropic substances (§ 184) comprised 82%. The number of crimes related to unlawful handling of small quantities of narcotic drugs or psychotropic substances (§ 183) decreased in 2011. They accounted for 10% in all registered drug-related crimes.

### **Drug-free departments and drug treatment in prisons**

Special departments for addiction rehabilitation have been established in Estonian prisons for the social reintegration of drug addicts. The departments of addiction rehabilitation have been established in three prisons in total: Tartu Prison (174 places in total), Viru Prison (16 places for young people and 20 for adults) and Harku Prison (8 places). According to the estimate of the Ministry of Justice, 987 persons with addiction diagnosis stayed in Estonian prisons at the end of 2011, i.e. 29% of the total number of prisoners. The percentage of opioid addicts was still the highest. In 2011 non-opiate detoxification treatment (236 cases) as well as methadone detoxification treatment and methadone substitution treatment was

conducted in prisons. Compared to 2010, the number of persons getting detoxification or substitution treatment was higher.

### **Drug market**

Three drug labs were detected in Estonia in 2011. Two labs were producing amphetamine, one GHB. Among the drugs smuggled to Estonia, amphetamine is still holding the lead, and most of it will reach Scandinavia through Estonia. In addition to amphetamine, also the precursors needed for the production of amphetamine and methamphetamine, which are subjected to strict limits in civil use (phenyl acetone, formamide etc.) are still actual. Organised smuggling of heroin and other opiates is continuously decreasing.

Compared to 2010, the confiscated amounts of cannabis products (128 kg) and ecstasy tablets (11 496 tablets) increased most in 2011. The greatest decrease in the confiscated amounts of drugs took place in 2011 with cocaine. Compared to the record amount 218 kg in 2010, this year only 0.83 kg was confiscated.

Confiscated amounts of methamphetamine increased (1.5 kg), from 36 to 57 cases. Compared to 2010, the confiscated amounts of amphetamine decreased by few kg, the total amount of amphetamine confiscated in 2011 was about 42 kg. Confiscated amounts of opiates increased in 2011. Confiscated amounts of fentanyl, which is much spread in Estonia, increased by 0.41 kg and confiscated amounts of heroin by 0.04 kg compared to 2010. Use and distribution of so-called legal drugs or new psychoactive drugs available in the internet is increasing.

### **Purity and price of drugs**

Compared to 2008-2010 the purity of almost all main confiscated drugs improved in 2011. Unlike other confiscated drugs, the purity of methamphetamine decreased. In 2011 the drug prices remained mainly on the level of 2009. Compared to 2010 the price of cocaine increased most in 2011; estimated street price of cocaine increased from 64 to 90 euros. Estimated street price of a heroin dose was about 20 euros in 2011. The most wide-spread opiate in Estonia is still fentanyl, which street price was 7–10 euros per dose in 2011.

## **Section A: New developments and trends**

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

During the drafting of this chapter, 2011 reports of the implementation plan of the National Strategy for Prevention of Drug Addiction until 2012 (NSPD) have been used, which provide a good overview of the taken measures and used monetary resources. In the chapter covering legal framework we used the legal acts regulating the drug field, published in the electronic database of Riigi Teataja (<http://www.riigiteataja.ee>). No changes took place in 2011 in the coordination of the NSPD. Implementation of this multidisciplinary strategy is still coordinated by the MSA.

#### **1.1 Legal framework**

11 new substances were added into List I of narcotic drugs and psychotropic substances in 2011. First, on February 12, 2011 the Regulation No 6 of the Minister of Social Affairs (RT I, 09.02.2011, 3) amended the Regulation No 73 of the Minister of Social Affairs from May 18, 2005 «Terms and conditions for medical and scientific handling of narcotic drugs and psychotropic substances and relevant accounting and reporting and lists of narcotic drugs and psychotropic substances» (RTL 2005, 57, 807; 2008, 61, 875) and added nine new psychoactive substances into the List I of narcotic drugs and psychotropic substances: Butylone (bk-MBDB); 3-fluoromethcathinone (3-FMC); JWH-019; JWH-081; JWH-200; JWH-250; Naphyrone; 3-trifluoromethylphenylpiperazine (TFMPP) and Tapentadol. Two following psychoactive substances: 4-methylethcathinone (4-MEC) and RCS-4; (4-methoxyphenyl)(1-pentyl-1H-indol-3-yl)methanone were added into List I of narcotic drugs and psychotropic substances with the Regulation No 40 of the Minister of Social Affairs on September 8, 2011 (RT I, 30.11.2011, 13)(enforced 03.12.2011).

The Order No 89 of the Government of the Republic from March 3, 2011 approved implementation plan 2011-2012 of the NSPD (RT III, 07.03.2011, 4). In 2011 legal bases were established for application of alternative penalties, but this theme was more thoroughly described in the 2011 report.

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

Realisation of the „NSPD is coordinated by the MSA. Participants in the implementation of this strategy are the MSA and the National Institute for Health Development (NIHD) under its administration, the Ministry of Education and Research (MER), the Ministry of Justice, the Ministry of the Interior and the Police and Border Guard Board (PBGB) under its administration and the Tax and Customs Board under the administration of the Ministry of Finance. At the end of 2011 the MSA launched assessment of NSPD, which should be completed by the end of 2012.

## 1.3 Economic analysis

Financial resources allocated for implementation of the drug addiction prevention strategy increased in 2011. While in 2010, 1,368,572 euros were allocated for the implementation of the drug addiction prevention strategy, the funds allocated in 2011 amounted to 1,958,674 euros (NSPD 2012).

**Table 1.** Use of the resources of the NSPD in 2010 and 2011 (EUR).

	2010	2011
<b>Demand reduction</b>		
Ministry of Social Affairs (NIHD, SoM care department)	1,042,874	1,101,027
Ministry of Education and Research	*	72,859
<b>Supply reduction</b>		
Ministry of Justice	20,280	24,326
Ministry of the Interior (incl Police and Border Guard Board)	*	524,752
Ministry of Finance (Tax and Customs Board)	305,418	235,710
<b>The field of demand reduction and supply reduction in total</b>	<b>1,368,572</b>	<b>1,958,674</b>

*\*The costs of the Ministry of the Interior (incl PBGB) in 2010 are not separately shown in NSPD, as the activities specified in the implementation plan of the strategy are conducted within the framework of the main activity and therefore the activities conducted within the strategy cannot be separated from main activities.*

In demand reduction, especially the costs of the Ministry of the Interior, the fact should be taken into account that operating costs of operative activities (i.e. real costs on drug crime prevention) are not included in the budget of NSPD. NSPD does not include also the activities conducted by the MER as its main activity (incl drug education provided in schools).

The services provided to injecting drug users in the field of harm reduction (incl syringe exchange, substitution treatment with methadone and distribution of condoms) are financed from the budget of the national HIV/AIDS strategy. 954,589 euros in total were used in 2011 from the national HIV/AIDS strategy for counselling and provision of syringe exchange

service to IDUs. 58,306 euros were spent on the testing of sexually transmitted infections of IDUs and their sexual partners. 729,436 euros in total were used for methadone substitution treatment in Tallinn and Ida-Viru County, 86,342 of it for purchasing of methadone. 7,209 euros were spent on training and supervision of the providers of services to IDUs and 22,320 euros on disposable protection equipment, disinfection equipment and vaccination against B hepatitis in custodial institutions (517 persons in 2011). 216,360 euros in total were spent on support group services for HIV-positive prisoners and HIV tests (4,364 tests in total). 3,331,449 euros were used in 2011 for the provision of inpatient and outpatient health care service to HIV-positive persons covered and not covered by health insurance.

2,550,230 euros in total were used in 2011 for HIV/AIDS prevention (SoM and NIHD) within the framework of harm reduction (2,392,202 euros in 2010) (Table 2). Significantly less financial resources were used in 2011 for ARV treatment, because the payments made for the purchase of ARV pharmaceuticals were partially postponed to the next year.

**Table 2.** Financing of harm reduction of HIV/AIDS and ARV treatment from the budget of NIHD and the Ministry of Social Affairs 2010–2010 (EUR)

	2010	2011
HIV/AIDS prevention (activities of the Ministry of Social Affairs and NIHD)	2,392,202	2,550,230
ARV treatment *	6,269,110	5,441,041

*Source: 2010 and 2011 report of the national HIV and AIDS strategy.*

*\*Purchase of ARV pharmaceuticals was financed from the budget of the Ministry of Social Affairs.*

Distribution of the budget is described in detail by years in Chapter 12.

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

This chapter provides an overview of the main results in the field of drug addiction in the ESPAD survey conducted in 2011 among the students in the 15-16 age group. The research was conducted by the Institute of International and Social Studies at the University of Tallinn in cooperation with the NIHD.

The section entitled “Drug Use Among Specific Groups” presents the analysis of the data collected within the framework of the study of risk behaviour of IDUs of Tallinn and the spread of infectious diseases among them, conducted in 2009 by the Department of Public Health of the University of Tartu and the NIHD. More specifically, the 2009 data has been used for the comparison of risk behaviour and the spread of HIV among IDUs both with and without prison experience.

### **2.1 Drug use in the general population**

No new data of drug use in the general population has been reported in the reporting period.

### **2.2 Drug use in the school and youth population**

In spring 2011 the European School Survey Project on Alcohol and Other Drugs (ESPAD) was conducted in Estonia. The first ESPAD survey was conducted in 1995 and this survey was the fifth. The survey covered 2,460 school students in total, in the 15–16 age group, from 8th and 9th grades of Estonian general education schools.

The use of illegal drugs has increased throughout the years; whereas in 1995, 7% of 15–16 years old school students had tried some illegal drug, in 2011 the relevant indicator was 32%. A positive fact is that compared with the 2007 survey, where 30% admitted that they had tried some illegal drug, the results of the 2011 survey did not reveal a major change and it can be said that the growth of drug use in the school population has stabilised (ESPAD Report 1995; ESPAD Report 2007; ESPAD Report 2011).

Amongst the various drugs, cannabis is the most popular among youth population. According to the 2011 survey it had been tried by 24% of the students (27% in 2007). Seventeen per cent had used cannabis in the last 12 months (19% in 2007) and 6% in last 30 days (6% in 2007). According to the 2011 survey 18% of the students had used some illegal drug other than cannabis (19% in 2007). In addition to cannabis, other major drugs were inhalants, which had been tried by 15% of the students (9% in 2007), and tranquillizers or opiates used without medical prescription, which had been tried by 8% of

the students (7% in 2007). Testing of amphetamine and ecstasy has slightly decreased; 3% (4% in 2007) had at least once tried amphetamine and 3% (6% in 2007) had tried ecstasy (ESPAD Report 2007; ESPAD Report 2011).

Compared with the girls, there are more drug users among the boys, but compared with the 2007 survey the number of girls having tried for drugs has increased by 4%, while the corresponding number of boys has not changed. The first use of illegal drugs usually takes place at the age of 14-15 years. While the former surveys have shown that drugs have become more available, this survey showed decrease of the availability of drugs. Compared with the 2007 survey, fewer students consider that tranquillizers, opiates, ecstasy, amphetamines as well as cannabis has become more easily available. The greatest change took place in the assessment of availability of ecstasy; while in 2011 14% considered ecstasy rather or quite easily available, in 2007 the relevant indicator stood at 26% (ESPAD Report 2007; ESPAD Report 2011).

The main activities related to drug use mentioned in the survey were frequent spending of evenings with friends and walking around in shopping centres, streets, parks and elsewhere. Parental control was also related to experimenting with drug. Twenty seven per cent of the students whose parents did not know with whom their children were out in the evening, had tried for some drug,<sup>1</sup> compared with 14% of the students whose parents knew with whom their children were out in the evening. Furthermore, non-fulfilment of compulsory school attendance and poor progress at school were related to drug use. Comparison of social skills of the students revealed that low social skills predict more likely drug use of 15–16 years old students. Students with low social skills had tried drugs more frequently than students with high social skills.

Comparison of the students of schools with Estonian and Russian study languages revealed that the boys studying in schools where the language of study is Russian had used illegal drugs most frequently; 43% of them had tried some drug. Comparing different regions of Estonia, the number of school youth having tried illegal drugs was the highest in Ida-Viru County (41%), and the lowest in South Estonia and the islands (ESPAD Report 2011).

### **2.3 Drug use among specific groups and locations at the national and local levels**

#### **Risk behaviour of injecting drug users with prison experience**

Based on the analysis of the 2009 survey it can be said that more than half (59%) of IDUs in Tallinn had been in prison for some period during their life. Table 3 shows major social-

---

<sup>1</sup> *Except cannabis, for which separate questions were asked.*

demographic indicators of IDUs with and without prison experience. Twenty seven per cent of 195 drug users with prison experience, who participated in the survey, had injected drugs during their stay in prison (n=51). Sixty four per cent had injected drugs during their last stay in prison (n=36), 75% of them (n=27) had done it with used syringes and/or needles.

**Table 3.** Major social-demographic indicators of IDUs with and without prison experience in 2009, Tallinn.

Attributes	Without prison experience (n=136)		With prison experience (n=195)	
	n	%	n	%
Gender				
female	29	21.3	30	15.4
male	107	78.7	165	84.6
Age				
-24	57	41.9	53	27.2
25-29	50	36.8	62	31.8
30+	29	21.3	80	41.0
Nationality				
Estonian	6	4.4	14	7.2
Russian	118	86.8	164	84.1
Level of education				
vocational education	33	24.3	41	21.0
basic education	60	44.1	103	52.8
secondary education	42	30.9	46	23.6

Source: University of Tartu, NIHD, 2009.

More than half of the drug users with (56.3%) as well as without (53.7%) prison experience had used fentanyl as the main drug in last four weeks, followed by amphetamine (29% vs 26%). Compared to IDUs without prison experience, more IDUs with prison experience had started to use drugs by injecting (45% vs 34%) (p=0.049), they injected more frequently (p=0.002) and had longer injecting practice (p=0.000). Average injecting practice among IDUs with prison experience was 9.6 years and among IDUs without prison experience 8.4 years (Salekešin 2012).

## **Chapter 3. Prevention**

Primary prevention is the responsibility of the NSPD administered by the MSA. At a national level, the main implementing parties of the prevention are the NIHD and the MER. Data collection in the field of prevention is conducted through the reporting process of the national strategy. The main primary prevention activities in the reported period were distribution of information in the society, development of methodological materials and specialist training. In 2011 work was also continued in the education system with new curricula, whose final result should be integration of drug prevention into the human study lessons of all age levels (grades 2-12) Selective drug prevention was mainly included in the study program of specialised schools in 2011. No indicative drug prevention or national media campaigns were conducted in 2011.

### **3.1 Universal prevention**

#### **School-based prevention**

In 2011 a process continued, where preparations were made for adaptation of the new national curriculum enforced in 2010, which final application term will be the beginning of academic year 2013/2014. In the new curriculum, human study remained an obligatory subject for all age levels (grades 2-12). As of 2011 the new curriculum was obligatory for 5th and 7th grade. Official name of the course is „Health Study“, which one sub-theme is drug education. The textbook of 7th grade covers also self-relevant and social skills helping the students to manage in their life. In brief, a student should acquire the information, what are drugs, which are the consequences of their use and how to behave efficiently in drug-related situations. New textbooks have also been prepared for 5th and 7th grade on the basis of the new curriculum. From autumn 2012 health study is obligatory also in 8th grade. The new textbook of 8th grade will be ready for printing in autumn 2012. During the preparation of the new textbooks the drafters have proceeded from the findings of the survey mapping the barriers of drug and sexual behaviour conducted in 2011. No training of the support staff of schools/teachers was conducted in 2011 for implementation of the new curricula.

Furthermore, a priority of the MER was implementation of the model for early notice of and intervention in the problems of minors targeted to local governments in cooperation with the Ministry of Justice and UNICEF. In 2011 the number of local governments involved in the project increased by 6, increasing the total number of accessed local governments to 12.

### **Development of instructions for and training of youth specialists**

The instruction material „Let's speak about health“ targeted to youth professionals was published in 2011. The instruction material includes six chapters covering the themes essential for the health of young people. Drug themes are covered in a separate chapter. The drug chapter covers following themes: drugs and their impact, risk factors and protective factors, risk behaviour, adolescent and the surrounding society. This is an instruction material including theory as well as active study methods. 750 copies of the book were printed, and it is intended for distribution to the staff of open youth centres, members of the Estonian Society of Human Study and other youth professionals. The book is available also in e-form on the website *terviseinfo.ee*. In addition to the instruction material a training package was also developed and pilot training was conducted.

In 2011, 56 teachers were trained on the themes of prevention of risk behaviour of the children with learning difficulties. The training was based on the teacher's book "Study of social coping skills" prepared for simplified curriculum for 1st-5th grade. In 2011 also the advanced training course of group management was conducted already for the third year in sequence for specialists dealing with children and young people. Thirteen specialists passed full-time training. Also the training course for specialists dealing with children and young people started in 2009 was continued.

### **Updating of drug prevention materials**

In the previous reporting period a short overview was provided of four video clips on drug prevention made in 2010, covering four separate drugs and the consequences/hazards related to their use. In 2011 the main activity was development of information materials related to the study films. The information materials are targeted to teachers and youth professionals as well as students. The films are intended for use in general education schools and youth institutions. Use of the films is not recommended without information materials. Distribution of the films and information materials will start at the end of 2012.

### **Counselling of young people and distribution of information**

Updating of the texts of *Narko.ee* (will be disclosed in 2012). Also the letters received through *Narko.ee* were constantly answered. Information of the services targeted to drug users is also available through the information and counselling centres of the MER. Such counselling centres are operating in every county, their total number is 18.

### **3.2 Selective prevention**

Drug counselling service for risk children was provided by SA Tallinna Lastehaigla and OÜ Corrigo in Jõhvi. SA Tallinna Lastehaigla conducted mainly the activities targeted to risk children and parents, while Corrigo performed outpatient counselling of risk children and family counselling (total 149) as well as seven interactive training sessions to regular children, where 137 children and 6 parents participated.

In the schools of the students needing special education conditions, drug prevention covers all students. Relevant programmes are implemented within the framework of the general education activities. Students get mainly addiction-related knowledge and study of social skills.

### **3.3 Indicative prevention**

No activities took place in the reporting period.

### **3.4 National and local media campaigns**

No activities took place in the reporting period.

## **Chapter 4. Problematic use of drugs**

Although in the 2011 report it was promised that this year's report will disclose the new estimated size of the population group of drug addicts in 2005-2009, we must still proceed from the 2004 survey in the reporting period. At the moment the official amount of 15-44 years old injecting drug users in Estonia is still 13 886 (95% confidence interval (CI) 8 132–34 443) and the percentage of IDUs in total population of relevant age is 2.4% (95% CI 1.9–5.9 %) (Uusküla et al 2007). The new survey conducted by NIHD in cooperation with the University of Tartu has been completed, but cannot yet be disclosed at the time of completion of this report. The survey method is capture-recapture method, where extracts from three administrative databases were used for the conduction of the survey. Sources of the survey were the database of causes of death, database of the Estonian Health Insurance Fund and POLISE database of the PBGB. Extract covering the persons having died in result of drug use in 2005-2009 was taken from the database of causes of death. From the database of the Estonian Health Insurance Fund data were taken about the persons having been treated due to opioid use in 2005--2009 (ICD-10 codes F11.0-F11.9) and separately about the persons who needed first aid due to overdose. From the database of the PBGB data were taken about drug-related crimes in relevant years.

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

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

The subchapter 5.3 presents data of the drug addiction treatment database of NIHD, providing overview of the social-demographic and treatment-related data of the persons having sought drug addiction treatment in last two years (2010 and 2011). The drug addiction treatment database using internet-based data collection system has been operating since 2008 and includes the persons having sought drug addiction treatment and to whom their attending physician has placed the diagnosis F11-F16.9, F18-F19.9. In the interpretation of the data presented in the chapter account should be taken of the fact that due to the difference of the registration system the number of persons having sought treatment registered in the drug addiction treatment database from 1.01.2011 to 31.12.2011 differs from the number of treated persons shown in the reports of the national strategies (HIV/AIDS and the Strategy for Prevention of Drug Addiction). The Estonian drug treatment database receives data also from the medical departments of prisons, while the report of HIV/AIDS strategy shows the total number of persons treated in the treatment centres financed by NIHD in the year and as of the end of the year.

### **5.1 Strategy, policy**

Major legal amendments were made to the procedure of drug addiction treatment in 2011, which provided legal basis for application of drug addiction treatment as an alternative to imprisonment. To enable alternative penalty, the law of criminal procedure was amended on 23.02.2011, adding §419<sup>2</sup> specifying the procedure for sending to addiction treatment and the fact that addiction treatment as an alternative penalty is basing on the regulation of the Minister of Justice (RTI, 09.07.2012, 5). Relevant regulation of the Minister of Justice „The procedure for preparation, conduction and supervision of addiction treatment and drug addiction treatment applied in case of conditional sentence or release on parole“ was adopted on 17.06.2011 and enforced on 26.06.2011. (RTI, 22.06.2011, 7). The Regulation of the Minister specified the procedure for the preparation of addiction treatment, the procedure for conduct and supervision of addiction treatment and the procedure for

preparation, conduct and supervision of drug addiction treatment applied in case of conditional sentence or release on parole. The regulation was also accompanied by the list of health service providers applying addiction treatment, with whom an addiction treatment financing agreement has been concluded. A probation officer shall be appointed for an addict accused or suspect by the head of the probation supervision department, whose task is to assess suitability of the accused or suspect for alternative penalty, to find the place of addiction treatment for the probationer and to supervise that the probationer would fulfil his/her obligations related to the addiction treatment.

## **5.2 Treatment system**

In Estonia, the health service providers possessing the activity licence of psychiatry deal with drug addiction treatment. Drug addiction treatment is funded from various sources. In 2011, the Estonian National Strategy for HIV/AIDS 2006-2015 and the NSPD and funds from major local governments were used for that purpose. A client can also seek treatment on his/her own expense. The Estonian Health Insurance Fund does not finance drug addiction treatment specifically. Alike in 2010, in 2011 the field of drug addiction treatment was one of the few, which funding did not decrease. Still, the fact that funding remained on the same level still restricted the increase of the volume of services and provision of new required services, including treatment service for amphetamine addicts. At the moment, most persons seeking drug addiction treatment are opiate addicts. Such situation has been caused by the fact that most treatment providers in Estonia deal with the provision of opiate substitution treatment, while provision of other treatment types is limited. From the most recent cross-sectional surveys conducted among IDUs in Estonia we can see that the number of drug users injecting amphetamine as the main drug has increased year by year: 13% in 2007, 28% in 2009 and 71% in 2010. This confirms an increasing need for the creation of treatment possibilities for amphetamine users. (Lõhmus et al 2007, Uusküla et al 2010, TAI 2010, Lõhmus et al., 2011).

Five out of six Estonian national health care institutions providing addiction treatment are providing only outpatient treatment. Inpatient treatment service for drug users is provided by Wismari Hospital, which from 2011 is providing also the service financed from the national drug strategy in addition to the addiction treatment financed by the patients themselves. Of the treatment facilities financed by the City of Tallinn, one (treatment centre of opiate addicts of Western Tallinn Central Hospital) is providing outpatient treatment and the other (Tallinn Children's Hospital, a centre targeted to children) outpatient as well as inpatient treatment.

### **5.2.1. Substitution treatment**

Alike in recent years, in 2011 methadone substitution treatment was financed from the national HIV/AIDS strategy budget. 729 436 euros were used for the provision of treatment service, which is 142 410 euros more than in 2010. 86 342 euros of the mentioned 729 436 euros were spent on the purchase of methadone. In 2011 the Estonian NIHD concluded year-long agreements for the provision of methadone substitution treatment with six service providers, who provided the service in eight different treatment centres (Table 5). Until February 2011 treatment was provided also in the Health Centre Elulootus at two addresses, but one of them was closed after the inspection by the State Agency of Medicines and the Health Board.

In last four years the number of clients having received methadone substitution treatment has increased. While in 2008 the substitution treatment was provided to 1008 drug users, in 2009 to 1012 and in 2010 to 1064 drug users, in 2011 the number of clients was 1076. At the end of the year the number of clients receiving methadone substitution treatment was 717 (660 at the end of 2009 and 662 at the end of 2010). 293 clients terminated participation in the treatment programme and 64 clients passed the treatment programme successfully (Table 4).

Average daily quantity of methadone administered to the client varied in different centres from 48 mg to 81 mg. Average quantity of methadone administered to the clients has increased year by year: in 2005 it was 37 mg, in 2010 59 mg and in 2011 63mg. Minimum and maximum quantity of methadone administered in the centres may fluctuate several hundred times (Table 5).

**Table 4.** Methadone substitution treatment funded from state budget for injecting drug users in 2011

Name of a health care institution	Number of clients at the end of 2011	Number of persons having joined the treatment program	Number of persons having passed the treatment program successfully	Number of persons having terminated the program
OÜ Tervisekeskus Elulootus	179	61	14	35
Wismari Hospital AS	94	80	0	66
OÜ Sõltuvuste Ravikeskus	142	106	22	57
AS Lääne-Tallinna Nakkuskeskus	30	38	0	19
AS Lääne-Tallinna Keskhaigla Psühhiaatriakeskus	15	2	1	1
OÜ Corrigo (Jõhvi+Kiviõli centres)	207	109	22	94
OÜ Aasa Kliinik	50	19	5	21
<b>Total</b>	<b>717</b>	<b>415</b>	<b>64</b>	<b>293</b>

Source: 2011 report of the national HIV/AIDS strategy.

**Table 5.** Quantities of methadone administered in nationally funded methadone substitution treatment centres in 2011 (mg).

Name of a health care institution	Total quantity of methadone used	Average dose per client	Minimum dose	Maximum dose
OÜ Elulootus	1,163,701	51	5	195
Wismari Hospital AS	1,163,701	63	7	150
OÜ Sõltuvuste Ravikeskus	1,819,627	42	2	150
OÜ Corrigo	4,289,127	68	2	390
OÜ Aasa Kliinik	1,163,701	65	5	225
AS LTKH psühhiaatriakeskus	404,855	81	21	200
AS LTHK nakkuskeskus	640,435	72	15	265
<b>Total</b>	<b>12,309,804</b>	<b>63</b>	<b>2</b>	<b>390</b>

Source: 2011 report of the national HIV/AIDS strategy.

In addition to the national funds, in 2011 methadone substitution treatment was funded also by the City of Tallinn. Tallinn Social and Health Care Board financed operation of the addiction treatment unit of the psychiatry centre of Western Tallinn Central Hospital providing outpatient substitution treatment to drug addicts with 159 779 euros. Compared to 2010 the sum assigned by the city has increased by 25 164 euros. Together with national funding, in 2011 service was provided in Western Tallinn Central Hospital to 52 persons having started the treatment; 3 persons passed the treatment successfully and 20 terminated the treatment (Western Tallinn Central Hospital 2011, personal communication).

### **5.2.2 Detoxification treatment**

According to the data of the Estonian drug treatment database, in 2011 detoxification treatment was provided in seven treatment centres (including three prisons) to 62 persons in total. In 2011 the Estonian drug treatment database did not incorporate any notice of the provision of detoxification treatment basing on non-opiate pharmaceuticals. However, the report of NSPD shows that in 2011 an agreement for total sum of 35 138 euros was concluded with Wismari Hospital for the provision of short-term detoxification treatment basing on non-opiate pharmaceuticals. Within the framework of the provided service a patient could get short-term (up to 1 month) institutional detoxification treatment basing on non-opiate pharmaceuticals, after which the patient could continue outpatient follow-up treatment for up to three months. With the mentioned sum, institutional detoxification treatment service was provided to 46 patients, of whom 16 received also outpatient follow-up treatment.

In addition to the detoxification treatment provided to adults, the City of Tallinn financed detoxification treatment provided to children and adolescents in 2011. 26 076 Euros in total were assigned to the department of addiction disorders of Tallinn Children's Hospital for that purpose (furthermore the City of Tallinn assigned 18 346 Euros to the department of psychiatry of Tallinn Children's Hospital for the provision of outpatient psychotherapy and 37 133 Euros for psychological counselling of children and adolescents). 115 patients received inpatient treatment in 2011; in 14% of the cases the main diagnosis was addiction to drugs. Further 53 688 Euros were allocated to Tallinn Children's Hospital from the NSPD budget for funding of the educational activities of the unit of children and adolescents of Tallinn Children's Hospital not included in the price list of the Estonian Health Insurance Fund, but which is necessary for the conduction of successful treatment.

### **5.2.3 Rehabilitation**

391 058.14 Euros were allocated in 2011 from the resources of NSPD for the provision of rehabilitation service for adults, a further 91 398 Euros were allocated from the same source for the provision of counselling and support services to the addicts with dual diagnosis. 264 393 Euros in total were allocated for the provision of rehabilitation service for minors, of which 241 967 were assigned to OÜ Corrigo and used for the provision of rehabilitation service to 52 minors (37 boys and 15 girls) and 22 426 euros were assigned to Tallinn Children's Hospital for organisation of counselling and therapy groups for the parents of minor addicts and adolescent addicts. In total, funds for the provision of rehabilitation service were allocated from national resources to five rehabilitation centres

and one treatment centre for the conduction of post-treatment counselling and therapy. Three rehabilitation centres funded from national resources provided service only to adult clients, one to the children and one funded centre provided counselling and support services to the addicts with dual diagnosis. Counselling and therapy service of the treatment centre was targeted to adolescent addicts and their parents. In addition to the funds of NSPD an agreement was concluded in November 2010 with OÜ Comenius for the provision of rehabilitation service to male and female patients with the resources of European Social Fund (ESF), but the provision of service was suspended in April 2012. 21 persons received rehabilitation service from OÜ Comenius from November 2010 to April 2011. In 2011 the financial resources of NSPD were used for the provision of rehabilitation service to 137 clients and service targeted to the addicts with dual diagnosis to 23 persons (Table 6).

Most rehabilitation services were targeted to adult men, but also the rehabilitation service targeted to male as well as female adolescents was financed (Jõhvi Rehabilitation Centre for Children and Adolescents of OÜ Corrigo). Despite the type of rehabilitation service the aim was to offer psychosocial support and counselling to the clients and to provide them with the skills needed for integration into the everyday life (discipline, study and work habits).

**Table 6.** Rehabilitation services for drug addicts in 2011.

<b>Name of the health care institution</b>	<b>Number of clients at the end of 2011</b>	<b>Number of participants</b>	<b>Number of clients completing the programme successfully</b>	<b>Number of persons stopping the programme</b>
MTÜ AIDSi Tugikeskus	10	24	3	15
MTÜ Narva Narkomaanide ja Alkohoolikute Rehabilitatsiooni Keskus „Sind ei jäeta üksi” (commune)	6	16	17	4
SA Sillamäe Narkorehabilitatsioonikeskus (in-patient rehab centre)	20	59	25	37
OÜ Corrigo (in-patient rehab centre for minors)	0	7	5	0
MTÜ Eesti Abikeskused, day centre for addicts with dual diagnosis*	12	14	0	11
<b>Total</b>	<b>48</b>	<b>120</b>	<b>50</b>	<b>62</b>

*Source: Report of NSPD 2011 action plan.*

*\* Operation of the day centre for addicts with dual diagnosis of MTÜ Eesti Abikeskused was financed from the budget of the City of Tallinn through the National Institute for Health Development.*

### 5.3 Background information of the clients having sought treatment

In 2011, 867 entries were made in the Estonian drug treatment database (532 about starting and 335 about completion of treatment) pertaining to starting and completion of drug addiction treatment. Compared to 2010 the number of entries decreased by 290, but it was not caused by sharp decrease of treatment places or decrease of interest of the addicts in the treatment, but by a technical problem of the internet-based information system of the Estonian drug treatment database, which did not enable to make entries in the register for 90 days.

In 2011, 30% of the persons seeking drug addiction treatment (27% in 2010) sought treatment for the first time (as told by the patients), while majority were the recurrent patients. Most of the persons seeking treatment were male (75%), the percentage of women was less than 25% (Table 7).

**Table 7.** Persons seeking treatment for the first time and recurrently in 2010-2011 by gender

	2010						2011					
	Male		Female		Total		Male		Female		Total	
	n	%	n	%	n	%	n	%	n	%	n	%
First cases	131	25.5	45	29.8	176	26.5	120	30.2	43	32.1	163	30.6
Recurrent treatment	373	72.6	105	69.5	478	71.9	258	64.8	87	64.9	345	64.9
Unknown	10	2.0	1	0.7	11	1.7	20	5.0	4	3.0	24	4.5
<b>Total</b>	<b>514</b>	<b>77.3</b>	<b>151</b>	<b>22.7</b>	<b>665</b>	<b>100</b>	<b>398</b>	<b>74.8</b>	<b>134</b>	<b>25.2</b>	<b>532</b>	<b>100.0</b>

*Source: Estonian drug treatment database of the Estonian Drug Monitoring Centre of the National Institute for Health Development (2011).*

In last two years the distribution of persons seeking treatment by gender has not changed, over a half (66% in 2010 and 67% in 2011) were in the age 25-34 years (Table 8). Average age of the persons starting treatment was ca 28.8 years, the youngest patient was 10 and the oldest 56. Average age of the first time of seeking treatment was 25.9 years. At the same time it was found that women seek treatment earlier than men. Among all persons seeking treatment in 2010 the average age of women was 26.4 years (95% CI 25.4–27.4) and men 29.5 years (95% CI 28.9–30.2). Among first-time patients the average age of women was 22.8 years (95% CI 20.9–24.8) and men 26.9 years (95% CI 25.4–28.5). Minors (under 18 years of age) formed 6.2% of all persons seeking treatment and 20.3% of the persons seeking treatment for the first time.

**Table 8.** Distribution of persons seeking treatment by gender on the basis of treatment status in 2010-2011.

	2010				2011			
	All persons seeking treatment		First-time applicants		All persons seeking treatment		First-time applicants	
	n	%	n	%	n	%	n	%
<24	140	21.1	71	40.3	98	18.4	61	37.4
25-34	440	66.2	85	48.3	360	67.7	85	52.2
35<	85	12.8	20	11.4	74	13.9	17	10.4
<b>Total</b>	<b>665</b>	<b>100.0</b>	<b>176</b>	<b>100.0</b>	<b>532</b>	<b>100.0</b>	<b>163</b>	<b>100.0</b>

Source: Estonian drug treatment database of the Estonian Drug Monitoring Centre of the National Institute for Health Development (2011).

Most of the persons receiving drug addiction treatment (over 80%) were Russians, the percentage of Estonians was less than 15% (Table 9). More than half of the persons seeking treatment lived in Tallinn and Harju County and 31% in Ida-Viru County (Table 10). Most of the persons receiving addiction treatment were unemployed, only 19% in 2010 and in 2011 had regular job (Table 11). Imprisoned persons formed 2% of the persons seeking treatment in 2010 and 7.2% in 2011; such increase was probably caused by improved data reporting by prisons to the register.

**Table 9.** Nationality of the persons seeking treatment on the basis of treatment status in 2010-2011.

	2010				2011			
	All persons seeking treatment		First-time applicants		All persons seeking treatment		First-time applicants	
	n	%	n	%	n	%	n	%
Estonian	95	14.3	35	19.9	76	14.3	31	19.0
Russian	543	81.7	132	75.0	429	80.6	122	74.9
Other	27	4.1	9	5.1	27	5.1	10	6.1
<b>Total</b>	<b>665</b>	<b>100.0</b>	<b>176</b>	<b>100.0</b>	<b>532</b>	<b>100.0</b>	<b>163</b>	<b>100.0</b>

Source: Estonian drug treatment database of the Estonian Drug Monitoring Centre of the National Institute for Health Development (2011).

**Table 10.** Place of residence of the persons seeking treatment on the basis of treatment status in 2010-2011.

	2010				2011			
	All persons seeking treatment		First-time applicants		All persons seeking treatment		First-time applicants	
	n	%	n	%	n	%	n	%
Tallinn/Harju County	415	62.4	134	76.1	338	63.5	116	71.2
Ida-Viru County	228	34.3	32	18.2	165	31.0	31	19.0
Other	22	3.3	10	5.7	27	5.1	15	9.2
Unknown/n/a	-	-	-	-	2	0.4	1	0.6
<b>Total</b>	<b>665</b>	<b>100.0</b>	<b>176</b>	<b>100.0</b>	<b>532</b>	<b>100.0</b>	<b>163</b>	<b>100.0</b>

Source: Estonian Drug treatment database of the Estonian Drug Monitoring Centre of the National Institute for Health Development (2011).

**Table 11.** Employment of the persons seeking treatment on labour market in 2010-2011.

	2010				2011			
	All persons seeking treatment		First-time applicants		All persons seeking treatment		First-time applicants	
	n	%	n	%	n	%	n	%
Employed (regular job)	123	18.5	35	19.9	108	20.3	34	20,9
Unemployed	388	58.3	104	59,1	264	49.6	81	49.7
Pupil/student	33	5.0	21	11.9	40	7.5	37	22.7
Dependent*	107	16.1	12	6.8	82	15.4	11	6.8
Other**	14	2.1	4	2.3	38	7.2	0	0.0
<b>Total</b>	<b>665</b>	<b>100.0</b>	<b>176</b>	<b>100.0</b>	<b>532</b>	<b>100.0</b>	<b>163</b>	<b>100.0</b>

Source: Estonian drug treatment database of the Estonian Drug Monitoring Centre of the National Institute for Health Development (2011).

\*"Dependent" includes home-makers, retired, persons receiving pension for incapacity for work

\*\* „Other“ includes prisoners and conscripts.

In both reporting years slightly more than half of the persons seeking treatment had basic education and almost 45% secondary education. One person seeking treatment in 2010 said that he had never attended school (Table 12).

**Table 12.** Education of the persons seeking treatment on the basis of treatment status in 2010-2011.

	2010				2011			
	All persons seeking treatment		First-time applicants		All persons seeking treatment		First-time applicants	
	n	%	n	%	n	%	n	%
Has not attended school	1	0.2	1	0.6	0	0.0	0	0.0
Primary education	18	2.7	5	2.8	23	4.3	12	7.4
Basic education*	343	51.6	103	58.5	267	50.2	91	55.8
Secondary education**	298	44.8	66	37.5	232	43.6	60	36.8
Higher education	4	0.6	1	0.6	4	0.8	0	0.0
Unknown/n/a	1	0.2	-	-	6	1.1	0	0.0
<b>Total</b>	<b>665</b>	<b>100.0</b>	<b>176</b>	<b>100.0</b>	<b>532</b>	<b>100.0</b>	<b>163</b>	<b>100.0</b>

Source: Estonian drug treatment database of the Estonian Drug Monitoring Centre of the National Institute for Health Development (2011).

\* Basic education includes also vocational education basing on primary and basic school not providing secondary education.

\*\* Secondary education includes also vocational education basing on secondary education (without the level of applied higher education) and vocational education basing on basic school providing secondary education.

Most of the persons seeking treatment, 98% in 2010 and 94% in 2011, received outpatient treatment, because the number of inpatient drug addiction treatment places is limited in Estonia and therefore the number of the persons receiving inpatient treatment was very low (n=14 in 2010 n=33 in 2011). Many persons seeking treatment received substitution treatment, detoxification treatment was provided in 2010 to 10% and in 2011 to 12% of all persons seeking treatment (Table 13). Other treatment methods (non-medicament treatment and mitigation of symptoms) were provided in 2010 to 14% and in 2011 to 12% of the patients.

**Table 13.** Drug addiction treatment types on the basis of treatment status in 2010-2011.

	2010				2011			
	All persons seeking treatment		First-time applicants		All persons seeking treatment		First-time applicants	
	n	%	n	%	n	%	n	%
Substitution treatment	504	75.8	121	68.8	407	76.5	104	63.8
Detoxification treatment	65	9.8	25	14.2	62	11.7	21	12.9
Other*	96	14.4	30	17.0	63	11.8	38	23.3
<b>Total</b>	<b>665</b>	<b>100.0</b>	<b>176</b>	<b>100.0</b>	<b>532</b>	<b>100.0</b>	<b>163</b>	<b>100.0</b>

Source: Estonian drug treatment database of the Estonian Drug Monitoring Centre of the National Institute for Health Development (2011).

\* Mitigation of symptoms and non-medicament treatment.

Compared to 2010 the percentage of users of fentanyl/3-methylfentanyl decreased in 2011. In 2009 fentanyl/3-methylfentanyl was used as primary drug by 71%, in 2010 by 84% and in 2011 by 76% of the patients. At the same time the percentage of the addicts who used heroin as the main drug increased from 6% in 2010 to 10% in 2011. In general it can be said that more than 90% of the persons seeking drug addiction treatment used opiates as the main drug. Cocaine, cannabis and amphetamine were mentioned significantly less as main drugs (Table 14).

**Table 14.** The main drug used on the basis of treatment status in 2010-2011.

	2010				2011			
	All persons seeking treatment		First-time applicants		All persons seeking treatment		First-time applicants	
	n	%	n	%	n	%	n	%
Heroin	38	5,7	4	2,3	54	10,2	10	6,1
Methadone	9	1,4	3	1,7	9	1,7	3	1,8
Fentanyl/3-methylfentanyl	559	84,1	141	80,1	407	76,5	118	72,4
Cocaine	0	0,0	0	0,0	0	0,0	0	0,0
Amphetamine	28	4,2	19	10,8	13	2,4	8	4,9
Cannabis	3	0,5	3	1,7	28	5,3	19	11,7
Other	28	4,2	6	3,4	21	4,0	5	3,1
<b>Total</b>	<b>665</b>	<b>100.0</b>	<b>176</b>	<b>100.0</b>	<b>532</b>	<b>100.0</b>	<b>163</b>	<b>100.0</b>

Source: Estonian drug treatment database of the Estonian Drug Monitoring Centre of the National Institute for Health Development (2011).

Majority of the persons seeking treatment used their main drugs by injecting (85% in 2010 and 79% in 2011), only 12% in 2010 and 19% in 2011 used the main drug by smoking or inhaling, while the rest used it by oral or other administration. Almost 80% used their main drug daily and 12% said that they used the main drug at least once a week. Only 25% of the respondents said that they used also other drugs in addition to the main drug; the most

frequently mentioned drugs were fentanyl/3-methylfentanyl, amphetamine, cannabis and alcohol. 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. Less than half of the persons seeking treatment were active injecting drug users. i.e. had injected themselves in last 30 days. Compared to 2009 and 2010 their percentage had decreased (65% in 2009, 54% in 2010, 44% in 2011) (Table 15).

**Table 15.** Injection status of the persons seeking treatment on the basis of treatment status in 2010-2011.

	2010				2011			
	All persons seeking treatment		First-time applicants		All persons seeking treatment		First-time applicants	
	n	%	n	%	n	%	n	%
Ever injected, but not presently	237	35.6	64	36.4	225	42.3	62	38.0
Injected during the last 30 days.	362	54.4	87	49.4	233	72.9	64	39.3
Never injected	44	6.6	24	13.6	55	10.3	36	22.1
Unknown/n/a	22	3.3	1	0.6	19	3.6	1	0.6
<b>Total</b>	<b>665</b>	<b>100.0</b>	<b>176</b>	<b>100.0</b>	<b>532</b>	<b>100.0</b>	<b>163</b>	<b>100.0</b>

*Source: Estonian drug treatment database of the Estonian Drug Monitoring Centre of the National Institute for Health Development (2011).*

No major changes have taken place in 2011 in the risk behaviour of IDUs; alike in 2010, approximately 60% treated addicts have admitted sharing of a syringe, while the percentage of persons having shared syringe in last 30 days has increased (from 2% in 2010 to 8% in 2011) (Table 16).

**Table 16.** Sharing of syringe among the persons seeking treatment on the basis of treatment status in 2010-2011.

	2010				2011			
	All persons seeking treatment		First-time applicants		All persons seeking treatment		First-time applicants	
	n	%	n	%	n	%	n	%
Shared the syringe, but not during the last 30 days	387	58.2	85	48.3	267	50.2	65	39.9
Shared the syringe during the last 30 days	14	2.1	9	5.1	43	8.1	17	10.4
Never shared a syringe	214	32.2	76	43.2	188	35,3	76	46.6
Unknown	50	7.5	6	3.4	34	6.4	5	3.1.
<b>Total</b>	<b>665</b>	<b>100.0</b>	<b>176</b>	<b>100.0</b>	<b>532</b>	<b>100.0</b>	<b>163</b>	<b>100.0</b>

*Source: Estonian drug treatment database of the Estonian Drug Monitoring Centre of the National Institute for Health Development (2011).*

A problem of drug addiction treatment is still high percentage of the cases of termination due to non-appearance of the patient to treatment (63% in 2010 and 53% in 2011). In addition to non-appearance the reasons for termination of treatment were following: imprisonment or release of the patient; voluntary leave agreed with the physician; sending to another attending physician or any other reason (e.g. death of the patient). Recovery of drug addict receiving drug addiction treatment was noted as the reason for termination of treatment in 4% of the cases in 2010 and in 2% of the cases in 2011.

## **Chapter 6. Health correlates and consequences of drug use**

### **6.1 Introduction**

The Health Board is dealing with the prevention, monitoring and control of infectious diseases as well as epidemiological risk analysis and risk assessment of infectious diseases. This chapter includes data received from the Health Board about the cases of acute B viral hepatitis (B16) and C viral hepatitis (B17.1), chronic B viral hepatitis (B18.0-18.1) and C viral hepatitis (B18.2) and new registered cases of HIV infection (Z21) and HIV disease (B20-B24) among injecting drug users. Data about HIV infection and its risk factors are submitted to the Health Board by the physicians diagnosing the first HIV infection case and HIV disease in a person.

Data about drug-related deaths originate from the database of causes of death. Authorised processor of this person-based register is the NIHD and it includes death cases of Estonian residents registered in Estonia and foreign missions of Estonia. The database of causes of death uses the International Classification of Diseases (ICD-10) for encoding of death data. The definition of drug-related deaths is the same as used by EMCDDA (selection B).

Data about TB among drug users and HIV positive persons with TB originate from the Tuberculosis Register, which responsible processor is the NIHD. The register includes all cases of TB diagnosed in Estonia. Personal data are entered in the tuberculosis register. Data about overdoses originate from Tallinna Emergency Medical Service.

### **6.2 Drug-related infectious diseases**

#### **HIV and AIDS**

According to the Health Board, 147 453 persons were examined in 2011 for HIV (142 040 in 2010). The number of tested persons was higher in Tallinn (n=79,086), Tartu County (n=40,410), Pärnu County (n=9,913), Narva (n=4,516) and Ida-Viru County (n=6,088) (Health Board, 2012). As of 31.12.2011 HIV infection (Z21) was cumulatively diagnosed in 8 062 persons. Most cases were registered in Tallinn (n=3 081), Narva (n=2 116), Ida-Viru County (n=2 106) (except Narva), Tartu (n=298) and Harju County (n=261). According to the Health Board the total number of new HIV infections in 2011 was 370 (372 in 2010; 411 in 2009) (Table 17). Most of the new HIV cases diagnosed in 2011 were registered in two regions of Estonia – 55% in Harju County (incl Tallinn) (n=205) and 37% in Ida-Viru County (n=137). As of 31.12.2011 HIV disease (AIDS) (B20-B24) was cumulatively diagnosed in Estonia in 354 persons (Health Board 2012). Most cases of HIV disease were registered in Tallinn

(n=126), Narva (n=80) and Ida-Viru County (except Narva) (n=79). In 36% of new HIV infection cases the infection route was known. Almost half of HIV infected persons (48%), in whose case the infection route was known, were injecting drug users (Table 17). Cross-sectional study conducted among injecting drug users of Narva in 2010 showed that 52.4% (n=184) of the studied injecting drug users were infected with HIV, 75.8% had C viral hepatitis and 5.7% had HBV antigen.

### **Acute B viral hepatitis**

Since 2002 the cases of B viral hepatitis (B16) have decreased. While in 2001 the number of persons with acute B viral hepatitis was 449, since 2002 the number of cases of acute B viral hepatitis has decreased essentially year by year (Table 18). This has probably been influenced by vaccination of newborn children and teenagers at the age of 13 against B viral hepatitis on the basis of the national immunisation plan. According to the Health Board the number of persons with acute B viral hepatitis decreased from 23 cases in 2010 to 16 in 2011 (Health Board 2011). (Table 18). In case of the data concerning acute B viral hepatitis it is important to remember that infection route is known in very few cases – 9 of 16 persons with acute B viral hepatitis registered in 2011 knew the possible infection route, 5 of them (M=2; F=3; 55.6%) were injecting drug users (Health Board 2011). Three of five IDUs with acute B viral hepatitis were under 25 and two 25-34 years of age.

### **Chronic B viral hepatitis**

29 cases of chronic B viral hepatitis were registered in Estonia in 2011, whereby the infection route was known in case of 13 persons, nine (69%) of whom were injecting drug users. Seven (78%) of nine IDUs with chronic C viral hepatitis were male. One IDU with C viral hepatitis was under 25, seven were 25-34 and one was older than 34.

### **Acute C viral hepatitis**

In 2011 the number of persons with acute C viral hepatitis was twice less than in 2010. While in 2010 acute C viral hepatitis was registered in 34 persons, in 2011 only in 17 persons; in four cases (M=3, F=1) the infection route was known (Table 19). All four persons with known infection route were injecting drug users, one of whom was under 25 and three 25-34 years of age.

**Chronic C viral hepatitis**

190 cases of chronic C viral hepatitis were registered in 2011. In 94 cases the infection route was known. 72.3% (n=68) were injecting drug users, 78% (n=53) of them were male. Considering the cases of acute B and C viral hepatitis, account should be taken of the fact that the percentage of cases with unknown infection route is relatively high (Table 17-19).

**Table 17.** New HIV infection cases among IDUs diagnosed in Estonia in 1998-2011

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
HIV infected persons in total	10	9	390	1474	899	840	743	621	668	633	545	411	372	370
Infection route of HIV is known	10	9	390	1474	899	359	261	204	195	117	47	112	130	129
Injecting drug users infected with HIV	0	0	354	1340	702	356	254	200	191	115	36	84	62	62
The percentage of IDUs with HIV among all cases with known infection route (%)	0,0	0,0	90,8	90,9	78,1	99,2	97,3	98,0	97,9	98,3	76,6	75,0	47,7	48,1

Source: Health Board, 2012 (J. Epstein, personal communication)

**Table 18 . Cases of acute B viral hepatitis in 2000-2011.**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Cases of acute B viral hepatitis in total	437	449	244	173	127	78	45	44	53	29	23	16
Infection route of acute HBV infection is known	247	300	150	97	68	34	21	19	17	7	13	9
Injecting drug users with acute B viral hepatitis	219	257	106	68	48	21	9	10	10	4	10	5
The percentage of IDUs with acute B viral hepatitis among all cases with known infection route (%)	88,7	85,7	70,7	70,1	70,6	61,8	42,9	52,6	58,8	57,1	76,9	55,6

Source: Health Board 2012, standard table 9, section 4.

**Table 19. Cases of acute C viral hepatitis 1999-2011**

	<b>1999</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>
Cases of acute C viral hepatitis in total	244	365	306	199	154	124	81	57	36	64	67	34	17
Infection route of acute HCV infection is known	146	198	193	131	96	76	44	29	16	30	24	2	4
Injecting drug users with acute C viral hepatitis	134	178	162	98	75	54	36	16	10	15	16	2	4
The percentage of IDUs with acute C viral hepatitis among all cases with known infection route (%)	91,8	89,9	83,9	74,8	78,1	71	81,8	55,1	62,5	50	66,7	100	100

Source: Health Board 2011, standard table 9, section 4.

### Infection with tuberculosis

According to the data of the Tuberculosis Register of the NIHD TB was diagnosed in Estonia in 2011 in 317 persons, 264 of whom were first cases of TB and 53 recurrent cases, and furthermore 23 cases of repeated treatment were registered. („National tuberculosis prevention program for 2008-2012“, 2011 report, 2012). Multi-resistant TB was diagnosed in 61 persons, of whom 48 had been infected for the first time. HIV infected persons with TB formed 13.5% (46 in total, of whom 36 first cases, five recurrent cases, plus five repeatedly treated persons, i.e. who terminated the former treatment or completed treatment without result) of all TB cases registered in 2011. First and recurrent cases with dual diagnosis have been analysed in the table. 32.6% of the registered persons with dual infection of TB and HIV had multiple resistant cause in 2011. 40.5% of all persons with dual infection of TB and HIV were drug users (Table 20).

**Table 20.** Occurrence of dual infection of tuberculosis and HIV in first and recurrent cases 2002-2010.

	2002	2003	2004	2005	2006	2007*	2008	2009	2010	2011
Persons infected with dual infection of tuberculosis and HIV (first and recurrent cases)	17	15	22	33	38	47	37	36	31	41
Inc. TB/HIV+ first cases first cases (n)	17	12	20	30	33	41	33	33	29	36
Inc. detected during preventive checks (n)	1	1	4	9	9	9	2	5	7	8
Detected during preventive checks (%)	5,9	6,7	18,2	27,3	23,1	19,1	5,4	13,9	22,6	19,0
Inc. multi-resistant tuberculosis (n)	3	2	2	6	4	11	9	4	6	12
Multi-resistant tuberculosis (%)	23,1	15,4	10,0	18,2	13,8	26,2	30,0	17,4	19,4	28,6
inc. drug users* (n)	-	-	-	-	-	16	24	24	17	17
Used drugs (%)	-	-	-	-	-	34,0	64,9	66,7	54,8	40,5

Source: Tuberculosis Register, NIHD 2012 (Viiklepp)

\*Drug use by tuberculosis patients has been registered since 2007 .

### 6.3 Other drug-related health correlates and consequences

According to the data of Tallinn Emergency Medical Service, emergency medical care was provided in 2011 to drug users due to overdose in 952 cases (930 in 2010 and 1399 in 2009) (TEMS 2012). 85 out of 952 drug users who received emergency medical care due to overdose in 2011 needed hospitalisation and in 56 cases drug use was the supposed cause of death (Table 21).

**Table 21.** Provision of emergency medical care to drug users due to overdose in 2009-2011.

	2009	2010	2011
provision of emergency medical care due to drug intoxication	1399	930	952
hospitalised	96	75	84
drug intoxication was supposed cause of death	76	53	56

Source: Tallinn Emergency Medical Service, 2012, <http://www.tems.ee>

No data are available in the register of IDUs about occurrence of tetanus, wound botulism and other communicable diseases. The topic has neither been studied within the framework of cross-sectional studies conducted among IDUs.

#### 6.4 Drug-related deaths and mortality

According to the database of causes of death, 948 persons in total died in Estonia in 1999-2011 in result of drugs, most of whom (89%) were male (n=844) (Table 23). In the period 1999-2011 most (81%) of the persons who died due to drug overdose were 20-34 years of age (Table 24).

In 2011 the number of persons who died due to drug overdose in Estonia was 22 persons more than in 2010. 123 persons, most of whom were male (n=108), died in 2011 due to accidental drug poisoning (Table 22). According to the database of causes of death, in 2011 the average age of the persons who died due to drug overdose was 30.1 years (M=30.4 years; F=28.1 years). 117 out of 123 died due to opiate use. In 2011, 82.1% (n=87) of the persons who died due to drug overdose (84% in 2010) were in the age 20-34 years and 11.4% (n=14) in the age 35-39 years (Table 24)

In 2011, 71% of the persons who died due to drug overdose were ethnic Russians (n=87) and 16.2% ethnic Estonians, 59% had lived in Harju County (n=72, including Tallinn n=56) and 33% in Ida-Viru County (n=41, of whom 12 in Narva and 20 in Kohtla-Järve). In 2010, 77% of the persons who died due to drug overdose were ethnic Russians (n=78), 71% had lived in Harju County (n=72, including Tallinn n=57) and 24% in Ida-Viru County (n=24, of whom 8 in Narva and 15 in Kohtla-Järve). Data of the database of causes of death show that compared to 2010 the percentage of persons having died in result of drug poisoning has significantly increased in 2011 in Ida-Viru County (24% in 2010 vs 33% in 2011) and decreased in Harju County (including Tallinn) (71% in 2010 vs 59% in 2011). High number of deaths resulting from drug intoxication in Harju County (including Tallinn) and Ida-Viru County (including Narva and Kohtla-Järve) can be explained with the fact that in both counties the number and prevalence of IDUs in total population is rather high in both counties (Uusküla et al., 2007).

In 2011 the main cause of death of most (n=116) persons having died in result of drug use was accidental poisoning with non-classified drugs or psychodysleptics and their effect (X42) (n=91 in 2010) (Table 25). Majority of drug-related deaths (N=99 in 2011 and N=80 in 2010) are related to synthetic drugs (T40.4), which in Estonia are fentanyl and 3-methylfentanyl.

Data of drug-related poisoning deaths in 2011 originating from the database of causes of death and from the Estonian Forensic Science Institute (EFSI) are slightly different. According to EFSI, 125 persons died in result of accidental drug poisoning in 2011, 84% (n=105) of them in result of fentanyl use (EFSI, Tuusov, personal communication 2012). The difference between the database of causes of death and EFSI data can be explained with the fact that in the first only the deaths of Estonian residents are registered.

**Table 22.** Drug-related poisoning deaths in 2010 by gender and age groups.

	2011		
	Male	Female	Total
<15	0	0	0
15-19	1	1	2
20-24	13	1	14
25-29	33	8	41
30-34	42	4	46
35-39	13	1	14
40-44	4	0	4
45-49	0	0	0
50-54	1	0	1
55-59	0	0	0
60-64	1	0	1
>=65	0	0	0
Total	108	15	123
Average age	30.4	28.1	30.1

*Source: The database of causes of death, National Institute for Health Development 2010, EMCDDA standard table 5.*

Fentanyl produced in illegal drug labs entered the illegal drug market of Estonia due to heroin deficit in 2002 (Talu et al, 2010, Tuusov et al, 2012). Since 2002 the number of deaths caused by fentanyl poisoning has sharply increased and since 2003, when fentanyl was replaced by 3-methylfentanyl, the number of death cases related to the latter drug has increased significantly (Tuusov et al, 2012). In the period 2000-2009, 45.7% of all drug-related death cases (N=888) were caused by 3-methylfentanyl, 19.6% by fentanyl, 10.8% by morphine/heroin, 7.2% by amphetamine and 6.3% by methadone (Tuusov et al., 2012). 73% of all drug-related accidental poisoning deaths were caused by several drugs together, whereby the most frequent combination was fentanyl and amphetamine. Average age of the persons who died in result of drug use in the studied period was 28.1 years.

The database of causes of death of the NIHD and the EFSI conducted a survey in 2011, with the objective to get an overview, how the rules of the International Disease Classification (ICD) affect the data pertaining to intoxication deaths. The survey encoded data pertaining to intoxication deaths registered by EFSI in 2000-2009 in accordance with ICD valid from 2010 and observed the compliance of the diagnoses of forensic research with ICD categories and studied the impact of changes in ICD. It was found that due to the currently valid encoding rules of ICD, in case of combined intoxication deaths fentanyl should be registered as less hazardous than psychostimulants (Denissova et al., 2012). Such encoding rule causes confusion in Estonia, where most deaths are related to fentanyl produced in illegal drug labs. Authors of the study recommend to amend the ICD encoding list of drugs upon encoding of death data, placing fentanyl higher than psychostimulants and frequently misused tranquillizers (benzodiazepines and barbiturates) higher than non-opiate analgesics.

In 2011 the quality of registration of drug-related death data has significantly improved. According to the database of causes of death, the substance having caused poisoning was not known in only one drug-related death case. Good cooperation between the database of causes of death of the NIHD and the EFSI has undoubtedly contributed to the improvement of registration quality of death data.

**Table 23.** Persons having died as a result of drug use in 1999-2011, by gender.

	1999	2000	2001	2002	2003	2004	2005	2006*	2007	2008	2009	2010	2011	Total
Male	18	25	39	81	31	88	52	59	74	60	120	89	108	844
Female	4	6	6	5	5	10	5	9	7	7	13	12	15	104
<b>Total</b>	<b>22</b>	<b>31</b>	<b>45</b>	<b>86</b>	<b>36</b>	<b>98</b>	<b>57</b>	<b>68</b>	<b>81</b>	<b>67</b>	<b>133</b>	<b>101</b>	<b>123</b>	<b>948</b>
Average age	29	28	25	24	28	26	26	26	28	29	29	29	30,1	

Source: The database of causes of death 2011, Estonian National Institute for Health Development 2011, EMCDDA standard table 6.

**Table 24.** Age distribution of drug-related deaths 1999-2010.

	1999	2000	2001	2002	2003	2004	2005	2006*	2007	2008	2009	2010	2011	Total
<15	0	0	1	0	0	1	0	0	0	0	0	0	0	2
15-19	5	2	7	18	6	11	5	6	2	0	3	1	2	68
20-24	8	13	18	39	10	36	21	24	22	14	23	17	14	259
25-29	3	8	10	16	9	24	22	25	34	27	54	43	41	316
30-34	1	4	3	8	3	18	4	10	13	18	40	25	46	193
35-39	0	1	4	3	3	3	3	1	6	3	5	11	14	57
40-44	1	0	1	0	1	3	1	2	1	3	3	4	4	24
45-49	1	2	0	1	3	1	1	0	2	1	2	0	0	14
50-54	1	0	1	1	0	0	0	0	1	0	1	0	1	6
55-59	1	0	0	0	0	1	0	0	0	1	2	0	0	5
60-64	0	0	0	0	1	0	0	0	0	0	0	0	1	2
>=65	1	1	0	0	0	0	0	0	0	0	0	0	0	2
<b>Total</b>	<b>22</b>	<b>31</b>	<b>45</b>	<b>86</b>	<b>36</b>	<b>98</b>	<b>57</b>	<b>68</b>	<b>81</b>	<b>67</b>	<b>133</b>	<b>101</b>	<b>123</b>	<b>948</b>

Source: The database of causes of death, Estonian National Institute for Health Development 2011, EMCDDA standard table 6

**Table 25.** Drug-related deaths by gender and death cause 2009-2011.

Initial cause	Substance*	2009			2010			2011		
		M	F	Total	M	F	Total	M	F	Total
F112 Opiate addiction		1	0	1						
X41 Accidental intoxication with anti-epileptics, sedative-hypnotic, anti-parkinsonism or n.e.i. psychotropic drugs and their effect	T43.6				7	1	8	4		4
X42 Accidental intoxication with n.e.i. drugs or psychodysleptics [hallucinogens] and their effect	T40.0	1	0	1						
	T40.1							2		2
	T40.2	2	0	2	1	1	2	1	1	2
	T40.3	2	1	3	3	1	4	10	1	11
	T40.4	14	0	14	71	9	80	87	12	99
	T40.5							1		1
	T40.6	88	11	99	5		5		1	1
	T40.9	3	0	3						
X62 Intentional self-intoxication with n.e.i. drugs or psychodysleptics [hallucinogens] and their effect	T40.2	1	0	1						
	T40.9	1	0	1						
Y12 Intoxication with unknown intention with n.e.i. drugs or psychodysleptics [hallucinogens] and their effect	T40.3				1		1			
	T40.4	1	0	1	1		1	3		3
	T40.6	6	1	7						
<b>Total</b>		<b>120</b>	<b>13</b>	<b>133</b>	<b>89</b>	<b>12</b>	<b>101</b>	<b>108</b>	<b>15</b>	<b>123</b>

Source: The database of causes of death, Estonian National Institute for Health Development 2012, EMCDDA standard table 5

\*opium (T40.0), heroin (T40.1), other opiates (T40.2), methadone (T40.3), other synthetic drugs (T40.4), cocaine (T40.5), other and unspecified drugs (T40.6), other and unspecified psychodysleptics (T40.9), psychostimulants with possibility for misuse (T43.6)

## **Chapter 7. Responses to drug-related health correlates and consequences**

### **7.1 Introduction**

Data pertaining to the prevention and treatment of drug-related communicable diseases are basing on the reports of the Institute for Health Development.

### **7.2 Prevention of drug-related accidents and decrease of drug-related deaths**

No prevention programs of drug-related deaths and overdoses have been implemented in Estonia for IDUs or other drug users. It is still planned to establish a naloxone programme together with training, in order to teach injecting drug users how to behave in case of an overdose and how to help friends, if necessary, but it has not yet been launched. Currently naloxone is used only in emergency medical service.

### **7.3 Harm reduction services targeted to IDUs**

2 550 231 euros were spent on HIV/AIDS prevention in 2011. In Estonia the main harm reduction services targeted to IDUs are syringe exchange and methadone treatment for opioid addicts, provided by non-profit organisations and financed mainly through the national HIV/AIDS strategy. 36 syringe exchange and counselling points in total operated in nine organisations in 2011. 954 589 euros in total were used for counselling and provision of syringe exchange service to IDUs. Syringe exchange point was visited for the first time by 1289 and recurrently by 6 910 persons. In total there were 154 745 visits, during which 2 130 306 syringes, 493 065 condoms and 68 498 information materials were distributed.

### **7.4 Other support services to IDUs**

#### **HIV testing and counselling**

HIV testing and counselling service is provided in Estonia by eight institutions in nine different cities (Tallinn, Tartu, Narva, Puru, Pärnu, Rakvere, Kunda, Paide, Tamsalu). In September Rakvere counselling centre was added as a new place. In total there were 10 913 visits, during which 190 HIV infected persons were detected, of whom 77 (38%) had injected drugs. Control analyses of initially positive and unclear HIV analyses were conducted in 542 cases, which costs were covered from the resources of the national HIV/AIDS strategy.

### **Diagnostics of sexually transmitted infections**

In 2011 the option of free testing and, if necessary, treatment of HIV and other sexually transmitted infections was offered to IDUs and their partners in Narva and Jõhvi. In total 784 cases were registered, including 163 treatment cases. Launch of similar service was planned also in Tallinn, but no suitable service provider was found. A pilot project of information of partners was launched in Jõhvi, to ensure more efficient diagnostics of HIV and sexually transmitted infections in risk groups. The pilot project will last until March 30, 2012 and it is funded from the European Commission project "BORDERNETWork- further development of hands-on HIV/AIDS/STI prevention, diagnostic and treatment in Central and Eastern Europe".

### **Pregnant drug users**

Free breast milk substitute is offered to the children of HIV positive mothers, in order to limit HIV transmission from the mother to the child. Children will get breast milk substitute until their 1st birthday. The service is provided in Western Tallinn Central Hospital, in Ida-Viru Central Hospital in Kohtla-Järve and in Narva Hospital. 210 children received infant formulae in 2011.

In April 2011 the treatment project of pregnant opioid addicts funded from Norway was completed, which was conducted by Western Tallinn Central Hospital. During the entire project, since May 2009, 21 women participated in the project, nine of whom completed it successfully.

### **Case control**

In the reporting period, three major outpatient facilities of infectious diseases in Estonia: Western Tallinn Central Hospital, Ida-Viru Central Hospital and Narva Hospital provided case control for HIV positive persons, including pregnant HIV positive women. 1 759 clients contacted a case control nurse for the first time, while total number of contacts was 15 343. 1 759 clients contacted social worker for the first time, while the number of recurrent contacts was 491.

### **Prevention and treatment of tuberculosis**

333 117 Euros were used in 2011 for the conduction of TB prevention programme (340 241 Euros in 2010). Within the framework of the programme, health care and social services preventing infection with TB are provided to HIV positive persons and other risk groups. Regular preventive laboratory tests of HIV infected persons and persons of risk groups not covered by health insurance are performed for early detection of TB. Regular screening for TB is also performed for all residents of shelters.

Treatment of TB is directly controlled in Estonia. The table below shows treatment results of the patients with TB/HIV+ co-infection. According to the reports of TB prevention programme, in 2009-2011 treatment was provided to 80-90 per cent of all TB patients needing ARV treatment, but unfortunately every year some patients refuse or terminate ARV treatment.

Since 2008 the treatment consultations of the patients with TB/HIV+ co-infection take place twice a year together with infection specialists, where also recommendations are provided in the issues related to TB, ARV and addiction treatment (drugs as well as alcohol).

As a consequence, the treatment results of the patients with dual diagnosis have also significantly improved; whereas in 2002-2007 53-74% of the patients recovered, in 2008-2010 at least 83% of the persons having started TB treatment had recovered.

Treatment results for 2011 are not yet completely clear, because the treatment of MDR-TB cases can last over two years and some patients are still receiving treatment.

All inpatient facilities of TB treatment and outpatient facilities at Ida-Viru Central Hospital and Western Tallinn Central Hospital also a possibility to get methadone substitution treatment is offered to the opioid addicts undergoing TB treatment. Also, in order to reduce cases of termination of treatment among the persons released from prison, since May 2010 an agreement has been concluded with the Ministry of Justice that a prison shall transport the patients 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 PERH or to outpatient visit in order to continue the treatment.

**Table 26.** Treatment results of patients with TB/HIV+ co-infection in 2002-2011, as of 1.10. 2012.

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
TB/HIV+ first cases and relapses	17	13	22	33	38	47	37	36	31	41
Died before TB treatment started or during the first month of the treatment	1	1	4	5	8	9	7	6	6	6
Died before TB treatment started or during the first month of the treatment (%)	5.9	7.7	18.2	15.2	21.1	19.1	18.9	19.4	16.1	14.6
Started treatment of TB	16	15	18	27	31	38	30	29	24	35
Recovered from TB	9	8	11	20	20	25	25	26	20	19*
Recovered from TB (%)	56.3	53.3	61.1	74.1	64.5	65.8	83.3	89.7	83.3	-*
Received ARV co-treatment							13	20	17	24
Refused or terminated ARV treatment							1	2	2	2
Did not need ARV**							1	5	3	6
Data not available or did not receive ARV treatment-cause unknown***							16	2	2	3

Source: NIHD, TB register 2012.

\*Treatment results of 2011 are not yet completely clear, because the treatment of MDR-TB cases may last over 2 years and some patients are still receiving treatment.

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

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

## **Chapter 8. Social indicators and social reintegration**

Separate services facilitating the social reintegration of former patients of drug treatment are lacking in Estonia. Addicts can get general social and health services targeted at socially vulnerable groups, but relevant separate reintegration system is lacking in Estonia. As the addicts often feel themselves to be stigmatized in the society, they tend not to seek help from general social services and public authorities. Therefore no overall data of the use of reintegration services by drug addicts is available in Estonia. The data presented in this chapter has been taken from the focus groups of drug addict reintegration held within the framework of the mapping of health and support services for adult drug addicts conducted in 2011. More specifically, the focus groups concentrated on the problems of drug addict related education, employment and accommodation in Estonia (NIHD 2012, Mapping of health and support services for adult drug addicts, 2012).

### **8.1 Social exclusion and drug use**

No specific surveys have been conducted in Estonia on drug use in socially excluded groups. However, looking at the surveys of prevalence among injecting drug users (see chapter 4) and based on the drug addiction treatment database, IDUs have a higher risk to become socially excluded and therefore also barriers preventing successful social integration. Based on the 2011 extract from the drug addiction treatment database, the socio-economic background of the addicts having sought treatment is as follows: 92.0% had a permanent place of residence, 15.3% lived alone, 49.7% were unemployed and 55.8% had only received a basic education (Drug Addiction Treatment Database 2012).

### **8.2 Social reintegration**

#### **Accommodation**

The focus groups reached the common opinion that supported accommodation forms for addicts would help the addicts and reduce social damage. Most addicts are living with their parents or partner. If the place of residence is lacking, accommodation is provided also in shelters and lodging centres for the homeless (Tallinn), but these places are definitely not suitable for a person wishing to quit drug use. In Estonia there are no accommodation options for the clients who are former drug addicts wishing to retreat from their former environment. For this purpose the possibilities of halfway housing should be created for the addicts. In Ida-Viru county the problems with social housing are not as sharp as elsewhere

in Estonia. Social housing has been ensured for those needing help for minimum fee in Kohtla-Järve, Narva, Jõhvi as well as Sillamäe. Other important aspects in addition to accommodation are supervision and social support. Some drug addicts can manage themselves after some time, while others will constantly need support and supervision.

### **Education and advanced training**

An opinion prevailed in the focus groups that nobody can prevent a drug addict from continuing his/her education, if the person is motivated and ready. Drug addicts simply often have very poor social capital and educational backgrounds (6-7 grades). Also their literacy can be inadequate, due to which it is difficult to find a place for them in the education system. In order to reach some type of vocational study, a long way should be passed, for which the persons are often not prepared. An option would be the immediate study of a specific profession outside the official education system. Practice has shown that some addicts are able to attain professions requiring technical skills in two to three months. The focus groups proposed an option to study the profession of a welder or some physically demanding job (cleaning and construction work etc). This contingent would especially need to learn jobs, which in the future would require only following of safety requirements, appearance to the workplace and performing the work.

Representatives of official educational institutions, who participated in the focus groups, said that they admit all students with suitable education and nobody will be stigmatised. The only requirement set to drug addicts and alcoholics is that drugs may not be used at school. Since 2004 also Ida-Viru Vocational Education Centre has provided education to the target group of drug addicts. According to their words, the interest in such education has decreased year by year. The reason for decrease is lack of practice and employment possibilities after the acquirement of education.

Although there is no specific support system for continuation of education for drug users in Estonia, some project-based approaches exist. MTÜ Allium operating in Ida-Viru County has organised courses of computer study, Estonian language and labour law for the addicts. Language skill of the addicts is good thanks to prison, computer skill was limited only to the use of internet and interest in labour law was lacking due to the lack of jobs.

### **Labour market**

The focus groups found that on the labour market a former addict often needs support service (organisation of work, training and supervision). Such support is mainly necessary for the fact that personality has been ruined due to drug addiction and the person has psychic disorders. Combination of substitution treatment and work is also problematic in case of some addicts.

The major challenge for labour market is stigmatisation of drug addicts. Offering of work targeted specifically to the target group of drug users would be the best for the addicts. A good example is MTÜ Allium in Kohtla-Järve, which concluded an agreement with a construction company for employment of drug addicts. It would be necessary to find such social employment options for addicts, taking account of the peculiarity of the target group and enabling part-time work, if necessary. If the persons manage well on social jobs, the further movement to normal labour market will be easier.

Before entry to the labour market the target group of addicts would need work practice with training and development of work habits. Entry to the official labour market is complicated for drug addicts, because the special needs of this target group do not match the interests of the employer (constant instruction, possible leave from work due to substitution treatment etc.). Employment of a person should be useful for the employer, and if the employee causes too much personality-related problems, the employment relationship will prove impossible. Another reality related to suitability for the labour market is that in addition to lacking education, drug addicts also tend to have poor health and low motivation. The focus group also found that if a person is already rehabilitated and has motivation for work, it would be better in Estonia to change the place of residence and find work in some other region.

### **Needs and development trends of integration service in Estonia**

The recommendations provided below originate from the mapping project of health and support services for adult drug addicts conducted in 2012.

Recommendations of the focus groups pertaining to the need for reintegration services were following:

- Social education programs should be developed, enabling the learning of simple working skills not depending on the level of education.
- It would be necessary to establish constantly functioning, non-project-based practice centres, encouraging the work habits of an addict and offering a possibility for the acquirement of work skills (not project-based).
- Availability of practice and practice place is essential in cases of vocational training.
- Creation/provision of social jobs for drug addicts.
- Availability of support persons at workplaces. A support person would deal with instruction, organisation and supervision of a drug addict at the place of work.
- It would be necessary to establish social housing possibilities for drug addicts, who do not use actively drugs anymore and who wish to change their living environment (the lack of such housing is sharpest in Tallinn).

- In addition to social housing, drug addicts also need the service of halfway housing, supervision and control in social housing units.

## Chapter 9. Drug-related crime

### 9.1. Introduction

Data about drug-related offences (crime or misdemeanour) originate from the E-file, the chief processor of which is the Ministry of Justice. No analysis has been conducted of the possible connection between the persons having committed drug crimes with drug use or of the drug types in the offences related to the consumption or possession of small quantities of narcotic drugs (the Act on Narcotic Drugs and Psychotropic Substances and Precursors thereof or NPALS § 15<sup>1</sup>).<sup>2</sup> Data of the prevention of drug-related crimes in prisons originated from the implementation report of the „Implementation plan 2011 of the NSPD and National HIV/AIDS Prevention Strategy“. Data of the services provided to drug addicted prisoners also originates from the same source.

### 9.2/9.3 Drug-related crime

913 drug-related crimes were registered in Estonia in 2011 (Penal Code or KarS §§ 183–190), which is 1% higher than in 2010 (901). Of all drug-related crimes recorded in 2011, cases of the unlawful handling of large quantities of narcotic drugs or psychotropic substances (§ 184) comprised 82% (78% in 2010; n=699). In the same year charges were brought against 25 organised criminal groups dealing with large-scale drug trafficking (25 groups in 2010), whereby the number of persons accused in international drug crime increased (from 32 persons in 2010 to 56 persons in 2011) (Table 27).

Compared with 2010, the number of crimes related to the Unlawful handling of small quantities of narcotic drugs or psychotropic substances decreased (§ 183). Their percentage among all registered drug crimes stood at 10% (15% in 2010).

2 908 offences related to the consumption or possession of small quantities of narcotic drugs were registered in 2011 (2 140 in 2010) (NPALS § 15<sup>1</sup>) (Table 28). 170 persons or 6% of all persons having committed such offences were minors (also 6% in 2010; n=125).

Registration of the number of drug-related offences and crimes in recent years has been influenced by the resources of research institutions and proceeding setting of priorities; also changes in the registration of crimes (in September 2008 the Guidelines for registration of crimes took force, providing that the crimes committed under similar

---

<sup>2</sup> In case of any offence the expert analysis will specify the type of substance(s) related to the case, but statistical analysis of the database would be too complicated.

circumstances are generally registered as one intermittent crime.<sup>3</sup>). The latter fact has influenced mainly the statistics of drug crimes related to large quantities.

**Table 27.** Registered drug-related crimes in 2007–2011.

Type of drug crime	KarS §	2007	2008	2009	2010	2011
Unlawful handling of small quantities of narcotic drugs or psychotropic substances	§ 183	297	301	153	138	91
Unlawful handling of large quantities of narcotic drugs or psychotropic substances	§ 184	1048	1143	789	699	745
Passing on of narcotic drugs or psychotropic substances to minors	§ 185	79	65	63	26	24
Inducing person to engage in illegal use of narcotic drugs or psychotropic substances	§ 186	0	0	0	0	0
Inducing minors to use narcotic drugs	§ 187	3	6	0	0	0
Illegal cultivation of opium poppy, cannabis or coca shrubs	§ 188	19	37	32	32	45
Preparation for distribution of narcotic drugs or psychotropic substances	§ 189	2	6	4	6	8
Violation of requirements for handling narcotic drugs or psychotropic substances or precursors thereof or of requirements for related recording keeping or reporting	§ 190	1	0	1	0	0
<b>Total</b>		<b>1449</b>	<b>1558</b>	<b>1042</b>	<b>901</b>	<b>913</b>

Source: Ministry of Justice, 2012.

**Table 28.** The number of drug-related offences and the number of persons involved in drug-related crimes in 2007-2011<sup>4</sup>

	2007	2008	2009	2010	2011
Drug-related offences (possession or consumption of small quantity of a substance for personal use) *	5991	6113	3205	2140	2908
Distribution/trading/production of drugs **	566	805	798	764	640
Other drug-related crimes ***	36	76	49	64	59
Total	6593	6994	4052	2968	3607

Source: Ministry of Justice, 2012.

\* Act on Narcotic Drugs and Psychotropic Substances and Precursors thereof § 15<sup>1</sup>

\*\* KarS §§ 183–184

\*\*\* KarS §§ 185–190

27 persons were convicted in 2011 for unlawful handling of small quantities of narcotic drugs or psychotropic substances (KarS § 183) (52 in 2010). 406 persons were convicted for unlawful handling of large quantities of narcotic drugs or psychotropic substances (KarS

<sup>3</sup> The procedure of publication of criminal statistics. <https://www.riigiteataja.ee/akt/13033704>

<sup>4</sup> Persons involved in crimes: prosecuted persons and persons, against whom criminal proceedings were terminated for reasons of expediency pursuant to the Code of Criminal Procedure §§ 201–205. A person may appear repeatedly.

§ 184) (408 in 2010). 46 persons were convicted for other drug-related crimes (KarS §§ 185-190), which is three cases more than in 2010. 88% of the convicted persons were men and 12% women.

Regionally, most drug-related crimes were registered in 2011 in Harju County: 426 crimes (461 in 2010) or 47% of all drug crimes, including 394 in Tallinn. 144 crimes were registered in Ida-Viru County (158 in 2010), including 74 in Narva and 30 in Kohtla-Järve. 372 crimes related to unlawful handling of large quantities of narcotic drugs or psychotropic substances (KarS § 184) were registered in Harju County (359 in 2010), including 344 in Tallinn; 116 such crimes were registered in Ida-Viru County (131 in 2010).

According to the 2011 report of the NSPD, the total sum of the confiscated proceeds of drug crimes was 795 463 Euros (511 290 Euros in 2010).

#### **9.4 Other drug-related crimes**

No data are available for the reporting period.

#### **9.5 Prevention of drug-related crimes**

No data are available for the reporting period.

#### **9.6 Activities of the legal protection system**

Amendment Act of Penal Code, Criminal Procedure Code, Mental Health Act, Punishment Register Act, Probation Supervision Act and Health Care Services Organisation Act was adopted by the Parliament on 27.01.2011 (RT I, 23.02.2011, 2). The act took force from 25.04.2011 and created a possibility to apply addiction treatment of drug addicts as an alternative to imprisonment in Estonia. This legislative amendment was described in detail in the 2011 report and Chapter 5.

#### **9.7 Drug use in prisons**

Routine data about use or availability of drugs in Estonian prisons are not available for the reporting period.

## **9.8 Addressing drug related health problems in prison**

Drug and HIV/AIDS prevention in Estonian prisons is based on NSPD and „National HIV and AIDS prevention strategy 2006-2015“.

### **Drug-free departments and drug addiction treatment in prisons**

Special departments of addiction rehabilitation have been established in Estonian prisons for social reintegration of drug addicts. The departments of addiction rehabilitation have been established in three prisons in total: Tartu Prison (174 places in total), Viru Prison (16 places for adolescents and 20 for adults) and Harku Prison (8 places). Due to low use of 20 places in the department of addiction rehabilitation in Viru Prison the total number of rehabilitation places for adolescents were decreased by four in 2011. The remaining 16 places cover the optimum need. Objective of the department is to provide pre-release support to drug addicts. In the prisons, rehabilitation of the remaining addicts is based on social programs. Resources required for drug addiction treatment come from general medical expenses of prisons.

According to the data of the Ministry of Justice, at the end of 2011 there were 987 persons with addiction diagnosis in Estonian prisons (877 in 2010 and 870 in 2009), which made 29% of the total number of prisoners. The percentage of opioid addicts was still the highest. In 2011 non-opiate detoxification treatment (236 cases) as well as methadone detoxification treatment and methadone substitution treatment was conducted in prisons. Compared to 2010, the number of persons getting detoxification (99 vs 59) or substitution (118 vs 64) treatment was higher.

In order to continue formerly started treatment, the Ministry of Justice has made methadone treatment available also in Viru detention house.

In the second half of 2011 the Estonian-Swiss cooperation programme project „Treatment and rehabilitation of drug addicted convicts“ was launched with the initiative of the Ministry of Justice, providing the financial resources needed for application of addiction treatment as alternative penalty. Enabling and facilitation of alternative penalties is an important measure from the standpoint of reduction of the number of imprisoned persons. During four project years (2011–2014) treatment will be provided for up to 90 persons. Training courses will be organised for service providers and efficiency indicators of the treatment will be developed in cooperation with NIHD and the MSA.

### **Training for prison staff and probation supervisors**

In order to improve the quality of services provided to imprisoned drug addicts, in 2007–2011 several training courses have been organised for prison staff in various fields: basic drug training, motivating counselling techniques, opiate addiction treatment. Also advanced training was provided to guards-dog handlers. For organisation of motivating counselling training inside the system, 32 prison officers and 9 providers of motivating interview training were trained in 2011. In 2011 also five prison chaplains, eight religious volunteers and theology students passed the training.

### **9.9 Reintegration of drug users after release from prison**

In the reporting period reintegration of drug users after release from prison was conducted within the framework of general social service. There is no data concerning separate services targeted to drug users.

## **Chapter 10. Market in drugs**

Data presented in the chapter covering the changes on illegal drug market have been collected on the basis of EMCDDA standard tables no. 13, no. 14 and no. 16. Data concerning the quantities of confiscated drugs and their purity originate from the EFSI. Overview of the drug prices is basing on the expert opinion of the Estonian PBGB, proceeding from surveillance. Data about drug transit originate from the Tax and Customs Board.

### **10.1 Availability and supply**

Three drug labs were detected in Estonia in 2011. Two labs were producing amphetamine, one GHB. In Russian Federation there is high demand for cannabis products (hashish, marijuana etc.) and MDMA tablets of Central European origin. Among the drugs smuggled to Estonia, amphetamine is still holding the lead, and most of it will reach Scandinavia through Estonia. In addition to amphetamine, also the precursors needed for the production of amphetamine and methamphetamine, which are subjected to strict limits in civil use (phenyl acetone, formamide etc.) are still actual. Organised smuggling of heroin and other opiates is continuously decreasing.

While the types of drugs smuggled over the border have generally not changed, changes have taken place compared with the former period in the smuggling methods of drugs and their precursors. Compared with the previous year, smuggling through Narva pedestrian terminal has been replaced by smuggling through the border and customs checkpoint of Narva Road, where drugs are hidden in the hiding places in vehicles. In addition to the aforementioned, drugs are transported from Russia to Estonia over the so-called green border or Narva River, where drugs are smuggled over the state border together with cigarettes of Russian origin.

### **10.2 Seizures**

Compared to 2010, the confiscated amounts of cannabis products (128 kg) and ecstasy tablets (11 496 tablets) increased most in 2011 (Table 29). The greatest decrease in the confiscated amounts of drugs took place in 2011 with cocaine. Compared to the record amount 218 kg in 2010, this year only 0.83 kg was confiscated. Confiscated amount of cocaine has decreased, but according to the PBGB it can be said that cocaine is more available than in the previous year and it is replacing the former substitute substance,

mephedrone (narcotic and psychotropic substance controlled since 2009). While in 2010 cocaine was confiscated in 25 cases, in 2011 the number of cases was 34.

**Table 29.** Amounts of confiscated narcotic substances in 2007-2011 (kg)

	2007	2008	2009	2010	2011
Cannabis resin (Hashish)	155.43	48.5	19.2	14.55	45.55
Cannabis leaf, Marijuana	8.14	24.2	7.11	14.81	53.46
Cannabis plants	8.1	23.2	17.2	10.83	29.28
Heroin	5.67	0.1	3.94	0.004	0.048
Cocaine	12.98	3.6	5.02	217.72	0.83
Amphetamine	56.27	23.3	55.9	47.67	41.57
Methamphetamine	0.022	37.7	0.001	0.523	1.54
GHB	26.4	7.7	25.1	16.1	13.49
Fentanyl/3-methylfentanyl	1.3	1	1.8	0.5	0.91
Poppy/Opium poppy	0	6.5	1.1	-	-
Methadone	1.8	3.8	1.1	1.5	2

Source: EMCDDA standard table 13, Estonian Forensic Science Institute 2012.

Also the confiscated amount of methamphetamine has increased (1.5 kg), which number of confiscation cases increased from 36 to 57. According to the PBGB methamphetamine is more common in Tallinn, while amphetamine originating mainly from Latvia is available in South Estonia.

Compared to 2010, the confiscated amounts of amphetamine decreased by few kg, the total amount of amphetamine confiscated in 2011 was about 42 kg. Confiscated amounts of opiates increased in 2011. Confiscated amounts of fentanyl, which is much spread in Estonia, increased by 0.41 kg and confiscated amounts of heroin by 0.04 kg compared to 2010. Alike in 2010, no poppy/opium poppy products were confiscated. More than 13 kg of GHB was confiscated in 2011, which is less than in 2010, but still significant quantity. Furthermore, 135.5 litres of GBL, which is a substance of voluntary control list, were detected in 48 cases, sent by post by 27 different senders. Furthermore, 2 kg of methadone was confiscated.

Use and distribution of so-called legal drugs or newer psychoactive drugs available in the internet is increasing. Newer synthetic psychoactive substances are more popular in South Estonia. Due to the changes in the drug market and its legislation, these newer psychoactive substances exit the market rapidly and get replaced by new alternative products. One example of this is the synthetic cannabinoid "Spice", which was popular some years ago, but which almost disappeared from the drug market by 2011 due to rapid legislative amendments. While in 2009 2.2 kg of synthetic cannabinoids were seized, in 2011 the relevant amount was 0.2 kg. 3.9 kg of synthetic cathinones were seized in 2011, which was significantly more than in 2009 (59,7 g). 26 g of pentylamines and 8.1 g of piperazines were seized in 2011.

### 10.3 Price and purity

Compared to 2008-2010 the purity of almost all main confiscated drugs improved in 2011. In 2011 the drug prices remained mainly on the level of 2009.

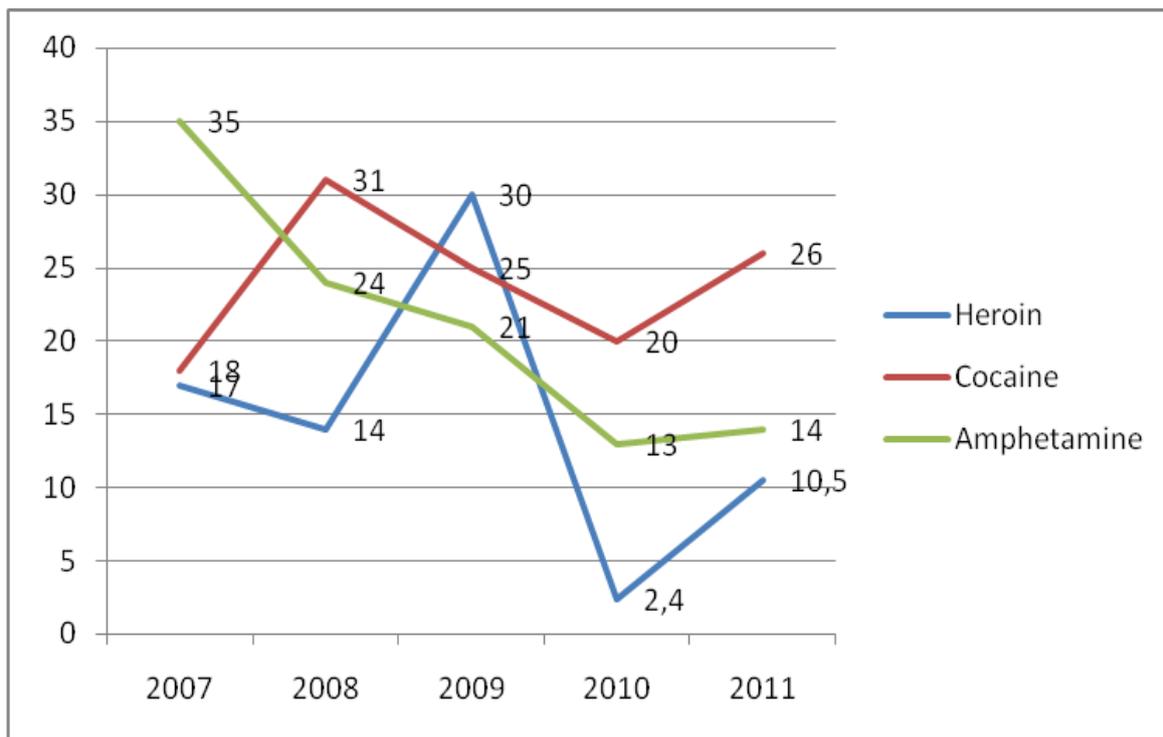
While in 2010 the most common THC content in hashish was 2.6%, in 2011 it was 5% (typical THC content 2-20%). The purity of marijuana also improved in 2011. While in 2010 the average THC content in marijuana was 10%, in 2011 it was 11%. Compared with 2010 the price of cannabis products has remained relatively the same. In 2011 the average price of cannabis products was 20 Euros. In case of larger quantities (from 10 g) the price per gram of cannabis products varied within the range 12–13 Euros. In case of one kilo the price was 6.4 Euros per gram.

Estimated street price of a heroin dose was about 20 Euros in 2011. Purity of the substance was significantly higher than in 2010. Minimum purity of heroin was 3% and maximum purity 23% of pure substance in one gram of heroin. In 2010 the purity of heroin varied from 0.2% to 5%. The most wide-spread opiate in Estonia is still fentanyl, which street price was 7–10 euros per dose in 2011. In case of larger quantities (1g) the price was 150-200 Euros. Compared to 2010 the street price of fentanyl has slightly decreased. In 2011 the most common purity of fentanyl was 3.2% of pure substance per gram (purity varied in the range 1.9%-12%).

The purity of amphetamine as well as ecstasy has increased compared with the previous reporting period. While in 2010 the average purity of a confiscated ecstasy tablet was 64%, in 2011 it was 91%. The purity of amphetamine increased also slightly in 2011. Estimated price of amphetamine ranged from 10 to 15 Euros in 2011. Compared to 2010 the street price of amphetamine was lower than in 2011 (12-19 Euros). Unlike other confiscated drugs, the purity of methamphetamine decreased in 2011. While in 2010 the prevalent purity of methamphetamine was 27%, in 2011 it was 11% (ranging from one to 37%).

Compared with 2010 the price of cocaine slightly increased in 2011. While in 2010 the minimum street price of cocaine was 64 Euros, in 2011 it stood at 90 Euros. The maximum street price of cocaine decreased a little. In 2011 it was 110 Euros compared with 128 Euros in 2010. The price of cocaine is much related to its quality. In cases of larger quantities the average price per gram of cocaine is 70 Euros (from 1 kg).

**Figure 1.** Purity of drugs 2002-2011\*.



Source: EMCDDA standard table 14, Estonian Forensic Science Institute 2011.

\* In 2010 the confiscated amount of heroin was too small for presentation.

## **Part B: Selected Issues**

### **Chapter 11. Residential treatment for drug users in Estonia**

#### **11.1 History and legislative framework**

##### **11.1.1 History of drug addiction treatment**

Inpatient addiction treatment is still in development stage in Estonia and we cannot speak of any historical consistency. Coercive treatment could in theory have been imposed on drug addicts by courts in the 1980s, but generally this practice was not applied, since in that period the drug problem was largely absent in Estonia. Drug addiction treatment started to develop in the beginning of 2000s due to the rapid spread of drug injection. In an Estonian context the drug addiction treatment consists mainly of methadone treatment. Methadone detoxification treatment was started in 1998 and a substitution treatment in 2001. Methadone treatment was implemented more extensively in 2003, when the first special methadone treatment centres were established.

The first rehabilitation farms were created at the end of 1990s. Operation of the rehabilitation farms was organised through non-profit associations financed from various sources, such as donations, state budget and self-financing.

##### **11.1.2 Legislation regulating inpatient addiction treatment**

‘Drug addiction treatment is regulated through the NSPD. Furthermore, drug addiction treatment is regulated by the Mental Health Act (Mental Health Act. (RT1 I 1997, 16, 260), enforced from 16.03.1997.

Provision of opiate substitution treatment has been regulated by the Regulation No. 73 of the Minister of Social Affairs “Terms and conditions for medical and scientific handling of narcotic drugs and psychotropic substances and relevant accounting and reporting and lists of narcotic drugs and psychotropic substances” (enforced from 05.06.2005) (RTL 2005, 57, 807), the Health Care Services Organisation Act (enforced from 01.01.2002) (RT I 2001, 50, 284) and the Personal Data Protection Act<sup>1</sup> (enforced from 15.02.2007) (RTI 2007, 24, 127). The aforementioned regulation specifies medical and scientific handling of narcotic drugs and psychotropic substances and relevant accounting and reporting. Supervision of

the execution of the law, i.e. compliance of drug handling, is the competency of the State Agency of Medicines.

The Health Care Services Organisation Act specifies the requirements to the provision of health care services and the procedure of management, financing and supervision of the field of health care. The Minister of Social Affairs shall establish the requirements for facilities, installations and equipment necessary for the provision of health care services (RTL 2002, 25, 353). Supervision of the organisation of health care services is performed by relevant officials of the Health Board.

The objective of the Personal Data Protection Act is to protect basic rights and freedoms of a natural person, above all the right for privacy, during the processing of personal data. Information about the state of health or disability of a person is a delicate information, which processing (collection, storage, organisation) shall be based on the principles of processing of personal data.

## **11.2 Availability and characteristics of treatment**

### **11.2.1 Overall availability and accessibility**

No data available

### **11.2.2 Types and description of stationary drug addiction treatment**

Of the inpatient treatment types targeted to drug users, only short-term detoxification treatment service and inpatient rehabilitation is provided in Estonia.

#### **Hospital-based drug addiction treatment**

Since June 2011 an agreement was concluded with Wismari Hospital for the provision of short-term inpatient detoxification treatment basing on non-opiate pharmaceuticals (maximum 21 days), which is financed from the national drug strategy. Before that, the patients had to cover the treatment costs themselves. In 2011 the hospital had four treatment places and service was provided to 46 clients in total. Treatment options are available for the users of fentanyl, amphetamine as well as mixed drugs. To fix the results of short-term detoxification treatment, the patients can receive outpatient follow-up counselling service for up to 3 months. Follow-up counselling includes weekly consultations of a psychologist and consultations of a psychiatrist held every second week. 16 persons used this possibility in 2011.

There are six places in total for drug addiction treatment for minors in Estonia (2 places at the Children's Department of the Psychiatry Clinic of Tartu University Hospital and four

places in Tallinn Children's Hospital). Inpatient treatment will last up to three weeks. Conduction of psychological, study and education work in the unit for children and adolescents with addiction disorders at Tallinn Children's Hospital is funded from the NSPD. In 2011 there were four beds for addicts in the Children's Hospital and inpatient addiction treatment was provided to 100 adolescents.

### **Inpatient rehabilitation**

48 places of round-the-clock rehabilitation for male clients were funded from the NSPD in 2011. In the reporting period the service was provided to 137 persons in total for 391 058 Euros. The duration of rehabilitation is generally 9-12 months, but it can also be longer. Inpatient rehabilitation service funded from the national strategy is provided in three centres. Two of these are operating as rehabilitation farms: MTÜ NARK „You will not remain alone“ in Vaivara near Narva, 12 places, and MTÜ AIDSi Tugikeskus in Lääne-Viru County, 10 places. The farms operate with the principle of 12 steps as therapeutic communes, where the proportion of professional services is low and more stress is laid on work therapy and religion. Since 2012 the farms are no longer funded from the national strategy.

In addition to the farms there are 26 treatment places for men in Sillamäe drug rehabilitation centre, which is also using the 12-step methodology. The centre has also a music therapist, activity instructor, experience counsellor, psychologist, social worker, nurse and psychiatrist.

Since November 2010 OÜ Comenius in Tallinn provided round-the-clock rehabilitation service for male and female patients, funded from the ESF programme, but from April 2012 OÜ Comenius suspended provision of the service. 21 persons in total received rehabilitation service during the mentioned period.

There are more centres providing inpatient rehabilitation service for drug and alcohol addicts, but these are not funded from the state budget. Two centres with longer experience are MTÜ Lootuse Küla in Laitse near Tallinn and MTÜ Sotsiaalrehabilitatsiooni Keskus Loksa. These centres are faith-based. Working methods are group, family and work therapy.

OÜ Corrigo in Jõhvi provides inpatient rehabilitation service for minors. The centre is open also for minors who are still using drugs. The centre is providing therapy to minors for the treatment of addiction problems, developing their social skills and enabling continuation of education in Jõhvi Vene Gümnaasium. Duration of the service is 10 months. In exceptional cases (e.g. children from orphanages) also longer or shorter (three-month) rehabilitation is available. There is a waiting list to get the service and from September 2011 the volume of the service was increased from 18 to 24 places funded from the NSPD. 52 adolescents,

including 37 boys and 15 girls, received inpatient rehabilitation service in the centre in 2011.

Tallinn Children's Shelter is a social welfare institution providing rehabilitation and reintegration services for minors after the necessary medical care. The centre is financed by Tallinn City Government. There are 48 places for minors in the centre, waiting period for the service is approximately one year. Normal duration of the service is 10-12 months. School education can also be continued in the centre.

### **11.2.3 Treatment connections with other services**

No data available

### **11.2.4 Opioid substitution treatment**

Only outpatient methadone treatment is available in Estonia.

### **11.2.5 Typical levels of collaboration and networking**

As for adults, cooperation takes place mainly with local governments and the Unemployment Insurance Fund. Also, the courses of Estonian language and computer study have been organised for the addicts. Since 2004 Ida-Viru Vocational Education Centre has provided education to drug users, but the aspect of vocational study still needs development. As for minors, cooperation takes place with schools, child protection and local governments.

## **11.3 Quality of treatment**

As the inpatient addiction treatment service is still in the development stage, no surveys of the quality of treatment have yet been conducted and it is difficult to assess the quality.

### **11.3.1 Availability of guidelines and service standards for inpatient treatment**

As the inpatient addiction treatment service is still in the development stage, no official treatment guidelines are available. There have been two consensus documents for the specialists dealing with drug addiction treatment: drug addiction treatment guidelines (2001) and opiate addiction treatment guidelines (2007). The treatment guidelines drafted

in 2001 cover drug addiction treatment in broader sense and concentrate only on detoxification treatment, while the 2007 version concentrates only on opiate addicts and extends the options of treatment methods.

For the services funded from the national strategy, the NIHD has set requirements on the basis of a contract. A contract specifies requirements to the staff, their training and facilities used for the provision of the service.

#### **11.4 Discussion and summary**

Taking account of the seriousness of drug problem in Estonia, there is strong need for inpatient treatment. At the moment the possibilities for inpatient treatment are relatively limited, especially in Ida-Viru County, where the option of inpatient treatment is completely lacking. At the same time the drug problem is very sharp in this region. Hospitals provide only short-term detoxification treatment for adults as well as minors, with maximum duration of three weeks, while a successful treatment should last at least three months. Since April 2012 the NIHD has concluded a contract with Jämejala Hospital for the provision of long-term inpatient drug addiction treatment services.

More places should be also created for inpatient treatment for minors. The survey mapping the needs of minor addicts for health care and support services found that Estonia would need centres dealing with addiction and psychic and behaviour disorders of minors and basing on common standards. The need for a treatment and rehabilitation centre dealing with addiction problems of minors is the sharpest in South Estonia. It would be important to establish a place, where to send the minors after their stay in a hospital or in cases where the child does not need active hospital treatment. The optimum size of a rehabilitation centre would be 10-15 places.

One reason for limited treatment possibilities is the lack of necessary staff. Estonia would need psychologists, psychiatrists, social workers and other specialists, who could treat people with addiction problems. Another problem is financing. Until now the financing of drug addiction treatment has been project-based; this restrains development and prevents drafting of long-term plans.

## Chapter 12. Recent trends of drug-related public expenditures and drug services

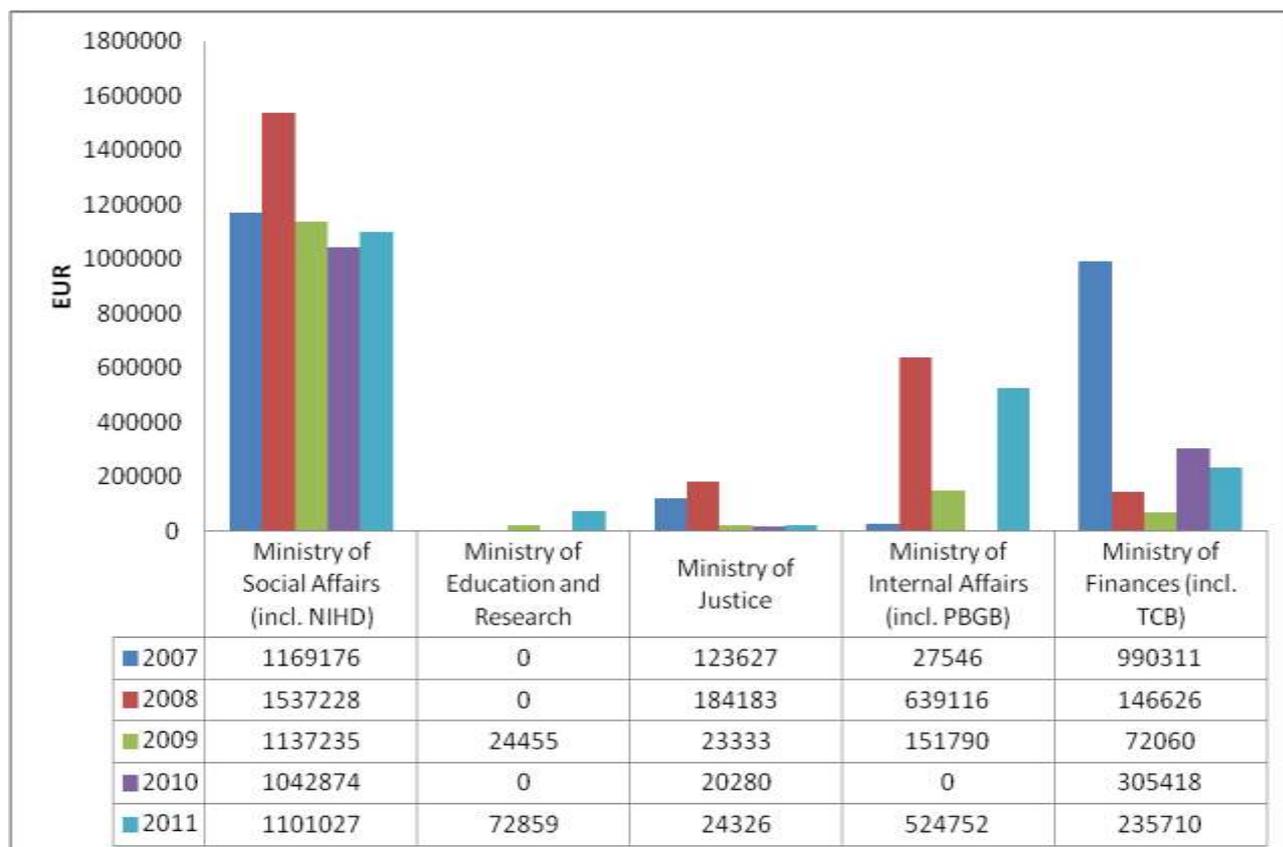
The goal of this chapter is to present an observation of whether the economic pressure and the wish to keep the state budget balanced has affected public expenditures for prevention of drug addiction. In preparing this chapter, the implementation plan reports of the years 2007-2011 of the NSDP were used. Those plans provide an overview of the actions taken and the interventions applied for implementing the NSDP and the financial expenditures made to that end by ministries and their agencies involved in implementing the strategy.

The National Strategy for Prevention of Drug Addiction until the year 2012 and its implementation plan are coordinated by the MSA. NSDP is a multi-sector strategy implemented by not only the MSA but also the NIHD (prevention, treatment and rehabilitation, monitoring and evaluation), the MER (primary prevention in schools), the Ministry of Justice (drug prevention and combating drug related crime in prisons), the Ministry of Interior and the PBGB in its area of government (combating drug related crime), and the Estonian Tax and Customs Board in the area of government of the Ministry of Finances (cross-border detection and combating of drug related crime).

Figure 1 shows the distribution of resources for various implementers of NSDP in the years 2007-2011. In the years 2009-2010 the expenditures of NSDP decreased in activities for demand reduction and in most activities for supply reduction. There was a positive trend of increasing the financing for the NSDP in the year 2011. We cannot present the expenditures of monitoring the field of drug addiction across separate years. Monitoring expenditures are included in the expenses for demand reduction. External financing was also used for financing the monitoring activities in the reviewed period.

In the year 2009 expenditures of the Ministry of Justice also decreased by several times (Figure 2). This decrease has practical causes as in the year 2008 there were large one-time investments made into equipment for combating import of drugs into prison environments (drug detector, preventing mobile telephone coverage). All drug-related activities of the Ministry of Justice cannot be detailed as several activities (incl. therapy and rehabilitation of drug addicts) are financed from the budgets of prisons instead of the NSDP. The number of prisoners receiving substitution and rehabilitation therapy in prisons has been growing year by year (2011 *Selective issue*).

**Figure 2.** Use of the resources of the NSPD in the years 2007-2011 (EUR)



Source: NSPD reports in the period of 2007-2011

*Comment: The activity of the MER is implemented on account of its main activity, thus it cannot be presented as a separate expenditure in the NSDP's budget. Expenditures of the Ministry of Interior and its agency (the Police and Border Guard Administration) are presented together. Expenditures of the Ministry of Social Affairs and the National Institute for Health Development are also presented together.*

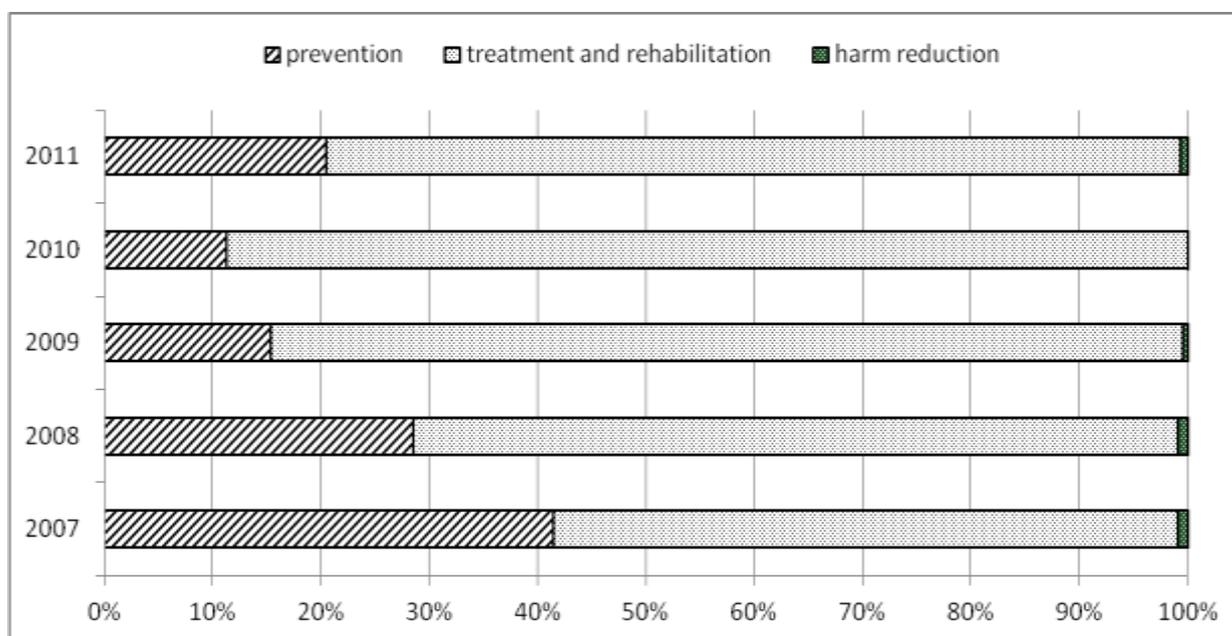
In the years 2007-2011 a total of 9,553,932 euros were used for implementing the NSPD; 64% of this (6,084,854 euros) were spent on demand reduction (the MSA and its agency, i.e. the NIHD, and the MER) and 32% (3,093,329 euros) were spent on supply reduction (the Ministry of Interior and its agency, i.e. the Police and Border Guard Administration, and the Tax and Customs Board as an agency of the Ministry of Finances). According to the relevant reports, the expenditures of the Ministry of Justice for implementing the NSPD in the period made up 4%.

### Demand reduction

In the years 2007-2011, 98% (5,987,540 euros) of the finances allocated for demand reduction were spent on the activities of the MSA and the NIHD (prevention, treatment and rehabilitation, monitoring and assessment). Expenditures of the MER made up only 2% (97,314 euros) of the total expenditure for demand reduction). At the same time, the percentage share presented here does not reflect all expenditures made by the MER in the field of drug addiction in the years 2007-2010. The specifics of reporting and the problems of separating expenditures of the MER must be taken into account when looking at its financial expenditures. In the years 2007, 2008 and 2010 the MER did not separate its drug prevention expenditure from its general education-related expenditure.

Figure 3 shows that the expenditures of treatment and rehabilitation services did not decrease in the reporting period. That decision was made knowingly and was caused by setting priorities during the economic hardship. The share that did decrease due to budget cuts was that of primary prevention. Harm reduction expenditures have been low in the NSPD throughout the years. Harm reduction has been divided between two different strategies in Estonia: The NSPD and the National Strategy for HIV and AIDS prevention.

**Figure 3.** Distribution of expenditures for primary prevention, treatment and rehabilitation in the years 2007-2011 (%)

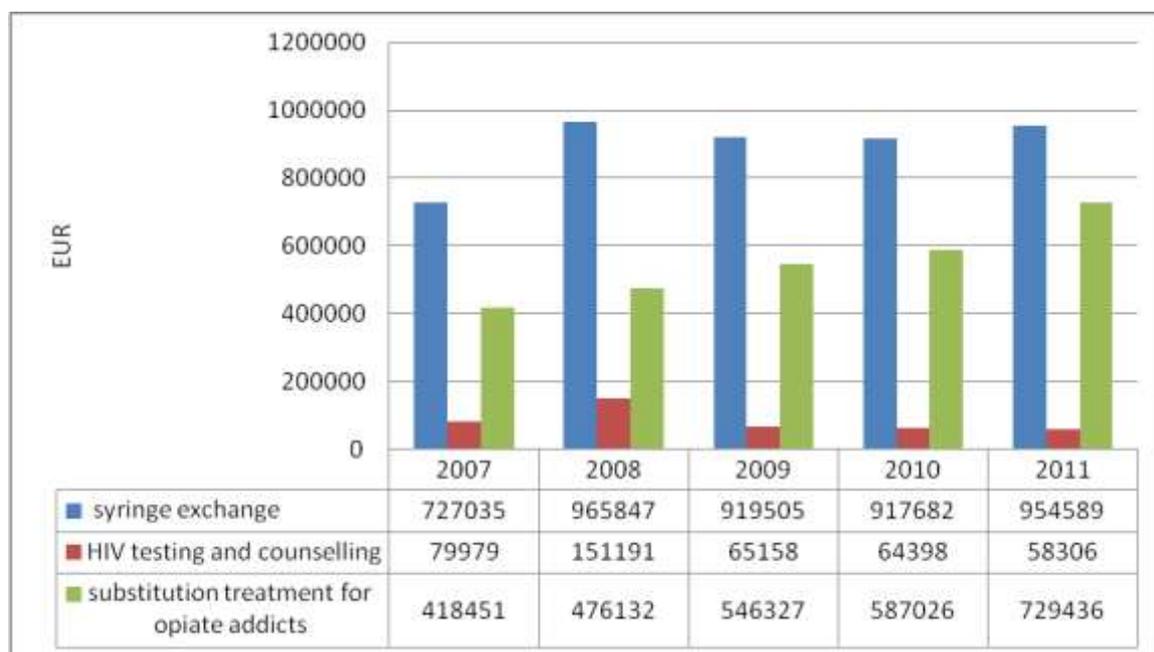


Source: NSPD reports in the period of 2007-2011

In Estonia the services of harm reduction for drug injectors are financed from the funds of the HIV/AIDS strategy. Financing of the harm reduction services is shown in Figure 4. Since year 2008, financing of the service of the syringe exchange programme and the voluntary testing and consulting for HIV and other drug-related infections has been

decreasing. In the year 2011 financing for the syringe exchange programme increased again. Expenditures on substitution therapy of opiate addicts have been growing continually since the year 2007.

**Figure 4.** Financing of the harm reduction services from the funds of the HIV/AIDS strategy in the years 2007-2011 (EUR

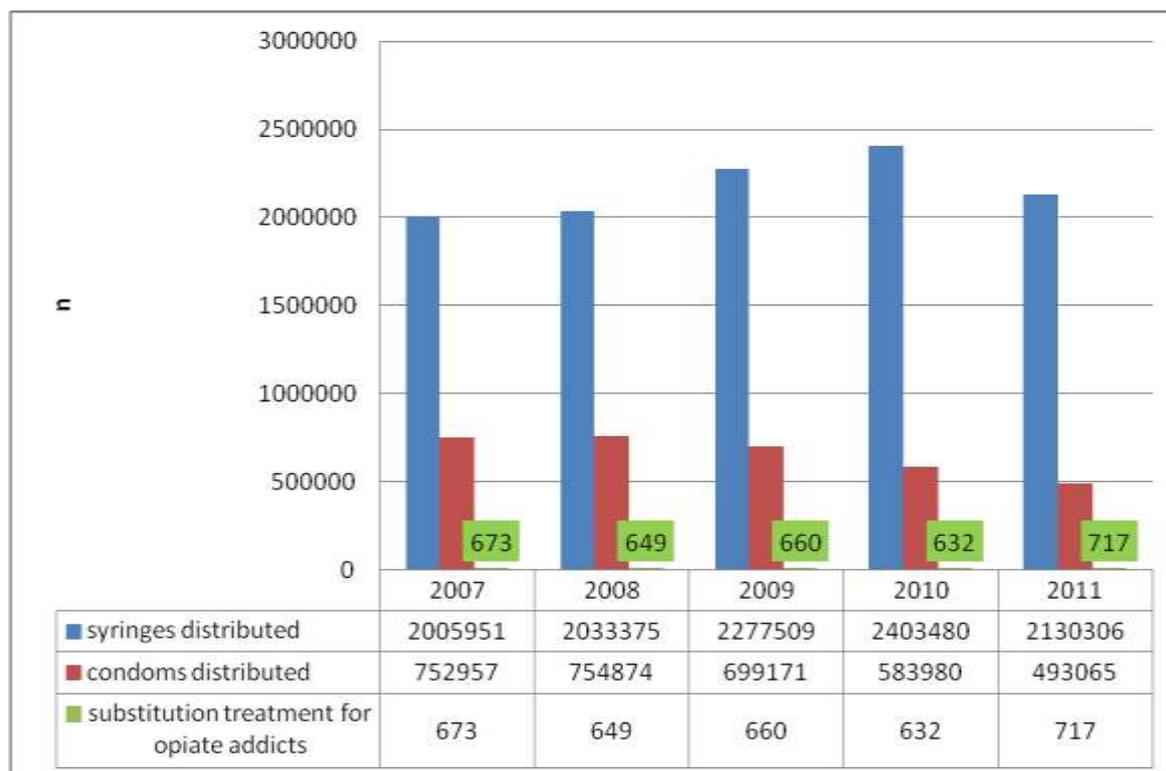


Source: Annual reports of the HIV/AIDS strategy in the years 2007-2011.

Note: Since the year 2008, drug injectors and their sexual partners can test themselves for HIV and blood-borne infections. Before that, this service was provided for drug injectors only.

Figure 5 shows the statistics of harm reduction services for drug injectors. In the year 2011 the number of syringes exchanged decreased significantly, although the funds allocated for the syringe exchange programme increased that year. The number of condoms distributed has also decreased significantly. The decrease of the number of syringes exchanged has been affected by changes in the target group of drug injectors and by additional services offered within the framework of the syringe exchange programme. The change of the target group of drug addicts is illustrated by the study of HIV spread and risk behaviour conducted in Narva in the year 2010; that study indicated that 71% of respondents were using amphetamine as their main drug and 69% were injecting once a week.

**Figure 5.** Damage reduction services for drug injectors in the years 2007-2011



*Source: Annual reports of the HIV/AIDS strategy in the years 2007-2011.*

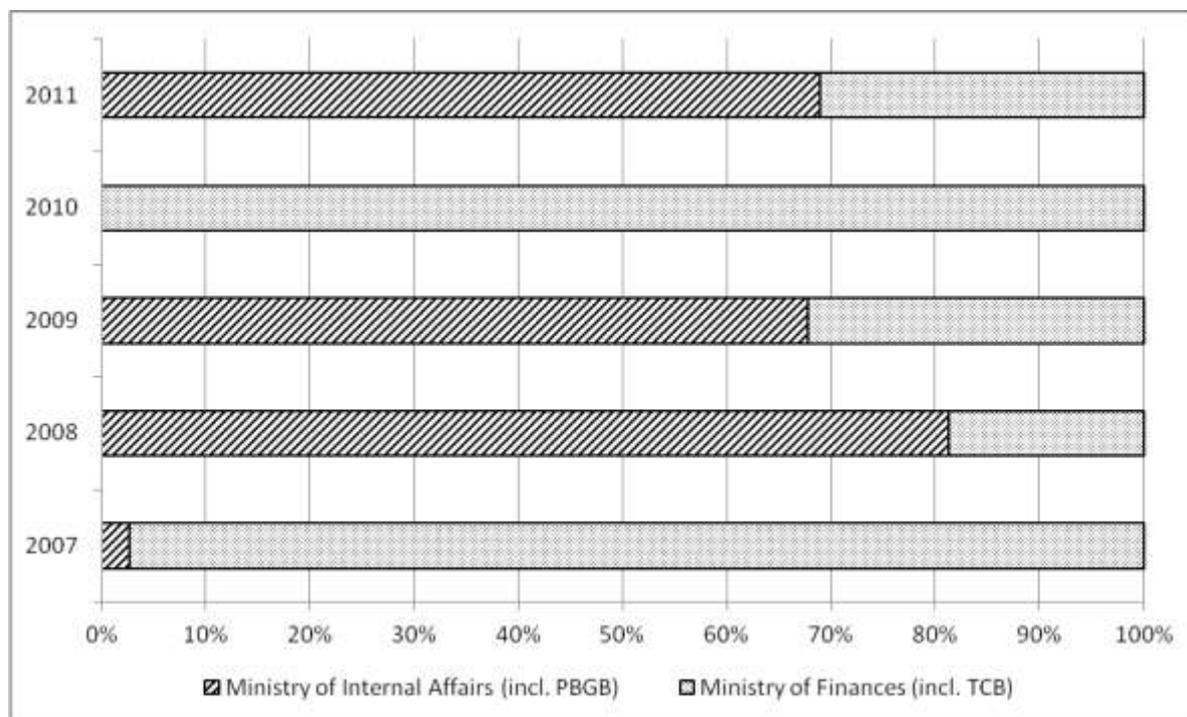
Figure 5 shows that less than 1000 people were receiving substitution treatment in Estonia as of the end of year 2011. The number of people on methadone substitution treatment in the year 2011 has increased when compared to year 2010. At the same time it needs to be taken into account that any increase of the number of people in methadone substitution treatment is hindered by the low numbers of health care institutions providing drug therapy in Estonia. It must be also kept in mind that there is a significant target group of amphetamine addicts in addition to opiate addicts, and that services (primarily treatment) offered for the amphetamine addicts are very limited.

### **Supply reduction**

In the years 2007-2011, the largest part of the budget of the NSPD for reducing supply was made up by the activities of the Tax and Customs Board (57%; 1,750,125 euros), followed by the activities of the Ministry of Interior and its agency, i.e. the Police and Border Guard Administration (43%; 1,343,204 euros). Similarly to the problems with separate presentation of the expenditure of the drug addiction field of the MER, the expenditure for supply reduction is also often impossible to present separately from the overall expenditures of the ministry.

Due to this, it is difficult to provide an adequate overview of the expenditure for supply reduction in the years 2007-2011. For example, the drug-related expenditure of the Ministry of Interior for the year 2010 cannot be discerned at all. The NSDP presents more detailed information about larger one-time expenditures for equipment facilitating the combating and prevention of drug related crime (e.g. procuring and installing license plate detection systems, drug tests). In the year 2007 the expenditures of the Tax and Customs Board related to implementation of the NSPD were high precisely because of acquiring expensive equipment (Figure 3).

**Figure 6.** Distribution of NSDP expenditures for supply reduction, in the years 2007-2011



Source: NSDP reporting in the period of 2007-2011.

Figure 6 shows that expenditures for supply reduction in the years 2007-2011 have been uneven. Due to specifics of reporting, problems with differentiating drug-related expenditures and the need-based nature of acquiring larger equipment, the fluctuations of expenditures cannot be related to economic decline.

**Summary**

As a summary it can be said that the current reporting system of the NSPD does not enable getting a good overview of the drug-related financing. Reports of the NSPD omit direct activity expenditures of the agencies related to drug prevention, as those expenses cannot be discerned in detail within a field of activities. Both the expenditures of the PBGB for combating drug related crime and the educational expenditures of the MER for

prevention of drug addiction (incl. salaries and economic expenditures) are included in general drug related crime combating and educational expenditures of those agencies. Everyday work of the Tax and Customs Board as an agency in the area of government of the Ministry of Finances for cross-border detection, combating and prevention of drug related crime and activities in the prison environment of the Ministry of Justice are also not reflected as separate budget rows in reports. The drug-related activities of the MSA and its area of government can be presented the best as these activities have specific contracts and volumes. To get a more accurate overview of the effects of the economic crisis on drug services, a more accurate study would need to be conducted instead of relying on existing reports.

The existing reporting indicates that the financing of both the NSPD and the HIV and AIDS strategy decreased somewhat in the years 2007-2011. Setting of priorities within the limited resources was very important during the years of reduced budget. Preserving the volume of drug services was set as a priority. The greatest decrease due to economic pressure has happened in the primary prevention activities. On the other hand, the financing and volume of the opiate substitution treatment has been increasing throughout the years. At the same time it needs to be kept in mind that in addition to providing methadone substitution treatment for opiate addicts, new treatment services need to be established for amphetamine abusers as well.

## Section C. Appendix

### References

- Denissoff G., Tuusov J., Mailis Tõnisson M., Lepik D., Väli M. (2012). The impact of changing classifications on official fatal poisoning figures. *Rom J Leg Med*, 20, 197-202
- ESPAD Report 1995. Alcohol and Other Drug Use Among Students in 35 European Countries.
- ESPAD Report 1999. Alcohol and Other Drug Use Among Students in 35 European Countries.
- ESPAD Report 2003. Alcohol and Other Drug Use Among Students in 35 European Countries.
- ESPAD Report 2007. Alcohol and Other Drug Use Among Students in 35 European Countries.
- ESPAD Report 2011. Alcohol and Other Drug Use Among Students in 35 European Countries.
- Ministry of Justice. (2012). Crime in Estonia 2011. Ministry of Justice Criminal policy studies 16. Tallinn 2, pp. 124-126.
- Lõhmus, L., Rüütel, K., Loit, H-M., Talu, A., Uusküla, A. (2007). Prevalence of HIV infection and other infections and risk behaviour of injecting drug users in Tallinn and Kohtla-Järve. National Institute for Health Development, Public Health Institute of the University of Tartu.
- Lõhmus, L., Abel-Ollo, K., Talu, A. (2011). Prevalence of HIV infection, hepatitis and risk behaviour among injecting drug users in Narva. 2010. National Institute for Health Development.
- National HIV and AIDS Strategy report of the year 2010
- National HIV and AIDS Strategy report of the year 2011
- National Strategy for Prevention of Drug Addiction until 2012 report of the year 2010
- National Strategy for Prevention of Drug Addiction until 2012 report of the year 2011
- National Tuberculosis Prevention Programme for 2008 – 2012 report of the year 2011
- Salekešin, M. (2012). Comparison of the risk behaviour and spread of HIV among drug users with and without prison experience. University of Tartu.
- Tallinn University, Institute of International and Social Studies, National Institute for Health Development. (2012). Drug use among school youth: Use of legal and illegal drugs by 15-16-year-old students in Estonia. Tallinn.
- Talu, A., Rajaleid, K., Abel-Ollo, K., Rüütel, K., Rahu, M., Rhodes, T., Platt, L., Bobrova, N., Uusküla, A. (2010). HIV infection and risk behaviour of primary fentanyl and

amphetamine injectors in Tallinn, Estonia: Implications for intervention. *International Journal of Drug Policy*, 21(1), 56–63.

Health Board. (2012). *Communicable Diseases in Estonia. Part 15*. Tallinn

National Institute for Health Development. (2012). *Mapping of health care and support services for adult drug addicts*. Tallinn

Tuusov, J., Vals, K., Tõnnisson, M., Denissov, G., Väli, M. (2012). Fatal Poisoning in Estonia 2000-2009. Trends in illegal drug-related deaths. *Journal of Forensic and Legal Medicine*, 1-6.

Uusküla, A., Abel, K., Rajaleid, K., Rüütel, K., Talu, A. (2007). Estimating injection drug use prevalence using state wide administrative data sources: Estonia, 2004. *Addict Res Theory*, 15, 411–424.

Uusküla, A., McMahon, J. M., Raag, M., Silm, S., Rüütel, K., Talu, A., Abel-Ollo, K., Ahas, R., Des Jarlais, D. C. (2010). Emergent properties of HIV risk among injection drug users in Tallinn, Estonia: synthesis of individual and neighbourhood-level factors. *Sex Transm Infect*, 86, 79–84.

### **Internet sources**

Tallinna Kiirabi veebileht - <http://www.tems.ee> [08.08.2010]

Riigi Teataja – [www.riigiteataja.ee](http://www.riigiteataja.ee)

### **EMCDDA standardtables, 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

## Tables and figures

**Table 1.** Use of the resources of the National Strategy for Prevention of Drug Addiction in 2010 and 2011 (EUR).

**Table 2.** Financing of harm reduction of HIV/AIDS and ARV treatment from the budget of NIHD and the Ministry of Social Affairs 2010–2010 (EUR).

**Table 3.** Major social-demographic indicators of IDUs with and without prison experience in 2009, Tallinn.

**Table 4.** Methadone substitution treatment funded from state budget for injecting drug users in 2011.

**Table 5.** Quantities of methadone administered in nationally funded methadone substitution treatment centres in 2011 (mg).

**Table 6.** Rehabilitation services for drug addicts in 2011.

**Table 7.** Persons seeking treatment for the first time and recurrently in 2010-2011 by gender.

**Table 8.** Distribution of persons seeking treatment by gender on the basis of treatment status in 2010-2011.

**Table 9.** Nationality of the persons seeking treatment on the basis of treatment status in 2010-2011.

**Table 10.** Place of residence of the persons seeking treatment on the basis of treatment status in 2010-2011.

**Table 11.** Employment of the persons seeking treatment on labour market in 2010-2011.

**Table 12.** Education of the persons seeking treatment on the basis of treatment status in 2010-2011.

**Table 13.** Drug addiction treatment types on the basis of treatment status in 2010-2011.

**Table 14.** The main drug used on the basis of treatment status in 2010-2011.

**Table 15.** Injection status of the persons seeking treatment on the basis of treatment status in 2010-2011.

**Table 16.** Sharing of syringe among the persons seeking treatment on the basis of treatment status in 2010-2011.

**Table 17.** New HIV infection cases among IDUs diagnosed in Estonia in 1998-2011.

**Table 18.** Cases of acute B viral hepatitis in 2000-2011.

**Table 19.** Cases of acute C viral hepatitis 1999-2011.

**Table 20.** Occurrence of dual infection of tuberculosis and HIV in first and recurrent cases 2002-2010.

**Table 21.** Provision of emergency medical care to drug users due to overdose in 2009-2011.

**Table 22.** Drug-related poisoning deaths in 2010 by gender and age groups.

**Table 23.** Persons having died as a result of drug use in 1999-2011, by gender.

**Table 24.** Age distribution of drug-related deaths 1999-2010.

**Table 25.** Drug-related deaths by gender and death cause 2009-2011.

**Table 26.** Treatment results of patients with TB/HIV+ co-infection in 2002-2011, as of 1.10.2012.

**Table 27.** Registered drug-related crimes in 2007–2011.

**Table 28.** The number of drug-related offences and the number of persons involved in drug-related crimes in 2007-2011.

**Table 29.** Amounts of confiscated narcotic substances in 2007-2011 (kg).

**Figure 1.** Purity of drugs 2002-2011\*.

**Figure 2.** Use of the resources of the National Strategy for Prevention of Drug Addiction in the years 2007-2011 (EUR).

**Figure 3.** Distribution of expenditures for primary prevention, treatment and rehabilitation in the years 2007-2011 (%).

**Figure 4.** Financing of the harm reduction services from the funds of the HIV/AIDS strategy in the years 2007-2011 (EUR).

**Figure 5.** Damage reduction services for drug injectors in the years 2007-2011.

**Figure 6.** Distribution of NSDP expenditures for supply reduction, in the years 2007-2011.