

Vili Varjonen

Finland Drug Situation 2014

REPORT



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Foreword

Finland – Drug Situation 2014 is an annual drug report by the Finnish National Focal Point. The report discusses the latest developments and research data from recent years, mainly focusing on 2013 and early 2014.

The drug situation is described from the perspectives of legislation, policies, use, harm, treatment and other interventions, and the drug issue is approached from the health, social and criminal points of view.

The report was compiled and written by Senior Planning Officers Vili Varjonen, Hannele Tanhua and Martta Forsell at the Finnish National Focal Point, which operates at the National Institute for Health and Welfare (THL).

Several experts contributed to and provided helpful comments on the preparation of the report (Appendix 1). We extend our warmest thanks to everyone involved in the preparation of the report. The report has been approved by the editorial board of Printed Products, Information, THL, as well as the working group on international co-operation on drug issues.

The report is available in Finnish and English online.

Finland – Drug Situation 2014 is one of the national annual reports compiled by the National Focal Points in the European Information Network on Drugs and Drug Addiction (REITOX) which is co-ordinated by the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA). The national reports form the basis for the EMCDDA's annual European Drug Report.

Helsinki, October 2014

Vili Varjonen
Senior Planning Officer

Abstract

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This report is a compilation of the most recent Finnish research on drugs and key indicators of the drug situation in Finland, mainly focusing on 2013 and early 2014.

Generally, drug use and drug-related problems have remained fairly stable in Finland over the past years.

According to the 2010 population survey, 17% of Finns aged 15 to 69 had tried at least one illegal drug at least once in their life. Experimentation principally involved cannabis: 13% of women and 20% of men had experimented with cannabis. There was a heightened incidence of experimentation, 36%, in the young adult age group (aged 25–34).

According to the national school health survey of 2013, 9% of comprehensive school pupils, 13% of first-year and second-year upper secondary school students and 21% of first-year and second-year vocational education students had tried illegal drugs at least once in their life.

According to a register study estimating the problem use of opioids and amphetamines, there were between 18,000 and 30,000 problem drug users in Finland in 2012: between 11,000 and 18,000 problem users of amphetamines and between 13,000 and 15,000 problem users of opioids. Compared with earlier studies, this would seem to indicate an increase in the number of problem drug users in Finland. However, according to the 2012 study there were fewer young problem users than in the early 2000s. In the most recent study, almost half of the problem users were found in the 25 to 34 age group. About one third of all problem users were women.

No changes have occurred in the backgrounds and life situations of drug user clients of substance abuse services in recent years. The majority of drug user clients of substance abuse services in 2013 were men (68%) and aged between 20 and 34 (63%). Their educational attainment was low, and few of them were employed or studying (21%). Polydrug use was very common, and problem use of at least three substances was reported for 62% of clients.

In 2011, there were about 2,400 clients in opioid substitution treatment.

The number of annual drug-related deaths has increased. According to the cause of death statistics compiled by Statistics Finland, there were 213 drug-related deaths in 2012, compared with 197 in 2011.

Keywords: intoxicant analgesics, narcotics offences, drugs, drug-related harm, drug users, drug policy, drug research, substance abuse prevention, public expenditure, consequences, harmful effects of substance abuse, substance abuse treatment, substance abuse culture, substance abuse rehabilitation, substance abuse problems, substance abuse services, substance abuse work, substance abuse services

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1 National policies and context

The purpose of drug policy is to prevent the use and distribution of drugs so as to minimise the economic, social and individual harm and costs of their use and prevention. Finland's drug policy is based on general social policy measures, national legislation and international treaties, together aimed at contributing to a reduction in the supply of and demand for drugs, and in drug-related harm, enabling early treatment for those suffering from drug problems and imposing penal liability on those engaged in illegal activities.

Drug policy is coordinated by the Ministry of Social Affairs and Health and implemented by the various administrative sectors in cooperation. The Drug Policy Coordination Group led by the Ministry has the job of developing and coordinating national drug policy and to monitor the drug situation. Finland's drug policy is based on the Government Resolution on an Action Plan to Reduce Drug Use and Related Harm 2012–2015 and on the Drug Strategy adopted in 1997. In its drug policy, Finland observes the United Nations international drug control conventions and the EU Drugs Strategy for the period 2005–2012.

The resources allocated have a significant impact on the implementation of drug policy.

1.1 Legal framework

Definition of drugs

The Decree on substances, preparations and plants considered as narcotics (543/2008) lists the substances and preparations defined as narcotics. This Decree is based on the UN Single Convention on Narcotic Drugs (SopS 44/1994) and its Convention on Psychotropic Substances (SopS 23/1967). In addition, the Decree lists substances placed under narcotics control at the community level, including 4-MTA, PMMA, 2C-I, 2C-T-2, 2C-T-7, TMA-2, 1-benzylpiperazine and most recently mephedrone, and also the substances nationally classified as narcotic drugs.

Narcotics Act

According to the Narcotics Act (373/2008), which entered into force in September 2008, the production, manufacture, import, export, transit, distribution, processing, possession and use of and trafficking in drugs is prohibited, although exemptions are possible for medical, scientific, investigative and control purposes.

Sanctions prescribed in the Narcotics Act are divided according to the severity of the offence into administrative coercive measures and sanctions for offences against the Narcotics Act and for narcotics offences. Administrative coercive measures include prohibition of further action and/or a default fine to enforce such a prohibition. Offences against the Narcotics Act include for instance intentional neglecting of the obligations of the Act. Unless a more severe punishment for the act is provided for elsewhere in the legislation in force, a person committing an offence against the Narcotics Act can be sentenced to a fine. Provisions concerning the more serious narcotics offences are laid down in Chapter 50 of the Penal Code (39/1889).

Under the Narcotics Act, the Finnish Medicines Agency (Fimea) is the licensing and controlling authority for narcotic drugs and drug precursors. A licence is required for the manufacture, import, export and handling of drugs unless this is specifically exempt by law, as for instance for many of the actors in the health care sector. The Decree on Narcotics Control (548/2008) lays down more specific provisions on the license administration, operations subject to authorisation and their supervision under the Narcotics Act. The trade in and handling of drug precursors is provided for in more detail by EC Regulations.

Legislation on substance abuse prevention

There are many other legislative provisions intended to prevent, treat and monitor drug use and problem use of drugs. Provisions concerning preventive substance abuse work are laid down in the Temperance Work Act (828/1982). This Act defines the purpose of temperance work as habituating citizens to healthy lifestyles by guiding them in avoidance of the use of substances and tobacco. According to the Act, the establishment of general prerequisites for substance abuse prevention is primarily the task of central and local government. Practical measures in this area are generally undertaken by local authorities and by temperance and public health organisations. Pursuant to the Act, each local authority must have a designated body responsible for temperance work. This body must cooperate with the local health care, social welfare and education services in particular. The Temperance Work Act is scheduled for revision in 2013. The purpose of this revision is to develop local measures for prevention of harmful impacts of substance abuse. Local aspects of measures aimed at preventing harmful impacts of substance abuse will be considered more closely than before in revising the Act. The Temperance Work Decree (233/1983) further specifies that this body must cooperate with organisations engaging in temperance work and substance abuse prevention and promoting healthy lifestyles.

Under the Child Welfare Act (417/2007), a child is entitled to a safe growing environment, balanced and well-rounded development and special protection. When the parent, guardian or person otherwise responsible for the care and upbringing of a child is a client of substance abuse services, mental health services or other social welfare or

health care services and as a result is judged to be impaired in his/her ability to manage the care and upbringing of the child, the child's need for care and support must be investigated, and sufficient care and support must be provided. An amendment to the Child Welfare Act entered into force in March 2010 containing a provision on submitting an anticipatory child welfare notification. An anticipatory child welfare notification must be submitted when there is reasonable cause to suspect that a forthcoming child will need child welfare support measures immediately after the birth. In other words, an anticipatory child welfare notification must be submitted by someone who has certain knowledge that a mother-to-be or father-to-be has a substance abuse problem or a severe mental health disturbance or is subject to a custodial sentence. A suspicion of substance abuse is not in itself enough for submitting an anticipatory child welfare report.

The key principles for pupil and student welfare services and the educational objectives are defined in the national curricula for the various educational levels. Legislation related to education (477–479/2003) has required educational institutions to apply these principles, together with social welfare and health care authorities, in local curricula in order to further the prevention and treatment of substance abuse.

The Government Decree on welfare clinic services, school and student health services and preventive oral health services for children and youth (380/2009) lays down provisions concerning health examinations in welfare clinics and carried out by school and student health services. According to the Decree, sufficient and regular health examinations and health counselling are aimed at enhancing early support and preventing social marginalisation. Another purpose of health counselling is to prevent substance abuse and thereby promote psychosocial wellbeing. The Decree specifies that welfare clinics must adopt extensive health examinations – as in school health care – involving the entire family. Health examinations in eighth grade in comprehensive school highlight the importance of early detection, intervention and further treatment in any substance abuse problems.

The Occupational Health Care Act (1383/2001) enables drug testing in the workplace. Before requiring any individual to take a test, the employer must have a written substance abuse programme, which contains the general goals of the workplace and practices to be followed to prevent substance abuse and help substance abusers in seeking treatment. The Act on the Protection of Privacy in Working Life (759/2004) regulates employers' rights and their limitations concerning drug tests required from employees. Drug control is justified in sectors where special legislative provisions apply. Such provisions may be found in the Conscriptation Act (1438/2007), the Aviation Act (1194/2009) and the Act on traffic safety duties in the railway system (1664/2009). The Ministry of Social Affairs and Health has issued instructions on drug tests in working life. (Ministry of Social Affairs and Health 2006).

Legislation on services and harm reduction

According to the Constitution (731/1999), those who cannot obtain the means necessary for a life of dignity have the right to receive indispensable subsistence and care.

Treatment for drug users is regulated by the Act on Welfare for Substance Abusers (41/1986), requiring municipalities to ensure that the provision of substance abuse services meets local needs as regards content and scope. These services must be delivered through the development of general social and health care services and the provision of services that are intended specifically for substance abusers. Such services must be provided primarily through outpatient care and should be easily available, flexible and diversified.

The Social Welfare Act (710/1982) requires local authorities to provide social welfare services, including substance abuse services.

At the moment, both the Act on Welfare for Substance Abusers (41/1986) and the Mental Health Act (1116/1990) allow for commitment to involuntary treatment. Section 11 of the Act on Welfare for Substance Abusers allows for involuntary commitment to treatment in case of a health risk, but this provision is applied only rarely. However, coercive measures are often exercised on substance problem users pursuant to the Mental Health Act (1116/1990).

The Decree governing detoxification and substitution treatment for opioid addicts (33/2008) stresses that unlike under previous legislation only demanding substitution treatment cases should be dealt with by specialist health care; other cases should be treated at the primary health care level. Pharmaceuticals containing buprenorphine or methadone may only be prescribed for the detoxification or substitution treatment of opioid addicts by a physician employed by a health care unit who is responsible for this function, or by a physician designated by him/her. However, the Decree also allows a combined preparation of buprenorphine and naloxone to be issued from a pharmacy under a pharmacy contract signed by the patient. A pharmacy contract is an agreement by which the patient commits to collecting the pharmaceuticals specified under the contract from only one pharmacy and agrees that this pharmacy may transmit treatment-related information to the physician treating the patient and notify other pharmacies of the existence of the pharmacy contract.

The amendment of the Decree on Prescription of Medicines (490/2008) specifies the conditions for prescribing a narcotic substance for medicinal use and, if special therapeutic reasons exist, for prescribing special preparations outside the special authorisation procedure under the Medicines Act for medicinal use. A condition for prescribing a preparation requiring special authorisation is that no other therapies are available for treating the patient or that the desired outcome cannot be achieved using other therapies. Special authorisation can be granted on a patient-specific basis and, at most, for one year at a time. Based on the amendment, a cannabis-based analgesic can also be prescribed in certain cases. However, cannabis-based medicines do not have an actual marketing authorisation.

The Communicable Disease Decree (786/1986) requires that the municipal body responsible combating infectious diseases ensure that work is undertaken for the prevention of infectious diseases, including the provision of health counselling for intravenous drug users as well as needle and syringe exchange. In addition, as part of the general vaccination programme, Decree 421/2004 recommends free hepatitis A and B vaccines for intravenous drug users, their sexual partners and individuals living in the same household.

Penal Code

Narcotics offences are provided for in chapter 50 of the Penal Code (39/1889), in an amendment to which (1304/1993) they were further categorised as narcotics offences, or the preparation or abetting of narcotics offences (maximum sentence 2 years' imprisonment), or aggravated narcotics offences (1 to 10 years' imprisonment). An amendment to the Penal Code enacted in 2001 (654/2001) defined the unlawful use of narcotics (maximum sentence six months' imprisonment). In 2006, a further amendment (928/2006) rendered the preparation of and abetting a narcotics offence punishable acts.

Dealing with the unlawful use of narcotics is possible in summary penal proceedings (692/1993). This may be done in cases where the penal provision applicable does not include a punishment more severe than a fine or a maximum of six months' imprisonment. A summary penal order is issued by the police, a customs official or another public official performing controls stipulated by law, on their own initiative or on behalf of the prosecutor. Through amendment 578/2008 to the Penal Code, it was determined that a fine imposed in summary penal proceedings may not be converted into imprisonment. In practice, this means that offenders issued a fine in summary penal proceedings by the police or the prosecutor for the unlawful use of narcotics may no longer be sent to prison instead. Charges may be waived for unlawful use of narcotics if the offender agrees to seek treatment or if, in the case of an offender under the age of 18, a reprimand is given. (Kainulainen 2009.)

Chapter 23 of the Penal Code (39/1889) concerns driving while intoxicated, including provisions on drugs. Since 2002, a zero-tolerance policy has been in effect concerning the use of drugs or pharmaceuticals classified as narcotics while driving, unless the driver has a valid prescription for them.

The control of illegal drugs is also provided for in the Coercive Measures Act (450/1987), which sets forth terms and conditions for wiretapping, telecommunications monitoring and technical monitoring, and in the Police Act (493/1995), which provides in more detail for undercover action, pseudo purchases and other significant intelligence methods in the prevention, uncovering and solving of serious and organised crime (including drug crime).

Legislation on sanctions

The Act on Imprisonment (686/2005) regulates both drug control and drug prevention and treatment work in prisons. The Act stipulates that, in a closed institution, the prison inmate must be provided with the opportunity to stay in a contractual ward where the inmates are committed to a supervised intoxicant-free life and to the activities arranged in the ward. An inmate with a substance abuse problem can also be placed for a fixed term in an institution outside prison, where he/she can participate in rehabilitation or other target-oriented activities that reinforce his/her coping skills and where he/she does not use intoxicating substances and observes the terms and conditions stipulated for free movement.

1.2 Drug policy and its coordination

Finnish drug policy is based on general social policy measures, national legislation and international treaties, together aimed at contributing to a reduction in the supply of and demand for drugs, and in drug-related harm, enabling early treatment for those suffering from drug problems and imposing penal liability on those engaged in illegal activities. This policy has not fundamentally changed in recent years. However, monitoring has been tightened through enactment of legislation on designer drugs. In its drug policy, Finland observes the United Nations international drug control conventions and the EU Drugs Strategy for the period 2005–2012. (Finnish Government 2007a.) Anti-drug work will also take account of measures contained in other Government action plans (including those adopted by previous Governments and still valid) and those under the Internal Security Programme, for instance.

The Ministry of Social Affairs and Health is responsible for coordinating national measures related to drug policy. The principal coordinating body for drug policy is the national Drug Policy Coordination Group led by the Ministry of Social Affairs and Health; each administrative sector brings matters under preparation with relevance for general drug policy to the group for discussion. The bodies represented in this group are the Ministry of the Interior, the National Police Board, the Ministry of Justice, the Office of the Prosecutor General, the Ministry of Finance, the Customs authorities, the Ministry of Education and Culture, the National Board of Education, the Ministry for Foreign Affairs, the National Institute for Health and Welfare and Fimea. The Drug Policy Coordination Group discusses legislative amendments and recent research findings and submits initiatives for action. The group regularly reports to the Government about the drug situation and new measures.

Background

The first Finnish drug strategy was published in 1997, with the aim of arresting the growth of drug use and the related crime. Based on this strategy, the Government has issued resolutions in 1998, 2000, 2004 and 2008.

According to a dissertation by Tuukka Tammi (2007), two contradictory views on the drug issue were held by the first national Drug Policy Committee: the police authorities advocated a drug-free society and strict control policies while the social welfare, health and criminal policy alliance was in favour of harm reduction. The general objective of harm reduction was not solely based on public health concerns. Indeed, the concept's ideological roots can be traced back to the tradition of a rational and humane criminal policy first adopted in the 1960s and 1970s, according to which criminal and social policy primarily aims at minimising social harm. (Tammi 2007.)

According to the study, minimising harm has not presented a threat to the drug prohibition policy; rather, it has become part of it. Minimising harm through the establishment of syringe and needle exchange points (health counselling centres) and extended substitution treatment has meant new, specialised services founded upon medicine and increased efforts by medical professionals to treat drug-related problems. At the same time, penal control of drug use has become more effective. Therefore, minimising harm has not meant a step towards a more liberal drug policy, nor has it vitiated the traditional policy based on complete drug prohibition. Instead, minimising harm combined with punitive prohibition policy forms a two-pronged paradigm for Finland's drug policy. (Tammi 2007.)

Aarne Kinnunen noted in his doctoral dissertation, completed in 2008, that despite its social welfare and health care elements the Finnish drug policy continues to rely principally on the criminal justice system. Sanctions for drug-related offences in Finland are more severe than for other offences. The criminalisation of drug use and the tightening of the practice of issuing fines demonstrate that a stricter moralist view of drug use and other high-risk behaviour is now prevalent. Moreover, criminal control tends to focus on persons of low socio-economic status. (Kinnunen 2008.)

Heini Kainulainen came to a similar conclusion in her dissertation. According to her, the criminal justice sanction system has in recent years focused increasingly on the offender, particularly in the case of offenders who are substance abusers. For example, waiving charges remains an extremely rare outcome, even though it would be especially needed in narcotics offences. The police have traditionally been reluctant to apply this procedure, since intervention in users' actions has been considered crucial. For a long time, prosecutors concurred. (Kainulainen 2009.)

Traditionally, it has been considered important in Finnish criminal policy to prefer values of humanity and social justice and to focus on preventive action. Sanctions have been considered a secondary resort. However, in drug policy criminal justice has retained a central role despite the fact that harm-reduction policy has made inroads and the welfare society has been able to provide a growing range of care services for problem users. (Kinnunen 2008.)

Current drug policy

A new Government was appointed in Finland in June 2011. The new Government Programme included the following commitments:

- The efficiency of measures to protect the entire population, but especially children and young people, from the adverse effects caused by alcohol, tobacco, other drugs and gambling problems will be enhanced.
- An action plan will be drafted to reduce drug abuse and its effects.
- Needs for developing drug legislation will be reviewed.
- Low-threshold services, medical counselling and outreach work for drug users will be increased.
- The efficiency of treatment referrals carried out by the police will be enhanced.
- Opportunities for the treatment of drug problems during imprisonment will be increased.

(Finnish Government 2011a.)

The Government Resolution on an Action Plan to Reduce Drug Use and Related Harm was adopted in August 2012. This Action Plan has five component areas: 1) Preventive work and early intervention; 2) Combating drug-related crime; 3) Treatment of drug addiction and reduction of harm from drug use; 4) The EU's drug policy and international co-operation; and 5) Information collection and research regarding drug problems. (Ministry of Social Affairs and Health 2012a.)

1. Preventive work and early intervention

Under the Temperance Work Act (828/1982), preventive substance abuse work is the responsibility of local authorities. Preventive substance abuse work is carried out in social and health care, youth work, schools and educational institutions, parishes and NGOs. Cooperation between administrative sectors and between authorities at the local level is crucial for preventing drug-related harm. The quality and methods of substance abuse prevention are being developed by the National Institute for Health and Welfare and by NGOs and local authorities. The purpose of the forthcoming revision of the Temperance Work Act is to reinforce the status of substance abuse prevention in municipalities and to ensure that preventive work is taken into account as local government structures change.

The Youth Act (72/2006) also requires improved planning and implementation of multiprofessional cooperation among local authorities. For this purpose, local authorities must have a guidance and service network in place for young people, involving representatives of the education, social welfare, health care and youth authorities and of the employment administration and the police. This network interacts with NGOs that provide services for young people.

Goals for the current electoral period include:

- enhancing the participation of young people in decision-making concerning substance abuse prevention and its implementation,
- clarifying the division of duties and structures in preventive work,
- supporting substance abuse prevention at schools and in pupil and student welfare services,
- engaging the police and other authorities in closer cooperation at the local level,
- intervening in crimes committed by young people with substance abuse problems at an early stage, and
- increasing reprimands issued by prosecutors to underage first-time offenders.

2. Combating drug-related crime

The purpose of crime prevention is to increase the likelihood of being caught with respect to aggravated narcotics offences and those involving distribution carried out in Finland. The aim is to implement criminal liability through seamless international co-operation with the offender's home country or country of residence. Drug imports are being combated through cooperation between the police, Customs and the Border Guard (PTR cooperation), the aim being to seize drugs at the border, except if a more comprehensive investigation of criminal activities calls for controlled delivery or similar measures. Control of the distribution of drugs and pharmaceuticals classified as drugs at the street level is part of the basic operations of the police. It is also important to uncover secondary drug-related crime such as money laundering and to recover criminal proceeds.

Goals for the current electoral period include:

- enhancing intelligence-led law enforcement between the law enforcement authorities,
- combating drug-related crime online,
- exploring how drug legislation can be revised to prevent the harmful effects of designer drugs, and
- increasing cooperation between laboratory authorities to prevent the harmful effects of designer drugs.

3. Prevention and treatment of drug-related harm

Under the Act on Welfare for Substance Abusers (41/1986), substance abuse services must be offered to substance problem users, their families and other people close to them to the extent determined by the client's need for help, support and treatment. The best interests of the problem user and people close to him/her must be prioritised. There is solid evidence that providing treatment for a drug abuser is ultimately less

expensive for society than not providing treatment. What may complicate the handling of drug problems in the public service system is that drug use is a criminal offence and clients may not dare report their problems even if asked.

Recovering from a substance abuse problem is a long-term process requiring various kinds of treatment and support at various points along the way, and it would thus be important to retain diversity in substance abuse services. The Government Programme states the aim of increasing low-threshold services, health advisory services and outreach work for substance abusers. The threshold to treatment must be further lowered, and obstacles to seeking treatment removed. It is also important to bring the substance abuse services of local authorities, NGOs and parishes closer together in terms of development and supply.

Goals for the current electoral period include:

- ensuring the coverage and quality of health advisory services for substance abusers,
- exploring the current situation in the drug treatment system to improve the coverage of services,
- enhancing the efficiency of treatment referrals by the police,
- improving information exchange between the authorities, treatment services and peer group activities,
- preventing abuse of prescription drugs, and
- increasing opportunities available for treatment of substance abuse problems while serving a sentence for a criminal offence.

4. EU drug policy and international cooperation

In accordance with the Government Resolution on Finland's Policy in International Drug Control, Finland is participating actively in the planning and implementation of the forthcoming EU Drugs Strategy and Action Plan and in action against drugs in the drug policy contexts of the United Nations, the Council of Europe, Baltic regional cooperation and the Nordic Council of Ministers, and also in other established forums.

Finland aims to help dismantle overlaps in the activities of the EU and the Council of Europe. Finland also uses development cooperation funds for combating drug use.

Finland supports the leadership of the UN Office on Drugs and Crime (UNODC) in the planning and implementation of international drug control. Finland actively supports the efforts of the EU to enhance the drug strategy and actions of the EU in the context of the UN and in other international drug control cooperation.

Goals for the current electoral period include:

- clarifying Finland's actions in various forums, and
- continuing to support the drug control efforts of the UNODC through general funding and theme-based funding.

5. Information collection and research regarding drug problems

Research into drug use, drug markets, the treatment of drug users and methods of combating drug-related problems is being furthered and international co-operation by Finnish researchers promoted. Public opinion regarding drugs, their use and their harmful effect is canvassed regularly. National information is also submitted to the information-collecting systems of the EU and the UN. Drug-related research is being carried out by the National Institute for Health and Welfare, the National Research Institute of Legal Policy and universities, among others.

Goals for the current electoral period include:

- enhancing research in the sector, and
- developing drug policy evaluation as a tool for supporting decision-making.

1.3 Government programmes and working groups affecting drug policy

In 2011–2015, preventing poverty, inequality and social exclusion forms one of the three focus areas in the Government Programme. The Government's cross-sectoral action plan for reducing social exclusion, poverty and health problems aims to create a permanent operating model whereby the promoting of health and wellbeing and the reduction of inequality are mainstreamed into all public decision-making. The action plan includes spearhead projects in various administrative sectors aiming to facilitate participation. (Ministry of Social Affairs and Health 2012b).

Broad-based development of general welfare policy and of social welfare and health care services continues. The National Development Plan for Social and Health Care Services (KASTE) is in its second four-year period. (Ministry of Social Affairs and Health 2012c.) This plan focuses on primary health care, social welfare, first response care, mental health services and substance abuse services.

The National Plan for Mental Health and Substance Abuse Work, Mieli 2009–2015 (Ministry of Social Affairs and Health 2009b) underlines prevention and early intervention as well as shifting the service focus to primary and outpatient services. According to the plan, people with both mental health and substance abuse problems must be able to access services flexibly through a one-stop shop and on an equal basis in comparison to other people. To enable eventual operating reforms, the National Institute for Health and Welfare also published a guide to strategic planning in mental health and substance abuse services at the local or regional level. (Laitila et al. 2009.)

The Ministry of Social Affairs and Health and the National Institute for Health and Welfare are responsible for implementing the national plan for mental health and substance abuse work. The National Institute for Health and Welfare published a report on the national plan for mental health and substance abuse work, its reception and its implementation plan in 2010. (Partanen et al. 2010.)

Key areas of interest in the development of mental health and substance abuse services include experiential expertise and peer group support, reforming the legislation on compulsory care, new means for reducing coercive measures, and low-threshold basic services, extending far beyond public services to the third sector. This involves not only the social welfare and health care sector but also education, culture and other leisure functions, businesses and bodies responsible for housing and living environments. (Ministry of Social Affairs and Health 2009b).

The National Action Plan to Reduce Health Inequalities 2008–2011 (Ministry of Social Affairs and Health 2008b) laid down practical guidelines for reducing socio-economic health inequalities. The action plan also sought to address certain special needs groups, such as families suffering from substance abuse and mental health problems. In the context of this action plan, the National Institute for Health and Welfare has set up an online service named Kaventaja, providing information on welfare and health differentials, factors affecting them and means for narrowing them. The National Institute for Health and Welfare and the Finnish Institute of Occupational Health are also engaging in a joint project (Teroka) for developing practices and collating information for attaining the goal in narrowing health differentials.

The Policy Programme for the Well-being of Children, Youth and Families 2007–2011 (Finnish Government 2007c) aimed to create a service system supporting families with children. A key priority was support services for children and young people, especially in the case of violence, mental health problems or intoxicant problems in families. The final report of this Policy Programme was published in 2011. It noted that legislation had been developed, successful efforts had been undertaken to prevent the social exclusion of young people, and low-threshold services for families had been increased. (Finnish Government 2011b.)

Under the Youth Act (72/2006), a youth policy development programme shall be prepared every fourth year. The first Child and Youth Policy Development Programme 2007–2011 (Ministry of Education 2007) affirmed that the passing of mental health and substance abuse problems from one generation to the next is one of the most common paths to social exclusion. The programme underlined that cooperation between child welfare services, substance abuse services and mental health services must be strengthened to meet the welfare and rehabilitation needs of children whose parents require adult services. Regarding criminal law, mental health or substance abuse services could also be included in juvenile punishments. (Advisory Council for Youth Affairs 2011.) The statutory programme for 2012–2015 was completed in December 2011; it includes goals for preventing substance abuse among young people. (Ministry of Education and Culture 2012.)

The Internal Security Programme is a regularly adopted extensive, cross-sectoral programme comprising measures in various administrative sectors to maintain and improve security. Previous Government Resolutions concerning such a programme were adopted in 2004 and 2008. Interim reports have been published annually on the

implementation of the 2008 Internal Security Programme (Ministry of the Interior 2009; 2010; 2011). The programme for 2012–2015 is the third cross-sectoral programme of its kind. Because social exclusion causes security threats, one of the objectives of the programme is to reduce social exclusion. Social exclusion generally involves substance abuse, and the programme aims to target security threats related to alcohol and other substance abuse. (Ministry of the Interior 2012.)

A working group appointed by the Ministry of the Interior and the Ministry of Social Affairs and Health prepared a report on the taking into custody, transport, treatment and care of intoxicated persons. The working group concluded that the involvement of the police in the apprehension, transport and taking into custody of intoxicated persons should be reduced and the role of social welfare and health care professionals augmented. Sobering-up stations should be located adjacent to a health care emergency clinic, a substance abuse service unit or a police custody unit. Key development points included improving of substance abuse prevention and services for the homeless in order to reduce the need for taking intoxicated persons into custody, clarifying the role of the private security sector with regard to assignments involving intoxicated persons, trying out new operating models, and improving information exchange between actors and statistics compilation. Regional special features and the long distances in sparsely populated areas should be taken into account in the development. (Ministry of the Interior 2011b.)

1.4 Economic analysis

Public expenditure from drug-related harm

The expenditure incurred from drug-related harm by the Finnish government is calculated based on a long-established calculation framework. (Salomaa 1996; Hein & Salomaa 1998.) The calculation framework was updated in 2011 and 2012, and the expenditure figures given in this section were derived using the updated framework. Harm-related expenditure is published annually in the Yearbook of Alcohol and Drug Statistics published by THL.

Table 1. Expenditure from drug-related harm by primary and secondary category in 2012, EUR million.

	Minimum	Maximum	Average	Change on previous year, %
DIRECT COSTS	364,4	434,3	399,3	2,6
Health care costs	38,2	60,7	49,4	8,8
Specialist medical care	32,0	49,8	40,9	14,1
*Somatic specialist medical care	12,7	15,8	14,3	-0,8
*Psychiatric specialist medical care	19,3	34,0	26,6	24,1
Primary health care	6,2	10,9	8,6	-11,0
Pensions and sickness allowances	7,1	23,4	15,2	6,0
Disability pensions	3,0	18,9	10,9	6,2
Sickness allowances	1,0	1,3	1,1	6,4
Family pensions	3,2	3,2	3,2	2,4
Social services costs	71,7	100,9	86,3	7,0
Substance abuse services	32,3	59,7	46,0	6,0
Income support	2,8	4,6	3,7	7,7
Child welfare services	36,2	36,2	36,2	8,4
Home services	0,3	0,4	0,4	-7,0
Public order and safety	75,4	75,4	75,4	3,4
Police	39,5	39,5	39,5	3,1
Rescue services	24,0	24,0	24,0	3,4
Customs	11,9	11,9	11,9	4,1
Border Guard	-	-	-	-
Judicial system and and prison service	56,8	58,7	57,7	1,7
Courts, prosecutors, legal aid and execution	10,6	12,4	11,5	2,8
Prison service	45,8	45,8	45,8	1,5
Other	0,4	0,5	0,4	-2,6
Accidents and criminal damage	111,4	111,4	111,4	-1,7
Other expenditure				
**General substance abuse prevention	3,8	3,8	3,8	-34,4

*) Classification according to the Classification of the Functions of Government (COFOG).

***) Classification has changed.

1.5 Social costs related to drugs

In 2012, costs related to the abuse of drugs and pharmaceuticals amounted to about EUR 364 to 434 million in social costs (Table 2). Social costs include not only public-sector costs but also costs incurred by enterprises and households. Social costs include insurance compensation paid as a result of drug-related injuries, fires and traffic accidents, and criminal damages. In all, the costs of damage from drug-related accidents and crimes in 2012 amounted to EUR 113 million. (Jääskeläinen 2012.)

Table 2. Expenditure from drug-related harm by main group in 2007–2011 (at market prices), EUR million.

	Health care		Pensions and sickness allowances		Social welfare		Maintaining public order and safety		Judicial system and prison service		Other (substance abuse prevention)		Accidents and criminal damage		Expenditure total	
	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
2008	28	48	7	19	45	62	73	73	57	59	11	11	96	96	317	368
2009	28	48	7	20	48	67	73	73	57	59	11	11	99	99	324	377
2010	28	48	7	21	49	68	77	77	58	60	10	10	96	96	325	380
2011	34	57	7	22	67	94	73	73	56	58	6	6	113	113	355	423
2012	38	61	7	23	72	101	75	75	57	59	4	4	111	111	364	434

2 Drug use in the population

In Finland, drug trends have followed international currents. Much like other countries, Finland has experienced two major drug waves: one in the 1960s and the other in the 1990s.

Much like in the 1960s, the new rise in experimentation with and the use of drugs in the 1990s was a youth and generational phenomenon. The techno culture landed in Finland at the end of the 1980s, beginning as a small underground movement. This phenomenon began to gain in popularity in the mid-1990s, especially among young adults (aged 15–34). By the end of the 1990s, the phenomenon had diversified and was no longer only a marginal way of partying among urban youth. Studies show that the trend in drug experimentation of the 1990s was subject to gender-specific variation and was set in motion by men, followed by women only in the second half of the decade. The percentage of those having tried drugs grew until the end of the 1990s, after which the trend clearly levelled off. Today, drug use is much more a part of everyday life for young people and is much more firmly established as a party pastime and as a component of substance abuse.

Nonetheless, drug experimentation and use are still significantly more prevalent now than at the beginning of the 1990s. This increase is partly explained by the increasing percentage in the domain of population surveys of the generation that began its drug experiments in and after the 1990s, while older generations with no drug experiences at all are dropping out. The most recent data show that experimentation is on the increase again, now particularly in the 25 to 34 age group. According to data for 2010, about 17% of Finns aged 15 to 69 reported that they had tried cannabis at some point in their lives, 4% within the past year. Men accounted for slightly more of those who had tried cannabis than women. The highest incidence of use was in the age group of 15 to 34.

2.1 Drug experimentation in Finland

According to the population study results from 2010, the percentage of the population aged 15 to 69 who had at some point in their lives tried cannabis was 17%.¹ The percentage was 13% among women and 20% among men. There was a heightened

1 The sample space of the study comprised Finns aged 15 to 69, from whom a random sample of 4,250 people was chosen in autumn 2010. The basic sample consisted of 3,000 randomly chosen members of the target group, while the additional sample consisted of 1,250 members of the age group 15 to 39. The aim of the oversampling was to focus the study on the most active population group in terms of drug use. The participants were given the options of responding online or returning a questionnaire by mail. Online responses were protected by personal IDs and passwords. To increase the response rate, the participants were sent a reminder form twice. A total of 2,023 responses were received (48%), the lowest response rate ever in this series of studies that had begun in 1992. (Hakkarainen et al. 2011b.)

incidence of experimentation, 36%, in the young adult age group (aged 25–34). The percentage of those who had at some point in their lives tried other drugs was 2.1% for amphetamines, 1.7% for ecstasy, 1.5% for cocaine and 1.0% for opiates. In the age group of young adults aged 25 to 34, the percentage of those who had at some point in their lives tried other drugs was 6.4% for amphetamines, 5.9% for ecstasy, 4.3% for cocaine and just under 3% for opiates. Based on the survey, a total of 4% had tried cannabis during the past year, and far less than 1% had experimented with other substances. The percentage of those who had tried cannabis during the past month was 1%. Hypnotics, sedatives or painkillers had been misused by 6.5% of the general population at some point in their lives, misuse being defined as using them for non-medical purposes, without a physician's prescription or in larger doses than prescribed, the most common motive for such usage being the ability to sleep soundly. The percentage of misuse of pharmaceuticals was 9.9% in the age group of young adults aged 25 to 34. (Hakkarainen et al. 2011a; Hakkarainen et al. 2011b.)

The percentage of those who had tried cannabis within the past year seems to have increased slightly throughout the 2000s. This is not a statistically significant increase, however. However, significant changes have occurred particularly within the age group of 15–34: from 2002 to 2010, the percentage of those who had tried cannabis remained almost stable in the 15–24 age group, while increasing to the level of the younger group in the 25–34 group. In other words, cannabis use almost tripled in the 25–34 group during this period. It would thus seem that cannabis is no longer the exclusive province of youth culture; also, the cannabis use of the generation that was experimenting around the turn of the 2000s seems to have acquired permanence. There are also notable differences in drug use between the genders: in the youngest age group men and women are almost on a par, but later the figures for men diverge. Unlike with men, the recent use percentage among women decreases sharply in the 25–34 age group. (Hakkarainen et al. 2010b.)

The percentage of those who had tried cannabis during the past month remained at 3% in the 15–34 group but was only 1% in the 35–44 age group, demonstrating that long-term, regular use of cannabis has not become a widespread phenomenon, at least not yet. An exception to this rule is formed by men who began their drug use around the turn of the 2000s; no fewer than 15% of them reported that they had used cannabis during the past year, and 5% during the past month. (Hakkarainen et al. 2010b.)

Table 3. Lifetime and 12-month prevalence of cannabis use by age group, 1992–2010, %.

	1992	1996	1998	2002	2006	2010
Lifetime prevalence						
All	5	8	10	12	13	17
15–24	12*	14**	19	25	19	21
25–34	10	16	19	19	25	36
35–44	4	8	8	11	16	22
45–69	1	2	3	4	6	6
12 month						
All	1	2	3	3	3	4
15–24	6*	9**	10	11	9	12
25–34	2	3	3	4	7	11
35–44	0	1	0	1	2	1
45–69	0	0	0	0	1	0

* = ages 18–24; ** = ages 16–24.

Source: Hakkarainen et al. 2011b.

In Finland, alcohol use and related problems have traditionally been far more common than drug use and related problems. However, drug use has increased substantially over the past 15 years. But how are alcohol use and drug use linked in Finland? This question was approached by combining data from the questionnaires from 1998, 2002 and 2004 referred to above. The material was divided into five categories: (1) persons who had never encountered drugs, (2) persons with occasional drug encounters, (3) persons who had tried drugs, (4) cannabis users and (5) multi-substance users.² (Hakkarainen & Metso 2009.)

Binge drinking (at least 6 units of alcohol at one time) and restaurant visits were the most common by far among cannabis users and polydrug users, and the least common among persons who had never encountered drugs. This difference remained significant

2 The categories were more specifically defined as follows: (1) persons who had never been offered drugs and had never tried them; (2) persons who had been offered drugs but had never tried them; (3) persons who had at some time tried drugs but had not used or tried them within the past 12 months, or who had tried drugs for the first time within the past 12 months; (4) persons who had used cannabis within the past 12 months and before that and who had tried (no more than two) other drugs; and (5) persons who had been using more than two different drugs, also within the past 12 months. In all, the study included data on 7,227 persons. Logistical regression analysis was used.

even when the data were controlled for gender and age. The intoxicant use of pharmaceuticals was particularly heightened among polydrug users. The study suggests a clear correlation between alcohol consumption, particularly binge drinking, and drug use. The often-quoted hypothesis that cannabis use tends to replace alcohol use does not seem to hold true, at least not in Finland; on the contrary, cannabis use tends to occur alongside heavy drinking. (Hakkarainen & Metso 2009.)

A more recent phenomenon in Finnish drug use, emerging in the late 2000s, is the rapid increase in the home growing of cannabis. This phenomenon manifests itself in crime statistics and has also been probed by survey.³ Seizure statistics show that while the number of cannabis plants seized annually was only a few hundred in the 1990s, this figure had ballooned to several thousand by the 2000s, and in 2010 the number of plants seized was 15,000. A similar rapid growth may be seen by comparing the data from the 2008 and 2010 population studies. In 2008, the lifetime prevalence of hashish was greater than that of marijuana (10% vs. 9%), but by 2010 their positions had switched (12% vs. 13%). In terms of 12-month prevalence, cannabis overtook hashish in 2008, and according to the 2010 population study, 2% of the adult population had used hashish but 4% had used marijuana. Moreover, 10% of the respondents declared that they personally knew someone who was growing cannabis, even though only 1% had themselves engaged in home growing. Nevertheless, the obvious shift in the relative status of hashish and marijuana experiments is probably largely due to increased domestic home growing of cannabis. By comparing the responses to questions concerning home growing during the past month, the researchers estimated that there must be almost 10,000 active home growers of cannabis in Finland. (Hakkarainen et al. 2011a.)

The survey shows that the majority (72%) of those practicing home growing of cannabis fall into the category of having 1 to 5 cannabis plants. Only slightly over 2% of the respondents reported that they grow more than 20 plants at a time. The online survey was weighted towards small-scale home growers, as the seizure statistics of the police show that 13% of seizures involved plantings of more than 20 plants. In all, about one in five respondents had had dealings with the police because of home growing of cannabis. The survey also revealed that the principal sources for information and for acquisition of seeds or seedlings were the Internet and other home growers – the percentage of cannabis sellers as sources was almost nil. More than two thirds of the respondents reported that they had invested no more than EUR 100 in their most recent harvest. (Hakkarainen et al. 2011a.)

Cannabis is typically grown by male adolescents and young adults who are more likely than other members of their age group to live alone and who are less settled in

3 Finnish home growers of cannabis were recruited for the study via a website dedicated to the subject. The interviews (38) were conducted in 2008. There were 36 men and 2 women, most of them (55%) in the 25 to 34 age group. Also, an anonymous online questionnaire was targeted at Finnish home growers of cannabis in 2009. There were 1,298 respondents, 80% of whom had grown cannabis during the past year. The research material was compared to the results of the 2008 population survey and the preliminary results of the 2010 population survey. (Hakkarainen et al. 2011a; Hakkarainen et al. 2011b.)

terms of family or children. About half of those practicing home growing are daily users of cannabis, whereas the percentage of daily users in general population studies is about 6%. Among the home growers 22% were heavy users (more than 1 g per day). Principal reasons given for home growing were: for the grower's own needs; the enjoyment of growing the crop; avoiding the illegal drug market; and the better quality of home-grown cannabis. Only 10% of respondents mentioned selling cannabis as a motive, although one in three did consider that they might offer their produce to their friends. The relationship between alcohol and cannabis among home growers was dualist: combined use was routine for one in ten, one in three reported that they used both together no more than 1 to 3 times per month, and one in three reported that they almost never use both together. (Hakkarainen et al. 2011a.)

In the Health Behaviour Surveys among the Finnish Adult Population (aged 15 to 64), the most important annual indicator depicting the development of the drug situation is the percentage of people in various age groups who know someone who has experimented with drugs. These percentages increased until the early 2000s but then went into a decline until the middle of the decade. The change has been clearest among the age group of 15 to 24. For the population as a whole, however, the decrease halted at the 15% level towards the end of the 2000s due to sharp annual shifts in the trend since 2006, especially in younger age groups. (Piispa et al. 2008; Helakorpi et al. 2011.)

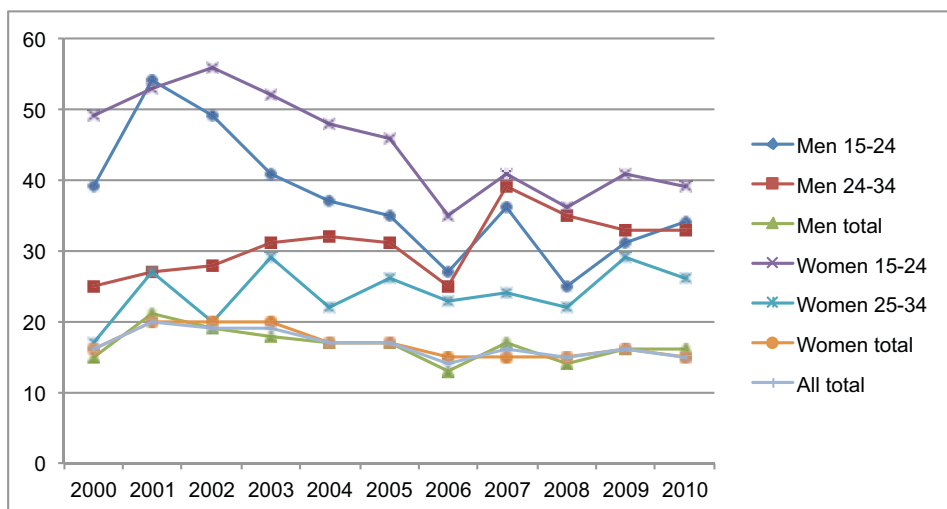


Figure 1. People who know at least one person who has experimented with drugs during the past year, %.

Source: Helakorpi et al. 2011.

After a plateau period, drug use in Finland began to increase again by the turn of the 2010s. This increase owes a great deal to cannabis use among men aged 25 to 34. It also correlates clearly with the increased home growing of cannabis. User trends for other substances have been relatively stable, with the possible exception that in the group of stimulants ecstasy and cocaine have caught up with amphetamine. In the group of opiates, it is noteworthy that the use of buprenorphine and other pharmaceutical opioids (tramadol, fentanyl, oxycodone) has increased at the expense of heroin. Misuse of hypnotics and sedatives ranks between the use of cannabis and the use of other illegal drugs; these pharmaceuticals are usually used for sleep problems but also for intoxication purposes and to alleviate or enhance the effects of other intoxicants. The combined use of alcohol and drugs is a characteristic feature of substance abuse in Finland, as witness the fact that of those who have used drugs during the past year about half are also high-risk users of alcohol. Despite the plateau of the early 2000s, by 2010 drugs seem to have strengthened their position in the partying habits of young urban adults (men) and recreational use and as a cause of social exclusion related to substance abuse. (Hakkarainen et al. 2010b.)

2.2 Drug use in the school and youth population

According to the 2011 ESPAD survey of school pupils, 12% of boys and 10% of girls aged 15 to 16 had experimented with cannabis at some time in their lives, whereas the corresponding figure was 10% in 1999, 11% in 2003 and 8% in 2007. The 2011 ESPAD survey was the first of its kind in Finland to include separate questions on hashish use, marijuana use and home growing of marijuana. Hashish use was reported by 7% of the boys and marijuana use by 10%, while the figures for girls were 4% and 6%, respectively; 12% of the boys and 10% of the girls reported that they knew someone who had grown cannabis at home. Among the pupils themselves, however, home growing was extremely rare: only 1% of the boys and none of the girls reported having grown cannabis at home at some time. For other drugs, the trend has been rather stable: in 2011, 5% reported that they had tried an illegal drug besides cannabis at some time in their lives. (Raitasalo et al. 2012.)

Drug use among school pupils is also surveyed in the national school health survey. The National School Health Survey covers half of Finland's municipalities each year on a biennial cycle and is aimed at 8th and 9th grades in comprehensive school and the 1st and 2nd years of upper secondary school.⁴

4 The School Health Survey is circulated among pupils in the 8th and 9th grades of comprehensive school and 1st-year and 2nd-year students at upper secondary schools and vocational education institutions. At vocational education institutions, the survey is given to young students in curriculum-based programmes leading to a vocational qualification. The Survey is administered in March and April at vocational education institutions and comprehensive schools and in April at upper secondary schools, and it is completed in class under a teacher's supervision. Responses are anonymous. Until 2011, the Survey was carried out in southern Finland, eastern Finland and Lapland in even-numbered years and elsewhere in mainland Finland and on Åland in odd-numbered years. In 2012, the Survey was not carried out at all. As of 2013, the National School Health Survey is conducted at the same time throughout Finland.

According to the National School Health Survey, 9% of comprehensive school pupils, 13% of upper secondary school students and 21% of vocational education students have tried illegal drugs at least once in their life. (School health survey 2013.)

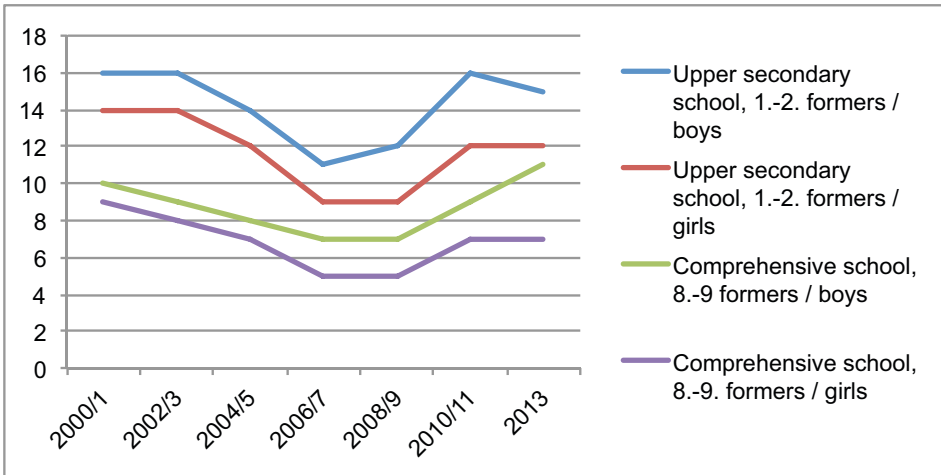


Figure 2. School health survey: Students who had tried illegal drugs at least once, %

Source: School health survey 2013.

The ESPAD study also included questions on the risks of intoxicant use. There was no significant difference between boys and girls in the appreciation of the risks involved in trying cannabis. In 2011, just under 30% of both boys and girls considered that trying cannabis involved high risk. The percentage of those who consider the risks of trying cannabis to be high has decreased steadily except for a slight upward bump between 2003 and 2007. The appreciation of the risks involved in trying ecstasy or amphetamines has also decreased among young people, more among boys than among girls. (Raitasalo et al. 2012.)

The questions in the national Adolescent Health and Lifestyle Survey, aimed at young people aged 12 to 18, enable the analysis of their ‘social exposure to drugs’. Respondents are asked whether any of their acquaintances has experimented with intoxicants or whether they themselves have been offered such substances. The survey indicates that the percentage of young people aged 14 to 18 with at least one acquaintance who has experimented with drugs increased between 1987 and 2001 and then started to fall before levelling off in 2007. The 2011 survey shows that the majority of drug offers are made by friends and acquaintances, which indicates that drugs have become part of

young people's everyday lives and that availability is not particularly scarce nor dependent solely on supply from external sources. In 2011, one in six boys and girls aged 18 had been offered drugs. (Raisamo et al. 2011.)

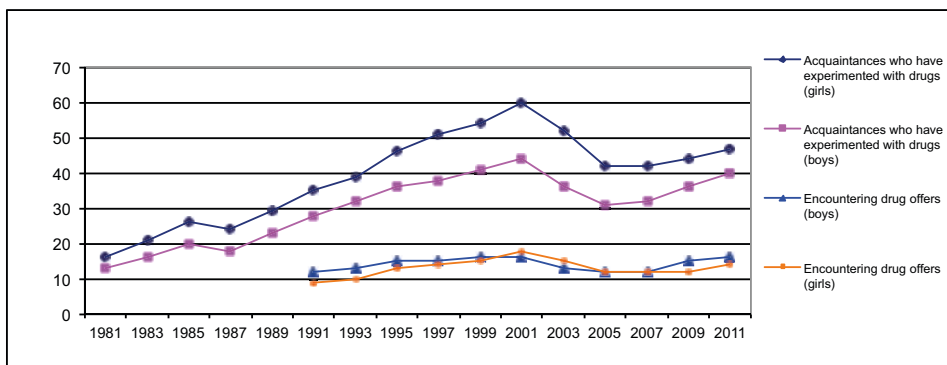


Figure 3. Social exposure to drugs among 14 to 18-year-olds (percentage, age-adjusted and gender-adjusted).

Source: Raisamo et al. 2011.

Links between adolescents' experiences of bullying at school and using drugs were explored in a nationwide study where the relevant responses from a survey of 8-year-old schoolchildren (boys) and interviews with their parents and teachers were compared with interview responses over a 10-year follow-up period. The results indicate that a boy being a bully at school at the age of 8 is a fairly reliable predictor of experimentation in drug use later, at the age of 18. Regular bullying also seemed to predict later drug use fairly well independently of the other variables taken into account in the study. Being bullied, by contrast, actually seemed to decrease the likelihood of drug use at a later age. As regards regular smoking, the correlation was completely reversed. The researchers explain the link between bullying and later drug use by referring to the antisocial personality characteristics of bullies. It should be noted, though, that the study only concerned boys. (Niemelä et al. 2011.)

In Finland, data on twins born between 1983 and 1987 have been gathered in the FinnTwin 12–17 studies. These data have been used to analyse the role of drug use determinants in drug experimentation: the role of individual, peer group and family variants in young people's experiments with cannabis (Korhonen et al. 2008) and the effect of early-age depression on later drug experiments (Sihvola et al. 2008). The purpose was to conduct a two-phase assessment of these interrelationships. First, the twins in the study sample were analysed as individuals. Subsequently, controls were introduced to

account for any family-specific (genetic) sources of error by targeting the analysis at those twins for whom a determinant in drug experimentation (and early-age depression) actually distinguished one twin from the other in the same family.

The study examining the effects of individual, peer group and family variants on drug use therefore found that 13.5% of the twins included in the study had experimented with cannabis by the age of 17.5 years. These experiments had been significantly influenced by early initiation into smoking, frequent binge drinking, the number of smoking friends, the number of friends who had experimented with drugs, weekly binge drinking by the family's father and, for boys, aggressive behaviour in early youth. When the model was specified by targeting the analysis at twin pairs of whom only one twin had experimented with drugs, the results changed. Ultimately, determinants significantly influencing experimentation with drugs included the following: a teacher's report of hyperactivity or aggressiveness at the age of 12, initiation into smoking and binge drinking at 14 or earlier, a high number of smoking friends (more than 5 persons) and, at 14, at least one friend who has experimented with drugs. However, the researchers point out that many determinants of drug experimentation discovered in other research literature (family attitudes, discipline, general environmental factors, availability of drugs) had to be excluded from the study's original list of variants. (Korhonen et al. 2008.)

In the most recently published twin study, the analysis of a possible connection between smoking and drug use was explored on the basis of surveys among subjects aged 17.5 years. The study compared structural equation models, the first assuming that smoking had a cause-and-effect impact on starting drug use and the second assuming that shared genetic and/or environmental factors underlie both. In both models, genetics had a lot to do with both starting smoking and starting drug use. The model where early smoking was assumed to influence drug use fit the data somewhat better, but shared genes could not be completely ruled out. By contrast, starting smoking had no direct impact on continued drug use (using drugs more than four times during their lifetime); the impact of smoking was indirect, through starting drug use. As a factor in continuing drug use, individual environmental factors emerged as more significant than they were for continuing smoking (smoking more than 50 times during their lifetime). (Huizink et al. 2010.)

2.3 Drug use by university students

According to the University Student Health Survey conducted in 2012⁵, 19% of all students (24% of men and 17% of women) had used a drug or pharmaceuticals, or alcohol and pharmaceuticals combined, for intoxication. The most commonly used drug was

5 The target group for the study consisted of Finnish undergraduates under the age of 35 at academic universities and universities of applied sciences. The sample size was 9,992, and the overall response rate was 44%. The average age of respondents was 24.4 years for men and 23.7 years for women at universities of applied sciences and 25.2 years for men and 24.7 years for women at academic universities. The survey is compatible with the University Student Health Surveys of 2000, 2004 and 2008.

cannabis; 24% of men and 15.7% of women reported having experimented with it or used it. There were no statistically significant differences between educational sectors, but the highest percentage of drug use was found among men studying at academic universities. (Kunttu & Pesonen 2013.)

3 Prevention

3.1 General remarks on substance abuse prevention in Finland

Substance abuse prevention affects awareness of, attitudes to, and rights pertaining to intoxicants; factors protecting from harm from substance abuse and risk factors; and the usages, availability, offering, and harmful effects of intoxicants.

Substance abuse prevention is principally governed by the Temperance Work Act (828/1982), the Temperance Work Decree (822/1976), and the Act on Welfare for Substance Abusers (41/1986). This Act defines the purpose of temperance work as habituating citizens to healthy lifestyles by guiding them in avoidance of the use of substances and tobacco. According to the Act, the establishment of general prerequisites for substance abuse prevention is primarily the task of central and local government. Practical measures in this area are generally undertaken by local authorities and by temperance and public health organisations. Pursuant to the Act, each local authority must have a designated body responsible for temperance work. This body must cooperate with the local health care, social welfare, and education services in particular. The Temperance Work Act will be revised during 2013. The purpose of this revision is to develop local measures for prevention of harmful impacts of substance abuse. The Temperance Work Decree (233/1983) further specifies that this body must cooperate with organisations engaging in temperance work and substance abuse prevention and promoting healthy lifestyles. Section 17 of the Local Government Act states that a 'municipal body' is the municipal council, the municipal board, a committee, or another body appointed by the council with decision-making powers. When the Temperance Work Act entered into force in 1984, temperance committees in municipalities were disbanded and the duties specified in the Act were to be assigned to another municipal body, generally the social services committee, the health care committee, or the education committee. (Strand 2011.) The purpose of the Act on Welfare for Substance Abusers (41/1986) is to prevent and reduce problem drug use and related harmful social and health impacts, and also to enhance the functional capacity and safety of substance abusers and persons close to them.

Preventive substance abuse work forms part of the wider concept of promotion of well-being and health. In Finland, municipalities and joint municipal boards are principally responsible for arranging and providing social and health care services. Substance abuse prevention is highlighted through inclusion in legislation, in addition to the Temperance Work Act and the Act on Welfare for Substance Abusers (Public Health Act, Child Welfare Act, Youth Act, etc.), in ongoing policy programmes (the Health 2015 public health programme, Kaste, Lanuke), and the service quality recommendations that guide policies (recommendations concerning the quality of services for substance abusers, quality criteria for substance abuse prevention, etc.).

In municipal substance abuse strategies, substance abuse prevention is usually seen as part of a continuum including prevention, early intervention, and treatment. According to a new concept definition, substance abuse work is divided into preventive and corrective substance abuse work. Municipal substance abuse strategies usually address intoxicating substances as a whole, without making a distinction between drugs and alcohol. Substance abuse prevention also includes the prevention of smoking and functional addictions.

Local authorities are recommended to have a mental health and substance abuse service strategy in place, defining the responsibilities of substance abuse services at health centres. (Ministry of Social Affairs and Health 2009b.) However, a study shows that only 69% of health centres have an approved strategy for substance abuse services.⁶ Moreover, only 65% of health centres have a plan approved by management for reducing harm caused by substance abuse. In the study, 73% of health centres stated that they undertake mini-interventions aimed at reducing alcohol use. Health counselling for drug users was only provided by one in three health centres (35%), and 40% had agreed on shared practices for identifying drug users. (Rimpelä et al. 2009a.)

Development of the municipal and regional networks for substance abuse prevention is carried out within the framework of the National Alcohol Programme, whose principal coordinator is the National Institute for Health and Welfare. All six Regional State Administrative Agencies have a regional coordinator for the National Alcohol Programme, who is responsible for implementation of the programme goals in their respective regions and for coordinating actions to prevent harm from substance abuse. In addition, THL is developing the regional developer network for substance abuse services and the quality developer network for substance abuse prevention. It also collects and disseminates best practices in the field. Substance abuse prevention involves not only municipalities: NGOs and other third-sector actors play a central role in the practical work of substance abuse prevention, both as individual actors and as service providers for municipalities. The NGOs aim to promote discussion and provide information on drugs, drug use, and the related causes and consequences. In addition, NGOs attempt to influence public attitudes, organise peer support activities, and provide post-care for substance abuse patients.

6 Directors of health centres (n=231) were sent an online survey in October 2008, requesting a joint response from the management group. In addition to aspects of actively promoting health among the population, the questionnaire included questions on how the management viewed health promotion and key public health programmes. Responses were received from 190 health centres (82%), including all of the largest ones (50,000+ residents) and 89% of the medium-size ones (20,000 to 49,999 residents).

Quality criteria have been determined for substance abuse prevention. The criteria are qualitative and suited to the prevention and reduction of harm related to substance abuse.⁷ These quality criteria do not separate drug prevention from other substance abuse prevention. The practical implementation of the quality criteria is considered a central tool in improving the quality of substance abuse prevention. A manual entitled *Laatutähteä tavoittelemassa* (Reaching for the quality star, Jokinen 2006) was published in 2006 to assist in deployment of the quality criteria. It introduced the ‘Quality star’ tool for planning, implementation, and evaluation. (STAKES 2006.) In 2013, the National Institute for Health and Welfare published a revised quality manual for substance abuse prevention. Entitled *Laatutähteä kiertämässä* (Orbiting the quality star, Warsell & Soikkeli 2013), it draws on experiences of the use of the ‘Quality star’ and its long-term development. To support local substance abuse prevention, the National Institute for Health and Welfare informs professionals of best practices, trains them, and organises guided workshops involving the substance abuse prevention quality network, Regional State Administrative Agencies, and NGOs.

The Ministry of Education and Culture supports preventive drug and substance abuse work by providing funding for improving the potential for prevention, for training employees and volunteers, and for running long-term projects. Drug use prevention also forms a component of other youth activities, such as youth workshops and afternoon clubs. Education and information projects concerning young people’s lifestyle choices are also supported as and when possible.

Drug prevention measures include electronic drug information services, discussion forums, and self-testing services for evaluating one’s own substance abuse. The dissemination of information and training of professionals has been developed by creating web-based expert forums in support of training.

The *Neuvoa-antavat* themed service (<http://www.thl.fi/neuvoa-antavat>) is the national substance abuse online service maintained by the National Institute for Health and Welfare. The website includes a database of substance abuse treatment facilities and strategies.

3.2 Environmental prevention

Regulation of taxes on alcoholic beverages is one of the principal tools of alcohol policy. The taxation of alcoholic beverages has been amended several times in the 2000s. The tax rates were lowered when Estonia joined the EU in 2004. This was motivated by

⁷ Criteria: focus of the work, target group, degree of effectiveness, knowledge base, values, realistic objectives, compatibility of the objectives with other strategies, operational models, resources, monitoring and evaluation, balance in the different subsections, and relationship to the original situation.

an increase in passenger imports of alcohol. Since then, taxes have again been raised, four times in all (in 2008, twice in 2009, and in 2012).⁸

The blood alcohol limit for drunk driving in Finland is 0.05%, and 0.12% for aggravated drunk driving. Offenders who have active substances of narcotics or their metabolic products in their blood may also be sentenced for drunk driving or aggravated drunk driving.

The sale and delivery of mild alcoholic beverages (up to 22%) to persons under 18 years of age is prohibited, and the sale and delivery of strong alcoholic beverages (over 22%) to persons under 20 years of age is prohibited. Possession of alcoholic beverages by persons under 18 years of age is prohibited, and possession of strong alcoholic beverages by persons under 20 years of age is prohibited. Alcoholic beverages with an alcohol content of no more than 4.7% may be sold in food shops; Alko has a monopoly on the retail sale of all products with a higher alcohol content. Retail outlets are only allowed to sell alcoholic beverages between 09.00 and 21.00. Advertising mild alcoholic beverages is basically allowed. However, advertising for alcoholic beverages must be restrained and conservative and must not be designed to attract ‘weak consumer groups’ such as heavy drinkers or young people. It is inappropriate to depict the intoxicating properties or plentiful consumption of alcoholic beverages in a positive light, or to give a misleading impression of the properties or effects of alcohol. (National Supervisory Authority for Welfare and Health 2010.)

There are a number of legislative provisions governing the marketing and sale of alcoholic beverages in licensed restaurants and also smoking in such premises. The Regional State Administrative Agencies supervise retail sales of alcoholic beverages, licensed restaurants and advertising and promotion for alcoholic beverages in their regions. The National Supervisory Authority for Welfare and Health (Valvira) is authorised to carry out supervision nationwide. (National Supervisory Authority for Welfare

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ALCOHOLIC BEVERAGES

Ethyl alcohol content, % by volume	Product group	Tax
Beer		
– over 0.5 but no more than 2.8	11.	EUR 0.04 per centilitre of ethyl alcohol
– over 2.8	12.	EUR 0.299 per centilitre of ethyl alcohol
Wine and other alcoholic beverages produced by fermentation		
– over 1.2 but no more than 2.8	21.	EUR 0.11 per litre of alcoholic beverage
– over 2.8 but no more than 5.5	22.	EUR 1.59 per litre of alcoholic beverage
– over 5.5 but no more than 8	23.	EUR 2.24 per litre of alcoholic beverage
– over 8 but no more than 15	24.	EUR 3.12 per litre of alcoholic beverage
Wine		
– over 15 but no more than 18	25.	EUR 3.12 per litre of alcoholic beverage
Intermediate products		
– over 1.2 but no more than 15	31.	EUR 3.79 per litre of alcoholic beverage
– over 15 but no more than 22	32.	EUR 6.25 per litre of alcoholic beverage
Ethyl alcohol		
Products under CN code 2208:		
– over 1.2 but no more than 2.8	41.	EUR 0.04 per centilitre of ethyl alcohol
– over 2.8	45.	EUR 0.434 per centilitre of ethyl alcohol
Others	46.	EUR 0.434 per centilitre of ethyl alcohol

and Health 2010.) The sale and delivery of tobacco products to persons under 18 years of age is prohibited. The advertising of tobacco products in Finland is prohibited. As of the beginning of 2012, tobacco brands may not be displayed to retail customers even at point of sale. Smoking is banned in all public indoor spaces. Many workplaces have declared themselves non-smoking workplaces.⁹

3.3 General substance abuse prevention

Youth work and policy

Substance abuse prevention components of the Youth Policy Development Programme 2007–2011, implemented pursuant to the Youth Act, have been run under the coordination of the Ministry of Education and Culture, in co-operation with the Ministry of Social Affairs and Health and the Ministry of the Interior, and youth work methods have been developed from the substance abuse prevention perspective.

Preventiimi, a national knowledge centre for youth substance abuse prevention, has published support materials for substance abuse education. In its guide, preventive substance abuse work with young people is considered to include social empowerment, general prevention, and risk prevention. The purpose of general prevention is to provide young people with current information on various intoxicants and the risks caused by their use. In addition to health risks, these include problems that substance abuse may cause in relationships with friends, in school work, and in families. How these matters are discussed and from what perspectives, and which examples are used, should be as closely related to the young people's own experiences as possible. Simply handing out information is not necessarily enough. Efforts should also be made to ensure that the young people can process the information given to them and that the understanding they gain is relevant for their world. (Pylkkänen et al. 2009.)

Whereas prevention aimed at adults usually focuses on adverse health effects and risk factors, substance abuse prevention aimed at young people may avoid mentioning intoxicants at all, and may instead focus on building up life management skills overall.

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TOBACCO PRODUCTS

Product of retail price	Product group	EUR/unit	%
Cigarettes	1.	22.50/1,000 pcs	52,0
– – Minimum tax on cigarettes	1A.	146.00/1,000 pcs	–
Cigars and cigarillos	2.	–	27,0
Pipe and cigarette tobacco	3.	13.50/kg	48,0
Fine-cut tobacco for self-rolled cigarettes	4.	16.50/kg	52,0
– – Minimum tax on fine-cut tobacco for self-rolled cigarettes	4A.	87.50/kg	–
Cigarette paper	5.	–	60,0
Other product containing tobacco	6.	–	60,0

The general prevention aspect of youth work is based on giving young people guidance, help, and support in growing up and in becoming a member of society, assisting them in coping with issues that they cannot necessarily handle on their own. What is essential is that the young people concerned feel that they are themselves participating in making decisions that affect their lives. (Pylkkänen et al. 2009.)

Preventiimi, which is administered by HUMAK University of Applied Sciences, also provides professionals with continuing education in substance abuse prevention for young people. Preventiimi is one of the national youth service and development centres designated by the Ministry of Education and Culture in a resolution adopted in 2010. Preventiimi provides training in substance abuse prevention for youth work professionals and others involved with young people, networking with local authorities and NGOs. The Preventiimi centre has developed and provided training in substance abuse prevention aimed at young people. Its projects also support prevention in schools, and it has produced a variety of materials. Support for projects aimed at young immigrants has been increased. Several hundred young people have participated in the international youth education programme Avartti, which is intended for all young people. The website of the Preventiimi knowledge centre for youth substance abuse prevention is at www.preventiimi.fi.

General substance abuse prevention at school

Finland applies what is known as an environmental strategy in substance abuse prevention in schools, the aim being to make schools into a safe and risk-reducing environment for pupils. Schools also constitute parts of local substance abuse prevention networks.

Substance abuse prevention in schools consists of:

- intoxicant education and information in normal classroom teaching, e.g. integrated into compulsory health education,
- support for healthy growth and development,
- promotion of a safe and healthy learning environment,
- school health care support and extensive health examinations,
- availability of guidance and assistance in confidence,
- support for learning, helping pupils stay at school and cope,
- leisure activities,
- a school curriculum to prevent substance abuse and ground rules outlining what to do in a case of substance abuse at the school,
- planned and learned correct and timely intervention in substance abuse,
- co-operation with homes,
- co-operation with substance abuse services, and
- co-operation with other professionals and active citizens in the local substance abuse prevention network.

According to a recent evaluation study, both teachers and pupils in Finland are highly motivated to engage in health education: teachers and pupils alike feel that there is much discussion in health education classes, and a notable percentage of pupils discuss the topics with their friends and parents after the classes. A qualification in health education is being required from teachers after a transition period, as of the beginning of 2012. (Aira 2010.)

Because substance abuse education is integrated into the school curriculum, school-based drug prevention programmes play a secondary role in Finland's drug strategy. Schools may decide for themselves whether to implement such programmes, and they are not systematically monitored. In 2008, two thirds of all upper-level comprehensive schools held health theme days, and more than one in ten held health theme weeks. (Aira 2010.)

The police have cooperated closely with schools in anti-drug efforts and have appointed a liaison officer for each school. School resource officers and community policing have enabled the police to establish close co-operation. The police have published information locally and nationwide on drug-related crime, designer drugs, drug offences under investigation, and their backgrounds. The information published is preventive in nature and specifically targeted at adolescents who are susceptible to experimenting with drugs.

3.4 Selective substance abuse prevention

Grants awarded from appropriations for youth work in 2010 have been used to support prevention projects aimed at risk groups among young people. Such projects have been organised by local authorities, NGOs, young people's workshops, and national youth centres. Outreach youth work in particular has been improved, and at the moment, there are 230 two-person teams in outreach youth work around Finland. The youth research network, working for instance with the National Institute for Health and Welfare, has been conducting research on substance abuse prevention.

Related to this issue, a guidebook for parents and people working with young people has been produced on how to approach anxiety and substance abuse and identify problems. (Fröjd et al. 2009).

In surveys for the promotion of health and well-being at upper secondary schools and vocational education institutions, respondents were asked what the procedure was when drug use was suspected.¹⁰ In all, the number of cases of drug use reported was very low, though notably higher at vocational education institutions (n=29) than at upper secondary schools (n=13). Generally, the procedure was for a teacher, group leader, or headmaster to talk to the student in question. Vocational education institutions are markedly more active in referring students to student health care in these

¹⁰ A largely coherent survey was conducted in 2008 among all upper secondary schools (n=416) and institutions with vocational upper secondary qualification programmes (n=192). The response rate was 90% for upper secondary schools and 84% for the other institutions.

cases, and also in contacting the parents in the case of a student aged under 18, and/or child welfare services, and/or the police. (Rimpelä et al. 2009b; Väyrynen et al. 2009.)

In working life, drug tests are conducted to prevent drug-related harm and to refer individuals with drug problems for treatment as soon as possible. In order to implement this, employers and employees have to co-operate in drafting a written substance abuse programme for the workplace.

Substance abuse prevention by NGOs

At the beginning of 2012, the Association for Healthy Lifestyles, the Terveys-Hälsän association and the Life is the Best Drug association merged into the EHYT association for substance abuse prevention. EHYT is a nationwide organisation working to promote healthy lifestyles. In addition to alcohol, tobacco and substance abuse prevention, EHYT also addresses gaming addiction and promotes intoxicant-free traffic. The EHYT coordination unit has organised, among other things, a joint NGO drug working group. This working group develops NGO collaboration in substance abuse field work, serves as an expert forum for drug issues and lobbies in the area of drug policy. The drug working group is a loose network whose participants at the moment apart from EHYT include the A Clinic Foundation, Free from Drugs, Probation Foundation Finland (KRITS), Music Against Drugs, Omaisest Huumetyön Tukena (Family Supported Drug Rehabilitation Association), the Stop Huumeille [Stop drugs] association, Suomen Lumme, the Finnish Red Cross and YAD Youth Against Drugs. There is also an expert member from the National Institute for Health and Welfare. In 2014, the drug working group organised seminar sessions on cannabis and designer drugs at Päihdepäivät, the national substance abuse seminar; published a brochure with current drug information; and issued an extensive memo concerning the amendments that need to be made to the Act on Welfare for Substance Abusers.

In 2012, the A Clinic Foundation continued to provide health and social guidance related to drug use, outreach work, peer support services, substitution treatment, detoxification treatment, therapeutic work at A Clinics and youth stations, institutional rehabilitation with both non-medical and medication-supported approaches, and community therapy. Drugs were featured in a large number of studies, student theses and development project, such as the Huuko project, which has been running since 2001. In 2012, the project involved networking actors involved in substance abuse and mental health services. Development and distribution of the good practices of the Huuko project are being continued in the VERKOTTAJA project for experience, peer support and professional assistance in substance abuse and mental health services (2013–2016) run by the A Clinic Foundation. Drugs were also prominently featured in the publicity and online services of the A Clinic Foundation. The Päihdelinkki online service, launched in 1996, reaches an average of 130,000 individual visitors each month. Discussing all types of intoxicants and addictions, this is a service that provides both citizens and profes-

sionals with information, tests, peer support and advisory services. A project to prevent infectious diseases among drug users and to alleviate their adverse impacts launched a website named Seonveressä.fi ('It's in the blood') in 2013. The website contains reliable information on hepatitis C – how to prevent it, how to test for it, how it is transmitted and how it is treated. It is intended for anyone who suspects or actually has hepatitis C, their family members, health care professionals and anyone who is interested.

The Vinkki.info website was revised in 2013. It is a website listing social welfare and health care advisory services for substance abusers nationwide, its purpose being to alleviate adverse impacts. It is intended for clients of social welfare and health care services, social welfare and health care professionals and anyone who is interested. The services of the A Clinic Foundation are being developed in cooperation with clients and partners.

Free from Drugs is a national volunteer organisation for preventive and corrective substance abuse work founded in 1984. Its purpose is to prevent drug use, to support drug users in efforts to quit using drugs, to support persons close to drug users, to lobby for the development of preventive and corrective substance abuse services, to lobby for the retaining of a restrictive drug policy, and to safeguard the interests of drug users and persons close to them. The professional unit of the association, the Family Support Centre, engages in family-oriented drug prevention work and serves as a low-threshold service centre in the Greater Helsinki area and nationwide. Free from Drugs began development of its regional operations in 2013, and in 2014 it celebrated its 30th anniversary. In the anniversary year, the organisation's website and visual appearance were redesigned. Regional seminars focusing on 30 years of family-oriented substance abuse work were held. President of the Republic Sauli Niinistö was the patron of the anniversary year.

Music Against Drugs is a national substance abuse prevention association that promotes the health and social wellbeing of children and adolescents. The organisation brings children and adolescents together with high-quality activities in national and regional organisations and also deploys acknowledged good practices and expertise in substance abuse prevention to local government actors, encouraging them to engage in multi-professional and sub-regional cooperation. The operations are channelled through Music Against Drugs events; 21 have been held so far in 28 municipalities around Finland. Apart from the Music Against Drugs events, the organisation engages in youth work at the national level. Any Finnish adolescent aged 13 or above can join Music Against Drugs as agents or volunteers regardless of where they live. Membership is free, and becoming an agent or a volunteer carries no obligations. Weekly online chats and meetings bringing together adolescents from around the country are among the activities organised for Music Against Drugs agents and volunteers.

Omaiset Huumetyön Tukena (Family Supported Drug Rehabilitation Association) is a politically and religiously unaffiliated NGO founded in 2000. Its purpose is to develop outpatient services for substance abusers and to provide assistance and support for

substance abusers, rehabilitees and their family members. The range of services offered by the association includes the OmaTila (Own Space) community centre with service guidance, Elämäntaito (Life Skills) groups, the Verna group forming part of Osis, the SATU project for service guidance and support activities at hospitals, the Jälkipolku (Afterstep) programme and the parents' group. The association also runs a development cooperation project named Sopi Jikko in Senegal, its purpose being to develop a drug rehabilitation model suitable for Senegal together with local actors.

YAD Youth Against Drugs is a national substance abuse prevention association. Founded in 1988, it relies on volunteer action by adolescents and young adults. Up-to-date drug use prevention and supporting materials with informative and emotive content are key elements in the operations of the association, which are based on peer influence. YAD has developed a model for volunteer work and participation known as the Street Team, aimed specifically at adolescents and administered over the Internet. In 2014, the association offers activities and employment for drug use rehabilitees, and recovering drug users are being recruited as experiential experts in substance abuse prevention.

The Finnish Red Cross introduced substance abuse services in 2000 and now has 800 committed and trained volunteers providing these services. Substance abuse prevention, guidance and support are the principal approaches. In summer 2014, substance abuse services volunteers attended some 50 festivals, distributing 7,000 Särkyvää ('Fragile') festival survival kits and engaging in one-on-one conversations with thousands of festivalgoers. The sobering-up stations run by the Finnish Red Cross substance abuse services helped some 200 people who required assistance because of intoxication. In the winter, substance abuse briefings will be taken to the everyday environments of citizens, and training will be provided for a variety of groups from young to old. Substance abuse training for civilian servicemen was introduced in 2014.

3.5 Targeted substance abuse prevention

Targeted substance abuse prevention aimed at young people often takes place in sheltered youth homes, rehabilitation units for young people, and workshops. Substance abuse treatment and rehabilitation for young people is also a form of risk prevention, being aimed at discouraging them from returning to an intoxicant-favouring lifestyle. (Pylkkänen et al. 2009.)

In 2009, the National Institute for Health and Welfare published a guide on early identification of mental health and substance abuse problems. This guide is intended for social welfare and health care professionals involved with clients, to help them identify and screen for mental health problems and substance abuse problems among young people and adults. It provides indicators for risk assessment and practical advice for prevention. Regarding drugs, the guide stresses the importance of a confidential client relationship and of having sufficient basic information on drugs. The guide does

not recommend routine drug testing as a screening procedure. Drug testing is feasible as a component of a treatment relationship encouraging a lifestyle change. (National Institute for Health and Welfare 2009a.)

Early intervention in offences committed by young offenders has been effected in co-operation with various authorities. The purpose of the police engaging in early intervention is to prevent the development of a vicious circle of crime and substance abuse. Co-operation between the police and the health care and social welfare authorities is particularly important in improving the conditions of children and adolescents in problem families where the parents have a history of substance abuse.

According to the prosecutor guidelines on unlawful use of drugs, a first offender under the age of 18 must, by default, be given a reprimand; instead of being fined, their charges should be waived and a verbal warning given. The reprimand session is attended by the young offender himself/herself and his/her parent or guardian, and also representatives of the police, the prosecutor, and the social welfare authorities. Reprimands were issued and charges waived thereafter in 40 cases in 2008, in 66 cases in 2009, and in 161 cases in 2010. The increase in the number of reprimands can be considered a positive trend, as it means that the procedure is being increasingly applied and that prosecutors are increasingly willing to apply it. In 2008, five of Finland's prosecution units gave no reprimands at all, whereas in 2010 all but one prosecution unit gave reprimands.

Health counselling centres engage in risk group prevention.¹¹ Local authorities and NGOs also perform outreach work to find individuals not covered by services, such as school dropouts or drug users who do not use the services of the health counselling centres. Targeted information about the risks of drug use is also provided by NGOs in various relevant environments, such as rock festivals or techno music events. (See e.g. Finnish Red Cross 2010; YAD 2011.)

3.6 National and local media campaigns

Traffic and waterway safety campaigns are organised annually, focusing on all substance abuse. A general intoxicant education campaign is also conducted during the annual substance abuse prevention week (week 45). Each year during the week, two regional radio stations (Radio Auran Aallot and Radio Melodia) conduct an anti-drug campaign in co-operation with the education authorities, the Turku Customs, the Free from Drugs NGO, and corporate sponsors.

11 See Chapter 7: Responses to health correlates and consequences.

4 Problem drug use

The number of problem drug users in Finland is estimated based on the number of problem users of amphetamines and opiates, which was 14,500 to 19,100 in 2005; this accounts for 0.6% to 0.7% of the population aged 15 to 55. Nearly four fifths of problem drug users used amphetamines. The percentage of men was almost 80%, the majority of problem drug users being in the age group 25 to 34.

According to the 2010 data from the Drug Treatment Information System, opiates were the major primary problem substance of clients entering drug treatment (representing 59% of all drug treatment clients of the substance abuse services), followed by stimulants (13%), cannabis (10%), alcohol (11%) and pharmaceuticals (6%). These results reflect the provision of treatment, since substitution treatment is so far available only to opiate users. Buprenorphine was the primary problem substance for as much as one third of the clientele. Although among the drug users with the most severe problems there are persons who use both amphetamines and opioids, the hard core of Finnish drug use consists of combined use featuring both polydrug use of opioid-based painkillers and sedatives (benzodiazepines) on the one hand and alcohol and cannabis on the other.

According to studies, alcohol is the primary problem substance in Finland. In fact, problem drug use is a very recent social problem in Finland. Typical factors in problem drug use in Finland are the relatively young age of users and, consequently, a relatively short history of drug use, albeit the average age of drug users has risen substantially over the past ten years. A particular feature is the central role of buprenorphine in intravenous use. Many drug users are socially marginalised in many ways and, in addition to substance abuse problems, have several other social and health-related disorders.

4.1 Prevalence and incidence estimates of problem drug use

Register studies exploring the problem use of amphetamines and opioids have been conducted in Finland since 1997. The first such study covered the Helsinki metropolitan area in 1995 (Partanen 1997); data have been collected nationwide since 1997 and on a regional basis since 1998. From the first, the registers used were the hospital discharge register, the police information system, the register of cases of driving while intoxicated and the national infectious diseases register (cases of hepatitis C). The statistical estimates are based on the capture-recapture method. (Partanen 1997; Partanen et al. 2000; 2001; 2004; 2007; Seppälä et al. 1999).

According to estimates obtained, there were between 18,000 and 30,000 problem users of amphetamines or opioids in 2012 (Table 4). Relative to population, this amounts to 0.55% to 0.90% of Finns aged 15–64.

Table 4. Estimates of numbers of problem users of amphetamines and opioids by age and gender and as a percentage of the population (police information system, hospital discharge register, national infectious diseases register).

	min	median	max	Percentage of population	
				min	max
Overall estimate	18,400	20,800	30,200	0.55%	0.90%
Ages 15 to 24	3,500	3,900	4,300	0.56%	0.68%
Ages 25 to 34	8,000	10,400	13,100	1.27%	2.07%
Ages 35 to 44	4,000	5,000	7,700	0.64%	1.25%
Ages 45 to 54	1,100	1,800	2,600	0.15%	0.37%
Ages 55 to 64	300	1,100	3,000	0.04%	0.40%
Men	13,500	14,900	21,000	0.80%	1.50%
Women	4,900	5,900	9,200	0.29%	0.55%

The incidence of problem use is generally reported as a confidence interval (min–max). Figure 4 shows the posterior distribution of estimates of the number of problem users. The maximum value of each curve on the Y axis shows the most probable estimate of the number of problem users on the X axis (mode). Because the distributions (posterior distributions) are biased to the right, the most probable estimates may be found around and below the midpoint of the confidence interval. The medians of the overall estimate are also shown in Table 4, and they were used for calculating the percentages.

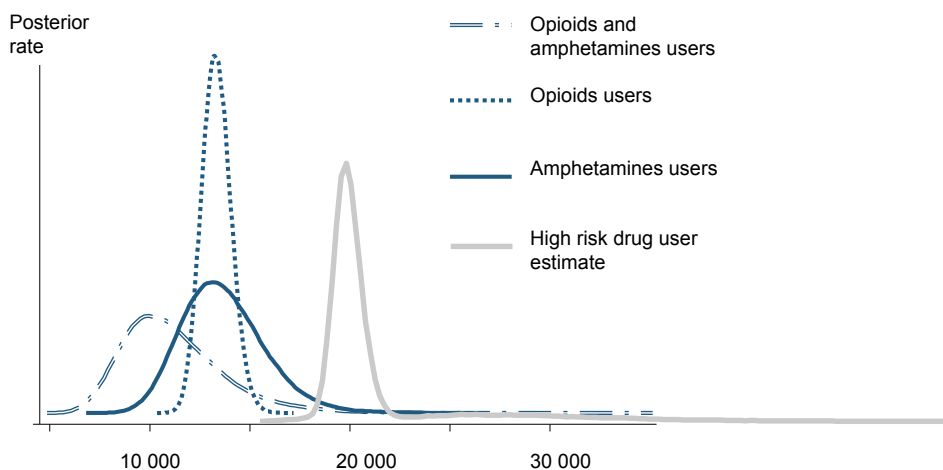


Figure 4. Estimates of numbers of amphetamine and opioid problem users.

The overall estimates given in Table 4 were calculated on the basis of data from three registers (police information system, hospital discharge register, infectious diseases register) and should be considered more reliable than the substance-specific estimates calculated on the basis of data from two registers (police information system, hospital discharge register) shown in Table 5. The substance-specific estimates cannot simply be added up, because problem users may have register entries for both opioids and amphetamines. However, the figures obtained with various combinations of registers are in the main very consistent, even if the estimate for amphetamine users in the youngest age group (Table 5) is larger than the overall estimate for the age group (Table 4). This is because there are not many overlapping observations concerning amphetamine users aged 15 to 24, and the substance-specific estimate is thus higher than in the more stable overall estimate.

Table 5. Substance-specific estimates of the number of problem users and their percentage of the population, by age and gender (police information system, hospital discharge register).

	Amphetamine users				Opioid users			
	min	max	Percentage of population		min	max	Percentage of population	
			min	max			min	max
Overall estimate	11,000	17,800	0.33%	0.53%	12,700	15,100	0.38%	0.45%
Ages 15 to 24	3,600	5,500	0.57%	0.87%	2,100	2,500	0.34%	0.40%
Ages 25 to 34	4,500	6,800	0.72%	1.08%	5,500	7,200	0.87%	1.14%
Ages 35 to 44	2,300	3,500	0.37%	0.56%	2,700	3,600	0.44%	0.58%
Ages 45 to 54	700	1,200	0.10%	0.16%	900	1,500	0.12%	0.21%
Ages 55 to 64	200	1,800	0.02%	0.24%	500	2,600	0.06%	0.35%
Men	7,700	11,900	0.46%	0.70%	8,300	9,900	0.49%	0.58%
Women	3,300	5,900	0.20%	0.35%	4,400	5,200	0.26%	0.31%

On the basis of this register study, the number of amphetamine problem users in Finland is estimated to be between 11,000 and 18,000, and the number of opioid problem users between 13,000 and 15,000 (Table 5). It was methodologically challenging to calculate the number of simultaneous users of both substances (7,500 to 15,500, Figure 4). Because of this, problem users are reported on a substance-specific basis in the present report, even though both groups include some of the same people who are problem users of both amphetamines and opioids.

It is estimated that 5,000 to 9,000 of the problem users are women (Table 4). In all, women account for about one third of problem users (median 29%). Women account for a slightly larger percentage of opioid users (35%) than amphetamine users (32%).

Among amphetamine users, the percentage of women across age groups was roughly equal, whereas among opioid users women accounted for 45% of the youngest age group. This percentage decreases steadily towards the older age groups.

The highest number of problem users is found in the 25–34 age group (8,000 to 13,000), meaning that problem users are estimated to amount to 1.3% to 2% of the population in this age group (Table X). Users in this age group account for almost half (44%) of all problem users, men and women. In the 25–34 age group, the percentage of opioid users (45%) is somewhat higher than the percentage of amphetamine users (40%). Among men, the highest number of users can be found in the 35–44 age group. Among women, there are almost as many problem users in the 15–24 age group as there are in the 25–34 age group (Table 6). The youngest age group, 15–24, was the only one where amphetamine users (0.57% to 0.87%) clearly outnumbered opioid users (0.34% to 0.40%) (Table 5).

Table 6. Number of problem users of amphetamines and opioids by age and gender (police information system, hospital discharge register, national infectious diseases register).

	Men		Women	
	min	max	min	max
Ages 15 to 24	2,400	3,400	1,200	2,400
Ages 25 to 34	5,800	7,300	1,500	2,600
Ages 35 to 44	3,500	5,000	800	1,600

Amphetamine and opioid abuse is found all around Finland (Table 7). About one third of all problem users are found in the Helsinki metropolitan area¹², and half within the domain of the Regional State Administrative Agency for Southern Finland¹³. Analysis of the population percentages shows that there are more problem users in the Helsinki metropolitan area than in the rest of the country combined, and this is reflected in the population percentage for southern Finland as a whole. The regional percentages are next highest in eastern Finland, which is tied with south-western Finland. There is considerable variation in the figures for Lapland and northern Finland, which is probably due to the small number of register entries for amphetamines. The lowest population percentages were found in western and central Finland. Overall, differences relative to population between regions are inconsiderable.

12 Helsinki, Espoo, Vantaa and Kauniainen.

13 Includes South Karelia, Kanta-Häme, Kymenlaakso, Päijät-Häme and Uusimaa.

Table 7. Overall estimates of numbers of problem users of amphetamines and opioids by age and gender and as a percentage of the population by region (police information system, hospital discharge register, national infectious diseases register).

	min	max	min	max
Overall estimate	18,400	30,200	0.55%	0.90%
Southern Finland	8,500	16,300	0.57%	1.09%
Western and Central Finland	3,600	5,700	0.47%	0.73%
Eastern Finland	1,800	3,300	0.51%	0.93%
Northern Finland and Lapland	1,600	3,900	0.37%	0.92%
Southwest Finland	2,300	3,800	0.52%	0.86%
Helsinki metropolitan area	5,600	10,300	0.73%	1.34%

Problem use of amphetamines is somewhat weighted towards southern Finland, whereas problem use of opioids is more evenly distributed throughout the country (Table 8). The age distribution of problem users was the same in the Helsinki metropolitan area as in the country as a whole: one fifth (21%) were aged 15 to 24, and almost half (46%) were aged 25 to 34.

Table 8. Substance-specific estimates of numbers of problem users and population percentages by region (police information system, hospital discharge register).

	Amphetamine users				Opioid users			
	min	max	Percentage of population		min	max	Percentage of population	
			min	max			min	max
Overall estimate	11,000	17,800	0.33%	0.53%	12,700	15,100	0.46%	0.54%
Southern Finland	3,600	5,500	0.41%	0.68%	5,700	6,500	0.38%	0.44%
Western and Central Finland	4,500	6,800	0.22%	0.35%	1,900	2,400	0.24%	0.32%
Eastern Finland	2,300	3,500	0.33%	0.52%	1,300	1,900	0.36%	0.52%
Northern Finland and Lapland	700	1,200	0.24%	0.66%	1,100	1,800	0.25%	0.42%
Southwest Finland	200	1,800	0.28%	0.51%	1,600	2,000	0.36%	0.45%
Helsinki metropolitan area	3,700	5,900	0.48%	0.77%	3,500	4,200	0.38%	0.44%

Comparing the most recent register study to earlier similar studies (Partanen 1997; Partanen et al. 2000; 2001; 2004; 2007; Seppälä et al. 1999) is difficult for several reasons. There are considerable differences in the sampling and statistical methods used in the most recent study compared with studies conducted in earlier years. Also, registration practices are now more comprehensive than before. For instance, the widespread use of opioid substitution treatment has meant that opioid users have better access to treatment and hence show up more frequently in registers. Because of this, the present results are not directly comparable with those of earlier studies. On the other hand, the findings do allow for cautious interpretations of changes that have occurred.

In 2005, the number of amphetamine and opioid problem users was estimated at between 14,500 and 19,100, whereas the figure for 2012 was between 18,000 and 30,000. While it would appear that the number of users had increased, the apparent growth may also be due to other reasons such as the aforementioned changes in registration practices. It is also possible, however, that there has indeed been a slight increase in the absolute number of problem drug users since 2005, and this is corroborated by data from other sources (Hjelt Institute 2013; Institutional health care; National Bureau of Investigation 2013; Jaakola et al. 2014).

Table 9. Shares of problem drug users by gender, age and region.

	All			Opioid users			Amphetamine users			Both opioid and amphetamine		
	min	median	max	min	median	max	min	median	max	min	median	max
Women	26	29	30	33,1	34,6	36	27	32,1	36,7	22	24	26
15–24-vuotiaiden osuus	18	20	21	16	17	18	30	32	34	22	24	27
25–34-vuotiaiden osuus	40	44	46	38	45	50	38	40	41	48	51	53
34–44-vuotiaiden osuus	20	23	25	20	23	25	19	20	21	18	20	22
45–54-vuotiaiden osuus	6	8	12	7	8	11	6	7	8	3	6	7
55–64-vuotiaiden osuus	2	5	13	4	8	17	1	4	12	0	1	2
Helsinki metropolitan area	30	31	32	26,7	27,6	28,9	28,5	32	39,6	25	36	47
Southern Finland	47	49	50	43	43,9	44,8	51	55	65,6	41	50	62
Western and Central Finland	18	19	19	13	15	17	14	15	17	11	19	24
Eastern Finland	10	11	13	9	11	13	9	10	12	3	8	15
Northern Finland and Lapland	8	12	14	8	10	13	8	10	18	9	13	28
Southwest Finland	12	13	14	12	13	14	9	12	14	9	12	15

4.2 Problem drug use in a wider context

Finland's second wave of drug use, at the turn of the 2000s, manifested itself for instance in deaths from heroin overdose. In the statistics on drug-related deaths, which indirectly reflect the incidence of problem drug use, buprenorphine has been more common than heroin since 2002. The number of buprenorphine findings in forensic post-mortem examinations rose year on year throughout the 2000s, from fewer than 10 in 2000 to 156 in 2010. On the other hand, the number of cannabis and amphetamine findings increased by 50% over the same period, to more than 100 findings per year. By contrast, the number of deaths caused by either heroin or cocaine were restricted to a few cases every year during the same period. (Vuori et al. 2006; Vuori et al. 2011.)

The increase in the percentage of treatment periods related to pharmaceutical opioids can be clearly seen in medical care statistics. In the information collected from drug-related treatment, 74% of the clients reported problem use of pharmaceutical opioids.

In the 2000s, the average number of treatment days related to drug use has slightly decreased, but the percentage of those treatment days related to opiate use has doubled. The number of treatment days classified as substitution treatment is showing a clear upward trend; the number of treatment periods related to other opioid use varies considerably year on year but is not showing a clear upward trend.

The absolute number of hospital days per year related to other drugs has decreased, but their percentage has remained fairly stable. An exception to this may be found in the percentage of treatment days related to stimulants (amphetamine and cocaine); this figure has slightly decreased over the past decade.

According to a study of morbidity statistics, the incidence of behavioural disorders and organic brain syndrome caused by drug use, controlled for age, was 16.5 in 10,000 among men and 8.1 in 10,000 among women in 2009. The incidence was thus about twice as high among men as among women. The absolute numbers were 4,141 men and 2,071 women. The age-controlled incidence of behavioural disorders and organic brain syndrome caused by drug use increased by almost 25% among both men and women between 2005 and 2009 (Gissler et al. 2012).

The above findings notwithstanding, it is unclear by how much problem drug use actually increased in the 2000s, if at all. It is also unclear whether the percentage of opiate use out of all drug use has increased. The number of clients in substitution treatment has multiplied many times over, and both problem users and health care professionals are very well aware of the treatment available for opiate addiction. On the other hand, opiate problem users are more likely to seek out substance abuse services than users of other drugs. Opiate use is often an indicator of a clear need for treatment: users have typically used several kinds of drugs for years, often intravenously. Also, opiate withdrawal symptoms are easier to treat medically than withdrawal symptoms from other drugs. Indeed, it is a good thing that more treatment for opiate use is now available.

What is not clear is whether drug users' access to treatment has become more difficult at the same time. (Forsell 2012.)

Information collecting from drug-related treatment

In the annual survey for collecting information from drug-related treatment conducted by the National Institute for Health and Welfare, the drug user clients were mainly men (68%) and mainly aged 20 to 34 (62%). Their educational attainment was low, and most of them were unemployed (59%). One out of ten clients was homeless. Intravenous drugs had been used at some point in their life by 74% of the clients. (Forsell & Nurmi 2013.)

Opiates were the primary problem drug for 55% of the clients covered by the information collection. Overall, 69% of drug user clients had a history of opiate problem use. In recent years, nearly all of the opiate use recorded in Finland has involved synthetic, pharmaceutical opioids. Two of these, buprenorphine and methadone, are used both as intoxicants and as detoxification or substitution treatment medication. Substitution treatment medication is typically taken under a physician's supervision and orally, while drug use is typically intravenous and involves the use of other drugs too. (Forsell & Nurmi 2013.)

Buprenorphine is by far the most common single opiate also in drug use (accounting for at least 62% of all opiate use). Other substances were occasionally reported as being used: heroin and other opium derivatives 7%, tramadol 3%, oxycodone 3%, codeine preparations 3% and fentanyl 1%. There was less intoxicant use of methadone (1%) than of a combined preparation of buprenorphine and naloxone (6%). (Forsell & Nurmi 2013.)

Of those who reported that buprenorphine was their primary problem drug, no fewer than 88% used this substance mainly intravenously; nearly half of these buprenorphine problem users (43%) used the drug on a daily basis. (Forsell & Nurmi 2013.)

In the datasets from this information collecting, the percentage of clients for whom opiates are the primary problem drug has been constantly increasing through the 2000s (Figure 5). In the data for 2012, however, the rising trend in the percentage of opiate users has levelled off for the first time. It is possible that the percentage of opiate users in care services has peaked. Opiate problem users are more likely to seek out substance abuse services than users of other drugs, and the number of clients in substitution treatment has multiplied many times over in the past ten years. (Forsell & Nurmi 2013.)

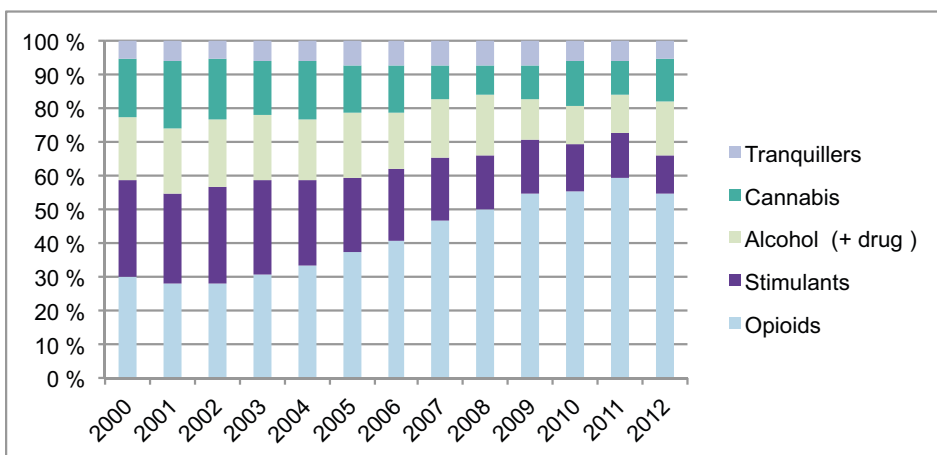


Figure 5. Primary substances used by clients entering treatment for the use of narcotics and pharmaceuticals (% of clientele) in 2000–2012.

Source: Drug user clients of substance abuse services, THL.

Polydrug use was very common. More than half (58%) of the clients seeking substance abuse treatment reported that they had a problem use history with at least three intoxicants.

Tranquillisers were reported as secondary drugs far more often than as primary drugs. Pharmaceutical abuse (excluding opiates) comprised benzodiazepine abuse in 91% of the cases, and pregabalin abuse in 6% of the cases. (Forsell & Nurmi 2013.)

Stimulant use mainly comprised amphetamine use; there were some reports of secondary drug use of ecstasy (6% of all stimulants). Although methamphetamine and MDPV had become more common on the drug market, they were not significant problem drugs in terms of causing users to seek treatment, having an incidence of 2% and 3%, respectively. (Forsell & Nurmi 2013.)

Of the clients who sought treatment primarily for stimulant problem use, only 14% used a stimulant on a daily basis; 46% had not used stimulants in the previous month. By contrast, of the clients who sought treatment primarily for tranquilliser problem use, many used such drugs on a daily basis (49%), and only about one out of four (23%) had not used them in the previous month. The principal mode of use was intravenous for stimulants (75%) and oral for tranquillisers (96%). (Forsell & Nurmi 2013.)

Among the drug users seeking treatment who were not opiate problem users, cannabis was the most common drug leading the clients to seek treatment (35%). The percentage of cannabis as a primary cause for seeking treatment was considerably elevated in the youngest age groups. In fact, it was the most common problem drug reported as a cause for seeking treatment in the age group of under 20 (62%).

4.3 Data on problem drug use from non-treatment sources

In late 2009, a study was conducted on the substances used by drug users in Helsinki, how they used them and where they obtained them. The criterion for inclusion in the study was that the interviewees had to be active users; however, persons who had not been actively using drugs for up to a month were also accepted. Out of the 100 people interviewed, 71 were men and 29 women; 23 of the interviewees were in substitution treatment, 20 of them men. The average age of the interviewees was about 29 years. However, more than two thirds of the women were under 28 years of age, as compared with less than a third of the men. The substitution treatment patients included in the study were on average older than the other interviewees (average age about 32 years). More than half of the interviewees were not in a steady relationship at the time of the interview. (Tammi et al. 2011.)

The interviewees were seriously disadvantaged. The majority (79%) of them were unemployed at the time of the interview, three fourths of them had only completed comprehensive school, and the highest educational attainment among them was vocational education or upper secondary school. More than half of the interviewees had a place to live, whether own or rented, but one in four lived in a shelter or were completely homeless. Three out of four respondents named social security as their principal source of income, and nearly one in six named drug trading or other illegal activities; by comparison, no one's principal source of income was begging or prostitution. Two out of every three interviewees had had trouble with the police more than once in the preceding year. (Tammi et al. 2011.)

For all interviewees, the average period of drug use was 13 years, the shortest being 3 and the longest 35 years. Interviewees in substitution treatment had been drug users for longer than the average, the average among them being 17 years. Most of the users had begun using drugs during the 'second wave' of drug use increase in Finland after the mid-1990s. The most commonly used substances during the previous month were opioids (88 respondents), followed by benzodiazepines (81), alcohol and cannabis (73) and amphetamines (66). The most frequently used opioid was buprenorphine as Subutex (60), followed by buprenorphine-naloxone combination (Suboxone) (39) and methadone (14). More than 90% of the interviewees used Subutex intravenously, and a similar percentage may be obtained for Suboxone and methadone when the interviewees in substitution treatment are excluded. Injecting Suboxone was particularly popular with users under the age of 28. Amphetamine, metamphetamine and MDPV were also used intravenously by more than 90% of users; 26 respondents said they had used MDPV during the previous month. (Tammi et al. 2011.)

Nearly half of those who had used benzodiazepines during the previous month (39 out of 81) had used them on a daily basis. Half of them had obtained the benzodiazepine from a physician, and about one fourth of them had used the illegal market. Four out of five of those who had used opioids during the previous month (74 out of 88) had used them on a daily basis; 23 of these were in substitution treatment. Nearly

half of those who had used Subutex during the previous month (29 out of 60) had used it on a daily basis, and more than 80% had used it at least every other day. Four out of five Subutex users had obtained the substance on the illegal market. More than half of Suboxone users had obtained the substance on the illegal market. Amphetamine use is more occasional: out of the 56 respondents who said they had used amphetamine during the previous month, only 8 had used it on a daily basis, and 17 at least every other day. (Tammi et al. 2011.)

Certain statistically significant differences were observed in substance profiles with regard to user age: benzodiazepines were more common among those under 30 than in older age groups, whereas in the older group there were more amphetamine users who had not used the substance at all in the previous month. Gender analysis showed that men more frequently than women had used drugs in the previous month in all substance groups except for amphetamine. The substitution treatment patients interviewed used alcohol, benzodiazepines and cannabis just as commonly as the rest of the respondents, but amphetamines more rarely. All except one of the substitution treatment patients had used self-procured opiates during their treatment. (Tammi et al. 2011.)

Assessing forms of polydrug use was one of the key findings of the study. Although the study does not allow for broad generalisation, it may be concluded that among the drug users with the most severe problems there are persons who use both amphetamines and opioids; the most common pattern, however, is combined use featuring both polydrug use of opioid-based painkillers and sedatives (benzodiazepines) on the one hand and alcohol and cannabis on the other. (Tammi et al. 2011.)

A register study showed that the most common substances found in the blood and urine samples of intoxicated drivers were benzodiazepines and amphetamines. The study also showed that polydrug use was common in cases of suspected driving while intoxicated. It was considered important for intoxicated drivers to be referred to treatment and rehabilitation as an alternative to being convicted and sentenced, because being caught for driving while intoxicated would be a good opportunity for reaching out to substance abusers and referring them to treatment. (Karjalainen 2010.)

How the problem use of drugs is addressed is influenced by conceptions of problem use in society at large. Shifts in the discussion and scope of substance abuse and of addiction in general in the press between 1968 and 2006 has been analysed on the basis of articles published in Finland's leading daily newspaper. The findings show that four trends may be identified over the 40-year period: an increasing number of articles on the topic, the expansion of discussion of the phenomenon from alcohol use to various other kinds of divergent behaviour, the mainstreaming of a previously marginal phenomenon, and a shift from social models explaining the phenomenon to personal histories. Over the period examined, the number of articles in this area per year would seem to have doubled. As recently as in the 1970s and 1980s, the phenomenon was identified with a specific group of people who had problems with a specific behavioural pattern, usually related to a specific substance (alcohol or drugs). The problems were seen as functions

of the social status of these groups and not discussed as wider phenomena. From the 1990s onwards, however, addiction has been identified in highly diverse areas (work, gaming, TV, Internet use, eating disorders, etc.), and today a large percentage of the population could be described as being addicted to something. As the problem is seen to affect an increasing percentage of the population, it is becoming less of an anomaly and more of a mainstream phenomenon. At the same time, the identification of problems with a specific social status has decreased, and addiction is now seen largely as a personal problem; this is also reflected in the treatment of addiction, particularly in the medicalisation of treatment. (Hellman 2009; Hellman 2010.)

In a joint Nordic study, the harm caused by illegal drug use to family members and friends was studied in the Nordic countries by asking respondents about personal experiences of drug users among their family and friends, the harm caused by them and the willingness of the respondents to help drug users close to them. The study showed that respondents in Helsinki differed from those in the other Nordic capitals in that they had fewer personal experiences of drug users in their proximity than the other respondents. In Helsinki, 45% of respondents had had concerns about the drug use of someone personally known to them (12% within the previous year), whereas the figure in the other Nordic capitals was 56% to 67% (22% to 28%). The researchers explained this difference by referring to Finland's relatively brief history of drug use (compared to Denmark in particular), lower number of users of hard drugs (compared to Denmark and Norway) and shorter history of hard drug use (compared to all other Nordic countries). Similarly, fewer respondents in Helsinki had been personally acquainted with someone receiving treatment for substance abuse, but the difference between Helsinki and the other Nordic capitals was no longer significant in responses concerning personal acquaintance with someone receiving treatment within the previous year. (Melberg et al. 2011.)

There were also clear differences between Helsinki and the other Nordic capitals as to how serious the drug problem overall was considered by people who knew problem drug users personally. In Helsinki, 30% of respondents had experienced a fear of violence because of drug use by a person close to them in their lifetime (9% during the previous year), whereas the figures in the other Nordic countries were 20% to 23% (5% to 7%). Correspondingly, in Helsinki 11% of respondents had had to call in the police because of drug use (3% during the previous year), whereas the figures in the other Nordic countries were 4% to 6% (1% during the previous year). The researchers explain this difference too by the fact that this problem set is unfamiliar in Helsinki and that, on the other hand, Finland's drug policy is traditionally control-oriented, which is reflected in how citizens act. However, there were no great differences between the countries as regards how large a percentage of those personally acquainted with problem users had attempted to get those problem users to seek treatment. (Melberg et al. 2011.)

With regard to drug-related harm, the views of respondents personally acquainted with drug users differed from one another in that the perceived harm sometimes proved

to be greatest in the countries with the longest history of drug-related problems. By contrast, there were only minor differences between countries in conceptions of drug-related harm in the previous year among respondents personally acquainted with drug users. In all the cities, the most experiences of drug-related harm were cited by women and by respondents who had experience of a drug problem in a person close to them, for instance in their own family. When comparing the drug problem with a variety of common diseases (e.g. diabetes, asthma, cancer), the seriousness of the drug problem was assessed in much the same way in all the countries. In all, the incidence of personal experiences of drug-related harm proved to be slightly lower in Helsinki than in the other Nordic countries. (Melberg et al. 2011.)

5 Drug-related treatment services

According to the Act on Welfare for Substance Abusers, municipalities must provide substance abuse services that are in accordance with the needs of the municipalities in both their content and coverage. All substances that are used for intoxication are considered intoxicants: alcohol, substitutes, pharmaceuticals, and drugs. Units providing specialised services for substance abusers include outpatient care (A Clinics, youth centres), short-term inpatient care (detoxification units), longer-term rehabilitative care and support services (day centres, sheltered housing and supported housing), and peer support activities.

In addition to the units providing specialised services for substance abusers, increasing numbers of substance abusers are treated within primary social and health care services, including social welfare offices and child welfare services, mental health clinics, health centre clinics and wards, hospitals, and psychiatric hospitals. The Finnish system emphasises that drug treatment as such is often insufficient and the substance abuser should be assisted in solving problems related to income, living, and employment.

In Finland, municipalities are in charge of organising social and health services, but local government lacks monitoring systems that would help identify client-group-specific welfare deficits and service needs. In particular, the most socially marginalised substance abuse clients face an increased risk of exclusion from the service network.

A quality framework for substance abuse services (Ministry of Social Affairs and Health 2002) and Current Care guidelines (Duodecim 2006) for the treatment of drug abusers have been created in order to develop substance abuse work. The development policy for drug treatment services emphasises the development of low-threshold services and related training.

It is alleged that, due to the fact that more and more drug users are receiving medical treatment, substance abuse problems, which were previously considered social problems, are now regarded as medical problems and are increasingly being handled by the health care services. Substitution treatment for opiate addicts is increasingly being transferred to health centres and, in part, also to pharmacies. This phenomenon reflects the differences in focus between psychosocially and medically oriented substance abuse treatment services. Another reason would be that municipalities are attempting to transfer these services from the specialist level to the primary level in order to find savings.

It is also a challenge for the substance abuse service system to see substance abuse problems as a part of broader problem spectra that include mental health problems, needs for new treatment, and a vicious circle of social exclusion.

5.1 Strategy and treatment systems

Recovering from a substance abuse problem is a long-term process requiring various kinds of treatment and support at various points along the way, and it would thus be important to retain diversity in substance abuse services. The Government Programme states the aim of increasing low-threshold services, health advisory services and outreach work for substance abusers. The threshold to treatment must be further lowered, and obstacles to seeking treatment removed. It is also important to bring the substance abuse services of local authorities, NGOs and parishes closer together in terms of development and supply.

Goals for the current electoral period include:

- ensuring the coverage and quality of health advisory services for substance abusers,
- exploring the current situation in the drug treatment system to improve the coverage of services,
- enhancing the efficiency of treatment referrals by the police,
- improving information exchange between the authorities, treatment services and peer group activities,
- preventing abuse of prescription drugs, and
- increasing opportunities available for treatment of substance abuse problems while serving a sentence for a criminal offence.

Treatment services

In Finland, services for substance abusers are provided within both social welfare and health care. Specialised services for substance abusers are mainly provided under social welfare. Outpatient treatment within these specialised services is free of charge for the client, whereas inpatient treatment generally requires a payment guarantee from the social welfare office of the client's home municipality. Services are provided by municipal, private, and third-sector actors.

The practical difficulty in substance abuse treatment is that the clients' problems and the availability of services do not necessarily meet. Some of the largest obstacles to receiving treatment are waiting times, the lack of knowledge and skills and negative attitudes towards substance abusers within the primary services, and the physical distance to the treatment units within specialised services. One possible solution particularly for drug users is service guidance, a more personal counselling service for drug problem users (see also section 8.3 Social rehabilitation).

Outpatient substance abuse services

Drug users are offered specialist outpatient care services at A Clinics and youth centres. The services offered may include a survey of mental and somatic state, counselling, individual therapy, family therapy, group therapy, networking, outpatient detoxification, or substitution treatment, depending on the client's needs. The care is undertaken according to a treatment plan drawn up together with the client and their support network. (Korteniemi 2011.)

Institutional detoxification or withdrawal treatment

Detoxification or withdrawal treatment is 24h institutional care. The length of the treatment period is determined according to the care needs of the client. The purpose of this treatment is to break the vicious circle of substance abuse, to treat withdrawal symptoms, and to plan for further treatment. Once the client's physical health has improved, rehabilitative discussions are begun. (Korteniemi 2011.)

Rehabilitative institutional care

Rehabilitative institutional care in substance abuse services is long-term 24h institutional care. Rehabilitative institutional care forms part of a client's overall rehabilitation programme and is part of the treatment plan. Institutional care is intended as a treatment period to support outpatient care in the case of clients for whom outpatient care or institutional detoxification are not sufficient or feasible, or whose rehabilitation requires them to be removed from their normal living environment for a while. The length of the treatment period is individually determined. The content of the rehabilitation is also determined individually, according to the treatment ideology of the facility in question and the methods used. (Korteniemi 2011.)

Rehabilitative housing services

The purpose of housing services is to provide safe accommodation for the client, to support them in leading an intoxicant-free life, and to guide them to the use of services. Rehabilitative housing services include sheltered housing with 24h assistance, sheltered housing, supported housing (near a sheltered home where help is available) and assisted housing (hour-based guidance). Forms of assistance may include guidance and counselling in everyday matters, setting limits, charting and strengthening the client's social networks, and providing health care services. Housing services are covered in the service and rehabilitation plan drawn up for the client. (Korteniemi 2011.)

Specialist medical care for drug users

Drug use treatment, which aims at ending or reducing drug use or abuse of pharmaceuticals or their harmful effects, is also provided at hospitals.

Somatic illnesses whose underlying causes include drug use are treated both at emergency clinics and in inpatient care. Drug-related poisoning, for instance, may be treated at an emergency clinic, or the client may need to be admitted for a few days of observation in an inpatient ward. Primary and secondary diagnoses are recorded for patients in health care, and a given patient may have a primary diagnosis of poisoning and a secondary diagnosis of polydrug use.

Drug use treatment proper is given at psychiatry outpatient clinics and wards. Clients may seek treatment at a specialist medical care substance abuse clinic through an A Clinic or a psychiatric emergency clinic, for instance. Substance abuse clinics conduct assessments of substitution treatment needs, among other things, if the client also has a psychiatric illness.

General social welfare and health care services

Drug use treatment given at health centres include discussions with a substance abuse nurse, substitution treatment, withdrawal treatment, and treatment of somatic illnesses. Social welfare services and child welfare services offer discussion therapy and referral to treatment.

Low-threshold services

The point of low-threshold services is to explain to clients that they may easily seek out services intended for them without fear of consequences. The concept has broadened from syringe and needle exchange points to a wider range of services intended for the disadvantaged, such as shelters, day centres, and night cafés. (Törmä 2009. See also the chapter Clinical research, Study on low-threshold operations.)

Care recommendations

The Current Care Guideline on *Treatment of drug abuse* was updated. (Duodecim 2012.) Prepared by a working group appointed by the Finnish Medical Society Duodecim and the Finnish Society of Addiction Medicine, the Current Care Guideline is based on systematically compiled research findings. The purpose of the guideline is to provide information to clarify treatment of drug problems, to improve cross-discipline co-operation, to promote networking, and to influence attitudes.

The key points of the guideline are (Duodecim 2012):

- Drug use in Finland has been low compared to the rest of Europe. Drug use increased in the 1980s and 1990s. The growth trend showed signs of flattening out at the turn of the millennium but had a slight upturn in the late 2000s.
- Drug addiction involves significant threats to personal health.
- Addressing drug problems may be complicated by the fact that drug use is illegal. Patients often do not dare tell physicians that they are drug users, and physicians cannot necessarily detect a drug problem even with direct questions.
- An open and confidential treatment relationship between the client and the substance abuse counsellor is an important tool in the identification and treatment of a drug problem. Problems may also be detected and monitored through laboratory tests.
- Psychosocial methods form the basis for the treatment, even though the evidence for their effectiveness in the treatment of certain drug problems is thin. Medication often only alleviates symptoms, although substitution treatment has proved effective for opioid addiction in particular.
- Drug use is often linked with mental health problems, and psychiatric or addiction psychiatry expertise is needed in coping with these.
- Drug use is often polydrug use, but clinically applicable research data are mainly available on individual substances.
- A doctor acting in good faith may actually make a patient's addiction worse by prescribing tranquillisers. However, such a risk must not prevent the use of vital medications for instance during detoxification.
- Drug use involves not only health threats but social complications too, and addressing these requires cooperation with various actors. The well-being of not only the patient but also the people close to him – family and especially children – must be addressed.
- An open, neutral and non-judging approach is needed for treating drug problems and preventing their adverse impacts.
- Providing treatment for a drug abuser is ultimately less expensive for society than not providing treatment.
- The criteria for access to non-urgent care (treatment guarantee) also apply to substitution treatment for opioid addicts.

The Hyvä hoito (Good treatment) series published by Duodecim includes a book entitled Huume- ja lääkeriippuvuudet (Drug and pharmaceutical addictions, Seppä et al. 2012), which is also available in database form in the Terveystietä health portal. The book describes treatments, how to identify addiction, how to encounter a drug user client, how to provide peer support, and activities to alleviate adverse impacts. The book also discussed the mental and physical damage caused by drug use, drug use among young people, and coping strategies for family members of drug users.

Quality recommendations have been published for substance abuse services. (Ministry of Social Affairs and Health 2002.)

Substitution treatment for opioid addicts

Substitution treatment may be given to opioid addict clients who have not been able to quit through other types of detoxification treatment. The Decree of the **Ministry of Social Affairs and Health** on the detoxification and substitution treatment of opioid addicts with certain medicinal products (33/2008) specifies the goal of substitution treatment as either rehabilitation and sobriety, or the reduction of harmful effects and the improvement of the client's quality of life. (Ministry of Social Affairs and Health 2008.)

More concretely, the purpose of substitution treatment is to prevent or to substantially reduce the use of illegal opioids, crime, and the risks of intravenous drug use including overdosing, and also to enable treatment of addictions and psychosocial rehabilitation. (Duodecim 2012.)

Substitution treatment is preceded by a treatment needs assessment, which may be conducted in either outpatient or institutional care. In most cases, the treatment needs assessment is conducted or the treatment begun at a specialist unit such as an addiction psychiatry ward at a hospital, after which the actual course of treatment is provided by substance abuse outpatient services (e.g. an A Clinic) or a health centre. The time limits imposed by the treatment guarantee apply to medical substitution treatment (for non-urgent cases, assessment of treatment needs within 3 days and access to treatment within 3 months, and, for specialist medical care, assessment of treatment needs within 3 weeks and access to treatment within 6 months).

Number of clients in substitution treatment

There were 2,439 patients undergoing pharmaceutical detoxification and substitution treatment for opioid addiction as at 30 November 2011.¹⁴ The most frequently used substitution treatment medication was a combination of buprenorphine and naloxone (58%), followed by methadone (38%). Only 4% of the patients in treatment received a medication containing buprenorphine only. Two out of three patients were clients of specialist substance abuse services; one fifth were at health centres, just over one tenth in specialist medical care, and a few dozen at prison health care units. (Partanen et al. 2013.)

14 The investigation of units providing pharmaceutical detoxification or substitution treatment for opioid addiction was carried out using a questionnaire on 30 November 2011. Respondents were asked to give the total number of patients in opioid treatment and an itemisation by treatment type. The data were analysed by treatment unit type and by municipality.

Table 10. Number of patients in pharmaceutical detoxification and substitution treatment as at 30 November 2011, analysed by type of treatment and type of treatment unit.

Type of treatment unit	Total	Detoxification	Rehabilitative substitution treatment, medication distribution at unit	Rehabilitative substitution treatment, pharmacy contract	Harm-reducing substitution treatment, mainly medication, no other treatment or support	Harm-reducing substitution treatment, medication + other treatment and support
Health centre	500	12	344	35	75	34
Specialised substance abuse services	1624	27	1033	137	322	105
Specialist medical care	276	7	208	3	46	12
Prison health care	39	11	25	0	3	0
Total	2439	57	1610	175	446	151

Source: Partanen et al. 2013.

Most of the opioid addict patients in pharmaceutical detoxification or substitution treatment were in rehabilitative substitution treatment. Two out of three patients (66%) were in rehabilitative substitution treatment where medication was distributed at the health care unit, while 7% were in rehabilitative substitution treatment where they picked up their medication at a pharmacy on a pharmacy contract. One out of four patients (25%) were in harm-reducing substitution treatment, most of them in treatment based on medication and involving no other treatment or psychosocial support. Only 2% of the patients were in detoxification aiming at the discontinuation of opioid medication. (Partanen et al. 2014.)

There were patients in pharmaceutical treatment for opioid addiction in all hospital districts, although the majority of them were in southern or western Finland. Almost half of the patients in pharmaceutical detoxification or substitution treatment for opioid addiction (45%) were treated at health care units in the municipalities that belong to the Helsinki and Uusimaa Hospital District. The comparable figure was 13% for the Hospital District of Southwest Finland, 10% for the Pirkanmaa Hospital District, 6% for the Hospital District of Pohjois-Savo, and 5% for the Hospital District of Kymenlaakso; the remaining hospital districts had percentages under 5%. Treatment was concentrated at treatment units in large cities. The three large cities of the Helsinki metropolitan area accounted for 39% of all patients. A further 21% of patients were found at treatment units in other municipalities with a population of over 100,000. (Partanen et al. 2014.)

The number of patients in pharmaceutical detoxification and substitution treatment for opioid addiction has been steadily growing in Finland in the 2000s. At the same time, a higher percentage than ever of all opioid addicts are in substitution treatment. This European trend was supported by the Decree of the **Ministry of Social Affairs and Health** adopted in 2008 and the extending of the criteria for non-urgent care to pharmaceutical detoxification and substitution treatment for opioid addiction. (Paranen et al. 2014.)

Follow-up studies

Jani Selin (2013) studied how substitution treatment has affected the health and well-being of patients and their lives more generally, based on the findings of Finnish substitution treatment follow-up studies published in scientific journals between 2005 and 2012. The effectiveness or impact of treatment can be measured with a variety of indicators. There are a number of well-established indicators for the effectiveness of substitution treatment: permanence, the state of the patient at the end of the treatment, changes in substance abuse, at-risk behaviour (e.g. intravenous drug use), changes in health, integration into society, and subjective perceived quality of life. (Selin 2013.)

The percentage of patients remaining in treatment was at a good level after one year in all the studies examined. Two studies of substitution treatment at Helsinki University Central Hospital found that 94% and 80% of patients, respectively, were still in treatment after one year, and 89%/77% after 18 months. A study conducted in Kotka showed similar results: 83% after one year and 77% after two years. In a study focusing on two treatment units of the A Clinic Foundation, the percentage remaining in treatment was 78% for the first two years and 71% in the further follow-up (4.5 to 6.5 years from the start of treatment). (Selin 2013.)

The main reasons cited in the studies for discontinuing treatment were violence, threatened violence, or unsuitability for the treatment. Only the A Clinic Foundation study offered detailed information on dropouts. Compared with the average for the group studied, they were younger, had more arrests during treatment, and were more often homeless. (Selin 2013.)

Using remaining in treatment as an indicator of effectiveness is problematic when juxtaposed with the controlled and agreed discontinuation of medication, that is, detoxification. The more patients are successfully detoxed, the poorer the effectiveness of the treatment looks when measured using this indicator. The studies indicated that detoxification out of substitution treatment was relatively rare: only 2% to 4% of patients became sober during the follow-up period. In a study where the follow-up period was between 4.5 and 6.5 years, no further patients achieved sobriety after the first three years. Treatments are of a long duration. There is little research available on substitution treatment even internationally. (Selin 2013.)

The studies showed that substance abuse among patients in substitution treatment decreased as the treatment progressed. After one year, 12% to 30% had completely given up substance abuse, and 44% to 75% had not had secondary use of opioids. A study that followed patients on buprenorphine and methadone at 2 months, 6 to 9 months, and 12 to 18 months after beginning treatment (Helsinki metropolitan area) showed that at the 2-month mark opioid use and other substance abuse was still very common. However, by the 6-month mark, the percentage of patients who were sober or used very little had increased substantially. In the Kotka study, the average score of the EuropAsi questionnaire, which gauges addiction severity, decreased from 0.46 at the start of treatment to 0.25 after one year. This was a statistically highly significant positive change. (Selin 2013.)

Substitution treatment has other impacts besides remaining in treatment or reduced substance abuse. The studies cited effects such as finding employment, getting training, improvements in human relationships, and better housing. However, such findings had not been compiled or systematically presented.

Ancillary impacts were discussed in the most detail in the study on two treatment units of the A Clinic Foundation: better housing was found with 23 patients, 16 patients had improved their relationships with their children, 5 patients had found employment, and 26 had participated in a variety of training activities. In the Kotka study, it was found that the incidence of depression had decreased and that perceived quality of life and the social situation had improved by a statistically significant amount. (Selin 2013.)

Recent studies on substitution treatment

In his doctoral dissertation, Kaarlo Simojoki studied the use of certain clinical methods or procedures in substitution treatment. To limit the amount of pharmaceuticals ending up on the street market to as little as possible, Simojoki studied the pharmacological impact of crushing the tablets. The crushing had no impact on serum levels, and the test subjects experienced no more or fewer side effects than the control group. It was therefore concluded that crushing the tablets has no impact on the clinical effectiveness of the pharmaceuticals. (Simojoki 2013.)

Simojoki also explored the advantages and disadvantages of a new, marker-based toxicology screen. Both patients and nursing staff felt that the marker-based toxicology screen was clearly more agreeable than the traditional toxicology screen based on visual assessment. Patients are therefore more likely to agree to treatment and to commit to it. It was also noted that the new toxicology screen cuts down on the time needed for screening, which will improve the efficiency and effectiveness of the treatment, as the nursing staff will be able to concentrate more on the actual care. (Simojoki 2013.)

In her master's thesis, Sini Kankaanpää (2013) explored the experiences of patients who had successfully left substitution treatment concerning their recovery process.¹⁵ Harm-reducing treatment and treatment aiming at abstinence were ranked as consecutive stages in the material before recovery. At every stage of the process, rehabilitation required structures to support the life changes needed.

5.2 Characteristics of treated clients

In the annual survey for collecting information from drug-related treatment conducted by the National Institute for Health and Welfare, the findings on the backgrounds and life situations of drug user clients were found to be much similar to findings in earlier years. The percentage of women out of all drug user clients was 32%, but this figure was 40% in the age group of under 29. By contrast, women accounted for a smaller percentage of older age groups of clients and of clients in opiate substitution treatment.

Three out of four drug user clients of substance abuse services are opiate problem users. In 2012, 40% of opiate problem users were undergoing opiate substitution treatment (Figure 7).

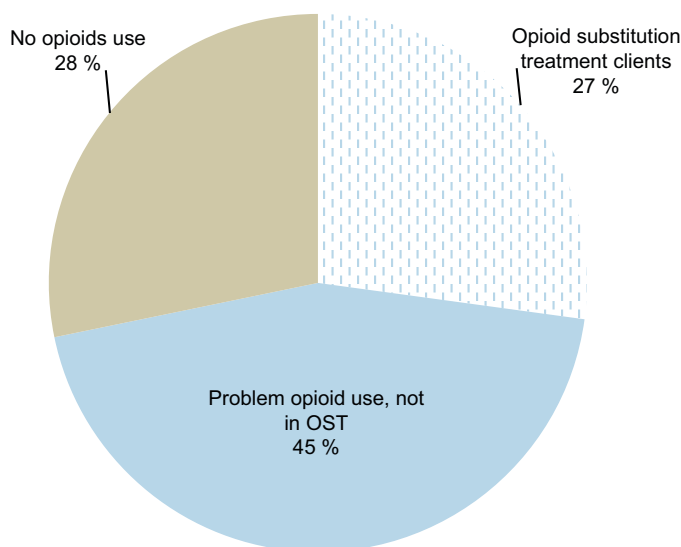


Figure 6. Opiate substitution treatment clients, opiate problem users and problem users of other drugs, 2012.

Source: Drug user clients of substance abuse services, THL.

¹⁵ The research material consists of narrative interviews with seven people from diverse backgrounds who had undergone substitution treatment. They were at least four months away from leaving substitution treatment, and at the time of the interviews they had been abstaining from intoxicants for quite some time.

Life situation

The average age of the drug user clients was about 31 years, median 30 years. The men were on average almost three years older than the women. Clients from Uusimaa were the oldest, and those from more predominantly rural regions were the youngest. Clients in 24h institutional care were of approximately the same age as those in outpatient care (median age 30 years). The clients in substitution treatment for opiate addiction were by far the oldest (median age 33 years). Intravenous drugs had been used at some point in their life by 74% of the clients. (Forsell & Nurmi 2013.)

Of the clients, 20% of the men and 35% of the women were married or cohabiting. Of those who were married or cohabiting, 59% had another problem substance user in the same household, women more commonly (76%) than men (44%). Children under the age of 18 were reported by 37% of the clients. Only 29% of the parents lived in the same household with their child or children, and 22% had had their children placed in care by child welfare services. Of the clients under the age of 20, 61% were still living with their parents. (Forsell & Nurmi 2013.)

The clients' educational attainment was low, and most of them were unemployed (59%). One out of ten clients (9%) was homeless, although only 4% of substitution treatment clients were homeless, while the figure among other opiate problem users was 12%. This is probably due to two causes: the effectiveness of substitution treatment and the 'apartment first' principle. (Forsell & Nurmi 2013.)

Intoxicants used

Polydrug use was very common, with 58% of clients reporting problem use of at least three drugs. Opiates were listed among the top three problem drugs by 65% of clients, followed by stimulants (41%), cannabis (49%), tranquillisers (41%) and alcohol (32%) (Figure 8). The percentage of opiate users among drug users seeking treatment increased significantly in the 2000s. This trend has levelled out in the 2012 material. Opiate problem users are more likely to seek out substance abuse services than users of other drugs. (Forsell & Nurmi 2013.)

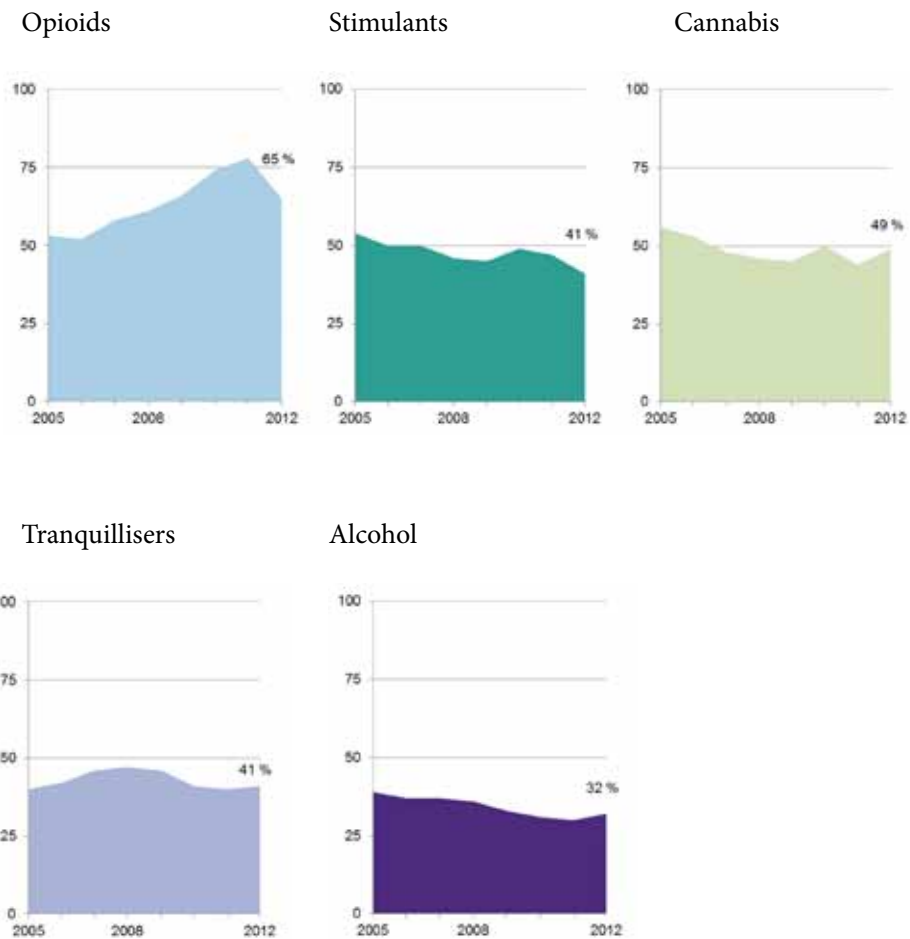


Figure 7. Problem drugs (primary, secondary and tertiary) leading drug users to seek treatment in 2005–2012, % of clients.

Source: Drug user clients of substance abuse services, THL.

Treatment

Among the clients, 13% were seeking treatment because of drug use for the first time. About half of the clients (55%) had previously received treatment for drug use but began a new treatment period in 2012. The treatment relationship had lasted more than one year for 33% of the clients and more than two years for 16% of the clients. Opioid substitution treatment had lasted for less than a year for 46% of clients. Opioid substitution treatment had lasted for more than five years for 15% of clients and for more than ten years for 3% of clients. (Forsell & Nurmi 2013.)

Out of all clients, 64% were in outpatient care and 36% in institutional care. Out of substitution treatment clients, 78% were in outpatient care and 22% were undergoing a period of institutional care. Institutional care, particularly rehabilitative institutional care, was more common among those clients who were not opioid users. The percentages of problem users of stimulants and alcohol were somewhat higher in institutional care than in outpatient care. A total of 27% of clients were in opioid substitution treatment. (Forsell & Nurmi 2013.)

Treatment offered for problem drug use

Two thirds (64%) of the drug-related treatment covered in the present information collecting was provided as outpatient treatment. The percentage of outpatient treatment has remained stable in recent years. Evaluation periods in outpatient care are particularly typical of addiction psychiatry outpatient clinics and wards in specialist medical care (44% of evaluation periods in outpatient care). Outpatient rehabilitative treatment is provided at youth stations and A-Clinics. Other outpatient treatment consists principally of substitution treatment, provided mainly at A-Clinics (28% of all substitution treatment), units specialising in drug-related treatment (25%) and addiction psychiatry wards (21%). All of the clients reported by health centres were substitution treatment clients. (Forsell & Nurmi 2013.)

Outpatient detoxification is rare and is mainly practiced at A-Clinics. Inpatient detoxification is provided by detoxification centres (37% of all institutional detoxification), combined detoxification and rehabilitation institutions (25%), and to some extent by units specialising in drug-related treatment (14%) and addiction psychiatry wards (14%). Institutional rehabilitation is provided by rehabilitation centres for substance abusers in the majority of cases (61%), but rehabilitative treatment is also provided at psychiatric hospitals, in prisons and in mother and child homes. (Forsell & Nurmi 2013.)

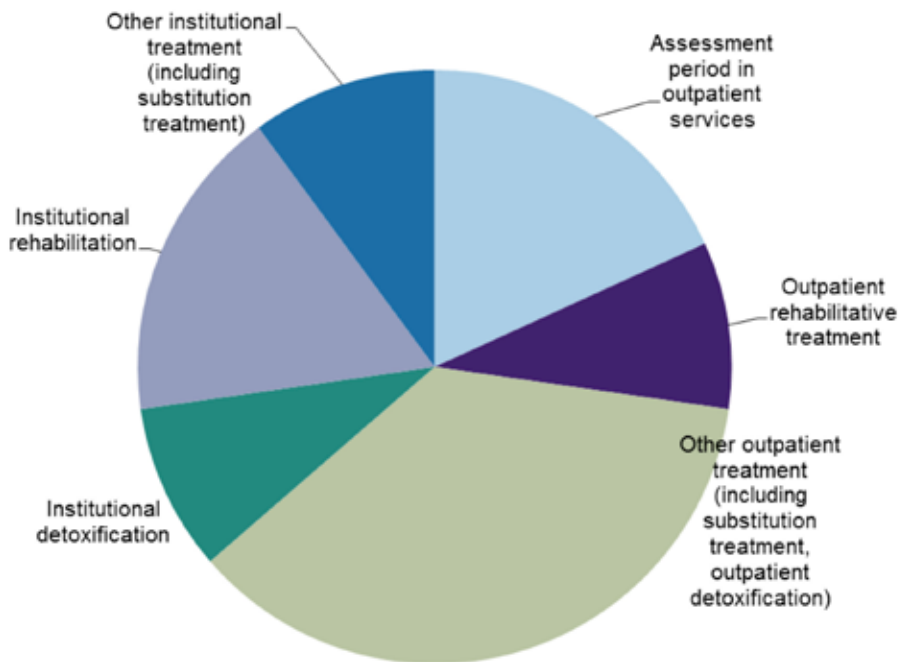


Figure 8. Drug user clients of substance abuse services, 2012 material (n = 2,688), by principal treatment service.

Source: Drug user clients of substance abuse services, THL.

Treatment units where the majority of clients were problem users of drugs other than opiates were youth stations (64% of clients), psychiatric hospitals (62%) and substance abuse service units in prisons (65%). Opioid problem users account for a remarkably large percentage of addiction psychiatry clients (81%). (Forsell & Nurmi 2013.)

5.3 Client trends in substance and drug treatment

As discussed above, the Finnish substance abuse service system is heterogeneous; both social welfare and health care services must be taken into account. The numbers of cases of drug-related treatment have been estimated using general care statistics (cf. section 6.2 Drug-related treatment periods in hospitals and Figure 10) and three separate studies conducted by the National Institute for Health and Welfare. The substance abuse census is conducted during one day and collects information concerning clients who used the services of social welfare or health care units (excluding children's day care) due to an injury caused by substance abuse or while intoxicated.

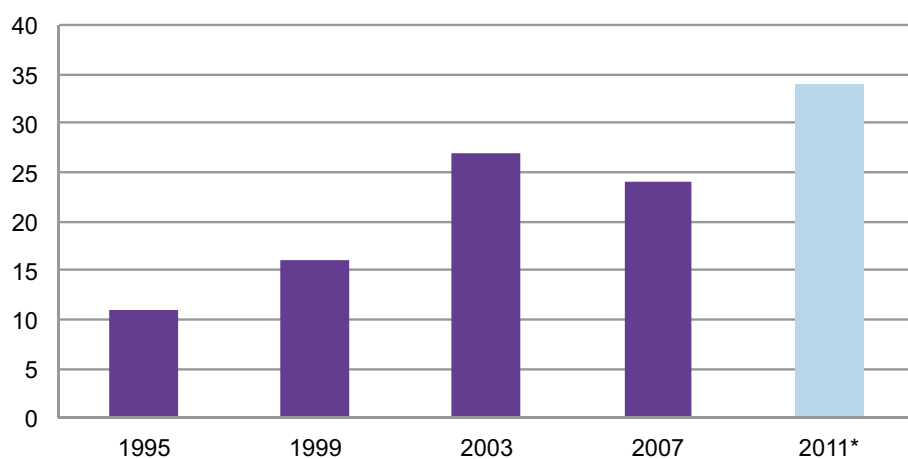
The census is conducted every four years. Comparable data on drug use are available from 1995. The findings of the substance abuse census can be used to estimate the percentage of drug user clients out of all social welfare and health care clients included in the census. Collecting of information on drug-related treatment is a voluntary, continuous system of information collection at treatment units for compiling anonymous, individual information on clients undergoing drug-related treatment (see section 4.3 for problem drug use and section 5.2 for clientele). A coverage survey was used to estimate the overall volume of drug-related treatment by treatment unit and by region for 2003 and 2008.

Substance abuse census

The most recent substance abuse census was conducted in October 2011. At that time, 11,738 intoxicant-related visits to social welfare and health care services were recorded in one 24-hour period. The majority of these visits were at health care units and specialist substance abuse services. However, in recent years client numbers at specialist substance abuse services have declined. There is a clear trend from rehabilitative institutional care to housing services, but on the other hand, the percentage of hospital care has slightly increased. It is also noteworthy that more intoxicant-related visits are now recorded in outpatient care in primary health care. (Kuussaari et al. 2012.)

In 1995, 10% of intoxicant-related visits involved illegal drug use. The corresponding percentage was 16% in 1999 and 27% in 2003. (Nuorvala et al. 2004, 611.) In the 2007 census, the percentage of drug-related visits (25%) had decreased slightly on the previous census. (Nuorvala et al. 2008, 663.)

In the 2011 census, the questions on intoxicant use were altered so that clients were asked about intoxicants used during the past 12 months. No such time limit had been imposed in earlier censuses. It should be noted that the results are not entirely comparable because of this. In the 2011 census material, the client had used an illegal drug in 34% of intoxicant-related visits. Cannabis was the most commonly used illegal drug in the 2011 census, having been involved in 18% of intoxicant-related visits. Amphetamine was involved in 14% and buprenorphine in 13% of intoxicant-related visits. (Kuussaari 2013.)



Percentages are percentages of cases for which at least one intoxicant was recorded. From 2003, the data includes the visits for which intravenous drug use was recorded, even if it is not known how many or what substances were used.

* The questions were amended in 2011, so the results here are not entirely comparable with the previous years.

Figure 9. Percentage of drug-related visits out of intoxicant-related visits to social welfare and health care services, 1995–2011.

Source: Kuussaari 2013.

The causes behind the rapid growth in 1999 and 2003 include not only increased demand for treatment services, but also changes in the service structure. The first health counselling centres for intravenous drug users were established in the late 1990s, and this manifested itself as an increase in the use of outpatient substance abuse services. Substitution treatment was not initiated on a wider scale until 2002, which is reflected in the number of drug treatment clients using substance abuser services or outpatient health care in 2003 and 2007. On the other hand, a cut in alcohol tax in Finland in 2004 increased the consumption of alcohol, and its delayed impact may be seen in the increased relative proportion of alcohol abusers in the 2007 census of intoxicant-related cases. This impact is particularly visible in the group of those over 50 years old. In the 2007 census of intoxicant-related cases, relatively little information was obtained from health counselling centres for intravenous drug users and, consequently, the proportion of drug users may have been underestimated in the 2007 census. (Huhtanen 2008; Nuorvala et al. 2008b.)

In the most recent substance abuse census conducted in 2011, the number of drug-related visits was clearly higher than in the previous censuses. One explanation for this may be that the number of clients in substitution treatment for opioid addiction has

increased in recent years and that such clients are more likely to be included in the substance abuse census than clients in a long therapy relationship, for instance. (Kuussaari & Partanen 2013.) In addition, somewhat more responses were received from health counselling centres for drug users in the 2011 census than before, which obviously also contributed to an increase in the percentage of drug users in the material. Yet another factor probably affecting the increase in drug-related visits is that visits related to certain specific substances have increased compared with the previous census. There were about 9% more cannabis-related visits in the 2011 material than in the 2007 material, and about 19% more buprenorphine-related visits.

Table 6 shows that the percentage of drug-related visits was particularly high in specialised substance abuse services. Of the intoxicant-related visits to health counselling centres, more than 90% also involved illegal drug use. Illegal drugs were likewise involved in the majority (70%) of intoxicant-related visits to youth stations. Illegal drug use during the past 12 months was reported in 56% of the intoxicant-related visits to A Clinics. Illegal drug use is also found in intoxicant-related visits to general social welfare and health care services. Moreover, illegal drug use was involved in 68% of intoxicant-related visits to professional family care and to residential care for children and adolescents. The comparable figure for intoxicant-related visits to outpatient clinics at psychiatric hospitals and to health centres was about one third. By contrast, illegal drug users were found far more rarely in services delivered to the home (domestic care services, home nursing). Use of pharmaceuticals for intoxication would seem to be more common than just alcohol use in visits to health counselling centres, youth stations, and child welfare service units.

Table 11. Intoxicant-related visits where the client reported using an illegal drug, pharmaceuticals, alcohol (alone or combined) during the previous 12 months, by unit type, in the 2011 substance abuse census.

	An illegal drug %	Intoxicant use of pharmaceuticals %	Alcohol only %	Alcohol combined %	N
SPECIALISED SUBSTANCE ABUSE SERVICES					
A Clinic	56	38	36	78	1657
Youth station	70	40	24	85	88
Health counselling centre for intoxicant abusers	92	50	4	58	197
Day centre	28	21	51	80	781
Detoxification station	41	37	50	88	267
Substance abuse services, rehabilitation institution	45	37	45	86	572
Substance abuse services, housing service	19	16	57	84	1079
Shelter	21	22	59	98	82
GENERAL SOCIAL WELFARE AND HEALTH CARE SERVICES					
Home help service	3	10	83	94	731
Institutions for children and adolescents, and professional family care	68	44	24	83	142
Social welfare office	24	18	58	86	878
Psychiatric hospital outpatient clinic	36	26	52	84	608
Health centre, outpatient clinic	32	22	52	80	871
Health centre, home nursing	4	11	85	94	110
General hospital, outpatient clinic	17	17	62	84	109

Source: Kuussaari 2013.

Among the intoxicant-related clients in the material from the 2011 substance abuse census, illegal drug use was reported by nearly half (48%) in specialised substance abuse services, 31% in health care outpatient services, and about one fifth (22%) in health care inpatient services. Women accounted for about 30% of the clients included in the substance abuse census in both outpatient and institutional care. In comparison to problem users of other substances, drug-using clients were relatively young. Three out of four (75%) intoxicant-related clients under the age of 40 reported using an illegal drug during the previous 12 months, but only 16% of those aged 40 to 49, and less than 10% of those older than that. In addition to their age structure, drug-using clients differed from other users of substance abuse services in terms of marginalisation and mental health problems. Homelessness was significantly more common among drug users than other client groups, and more than half of clients with a history of drug abuse suffered from depression or other mental disorders. (Kuussaari 2013.)

6 Health correlates and consequences

The number of HIV infections caused by intravenous drug use and hepatitis C, B and A cases recorded in the National Infectious Diseases Register has clearly declined over the past decade. Hepatitis A and B vaccinations for intravenous drug users have played an important role in reducing the spread of drug-related infectious diseases. Under the national vaccination programme, intravenous drug users and their sexual partners and people living in the same household are given vaccinations for both hepatitis A and B free of charge.

Health counselling centres have proved to be a cost-effective way of reducing adverse health impacts of drug use. The health and social welfare counselling centres provide health advisory services and a variety of support measures to help clients manage their own wellbeing. In addition to receiving advice, clients may exchange their needles and syringes for clean, disposable ones; receive vaccinations for hepatitis A and B; be tested for HIV and hepatitis; be treated for cuts and mild skin infections; and receive guidance and support for seeking other treatment or for managing everyday affairs.

The number of drug-related deaths grew along with other detriments at the turn of the millennium as a consequence of increased drug use in the 1990s. In the early 2000s, the number of deaths remained at this higher level. Drug findings in forensic toxicology investigations continue to increase, and new designer drugs are already beginning to be seen here too.

The increase in drug-related deaths have to do with polydrug use becoming common, with the fact that young drug users are risk-prone and inexperienced, with pharmaceuticals being used for intoxication and with mental health problems. It would be particularly important for users to be aware of the dangers of combined use, particularly with opioids, benzodiazepines and alcohol. In deaths related to combined use, victims typically die in their sleep, especially if buprenorphine, benzodiazepine and alcohol are involved.

6.1 Drug-related infectious diseases

Some 60% of the drug user clients of substance abuse service units submitting information to the drug use treatment information system had at some time in their lives taken all three tests: HIV, hepatitis B and hepatitis C: 66% had taken an HIV test, 64% a hepatitis B test and 73% a hepatitis C test. A hepatitis A test had been taken by 53% of clients. The percentage of missing data varied from 19% to 36%. The highest number of missing data was for hepatitis A tests.

Of those who had at some time used intravenous drugs and who had taken an HIV test and received a test result (n = 1,562), about 2% came up HIV-positive, while of those who had at some time used intravenous drugs and who had taken a hepatitis C test and received a test result (n = 1,724,688), 71% tested positive for hepatitis C. The similar figures for hepatitis A and B were about 3% and about 5%, respectively.

The percentage of users positive for hepatitis C correlated with the length of intravenous drug use, calculated as the difference between the user's current age and the age at which he/she began using intravenous drugs. The percentage of users who had taken a hepatitis C test also correlated with the calculated length of intravenous drug use. These figures include both tests reported by the clients themselves and confirmed test results (test taken at the unit itself or confirmed for instance in the referral document). There were no significant differences between the positive HIV and hepatitis C test results reported by clients themselves and confirmed test results.

Of those who had at some time used intravenous drugs, half (50%) had received at least one dose of hepatitis B vaccine, and 37% had received all three doses. (Drug user clients of substance abuse services 2012.)

HIV

According to the HIV infection statistics maintained by the National Institute for Welfare and Health, 159 new HIV infections were reported in 2012 (176 in 2011). The mode of transmission for the majority was sexual contact; infection through intravenous injection only accounted for 3% of the cases. (Jaakola et al. 2013.)

In addition to the passive monitoring enabled by the National Infectious Diseases Register, the National Institute for Health and Welfare has been co-ordinating prevalence surveys conducted approximately once a year.¹⁶ These surveys have aimed to assess the prevalence of infections also among those intravenous drug users who do not seek diagnostic testing. According to the survey results, the prevalence of HIV among intravenous drug users has remained, in spite of the epidemic of the early 2000s, at some 1% to 2%, which by international standards is very low. (Arponen et al. 2008.)

¹⁶ The survey has been conducted on a total of eight occasions between 1998 and 2009. The survey is usually arranged at several health counselling centres over a period of about two weeks. The respondents were clients of health counselling centres, numbering between 150 and 700. The respondents fill in an anonymous risk questionnaire and give a saliva sample, which is analysed for hepatitis C and HIV antibodies. Both the form and the sample bear the same anonymous participant number, enabling the comparison of individual risk factors against the antibody result. The test is not a diagnosis and, due to the anonymity observed, the results cannot be returned to participants. This fact is emphasised to the participants and it is also essential in terms of the survey's representativeness, since it enables participation by those who do not necessarily wish to learn of their infection. All clients of the health counselling centres are encouraged to participate in the study regardless of their HIV or HCV status.

Hepatitis C

In 2012, the number of new hepatitis C infections reported was 1,167 (1,160 in 2011). The means of transmission was not reported in almost 40% of the cases, and in about half the means of transmission was reported as intravenous drug use. A very high percentage, around 80%, of intravenous drug users have been found to have hepatitis C antibodies. Because of this, it would be difficult to reduce the incidence further despite the introduction of needle and syringe exchange programmes. (Jaakola et al. 2013.)

The number of annual cases in the age groups 15 to 19 and 20–24 has remained fairly stable. This may be a sign that health counselling for intravenous drug users and the related preventive work has decreased the risk of infection most effectively in younger age groups and that hepatitis C is now more typically contracted at a later age, after prolonged intravenous drug use. The highest number of infections per capita were reported in the hospital districts of South Karelia, North Ostrobothnia and Helsinki and Uusimaa. (Jaakola et al. 2012.)

Table 12. Hepatitis C according to physicians' reports, arranged by means of transmission, 2003–2012.

	2003	2005	2007	2008	2009	2010	2011	2012
Injection drugs	627	621	416	508	433	596	600	615
Sexual exposure	46	61	63	68	65	73	86	69
Perinatal	1	5	4	9	9	10	11	7
Blood products*	22	24	17	15	1	9	7	7
Other	34	35	23	31	26	38	39	31
Not identified	533	497	634	513	527	406	417	450
Total	1264	1244	1157	1144	1061	1132	1160	1179

Source: Jaakola et al. 2012.

Hepatitis B

The number of acute hepatitis B cases recorded in the National Infectious Diseases Register has shown a significant decline over the past decade, and in 2012 only 38 new cases were reported. The means of transmission was given in only one third of the cases: intravenous drug use in one case and sexual contact in the others. (Jaakola et al. 2013.)

Hepatitis A

Only eight cases of hepatitis A were reported in 2012, the lowest number ever. In three of the cases, the infection was reported as having been acquired abroad through food or water. Six of the infections had been contracted abroad and two in Finland. One of the domestic cases was contracted from foreign visitors with hepatitis. During the past

few years, the number of infections has remained low. The prevalence has remained low owing to the vaccination of risk groups. Intravenous drug users, their sexual partners and persons living in the same household have had access to hepatitis A vaccination free of charge under the national vaccination programme since 2005. Seeking a hepatitis A vaccination is also common among those who are planning to travel abroad. (Jaakola 2013.)

Follow-up study of HIV strains among intravenous drug users

Skar et al. conducted a detailed study¹⁷ of HIV epidemics among intravenous drug users in Stockholm and Helsinki, using both molecular epidemiology and epidemiology data. In summer 2006, the number of HIV infections among intravenous drug users in Stockholm began to spike, and the epidemic persisted until the end of 2007 with a total of more than 70 new cases. Prior to this, some 20 cases of HIV infection through intravenous drug use had been recorded in the Stockholm area annually since the early 1990s. In western Europe, HIV epidemics among intravenous drug users are principally caused by the HIV-1 B subtype. Of the infections among intravenous drug users in Sweden in 2001–2002, 85% were of the B subtype, and the majority of these had been contracted in Sweden; however, a handful of cases were reported as having been contracted in Finland. Finland experienced an HIV epidemic among intravenous drug users beginning in 1998. This epidemic was caused by the HIV-1 recombinant subtype CRF01-AE, which is common in Southeast Asia. (Skar et al. 2011.)

It was shown using phylogenetic analysis that the strain which caused the epidemic in Stockholm was CRF01-AE and came from Helsinki. Although several transmissions of CRF01-AE from Finland to Sweden were detected, the epidemic had a single source. While the CRF01-AE variant spread rapidly in Stockholm, the spread of the B subtype continued at a moderate pace. No biological factor could be isolated that would have explained the rapid spread of CRF01-AE: no difference in virus levels in the blood could be observed between patients infected by the B subtype and patients infected by the CRF01-AE subtype. However, a number of socio-demographic differences were noted; for instance, nearly all heroin users contracting the disease had CRF01-AE, whereas both B and CRF01-AE were common among amphetamine users. The CRF01-AE epidemics in both Stockholm and Helsinki are probably best explained by the appearance of HIV in networks of previously HIV-negative intravenous drug users, with risk behaviour related to drug injection and/or sex. (Skar et al. 2011.)

17 Materials and methods: The material for the study consisted of 74 cases of HIV infection associated with intravenous drug use, diagnosed in the Stockholm area between 2004 and 2007. The following data were obtained from patient records: year of diagnosis, age, gender, principal drug, housing conditions, CD cell count and virus burden. A blood sample was also taken from patients for a HIV-1 V3 loop sequence. The V3 sequences were analysed using phylogenetic and phylodynamic methods. Also, 83 V3 sequences obtained from HIV-positive intravenous drug users in Helsinki between 1998 and 2007 were added to the analysis. Statistical analyses were used to compare virus counts and CD4 counts among the infected patients. (Skar et al. 2011.)

Studying local epidemics among intravenous drug users in Stockholm and Helsinki produced data on key factors in the spreading of HIV (number of virus strains, temporal and spatial distribution patterns, time from infection to diagnosis). These data may be used to enhance monitoring and to prevent infections. Combining phylogenetic and epidemiology data results in an effective tool for studying epidemics caused not only by HIV but by other infectious diseases too. (Skar et al. 2011.)

6.2 Drug-related illnesses in health care

In 2012, hospitals treated at least 7,444 clients in cases related to substance abuse or use of pharmaceuticals for intoxication¹⁸. A drug-related illness was the primary diagnosis in the case of 4,105 clients, and a total of 6,016 patients had a drug-related illness as a primary or secondary diagnosis. An illness related to the use of pharmaceuticals for intoxication was reported as the primary diagnosis for 717 clients but was more common as a secondary diagnosis (1,428 clients had this as the primary or secondary diagnosis). Hospitals also treated more than 6,000 clients for pharmaceutical poisoning; it may be assumed that only a fraction of these involved use for intoxication.

The annual number of drug user clients has increased steadily in recent years, while the number of clients using pharmaceuticals for intoxication has remained stable. Two thirds of the clients were aged 20 to 35. One third of the clients were women.

The most common primary diagnosis for drug-related illnesses was opioid dependence (F11.2), the incidence of which has increased steadily in recent years. At the same time, treatment for polydrug use (F19.2) has decreased, so at least some of this trend may be explained by more precise diagnostics and documentation.

Growth in the number of patients with opioid addiction (+4%) and treatment days (+3%) remained moderate in 2012 as in 2011, while the increases in the number of treatment periods (+31%) and the number of outpatient clinic visits (+52%) may be explained by regional changes in treatment and recording practices.¹⁹

Opioid substitution treatment (F11.22) is becoming more common, which has significantly augmented the number of drug-related patients and cases recorded at hospitals. In 2012, 57,522 outpatient visits in specialist medical care²⁰ had to do with opioid substitution treatment. The average number of visits per client per year was 74, but half of the substitution treatment clients had fewer than 12 visits during the year.

18 The data are based on entries in the Hospital Discharge Register (HILMO) concerning inpatient treatment in hospitals and health centre wards, and outpatient visits in specialist medical care. The data do not include visits to social services, health centres or private medical centres. Each individual client is only counted once.

19 The increase in outpatient clinic visits is due to the fact that unlike in 2011 visits by opioid replacement treatment clients were recorded under specialist medical care in Southwest Finland, and the increase in treatment periods is almost exclusively due to changes in treatment practices in North Ostrobothnia.

20 Some 20,000 of these visits were recorded in basic specialist medical care in the City of Turku..

Table 13. Visits by opioid substitution treatment clients in specialist medical care, 2012.

	total visits	patients
fewer than 12 visits per year	1,005	388
13–99 visits per year	8,822	176
100–199 visits per year	12,686	89
200–299 visits per year	19,862	80
more than 300 visits per year	15,449	43

Source: Health care, specialist medical care. Official Statistics of Finland (OSF). National Institute for Health and Welfare.

According to a study conducted, there were 2,439 opioid substitution treatment clients as at 30 November 2011. In 2011, there were 915 clients at hospitals with a primary or secondary diagnosis of opioid substitution treatment, which means that one third of the substitution treatment clients were also treated in either outpatient or inpatient specialist medical care. According to the study, only 11% of substitution treatment clients receive their long-term substitution treatment medication in specialist medical care. (Partanen et al. 2014.)

Table 14. Treatment periods for drug-related illnesses at hospitals.

PRIMARY DIAGNOSIS					
	2000	2005	2010	2011	2012
Opioid dependence (F11.2)	492	485	627	701	915
Sedative, hypnotic or anxiolytic-related dependence (F13.2)	178	177	124	122	128
Dependence on other drugs ¹	786	646	551	529	512
Acute withdrawal symptoms (F1x.3–4)	267	182	194	199	212
Chronic mental disorders (F1x.5–9)	645	389	477	445	437
Other diagnoses (F55, R78.1-5, Z50.3, Z72.2, 035.5, Po4.4, Pg6.1)	88	119	104	136	133
State of intoxication (F1x.0–1)	429	270	319	382	349
Confirmed drug poisoning ²	219	199	183	188	189
Unspecified drug and pharmaceutical poisoning ³	1,049	1,056	772	822	788
Total	4,135	3,523	3,351	3,524	3,663
SECONDARY DIAGNOSIS					
	2000	2005	2010	2011	2012
Opioid dependence (F11.2)	564	595	896	997	1,285
Sedative, hypnotic or anxiolytic-related dependence (F13.2)	587	626	479	476	404
Dependence on other drugs ¹	1,625	1,390	1,417	1,407	1,466
Acute withdrawal symptoms (F1x.3–4)	322	224	237	236	263
Chronic mental disorders (F1x.5–9)	789	490	605	536	544
Other diagnoses (F55, R78.1-5, Z50.3, Z72.2, 035.5, Po4.4, Pg6.1)	158	259	243	283	283
State of intoxication (F1x.0–1)	793	635	856	932	852
Confirmed drug poisoning ²	239	225	218	225	209
Unspecified drug and pharmaceutical poisoning ³	1,317	1,405	1,193	1,204	1,152
Total	6,394	5,849	6,144	6,322	6,483

1) F12.2, 14.2, 15.2, 16.2, 17.2, 19.2.

2) Excluding suicide and attempted suicide. Drugs and pharmaceuticals used with intoxicating intent, such as opioids, sedatives and tranquillisers: T40.0-0, T36 and the ATC codes No6B, No7XA, No7XX, No1AH, No2A, Mo1AB, Mo3BC, Mo3BX, No7BC, No3AA, No1AF, No3AE, No5BA, No5BB, No5C. Also X41, X42, T43.6, T50.7, T42.3, T42.4, T42.6, T42.7.

3) Excluding suicide and attempted suicide. Cases of poisoning where the toxic substance was not specified. It may be assumed that this group includes a) a large number of poisonings due to polydrug use, b) poisonings by substances other than intoxicants, and c) suicides and attempted suicides, which have not been recorded.

Source: Institutional health care. Official Statistics of Finland (OSF).

The largest number of specialist medical care outpatient visits, inpatient treatment periods and treatment days is caused by opioid use. The specific diagnosis in cases of opioid use is nearly always opioid dependence. Typical diagnoses for stimulant and cannabis users include psychoses (long-term psychotic disorders, F1x.5–9). However, stimulant use only accounts for a fraction (3%) of all treatment days. The percentage of treatment days accounted for by cannabis use is also low (8%), but their absolute annual number is showing a strong upward trend, having doubled since 2009.

The number of treatment periods for clients with sedative, hypnotic or anxiolytic-related dependence (F13.2) has been decreasing significantly since 2005–2006. However, as a secondary diagnosis this has not decreased by as much, and there has been little change in the annual number of treatment days.

A client may be admitted to inpatient care or emergency specialist medical care because of intoxication. The annual numbers of treatment periods and visits due to drug intoxication have been slightly increasing in recent years, although cases where treatment is given for alcohol intoxication still outnumber drug intoxication cases by a factor of 10.

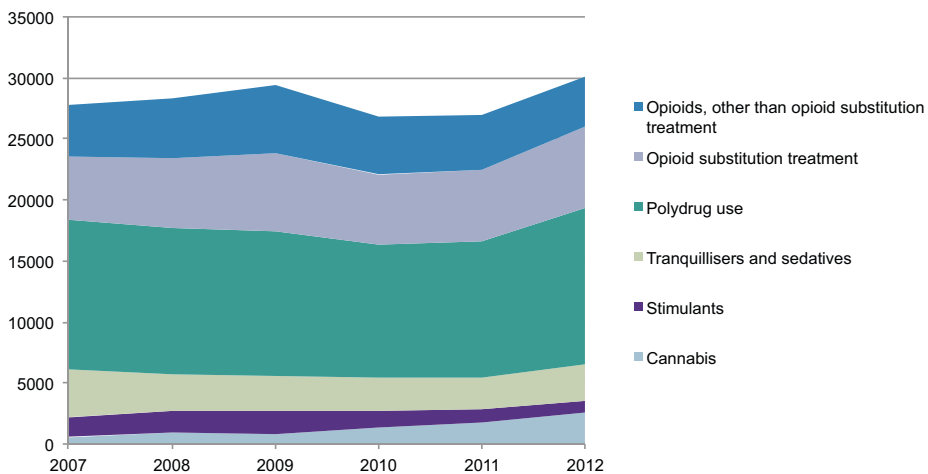


Figure 10 Distribution of treatment days by substance, 2012.

Source: Institutional health care. Official Statistics of Finland (OSF).

In a study of morbidity statistics conducted by the National Institute for Health and Welfare, data from the care registers for health care and social welfare and from the statistics on disability benefits provided by the Social Insurance Institution (Kela) were combined. The incidence of behavioural disorders and organic brain syndrome caused by drug use (F11–F16, F18, F19), controlled for age, was 16.5/10,000 among men and 8.1/10,000 among women in 2009. The incidence was thus about twice as high among men as among women. The absolute numbers were 4,141 men and 2,071 women. The incidence of drug-related illnesses (excluding poisonings), controlled for age, increased by almost one fourth in both men and women between 2005 and 2009. (Gissler et al. 2012.)

Data entered by hospitals in the Hospital Discharge Register concerning cases of drug and pharmaceutical poisoning are ambiguous. There are numerous treatment periods, but it is difficult to assess how the treatment periods are related to drug or intoxicant abuse, if at all. It may be estimated that a large percentage of the unspecified drug and pharmaceutical poisonings involve intoxicant use, and suicide or attempted suicide was not the intent. In any case, including the figure for unspecified drug and pharmaceutical poisonings produces a more illustrative result than if only confirmed cases of drug and pharmaceutical poisoning were included. This issue was discussed in more detail in Finland Drug Situation 2012 (Varjonen et al. 2013).

6.3 Drug-related deaths and mortality of drug users

Drug-related death cases in Finland can be analysed using three different types of statistics: chemical findings, causes of death and poisoning. Since the number of chemical findings is based on positive drug findings in forensic autopsies, the drug itself is not necessarily always the direct cause or a major indirect cause of death. In Finland, all cases involving an unclear or doubtful cause of death are examined for drugs. Statistics by cause of death are kept based on the EMCDDA protocol²¹, under which drug-related deaths include cases of intentional and unintentional poisoning (i.e. overdosing) and mental health disturbances due to drug use. In Finland, the causes of death statistics are produced by Statistics Finland.

In Figure 11, the trend in drug-related deaths is illustrated on the basis of causes of death and drug findings. In these drug-related death statistics, changes occurring since 2000 are highly consistent.

21 Data are extracted from the national cause of death statistics on the basis of WHO ICD-10 codes. The protocol is available as a PDF document at: <http://www.emcdda.europa.eu/?nnodeid=1419>.

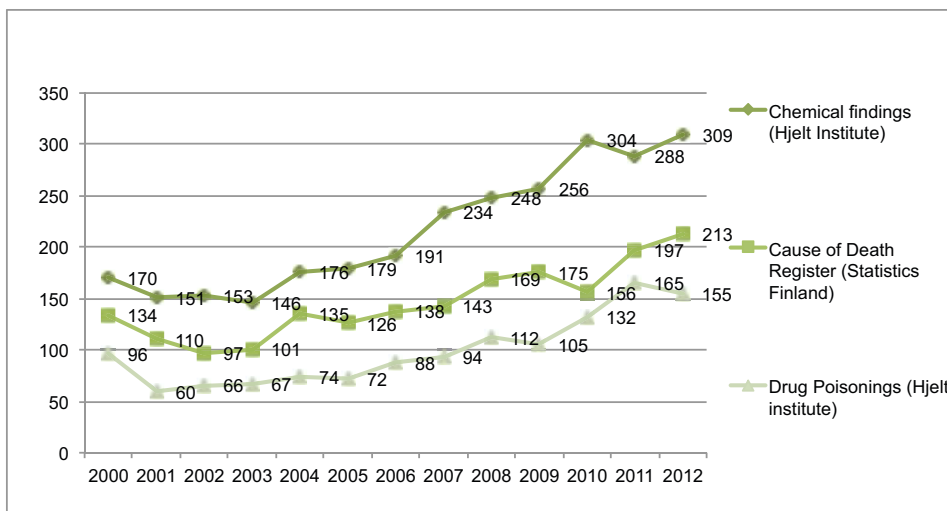


Figure 11. The number of drug-related deaths based on causes of death and drug findings in 2000–2012.

Source: Hjelt Institute and Statistics Finland 2014.

Intoxicant use of buprenorphine caused 46 deaths by poisoning in 2010. In deaths from poisoning caused by buprenorphine abuse, the substance was generally either injected or inhaled. In a typical case, the victim was also under the influence of alcohol and benzodiazepine and died in his/her sleep. After buprenorphine, the highest numbers of drug-related deaths were attributed to tramadol (26 cases), fentanyl (16), methadone (15), codeine (7) and oxycodone (5). Heroin and morphine were found in one case each. (Vuori et al. 2012.)

The statistics for the amphetamine group include MDPV, which is used like and as a substitute for amphetamine; this was the most commonly found designer drug in forensic investigations. Between 2008 and 2010, there were fewer than ten findings of ecstasy per year. By contrast, methamphetamine was a clearly more common finding between 2008 and 2010, being found in 11, 17 and 18 fatalities in those years, respectively. The finding of several amphetamine groups present at the same time is typical of amphetamine findings. (Vuori et al. 2012.)

In 2010, new designer drugs detected in samples from deceased persons included one case each of methylone, mCPP, 4-fluoromethamphetamine, 3-fluoromethamphetamine and desoxypradrol (2-DPMP) and two cases of mephedrone.²² (Vuori et al. 2012.)

²² Among designer drugs, MDPV was classified as a narcotic drug in Finland in 2011, and methylone, mCPP and 2-DPMP in 2012.

The year 2009 produced a spike in the number of GHB findings, the drug being found in 11 subjects as opposed to only one finding in the previous year and three in the following year. (Vuori et al. 2012.)

In 2010, cannabis findings were accompanied by findings of amphetamine in 38% of the cases and buprenorphine in 45% of the cases. Alcohol was also found in one third of the cases, and simultaneous finding of benzodiazepines was also common. Findings of pregabalin have become common since 2007, and in 2010 pregabalin was found in 65 drug user fatalities. The findings indicate that intoxicant use of pregabalin is often linked with opioid abuse. (Vuori et al. 2012.)

Of those who die of pharmaceutical poisoning (including drugs), a little over 60% are men. Suicide accounted for 43% to 47% of deaths from pharmaceutical poisoning between 2008 and 2011, the percentage varying by pharmaceutical substance group. In cases where the finding was a beta blocker, an anti-depressant, an anti-psychotic medication or a sleeping medication, the percentage of suicides was higher. Only one out of four deaths from opioid poisoning was a suicide, and these tended to involve codein and tramadol. Buprenorphin is commonly abused, but deaths from buprenorphin poisoning are rarely suicides; in 2008 and 2009, none of them were.

Table 15. Drug findings in forensic toxicology investigations of cause of death, 2007–2012.

	2007	2008	2009	2010	2011	2012
Heroin	1	3	3	2	1	3
Buprenorphine	97	104	111	156	150	129
Cannabinoids	94	93	119	116	124	141
Amphetamines	94	73	94	113	93	114
Methadone	26	33	34	34	37	21
Cocaine	3	3	4	4	2	5
Gamma	2	1	11	3	11	20
Total	234	248	256	304	288	309

Source: Hjelt-institute (2014).

The most abused opioid in Finland at the moment is buprenorphine. By far the most common preparation used for the treatment of opioid addicts is a buprenorphine–naloxone combination (Suboxone) intended to prevent parenteral abuse, as it contains an added opioid antagonist. However, some addicts abuse this buprenorphine–naloxone combination. Pure buprenorphine (Subutex) is in greater demand among drug users, and it is routinely smuggled into Finland. In 2010, buprenorphine was found in 180 deceased persons. Out of these findings, 156 were abuse-related, and 46 of these were deaths by poisoning, with buprenorphine being the most common finding. The deceased persons were mostly men (85%), the age median being 31 years for men and 28

years for women. Deaths by poisoning are rarely caused by buprenorphine alone; usually death is caused by combining buprenorphine with a central nervous system depressant such as benzodiazepine or pregabalin, or with alcohol. (Häkkinen et al. 2012a).

There are differences between strong and weak opioids as regards abuse and as regards deaths by poisoning. Codeine, tramadol, and dextropropoxyfen are generally taken orally. Users tend to use increasingly large doses because the effect is mild and tolerance builds, and the levels of these substances found in the blood in cases of deaths by poisoning tend to be much higher than therapeutic levels. Strong and medium-strong opioids such as phentanyl, methadone, and buprenorphine are generally taken parenterally (intravenously or as snuff). The effect is swift, and combined with any central nervous system depressants taken may result in a quick death. The levels of these substances found in the blood in cases of deaths by poisoning are equal or lower to those found in patients in appropriate, controlled treatment. (Häkkinen et al 2012b).

Table 16. Summary of opioids in fatal poisonings relative to drug abuse.

	Proportion of drug abusers in deaths	Blood concentration in fatal poisonings	Current significance in Finland	Source of drug
Codeine	moderate	high	low	prescriptions
Tramadol	moderate	high	high	prescr./street
Oxycodone	moderate	elevated	moderate	prescriptions
Fentanyl	very high	normal	high	prescriptions
Methadone	very high	normal	high	maintenance therapy
Buprenorphine	very high	normal	very high	street
Heroin	very high	normal	low	street
Dekstro-propoxyphene	low	high	low	street

Source: Hjelt-institute (2013).

Nordic study on drug-related deaths in 2007, Finnish component

A Nordic research team reviewed all of the positive drug findings for 2007 in attempting to describe what Nordic drug-related deaths are like and what the substances are that cause them and in what proportion.²³ In the case of Finland, the findings showed

²³ This was the fifth study of this kind conducted in the Nordic countries over the past 23 years. The material for the study was obtained from forensic autopsies and toxicology analyses in the five Nordic countries (Finland, Sweden, Norway, Denmark, Iceland). These data were compared to similar data from 1991, 1997 and 2002. For the purposes of the study, a 'drug user' was someone who, according to police records or an autopsy report, had been using substances listed in Schedule I or Schedule II of the UN Single Convention on Narcotic Drugs (1961) or in Schedule III or Schedule IV of the UN Convention on Psychotropic Substances (1971). The causes of death determined the principal toxic agent and, in cases involving polydrug use, the substance with the highest levels, being most probably the substance that caused death.

that the number of drug-related deaths per 100,000 inhabitants in 2007 was 4.02. In the Nordic countries in general, the place of death was in the capital city area in 29% to 35% of the cases in 2007, while the corresponding figure in 1991 had been between 53% and 75%. In Finland, about 15% of those who died from drugs in 2007 were women. The largest number of fatalities was found in the 25 to 29 age group. The average age of persons dying from drugs in Finland increased from 2002 to 2007. The number of fatalities in the 20 to 29 and the 25 to 34 age groups also increased. (Simonsen et al. 2011.)

Considered by drug classification, class I substances such as cocaine, fentanyl, heroin/morphine, ketobemidone, methadone, oxycodone, etc., caused 40% of all drug-related deaths. Of class II substances (amphetamine, methamphetamine, MDMA, etc.), amphetamine in particular caused a number of deaths (7%). The number of fatalities from heroin and morphine had dropped to almost nil by 2007. On the other hand, Finland had higher percentages than any other Nordic country of fatalities caused by class III substances (benzodiazepine, buprenorphine, meprobamate, zolpidem, etc.) (35%) and by class IV substances (other drugs and poisons, including ethanol and carbon monoxide) (17%). The drug most commonly found was buprenorphine, and drug-related deaths ascribed to buprenorphine increased from 16 cases in 2002 to 32 cases in 2007, accounting at that point for 25% of all drug-related deaths. Methadone fatalities were not previously analysed in the statistics, but in 2007 methadone was listed as the cause of death in 16 cases. This indicates that the methadone used in opioid substitution treatment is finding its way onto the illegal market. Tramadol fatalities increased from 9 cases in 2002 to 14 cases in 2007. Combined use was common in all the Nordic countries; in Finland, a typical scenario was using ethanol and several (5 on average) other substances simultaneously. (Simonsen et al. 2011.)

Study on drug-related deaths

Mikko Piispa categorised the causes of drug-related death as drug addiction, going crazy and self-medication. Piispa considered that in about half of the cases of drug-related death the deceased can be considered to have been actual drug addicts, characterised by compulsive use and diagnosed with intoxicant addiction, for instance. The subjects in these cases were over 20 years of age. In the 'going crazy' category were subjects aged 15 to 30 whose drug use had not (yet) become compulsive. Self-medication involved people who use drugs to alleviate their mental health problems (subjects over the age of 20) or somatic illnesses (subjects over the age of 30). Several of these actually had prescribed medication but used other drugs too. (Piispa 2010.)

In 2007, one in six (17%) of all deaths of young adults (aged 15 to 34) were drug-related. Accidental poisoning from drug use or polydrug use accounted for about one in ten (8% to 11%) of all deaths of persons aged 15 to 34. The most significant causes of death in this age group in 2007 were disease (29%), suicide (27%) and road traffic

accidents (17%). By contrast, alcohol poisoning accounted for only 3% of deaths in this age group. In examining the larger age group of 15 to 44, we find that drugs were involved in 11% of all deaths, accidental drug poisoning being the cause of death in 5% to 7% of cases.

A study by Piispa on drug-related deaths in 2007 explored the backgrounds of and events leading to these deaths, the contributing substances and how they were used. The study clearly shows how common polydrug use is, how risk-prone and inexperienced young drug users are, how pharmaceuticals are used for intoxication and how mental health problems are relevant in this context. Ignorance of the dangers of combined use was particularly apparent in cases of opioid, benzodiazepine and alcohol use among young people. (Piispa 2010.)

Driving while intoxicated in Finland 1977–2007

According to a register study, driving while intoxicated seems to have become more common, as over the past three decades the number of cases of driving while intoxicated reported to the police has multiplied by a factor of 18. The most common substances found in the blood and urine samples of intoxicated drivers were benzodiazepines and amphetamines. Polydrug use was also very common. (Karjalainen 2011.)

An exploration of the social background of intoxicated drivers showed that being socially disadvantaged correlated with driving while intoxicated. Because being socially disadvantaged correlates with substance abuse more generally, narrowing the gaps between socio-economic groups would be beneficial both in reducing and preventing drug use in general and in curbing driving while intoxicated in particular. Intoxicant use is often begun at an early age, and the majority of intoxicated drivers are young; therefore substance abuse prevention and early intervention with young people are crucially important. (Karjalainen 2011.)

A study shows that over a five-year monitoring period mortality among persons suspected of driving while intoxicated was almost ten times higher than among sober drivers. A particularly high risk – 15 to 25 times that of the general population – was noted among those suspected of driving while intoxicated who were found to have been using two or more intoxicants simultaneously on the occasion of their first offence (drugs / pharmaceuticals impairing driving ability / alcohol). The most common causes of death among those suspected of driving while intoxicated were suicide, accidental overdose of drugs or pharmaceuticals and alcohol-related diseases or accidental alcohol poisoning. Two thirds of those who were killed driving while intoxicated were intoxicated at the time of their death, as opposed to one fifth of the control population. The significance of intoxication as a contributing cause of death was elevated in cases where the primary cause of death was a traffic accident or homicide. (Karjalainen 2011.)

The widespread use of benzodiazepines among those suspected of driving while intoxicated was one of the key findings of the study. The study showed that benzo-

diazepine users had a higher risk of premature death than amphetamine users and that combined use of benzodiazepines and other drugs or alcohol was very common. Although it was not recorded why the drivers had taken benzodiazepines, it seems likely that most cases involved substance abuse; therefore more attention should be paid to the intoxicant use of legal pharmaceuticals. (Karjalainen 2011.)

The study also showed that polydrug use was common in cases of suspected driving while intoxicated. It was considered important for intoxicated drivers to be referred to treatment and rehabilitation as an alternative to being convicted and sentenced, because being caught for driving while intoxicated would be a good opportunity for reaching out to substance abusers and referring them to treatment. (Karjalainen 2011.)

7 Responses to health correlates and consequences

The best-known ways of reducing drug-related harm are health counselling, medical substitution treatment programmes and needle and syringe exchange programmes for intravenous drug users. Distributing information about safe use and providing peer support are also at the core of substance abuse work for harm reduction. Users are informed about correct dosages to avoid overdoses, and the importance of calling the rescue services immediately in an emergency is highlighted. The issue is also dealt with in drug treatment units with users, when necessary. The prevention of drug-related deaths is carried out as part of health counselling related to infectious diseases and in problem user peer group activities. Some training concerning the prevention of drug-related deaths is provided as part of basic training in social welfare and health care.

Low-threshold services in particular have been essential in preventing and reducing infectious diseases spread by intravenous drug use. There are separate health and social security counselling centres for drug users at about 35 locations in Finland.

According to the quality recommendations for substance abuse services, substance abusers with serious mental health problems tend to fall through the cracks between substance abuse services and mental health services in the present service system. The quality recommendations stipulate that a client should primarily be provided with help at that social welfare or health care unit at which he/she seeks help. Municipalities must also have a clearly agreed division of duties in substance abuse services. In particular, the principal responsibility for treatment of substance abusers with mental health problems must be defined.

The health counselling centre concept has proved to be a good way to make contact with drug users. The guidance and advice provided at health counselling centres is driven by clients' needs. Goals are set according to clients' wishes and abilities. The primary goal is to prevent the transmission of infectious diseases through intravenous drug use by encouraging users to employ practices as hygienic as possible. If a client expresses a desire to cut down or quit drug use, various alternatives for attaining this goal will be discussed. Information collected anonymously indicates that the health counselling centres had some 11,500 clients in 2011. There were about 85,000 visits recorded, and 309 syringes and needles per client were exchanged on average. The most visits were to the health counselling centres in Helsinki (about 8,350), Vantaa (about 900), Turku (about 890), Espoo (about 825) and Tampere (about 568).

The treatment and prevention of infectious diseases related to drug use is provided within primary health care services, specialised services within health care and substance abuse services, health counselling centres and pharmacies that sell syringes and

needles. HIV infected patients are treated at university hospitals and at central, regional and psychiatric hospitals in the area. Under the Communicable Disease Decree of 2003, municipalities must, within their health centres' operating areas, conduct prevention work against infectious diseases, including the dissemination of information on infectious diseases and health counselling. The scope of the Act encompasses health counselling for intravenous drug users, and exchanging syringes and needles where necessary. Free hepatitis A and B vaccinations have been included in the vaccination programme for intravenous drug users. Pharmacies play an important role in exchanging syringes and needles in areas where there are no health counselling centres.

In 2011, 3.5 million items of injection equipment were exchanged at health counselling centres. The most recent survey on needles and syringes sold at pharmacies was conducted in 2003. At that time, pharmacies sold 600,000 needles/syringes per year.

The websites of the health and social security counselling centres provide information on their location, on harm reduction, on field work and on peer support activities. The websites also give access to a materials databank with information for instance on infectious diseases, various drugs, health counselling, sexual health and first aid in an overdose emergency. (A Clinic Foundation 2012.)

7.1 Prevention of drug-related emergencies and reduction of drug-related deaths

Information for drug users on what to do in an emergency situation and how to prevent death from overdoses is provided in connection with all health counselling. However, the increase of drug-related deaths has also been taken into account by the authorities, and there is concern about the combined use of opioids, benzodiazepines and alcohol, which was evident in the findings of a study published in spring 2011. Combined use seemed to be a central part of the drug culture of the disadvantaged in Helsinki. Combined use of opioids, benzodiazepines and/or alcohol is the cause of a significant percentage of drug-related deaths in Finland. The study concluded that users should be informed of the risks of combined use to prevent drug-related deaths. Also, attention should be paid to intoxicant use of pharmaceuticals and the development of prescription practices to curb such use should be explored. (Tammi et al. 2011.)

Information on drugs is available on a 24/7 basis from third-sector helplines, for instance. Helplines are anonymous and free of charge for the caller. Information on drugs and the risks related to drug use is also distributed by the A Clinic Foundation, the Life is the Best Drug association and the rapid drug communications ring NOPSA maintained by the Deaconess Institute in Helsinki. NOPSA communicates with various target groups as needed. NOSA publishes information on the Päihdelinkki and Vinkki websites (www.paihdelinkki.fi, www.vinkki.info), uses the Mobiilivinkki® SMS service (free number 18182) and drafts press bulletins. (A Clinic Foundation 2012.)

Janne Liisanantti studied the prognosis of a patient with acute pharmaceutical poisoning and factors affecting the prognosis in his doctoral dissertation. His specific focus was on risk factors for prolonged treatment periods and repeated treatment periods and on long-term prognoses for patients with poisoning. (Liisanantti 2012.)

For acute pharmaceutical poisoning treated in hospital, the prognosis was good; even patients requiring intensive care only required a short treatment period in hospital. Mortality during the treatment period was 1.6% to 2.3% for patients requiring intensive care. In complicated cases of poisoning requiring intensive care, aspiration pneumonia caused by the inhalation of stomach contents was found to be a common complication, leading to an extended period of intensive care. Securing the airways by intubation prior to admission to hospital reduced the risk of aspiration pneumonia. Other risk factors for prolonging intensive care included respiratory failure, kidney failure and low blood platelet count on admission. (Liisanantti 2012.)

Both young and adult patients were found to have quite a lot of repeat visits because of poisonings (7% to 21%). Young people in particular logged repeat visits, as occurrences of poisoning are associated with impulsive behaviour in their case. In a long-term follow-up covering 14 years on average, 30.4% of patients hospitalised for poisoning died. The percentage in the control group, controlled for age and gender, was 13.6%. Patients with poisoning commonly died from cardiovascular disease. Injuries, poisonings and suicides were also more common in the study domain than in the control group. (Liisanantti 2012.)

The study indicated that patients with acute poisoning have a good prognosis while they are in hospital but that their long-term mortality rate is more than twice that of the control group. Respiratory disorders in particular are risk factors for prolonging treatment periods. Mortality from preventable causes such as suicide and cardiovascular disease was notably high in the long-term follow-up. (Liisanantti 2012.)

7.2 Prevention and treatment of drug-related infectious diseases

Almost two out of three (64%) of the drug user clients of substance abuse services had at some time in their lives taken all three tests: HIV, hepatitis B and hepatitis C. About 2% of the drug user clients of substance abuse services who had at some time used drugs intravenously were HIV positive, while 75% tested positive for hepatitis C, 3% for hepatitis A and about 5% for hepatitis B. Based on the data available in the drug treatment information system, of those drug treatment clients who had used drugs intravenously at some point in their lives, more than half (52%) had received at least one of the vaccine doses for hepatitis B. A total of 39% had received all three vaccine doses. (Forsell 2012a.)

Health counselling centres offer exchange of syringes and needles and also provide counselling on health issues, small-scale health care, testing and vaccination services

and case management. Health counselling centre services are provided in all municipalities with more than 100,000 inhabitants and, overall, at more than 35 locations. Many counselling centres offer anonymous instant HIV tests free of charge. The user's family members and acquaintances may visit the counselling centre too if they wish. Some health counselling centres undertake field work. The purpose of field work is to reach substance abusers not normally reached by the service system and to make services available to them.

Table 17. Activities of health counselling centres 2003–2012.

	2003	2005	2007	2009	2010	2011	2012
Health counselling centres	24	~26	<30	<30	<30	<30	<30
Clients	9,300	11,800	12,600	13,291	14,193	11,432	11,015
Visits	70,600	80,500	90,000	79,735	83,450	84,586	75,327
Needles and syringes per client	150	161	190	233	242	309	321
Exchanged syringes or needles	1.4 million	1.8 million	2.4 million	3.1 million	3.4 million	3.5 million	3.5 million

Source: THL 2013.

According to an evaluation study, the services of health counselling centres have played a central role in the prevention of HIV, hepatitis A and B and, to some extent, hepatitis C, as well as in combating epidemics among intravenous drug users and therefore indirectly in the population at large. The ambitious objectives set for the HIV infection situation have been attained, namely stopping the epidemic and bringing the annual number of new cases below 30. The health counselling centre model has proven to be a very cost-effective health intervention, and safeguarding its continuation and further development is very important. (Arponen et al. 2008.)

7.3 Study on the social management of the drug problem in Finland

In her doctoral dissertation, Riikka Perälä studied policy and practices for reducing drug-related harm. The study points out that when working with drug users, better attention should be paid in the future to the concrete consequences of the multiple problems associated with drug use, such as a compulsive pace of life resulting from attempts to control problems and the emotional stress caused by drug use. (Perälä 2012.)

The study showed that drug users try to put their life back on track in a number of ways: by seeking training, by trying to find accommodation or a place to stay the night,

to enter treatment or to gain various benefits. Obtaining drugs involves routines of its own, and drug users describe these as very similar to work. Many drug users would like to have help in life management. (Perälä 2012.)

Drug users considered that the ways in which the service systems try to help them are problematic. Many users had tried to seek help for their problems through services and treatment but had been discouraged by the bureaucracy and chilly attitudes they had encountered. Perälä notes that the human interaction dimension of treatment has been neglected in the discussion on how to develop substance abuse services, and during the period examined only the practices of the harm-reduction policy seemed to have succeeded in achieving a client-oriented approach in providing services. Drug users felt that they were treated like human beings at the health counselling centres, which they said was in itself a remarkable improvement over other services. (Perälä 2012.)

According to Perälä, the Finnish harm-reduction policy has successfully incorporated prevention of the harmful social and health impacts related to drug use, and efforts should be made to retain this feature of the policy. In Finland, harm reduction and treatment are not considered separate disciplines. Referral to services is a key component of harm reduction in Finland, and service professionals also emphasised the importance of treatment as the principal means for controlling drug problems. (Perälä 2012.)

8 Social correlates and social reintegration

The results of the drug treatment information system revealed the same facts as many other studies on the risk behaviours, substitution treatment and HIV infections of problem drug users: they have more social problems than the general population. About two thirds of drug treatment clients are unemployed and approximately one tenth are homeless, and clients have a low level of education.

Multi-professional co-operation between authorities has been emphasised in after-care adjustment activities. Drug problem users are often socially excluded and disadvantaged, and their social support network is oriented in drug user culture. Treatment and rehabilitation are required to take a comprehensive, long-term approach with concrete help. This includes social rehabilitation, employment and supported housing services. The education authorities are also involved; the planning of education and vocational guidance are automatically included in the treatment of young people.

The Finnish Constitution guarantees citizens universal rights to basic services. The Social Welfare Act is binding upon Finnish local authorities, stipulating the statutory duties that must be carried out at the municipal level. The Social Welfare Act provides for social services, income support, granting social credit, social security benefits and guidance and advisory services for their use, development of social conditions and elimination of social problems. (Ministry of Social Affairs and Health 2011c.) Universal basic services are complemented by special services for specific groups, such as substance abuse services and child welfare services. Preventive child welfare work is undertaken in family services, but also in substance abuse services for adult users, by investigating whether children involved have a need for care and support.

8.1 Social exclusion and drug use

The drug information system provides information annually on the socio-demographic situation of drug treatment clients and reveals that the situation has remained surprisingly unchanged for years. The clients' educational attainment was low, and most of them were unemployed (61%). One out of ten clients (10%) was homeless, although only 5% of substitution treatment clients were homeless, while the figure among other opiate problem users was 13%. This is probably due to two causes: the effectiveness of substitution treatment and the 'apartment first' principle. Of the clients, 22% of the men and 39% of the women were married or cohabiting. Of those who were married or cohabiting, 69% had another problem substance user in the same household, women more commonly (79%) than men (41%). Children under the age

of 18 were reported by 39% of the clients. Only 29% of the parents lived in the same household with their child or children, and 25% had had their children placed in care by child welfare services. Of the clients under the age of 20, half (52%) were still living with their parents. (Forsell 2012a.)

8.2 Social rehabilitation

The purpose of social rehabilitation is to support the re-entry into society of persons severely affected by social exclusion through enhancement of their social functional capacity and their ability for social interaction. According to the Act on rehabilitative employment activities (189/2001), such activities are meant for the long-term unemployed, in order to improve their possibilities of finding employment. The Act obliges municipalities and employment offices to co-operate in providing client-specific service packages. However, it is not expedient to start rehabilitative employment activities if the client has an acute substance abuse problem; instead, the client should be directed primarily to substance abuse services.

Social work is aimed at strengthening the resources of citizens who need help and to support the self-reliance and coping of individuals, families and communities. The goal is to prevent social exclusion and to resolve social problems, thereby maintaining and promoting the wellbeing and social safety of citizens and communities.

In individual social work, social workers guide and counsel their clients, work through their problems with them and organise other support measures through official networks to maintain and improve the safety and coping of the individual and the family.

Community work is for preventing the emergence of social problems in communities and for reinforcing potential for involvement and participation of residents in the development of their communities. In community work, social workers and other social welfare professionals help individuals and groups contribute to the wellbeing of their communities and to network with community members, officials in various administrative sectors, NGOs and other parties. (Ministry of Social Affairs and Health 2011d.)

8.3 Homelessness and the programme to reduce long-term homelessness

In 2011, there were about 7,400 homeless people in Finland, about 7,000 of them single. Some 4,000 of them live in the Greater Helsinki area. There are some 350 homeless families, more than half of them in Helsinki. Substance problem users are a risk group for homelessness.

In Finland, financially supported housing for substance abusers can be arranged within municipal social services. Housing service units for substance abusers form part of the Finnish substance abuse services. They are intended for substance abusers who need daily support for independent living.

The Ministry of the Environment's programme to reduce long-term homelessness 2008–2011 will be continued in the period 2012–2015 as outlined in the Government Programme. The purpose of the programme is to eliminate long-term homelessness by 2015, to reduce the risk of long-term homelessness by boosting the use of social rented housing for reducing homelessness and by enhancing measures to prevent people from becoming homeless in the first place. By 2015, some 1,000 apartments, supported housing apartments or treatment beds for the long-term homeless will be assigned in the Greater Helsinki area – 750 in Helsinki and 250 in Espoo and Vantaa combined. The aim is similarly to create at least 250 apartments, supported housing apartments or treatment beds in Tampere, Turku, Lahti, Kuopio, Joensuu, Oulu and Jyväskylä by 2015.

8.4 Social guarantee for young people

Under the Government Programme 2012–2015, the aim is to provide everyone under the age of 25 and all new graduates under the age of 30 with a job or traineeship or a placement in studies, workshops or rehabilitation within three months of becoming unemployed. To this end, a working group was appointed in autumn 2011 to prepare a proposal for what is known as the social guarantee for young people. Implementation will begin in 2012, and the policy will be fully in place at the beginning of 2013. Exclusion of young people from working life will be prevented through a variety of measures by the employment and economic development authorities. Despite previous such measures, youth unemployment remains high. According to employment exchange statistics, there were 54,600 unemployed jobseekers under the age of 29 in August 2011, of whom 30,300 were under the age of 25. About one third of them have only completed comprehensive school. Nearly half of these unemployed persons have a vocational qualification or a bachelor's degree yet cannot find a job.

The training guarantee will form part of the social guarantee for young people. Everyone completing comprehensive school will be guaranteed a further placement at an upper secondary school, in vocational education, in apprenticeship training, at a workshop, in rehabilitation or elsewhere. Comprehensive education lays the groundwork for the employment of young people. However, just completing comprehensive school is not enough; a secondary-level qualification is in practice a necessity for finding employment or for entering further studies. Some young people drop out at every stage of the education and training system. Some do not study further at all after comprehensive school, and some of those who do never complete a qualification. The result is that there are some 100,000 young adults (aged 25 to 34) in Finland who have no post-comprehensive qualification or degree of any kind.

Outreach youth work is intended for helping young adults under the age of 29 who are beyond the reach of training or the labour market. They need support in order to make use of the public-sector services available to them. In 2011, 223 local authorities are receiving a government grant for hiring 270 outreach youth workers. This covers

70% of Finland's municipalities. In 2010, outreach youth work contacted nearly 11,000 young people; 22% of them said they were unemployed even though they had not registered as jobseekers.

Implementing the social guarantee for young people requires broad-based cooperation between public actors. The Ministry of Social Affairs and Health stresses the importance of proactive prevention of social exclusion, early detection of problems and support for solving them. When a child's growth process is secured, he/she can grow up into a young person with a firm hold on training and on working life. During the current term of government, the Ministry of Social Affairs and Health is coordinating a programme to reduce poverty and social exclusion; this is also closely connected with the implementation of the social guarantee for young people.

The Government has set aside an annual appropriation of EUR 60 million for implementing the social guarantee. The first report of the working group presents solutions for allocating these funds and other proposals for implementing the social guarantee. With these solutions, implementation of the social guarantee for young people may begin in 2013.

The working group divided the task into two parts. Firstly, it must be ensured that the service network works as it should with regard to young people entering the sphere of the social guarantee. The aim is to create a system where all young people have a realistic chance of finding employment, training or other activities. These measures will create a situation where the number of young people who are socially excluded or at risk of social exclusion will no longer be increased by younger age groups.

Another focus area is to take care of the 110,000 young people who have no post-comprehensive education and who are thus at risk of social exclusion. Bringing them onto a stable employment path will be effected by increasing the supply of training so that by 2016 a 'normal situation' will have been attained: the youth service network is working and there is no longer an extensive number of young adults marginalised from society. This, however, cannot be achieved with the EUR 60 million per year reserved for implementing the social guarantee.

8.5 Cultural added value to preventing drug use

In August 2011, Finland organised a Nordic drug forum in Helsinki with topics including the prevention of drug use and social exclusion through cultural efforts. It was proposed at the meeting that cross-sectoral efforts between the cultural, health care and wellbeing services must be supported and that culture must be incorporated into the routines of the social welfare and health care services.

In 2008, the Finnish Cultural Foundation launched the Myrsky (Storm) project to strengthen the wellbeing and the social and mental growth of young people by bringing art and culture into their lives. Another aim was to introduce young people to new forms of arts activities. Myrsky was principally aimed at adolescents aged 13 to 17, who are

difficult to reach with traditional means. In the project, adolescents engaged in a variety of arts events under the guidance of professional artists. All adolescents were eligible, but particular attention was paid to those threatened by social exclusion. Some of the arts events were aimed at immigrants, mental health rehabilitees and institutionalised young people. Over a period of three years, more than 14,000 young people have had the opportunity to create art on their own terms. The Myrsky evaluation study shows that such activities strengthen the wellbeing of young people: arts activities make young people more content and happier with their lives while improving their social skills and capabilities. Art also boosts social participation among young people.

8.6 Social disadvantage as described in research

Being socially disadvantaged and being likely to turn to crime show a positive correlation: the weaker a family's financial standing is, the more likely it is that an adolescent in that family has committed criminal offences and been subject to violence. A survey among Finnish-speaking pupils in the 9th grade of comprehensive school (aged 15–16)²⁴ showed that the probability of experimenting with cannabis is the higher the worse off the family is. Of the young people who described the financial situation of their family as very good, only 5% reported that they had used cannabis during the current year. Similarly, of the young people who described the financial situation of their family as extremely poor, 14% reported that they had used cannabis during the current year. Cannabis use was also the more probable the less support and control the young person's parents provided (4% of young people under strong control, 9% of those under weak control). (Kivivuori et al. 2009.)

Finnish studies have shown that the majority of young people who commit homicide have similar family backgrounds (instability, lack of care, intoxicant abuse, domestic violence), an early history of disruptive behaviour (learning problems and behavioural problems at school, petty crimes) and problem use of intoxicants begun at a young age. Half of all young offenders who have committed a homicide have been diagnosed as drug users in the psychological evaluation following the offence. For a significant percentage of them, the parents or at least one of them had a history of problem use of alcohol. (Kivivuori et al. 2009.)

Young people who receive a suspended sentence for a narcotics offence have a high risk of recidivism. The study showed that the social ties, use of time and cognition of young probationers influenced the risk of recidivism the more the poorer their education, housing situation and work or study situation was. Obvious or worrying drug

24 In 2008, 5,826 young people responded to a questionnaire about self-declared crime. The sample space consisted of all pupils in the ninth grade (aged 15 to 16) in Finnish-language schools in Finland. The National Research Institute of Legal Policy conducts a survey on youth crime at regular intervals. The questionnaire contains questions regarding 21 forbidden or criminal acts. For each, the respondents are asked whether they have ever committed such an act in their lives, and if so, whether they have committed that act less than one year prior to the survey.

use was found in 11% of probationers, and slight or occasional use in 14%. Problem users of drugs were subjected to somewhat more effective surveillance during their suspended sentence than other probationers. The more severe the probationer's drug problem was considered, the more the probation focused on that particular problem. (Harrikari 2010.)

In a study of short-term prisoners, the most unfortunate were those young prisoners who had begun their criminal careers in their childhood or youth. They were the most active as criminals in adulthood too, and they used more alcohol and drugs and began earlier than others. They were also the least confident of finding paid employment after their release. (Kivivuori & Linderborg 2009.)

9 Drug-related crime, its prevention and drug use in prisons

9.1 Drug-related crime

Documented drug-related crime surged in the 1990s. Crime accompanying drug use, such as crime against property and driving under the influence of drugs, also increased in the 1990s. This growth levelled off after 2000. The statistical increase in cases of driving while intoxicated was boosted by the zero tolerance approach with regard to drugs and driving, adopted in 2003. In the past few years, documented drug-related crime has again been on the increase. In 2013, nearly 23,000 drug-related offences were recorded. The number of drug-related offences increased by about 2,500 on 2012. (Statistics Finland 2013; National Bureau of Investigation 2014). In 2008, the statistics only showed the offences reported to the police, but as of 2009 Statistics Finland changed its information base to include offences investigated by the Customs as well. This change may in fact explain part of the growth in the number of crimes, as it is observed later in the report that no corresponding growth in sanctions for drug-related crimes was found. (Kainulainen 2011.)

According to the police, Finnish professional crime has typically been loosely structured, but is now closing ranks and becoming more disciplined. Major drug-related crimes investigated in Finland clearly show that the drug trade is professional and largely handled by organised crime groups. Criminal motorcycle gangs in particular hold a strong position in the drug trade in Finland and have close and functioning relations to groups abroad, particularly organised crime in Estonia. The prominent role played by organised crime groups in Finnish drug crime can be seen, for instance, in the more frequent seizing of weapons, particularly gas sprays, in the context of narcotics offences. Organised criminal groups have extended their domain from the traditional drug trade and property crime to a wide range of financial crime and fraud, as organised crime seeks to generate rapid profits and increase its influence in the legal economy and in society at large. (National Bureau of Investigation 2014.)

In 2012, the number of seizures of cannabis plants in Finland was again considerable, according to statistics compiled by the police and Customs. The number of seized cannabis plants was larger than ever (23,000), which is probably due to the increased popularity of home growing and the fact that seeds are easy to buy over the Internet, and also due to the authorities becoming more effective at combating home growing. Home growing is still a minor activity in Finland, but the cases discovered have shown that cultivation is becoming more professional. A number of expertly set up cultivation facilities with more than 500 plants have been discovered in Finland. In 2013, two cultivation facilities with more than 1,000 plants were discovered. In Finland as elsewhere

in Europe, criminal motorcycle gangs have taken up cultivation of cannabis. (National Bureau of Investigation 2014.)

A worrying amount of new designer drugs continue to be found on the market. Designer drugs may be lethal, as the substances used and their levels in new drugs vary greatly, and there is no past user experience to rely on. The potential lethality is compounded by the fact that health care personnel are unaware of their effects. It is a substantial challenge in cases of poisoning and overdoses in emergency care that the symptoms caused by designer drugs are not accurately known. Also, there are no specific antidotes for treating cases of acute poisoning caused by designer drugs. Users order batches of designer drugs for their own use over the Internet, as is shown by the considerable increase in the number of parcels containing designer drugs sent by post.

No significant change has occurred in the number of seizures of amphetamine or methamphetamine. (National Bureau of Investigation 2014.)

Narcotics offences

There were 20,656 narcotics offences in 2013 (Statistics Finland 2014). Of course, the same persons may commit several narcotics offences in the course of a year. In 2013, the police suspected a total of 7,200 individual persons of narcotics offences. The number of individual persons suspected of aggravated narcotics offences was 891. (National Bureau of Investigation 2014.)

In 2013, some 12,800 cases of unlawful use of narcotics were recorded, about 56% of all documented drug-related crime. There were about 8,700 cases of basic narcotics offences (38%). One of the factors explaining the increase in narcotics offences is that home growing of cannabis is becoming more popular; there were also numerous cases involving ecstasy. In 2013, there were considerably more aggravated narcotics offences than in 2012, about 1,240, slightly more than 5% of all narcotics offences. Preparation or abetting of narcotics offences appears only rarely as a documented offence. (Statistics Finland 2013; National Bureau of Investigation 2014.)

The police and the other PTR authorities have stepped up their combating of serious crime. The focus in investigating drug-related crime is on the recovery of criminal gains, which has resulted in a weakening of the operating potential of drug-related crime.

Table 18. Drug-related crime reported to the police in 2007–2008, and drug-related crime reported to the police, Customs and Border Guard in 2009–2012.

Offence	2007	2008	2009	2010	2011	2012
Narcotics offence	4,206	4,835	6,274	6,444	7,226	7,752
Unlawful use of narcotics	10,333	9,823	11,257	12,158	12,093	11,292
Aggravated narcotics offence	883	789	922	1,083	1,036	1,025
Preparation or abetment of narcotics offences	26	35	71	39	39	33
Narcotics offences total	15,448	15,482	18,524	19,724	20,394	20,102

*The compilation of statistics changed as of 2009. The statistics for 2009–2012 include crimes reported to the Customs and Border Guard. This accounts for an increase of about 10% in the volume of drug-related crime.

Source: Statistics Finland.

Drug-related crime has robust international connections, particularly to Estonia. The percentage of suspects of foreign origin in aggravated narcotics offences has increased remarkably in recent years. In 2013, no fewer than 39% of people suspected of committing aggravated narcotic offences were foreigners. That figure was 27% in 2012 and 24% in 2011. For several years, the largest groups of suspects have been Estonians and Russians or Russians living in Estonia. On the Finnish market, Finnish criminals generally manage the reception and distribution of drugs in Finland, while foreigners are engaged in import and smuggling. (National Bureau of Investigation 2014.) The internationalisation of drug-related crime has brought added challenges particularly to the uncovering and pre-trial investigation of aggravated narcotics offences. Interpreters are increasingly needed in criminal investigations, for instance.

Narcotics convictions

There were 14,100 imputable narcotics offences in 2011. There were 8,300 convictions where a narcotics offence was the principal offence, i.e. the most serious offence of which the defendant was convicted. Narcotics offenders are generally sentenced to a fine. In 2011, there were somewhat over 6,700 offenders fined for a narcotics offence as the principal offence. Of these, 4,200 were sentenced in summary penal proceedings and about 2,500 in a district court. More than 1,500 persons were sentenced to imprisonment for a narcotics offence as the principal offence; 42% of these (632) received a sentence of unconditional imprisonment. Charges were waived by the prosecutor for about 530 persons, and 40 persons were acquitted by a district court. There have been no significant changes in sanction practices in recent years. (Kainulainen 2012; Statistics Finland 2013.)

The usual consequence of unlawful use of narcotics (Criminal Code, chapter 50 section 2a) is a summary fine, 14 day-fines on average in 2011. Alternatives to punishment remain a little-used option, but prison sentences are even more rare.

Sanctions for narcotics offences (Criminal Code, chapter 50 section 1) include prison sentences. If the same person is sentenced for several offences at once, the average sanction is usually more severe. In cases where only one offence is cited in the sentence, the average sanction for both conditional and unconditional imprisonment has been about four months. (Kainulainen 2012.) In 2011, the average unconditional and conditional prison sentences imposed for a narcotics offence as the principal offence were 4.7 months and 4.0 months, respectively. (Statistics Finland 2011.)

For aggravated narcotics offences (Criminal Code, chapter 50 section 2), the choice of punishment is in practice between unconditional and conditional imprisonment. An unconditional prison sentence is generally imposed for an aggravated narcotics offence; conditional imprisonment is considerably more rare. The average length of unconditional prison sentences has varied over the years; in 2011 it was about 3 years and 7 months (43.1 months). The average for conditional prison sentences has remained at about 1 year and 3 months for several years. (Kainulainen 2007; Kainulainen 2012; Statistics Finland 2011.)

Sanction tables are often used for consistency of punishment for narcotics offences. There has been inconsistency in sentences imposed by courts for home growing of cannabis. In order to harmonise prosecution practices, the narcotics prosecution team has drafted a recommendation to estimate the volume of the harvest gained from cannabis plants. The average yield of one plant is estimated at 25 grammes. The recommendation notes that a prosecutor could demand imprisonment for growing more than 10 plants and a fine if there are fewer plants. (Hakkarainen et al. 2011a; Prosecutor General's Office 10 June 2010.)

Driving while intoxicated

In 2012, the total number of cases of driving while intoxicated decreased by 11% on the previous year. However, the number of cases involving drugs (2,626) and poly-drug use (631) remained steady, and the percentage of cases involving alcohol thus decreased. In 2012, the cause of driving while intoxicated was alcohol use in 83% of the cases, drug use in 14%, and polydrug use in 3%. (Statistics Finland 2013.) In 2013, drugs and pharmaceuticals were tested for in 4,500 cases of driving while intoxicated. The most commonly discovered substances were benzodiazepines (64% of the cases), amphetamines (51%), cannabis (34%) and buprenorphine (21%). (National Bureau of Investigation 2014.)

A register study published in 2009 assessed the manifestation of, and trends in, driving under the influence of drugs or pharmaceuticals in Finland between 1977 and 2007.

During this period, driving under the influence of drugs or pharmaceuticals increased by a factor of 18. Of all suspects during the monitoring period, 90% were men, but the annual percentage of women increased slightly. Women accounted for 7% of suspects in 1977 and 10.3% in 2007. This trend has statistical significance. The most frequently detected substances were benzodiazepines (76%), amphetamines (46%), cannabis (28%) and opioids (14%). The most frequent narcotic substances, amphetamines and cannabis, began to appear during the late 1980s, and the number of drug use cases began to grow as Finland adopted a zero tolerance approach to drugs and driving in 2003. (Ojaniemi et al. 2009.)

Most (77%) of those caught driving while under the influence of drugs tested positive for more than one substance. The most common findings in cases of polydrug use were benzodiazepines with alcohol (20 %) and benzodiazepines with amphetamines (18 %). Benzodiazepines were present in the five most frequently found combinations. The percentage of polydrug use cases where alcohol was involved has decreased during the monitoring period (one fifth of samples in 2007). (Karjalainen 2010.)

Other drug-related crime

In certain categories of crime the perpetrators are intoxicated in a large percentage of cases, but alcohol use is far more common than drug use or polydrug use. Out of all cases of all types of assault (assault, petty assault and aggravated assault), 55% were committed under the influence of alcohol but only 0.3% under the influence of other substances and 1% under the influence of both alcohol and other substances. The comparable figures are 36%, 4% and 6% for all robberies; 11%, 2% and 1% for theft offences (petty theft, theft, aggravated theft); and 20%, 8% and 3% for stealing a motor vehicle for temporary use. (Statistics Finland 2013.)

In Finland, reports of suspicious business activities filed pursuant to the Act on Detecting and Preventing Money Laundering generally have to do with financial crime. In 2013, only 2% of the cases where a criminal investigation was launched involved drug-related crime. There are relatively few professional criminals in Finland specialising in money laundering, which is usually undertaken by persons in criminals' immediate circle of acquaintances. (National Bureau of Investigation 2014.)

The Financial Intelligence Unit of the National Bureau of Investigation compiled sentences involving money laundering from between 1994 and 2012. In the 156 sentences selected for the study, 56 involved a narcotics offence as a predicate offence. Various financial offences were also common predicate offences. The most common sentence included in the study was conditional imprisonment. Of the unconditional prison sentences imposed (42), 34 were joint sentences involving several offences, chiefly narcotics offences. (National Bureau of Investigation 2014.)

Study on conceptions of habitual crime held by drug users and the police

Tuula Kekki (2012) conducted a study on conceptions of habitual crime held by drug users and the police, exploring habitual crime from the perspective of a criminal lifestyle and identity on the one hand and from the perspective of law enforcement on the other. The domain of the study concerned drug users whose use is regular and who continuously engage in criminal activities. (Kekki 2012.)

The study analyses the motives and feasibility of criminal offences and changes in the behaviour of criminals over time. The study indicates that drug users commit a wide variety of crimes. No specialisation or professionalisation as such was found in the history of criminal activities of drug users. Financial reasons were not the only motivation for committing crimes; unlawful means were also used to attain immaterial benefits such as thrills and peer acceptance. The study material strongly indicated that the persons studied considered the criminal culture an attractive way of life. They were not interested in a conventional lifestyle, and they also became estranged from such a lifestyle as they acquired a criminal identity. They were more interested in identifying with a criminal peer group and gaining the respect of that group. Habitual criminals who use drugs are typically willing to take risks and are unwilling or unable to comprehend the consequences of their actions. However, living and acting according to the rules and customs of the chosen sub-culture did not always produce contentment. (Kekki 2012.)

Secondly, the study examines ways in which the police see the significance of combating drug-related crime for the individual drug user on the one hand and for the social harm caused by criminal actions on the other. Police enforcement has a solid statutory foundation: all drug-related activities are criminal, so the police have the authority to intervene in them. Moreover, the police consider that drug-related crime is a detrimental, immoral and undesirable activity and that the majority of the population is strongly in favour of bringing it under control. Materials describing police operations show that enforcement was focused on known drug users, which is largely due to the fact that drug users often commit accompanying crimes too. In police rhetoric, controlling the use of drugs is largely about maintaining public order and safety. The police feel that they have very little potential in addressing individual offenders, whereas overall surveillance of drug users is significant for 'keeping the peace'. (Kekki 2012.)

9.2 Alternatives to prison

Referral for treatment, and reprimand

Alternative sanctions to prison have been developed for drug users: a reprimand procedure for young users and referral to treatment for problem users. The Prosecutor General has encouraged prosecutors to waive charges for drug users who have sought

treatment (Prosecutor General 2006:1). The guidelines also note that breaking a drug addiction may be difficult and may require several treatment periods differing in content. Accordingly, it is possible to waive charges because of seeking treatment multiple times for the same individual. Seeking treatment must be demonstrated by written proof indicating that the drug user has sought treatment at a treatment institution or has booked a place or an appointment there.

According to data collected by the Prosecutor General's office, in 2010 treatment was cited in 38 decisions to waive charges. Half of these decisions were made in Lapland. According to a survey made in 2009 of decisions to waive charges, of those seeking treatment 70% were men and 30% were women. One in five were underaged (6). In 43% of the cases, the offence only involved mild drugs. In 33% of the cases, a pharmaceutical classified as a drug was discovered. A further 10% of the cases cited only hard drugs (amphetamines). The remaining 13% involved combinations of various drugs. Subutex or Suboxone was mentioned in nearly one out of every three cases. (Kainulainen 2012.)

An offender who sought treatment and whose charges were waived might be indicted with only a petty narcotics offence such as one-off drug use. In some of the cases, the offender had been using drugs for some months; in some cases, for a few years. In nearly all cases, the type of offence was unlawful use of narcotics. In a handful of cases, the offender had also committed another offence such as forgery, petty firearms offence or unlawful possession of alcohol. The materials also included some cases of a narcotics offence involving the growing of cannabis or the transfer of drugs. (Kainulainen 2012.)

The Prosecutor General recommends that prosecutors arrange a reprimand session for 15–17-year-olds who have been arrested for unlawful use of narcotics for the first time. The young offender, his/her guardian, a representative of the social welfare authorities and the police participate in the session (Prosecutor General 2006:1). At this session, the young offender is informed of the criminal and reprehensible nature of drug use as comprehensively as possible, the offender's life situation is examined and appropriate further measures are decided. After the session, the prosecutor may decide to waive charges. If the young offender does not attend the session, or if further factors emerge at the session, a fine may be imposed. (Kainulainen 2009.)

According to data compiled by the Prosecutor General, 161 young offenders were reprimanded in 2010. The majority of these cases (61%) was in southwestern Finland. According to a survey conducted in 2009, in a typical case the reprimanded young offender was guilty of experimenting with cannabis on a small number of occasions. He/she was offered the substance personally or was reported to be responsible for acquiring it. Only a few cases involved a young offender with a longer history of cannabis use, and even then the longest period of use recorded was two years. Some cases involved not unlawful use of narcotics but a narcotics offence, because the young offender had distributed a small amount of drugs to another person or kept drugs in his possession with intent to distribute. (Kainulainen 2012.)

A reprimand session might be attended by the parents, a social worker, a foster home representative or a police officer in addition to the young offender. In some cases it was mentioned that an official had not attended a session despite being invited. The prosecutor's decision sometimes included a description of how the young offender behaved at the reprimand session. Support from the young offender's family or child welfare services helped convince the prosecutor of the appropriateness of this approach. (Kainulainen 2012.)

The Prosecutor General has also compiled data on reprimands and referrals to treatment in 2011. The number of reprimands in 2011 was 154, 7 fewer than in 2010. Similarly, there were 38 referrals to treatment in 2010 and only 23 in 2011.

Table 19. Reprimands and referrals to treatment by prosecution unit, 2010–2012.

Prosecution unit	Reprimand			Referral to treatment		
	2010	2011	2012	2010	2011	2012
Helsinki	4	22	15	2	-	-
Länsi-Uusimaa	-	3	20	-	-	-
Itä-Uusimaa	13	15	21	-	-	-
Tavastia Proper	4	29	3	-	-	-
Salpausselkä	7	3	1	1	-	2
Western Finland	98	48	89	13	13	12
Tampere Region	2	7	11	3	-	-
Ostrobothnia	4	10	15	-	-	-
Central Finland	2	2	-	-	-	-
Eastern Finland	19	8	14	-	5	1
Oulu	7	7	15	-	-	-
Lapland	1	-	-	19	5	2
Total	161	154	204	38	23	17

Source: Prosecutor General's Office (2013).

In her doctoral dissertation, Heini Kainulainen (2009) examined the criminal control of drug users in Finland. The dissertation discusses alternative sanctions such as waiving measures and waiving prosecution, as well as referral to treatment and reprimands, which were added to alternative sanctions during the reform concerning the unlawful use of narcotics during the 2000s. The analysis indicates that proper consideration of sanctions has not been possible in the current processes. For instance, drug users have repeatedly been fined in summary penal proceedings.

The data indicate that the waiving of measures has been used very seldom, although there is a particular need for it especially in relation to narcotics offences. For decades, the police have been reluctant to apply this procedure, since they consider it crucial

to intervene in drug users' actions. Prosecutors largely agreed with this view from the 1960s to the 1980s. Waiving punishment was common in the early 1970s, but within a few years practices became stricter. In the 1990s the procedure for waiving measures was reformed, after which waiving prosecution became more common. (Kainulainen 2009.)

Alongside the reform concerning the unlawful use of narcotics in the early 2000s, sanctioning practices became stricter, since fining drug users in summary penal proceedings became more frequent and the number of cases where prosecution was waived declined. According to Kainulainen, the reform regarding the unlawful use of narcotics has not been successful, since waiving charges as a result of the offender seeking treatment is extremely rare. (Kainulainen 2009.)

9.3 Drug use and substance abuse services in prisons

The clients of the criminal sanctions sector constitute a marginal group of disadvantaged people whose educational attainment, social status, occupational career and state of health are clearly worse than those of the majority of the population. The majority of crimes are committed while intoxicated, or else the offenders fall into a pattern of criminal behaviour to finance their substance abuse habit. Prison inmates include those for whom substance addiction has led to social exclusion at an early age. This has prompted a need to combine rehabilitation with criminal sanctions to reduce the risk of recidivism. This chapter describes drug use in prisons and the substance abuse services provided to prisoners.

Prison as an operating environment

There are 26 prisons in Finland, all very different in their size, operating culture, structures and traditions even though the legislation governing them is the same. A prison is not a rehabilitation institution as referred to in rehabilitation legislation. Under the Act on Welfare for Substance Abusers, it is the responsibility of local authorities to provide treatment for substance abusers. The primary purpose of a prison is to enforce criminal sanctions, not to provide rehabilitation. The prison system often deals with any individual substance abuser for a longer period of time than other social systems combined. For this reason, time spent in imprisonment must be leveraged as far as possible for providing treatment and support for substance abuse problems (Havio, Inkinen & Partanen 2009).

A prison is a highly challenging rehabilitation environment. Closed prisons in particular have features that are characteristics of prisons and complicate rehabilitation, such as the imposition of restrictions on prisoners' self-determination and the quite dispiriting physical environment. Also, prisoners have their own code of conduct, and the prison population maintains a criminal mindset and related values and norms. (Kurki, Kurki-Suutarinen & Taruvuori 2010.)

Substance abuse services in prisons are guided by Päihdetyön linjaukset vuosille 2012–2016 (Substance abuse services guidelines for 2012–2016), where it is noted that substance abuse services provided in this sector must correspond to substance abuse services and rehabilitation provided in the social welfare and health care sector in general in terms of their range and level. Substance abuse services are a key area of the criminal sanctions sector, and the entire personnel contributes to them. Substance abuse services are divided into motivation, evaluation, service referrals, intoxicant monitoring, treatment and rehabilitation. Employees participate in each of these areas in an active or supportive role depending on the division of duties and their individual training. In the future, attempts will be made to introduce extramural substance abuse service practices to prisons and to outsource substance abuse rehabilitation services. (Criminal Sanctions Agency 2012a.)

In prison, it is possible to employ various activity programmes, substance abuse rehabilitation measures, social and occupational rehabilitation measures and individual support measures to influence prisoners' attitudes, emotional life, intoxicant abuse, cognitive and social skills, social networks and social circumstances. Underlying this approach is one of the key principles of the criminal sanctions sector: the concept that an individual can change and mature.

Evaluation of the extent of drug use

The crime situation has remained relatively stable in recent years, and the overall number of documented offences has slightly decreased in nearly all types of crime since the early 2000s. In 2012, 17% of all prisoners had been imprisoned with a narcotics offence as the principal offence; narcotics offences are the third most common type of offence for which prison sentences are imposed. The percentage of prisoners convicted for a narcotics offence has varied between 14% and 18% in the 2000s. Narcotics offences are the most common type of offence among prisoners of foreign origin (40%), while among other prisoners the most common type of offence is violent crime. (Criminal Sanctions Agency 2012b; 2013a.)

Most prisoners are also themselves victims of crime and have physical and mental health problems, inadequate social skills and a lower educational attainment than the majority population, besides being excluded from the labour market. The number of offenders convicted for narcotics offences has remained stable in recent years, but it is difficult to make long-term prognoses. The number of prisoners who are substance addicts is expected to continue to increase even if the growth trend is now levelling off. (Criminal Sanctions Agency 2013b.)

It is not known exactly how many drug users there are in prisons, but the aim is to monitor their number systematically. The main element in monitoring the drug situation in prisons is a reliable statistical system that yields key indicators.

Indicators for drug use in prison include the following:

- prisoner interviews and surveys, entry interview, risk and needs assessment, various examinations, etc.
- incidence (%) of intoxicant abuse diagnoses among prison inmates
- previous medical case summaries and patient history
- results of intoxicant screening
- detoxification and withdrawal treatment while in prison
- number of hepatitis and HIV tests conducted, and number of positive test results
- number of B hepatitis vaccinations given
- disciplinary measures imposed for self-intoxication or other intoxicant-related offences
- intoxicants and drug use equipment seized
- substance abuse rehabilitation goals entered in prison sentence plans and participation in rehabilitation

Clients' drug use is evaluated in a number of contexts, including the drawing up of the prison sentence plan, detection of withdrawal symptoms, detection of drug use while imprisoned, evaluation of how clients cope with open prison or probationary freedom, planning of substance abuse treatment and rehabilitation, and referral to outside substance abuse services.

In June 2010, an extensive health survey focusing on the state of health and substance abuse problems of both prisoners and offenders performing community service was published. The research material, gathered in 2005–2006, described the physical and mental state of health of about 700 offenders. The study indicated that prisoners and other sanctioned offenders were more sick than they had been 20 years previously. The declining trend was particularly apparent for mental disorders and hepatitis. Substance abuse problems among convicted offenders have mushroomed: according to this study, 84% of all male prisoners had or had had a substance addiction at some time in their lives. (Joukamaa 2010.)

In December 2010, a survey on the quality of prison life in Finland was conducted at four prisons (n=264); the survey included questions on substance abuse by the prisoners. In a rather even split, 49 % of the respondents said that they have a substance abuse problem and 51 % said they had no substance abuse problem. The prisoners were also asked about substance abuse since being imprisoned in their current facility. According to the respondents, intoxicant abuse while imprisoned was exceedingly rare: only 1 % reported having begun to use intoxicants and 4 % reported having continued their existing substance abuse habit while in prison. (Linderborg et al. 2012.) Perälä (2011) also found that some convicts when sent to prison stop dealing in and using drugs, at least for the duration of their prison sentence.

The quality survey of the Criminal Sanctions Agency conducted in 2013 included a questionnaire for prisoners which, among other things, polled prisoners regarding

substance abuse problems. At the time when these data were collected, there were 3,215 prisoners in the system. Of the respondents, 28% stated that they felt they had a substance abuse problem, while 72% stated that they do not. (Criminal Sanctions Agency 2013c.)

In a study on short-term prisoners conducted by Kivivuori and Linderborg (2009), more than half of the respondents reported that they had used cannabis before being imprisoned, and almost half reported that they had used hard drugs; 42% reported that they had used intravenous drugs at least once. Of those who began their criminal activities at a young age, 82% had used drugs, while drug use was rarest (23%) among prisoners who had begun their criminal activities in adulthood. The average age for beginning substance abuse was clearly lower among prisoners than in the control group. Nine out of ten prisoners said that intoxicant use had influenced their criminal actions. Four out of five prisoners reported feeling that intoxicant use was a problem, at least sometimes. More than one third of the prisoners had spent time at a substance abuse service institution at some time in their lives, one in four had visited an A-Clinic, and one in five had attended a peer support group such as AA or NA. (Kivivuori & Linderborg 2009.)

Substance abuse monitoring as part of prevention

Substance abuse prevention in the criminal sanctions sector relies on the reduction of supply and demand by preventing dealers from operating, thereby making access to drugs in prison difficult. In a closed setting like a prison, drug use involves not only the usual adverse effects but also debt recovery and coercion to commit narcotics offences, which is why many prisoners wish to spend their time in prison completely isolated from other prisoners (see e.g. Ruckenstein & Teppo 2005). Most prisoners appreciate drug-free departments and institutions and the enforcement of this through drug tests (Danielsson et al. 2006; Linderborg et al. 2012).

Prisoners have the right to serve their prison sentence in an intoxicant-free environment where they are not pressured into intoxicant use. Compartmentalisation into blocks enables prisoners participating in substance abuse programmes to commit to being intoxicant-free and to stay in an environment conducive to rehabilitation. There are not very many contract blocks at the moment. Some prisons have no contract blocks at all, even though monitoring data suggest that the more there are intoxicant-free areas in the prison, the fewer problems and needs for disciplinary action there are (Junninen 2008).

The results of intoxicant tests are documented comprehensively in the prisoner information system. Therefore drug tests may be regarded as the primary source for drug use by prisoners while in prison. However, the intoxicant testing system is not comprehensive, because under chapter 16 section 7 of the Prison Sentences Act prisoners may only be tested when intoxicant use is suspected and in connection with certain permit matters, e.g. for screening purposes.

Table 20. Urine, blood and saliva tests taken / average key indicator

Institutions	2010	2011	2012
Closed institutions	5.1	5.5	5.9
Open institutions	9.1	9.4	9.4
Total	6.2	6.7	6.9

The number of intoxicant tests taken in 2012 was 36,070, as compared with 33,090 in 2011. Of these, just under 2,000 were sent to a laboratory for confirmation and further screening, and just under 1,000 returned a positive result. The substances most commonly found were benzodiazepine, buprenorphine and amphetamine.

According to Obstbaum, Tyni & Rynnänen (2009), offenders do not greatly differ from one another regarding positive drug test results except for sexual offenders. Most commonly positive test results are found in those guilty of narcotics offences, but on the other hand they tend to get tested more too. Benzodiazepine use is common in all groups, though most in the groups of violent crime and property crime offenders.

Table 21. Drug-related discipline violations and criminal reports in prisons in 2011–2012.

	Number of disciplinary measures per average number of prisoners		Number of criminal reports per average number of prisoners	
	2011	2012	2011	2012
All institutions	0.4	0.4	0.06	0.06
Closed institutions	0.3	0.3	0.09	0.08
Open institutions	0.6	0.6	0.02	0.02

Just under 500 disciplinary measures are imposed annually in prisons because of self-intoxication. This number has remained stable in recent years. More serious offences – narcotics offences, prison breaks and violent crime – are reported to the police. Local cooperation agreements between the prison and the police determine what the consequences of a drug discovery will be: a disciplinary matter within the prison or a referral to a police investigation.

In 2010, less drugs were seized in prisons than in previous years. The combined amount of cannabis, amphetamines and heroin seized in 2010 was under 200 g, compared with about 600 g per year in 2003–2005. The decreasing trend may be ascribed to tighter security (including the use of drug detector dogs), intoxicant-free blocks and drug testing. These factors add up to an increased risk of being caught. Losing a place in an open prison is an effective deterrent to being caught in a drug-related offence.

There are many unidentified tablets doing the rounds in prisons; imports of hormones may be one reason for this. Persons coming into possession of these substances may not know what it is that they contain. (Perälä 2011.)

Table 22. Drugs discovered in prisons, 2008–2010.

Chemical findings	2008	2009	2010
Amphetamines	191 g	141 g	94 g
Cannabis	85 g	133 g	95 g
Subutex in powder form	-	-	19 g
Subutex tablets	141 pcs	77 pcs	77 pcs
Heroin	0.2 g	2 g	0 g
Cocaine	0.98 g	20 g	1.3 g
Hormones (liquid)	-	-	55 ml
Hormone tablets	2,478	1,294 tbl	900 tbl
Absorbed substances and powders (stamps, letters)	314 pcs	256 pcs	190 pcs
Pharmaceuticals classified as drugs, in tablet form	1,549 pcs	1,766 pcs	1,089 pcs
Other unidentified pharmaceuticals	3,740 pcs	4,165 pcs	4,046 pcs
Drug syringe		176 pcs	97 pcs
Needle		215 pcs	123 pcs
Pipe		12 pcs	21 pcs
Other drug use implements		10 pcs	8 pcs

Source: Criminal Sanctions Agency 2011.

According to Perälä (2011), benzodiazepine-based pharmaceuticals are a perennial favourite on the prison market. Buprenorphine is also popular, mainly because it can be packed into a small space and it is difficult for a drug detector dog to find if it is well packed. It also has the highest profit margin on the prison market, and it only shows up on a drug test for a short time after use. Amphetamines are the second most popular drug in prisons. Like buprenorphine, it can be packed economically, and it also only shows up on a drug test for a short time after use. However, its profit margin is not as good as that of buprenorphine, and a drug detector dog can find it more easily. (Perälä 2011.)

Measures taken to prevent intoxicant use in prisons include systematic monitoring and inspections. Prisoner's accommodation and property is inspected for instance if

disorderly conduct is suspected. There must always be probable cause for an inspection to be conducted. Special inspections involve a thorough check of the entire prison or a block or other facility thereof. Personal searches are a more serious infraction of personal integrity than inspections. A personal search is a serious infraction of personal integrity and can only be conducted if a prisoner is suspected of carrying or concealing within his/her body drugs or drug use implements, or doping substances. (Myhrberg 2007.)

Prisoners discovered to be dealing in intoxicants or otherwise committing narcotics offences while in prison are isolated from the rest of the prison population if necessary to prevent disruptions and referred to talk about their substance abuse with specialist personnel. Basically, a positive test result always results in the revoking of certain privileges: the prisoner usually loses his/her open prison placement or has his/her trial freedom revoked. If a prisoner in an ordinary cell block is caught using intoxicants, the sanction is usually a disciplinary measure. If a prisoner gives a positive sample while participating in a rehabilitation programme, he/she is transferred out of the programme and the incident is treated as a relapse, following which the prisoner may re-enter rehabilitation.

Trained drug dogs and their operators are effective at keeping drugs outside prison walls and at finding drugs smuggled in. Drug dogs are used to inspect both premises and persons. Drug dogs are also an effective deterrent to smuggling drugs into prisons. As at the end of 2011, there were 21 drug dogs at prisons.

Contribution of the Health Care Unit of the Criminal Sanctions Agency to substance abuse work

The Health Care Unit of the Criminal Sanctions Agency is responsible for the health care of remand prisoners and convicts during their time in prison. The Government Programme of the Government of Prime Minister Jyrki Katainen contains the following remarks concerning criminal sanctions and substance abuse services: The ability to work, rehabilitation needs, and the training opportunities of each prisoner will be evaluated during the imprisonment. The Government Programme also notes that prisoner health care will be transferred to the supervision of the National Supervisory Authority for Welfare and Health, and the potential for incorporating the contract treatment procedure into the criminal sanctions system will be investigated. (Final report of the Drug Policy Coordinating Group for the electoral period 2007–2011.) The possibility of transferring the provision and funding of health care services for the Defence Forces and prisoners to the Ministry of Social Affairs and Health is being investigated in the administrative sector of the Ministry of Justice.

The personnel of the Health Care Unit make an important contribution to substance abuse work in providing substance abuse treatment. This is particularly important when a prisoner is admitted. The need for detoxification and withdrawal treatment is assessed

by surveying the prisoner's substance abuse situation prior to being imprisoned. Substance abuse treatment provided by health care services consists of the treatment of substance-related illnesses and substance-related psychiatric treatment, and substitution treatment for opioid addicts. Health care personnel do not participate in the actual substance abuse rehabilitation undertaken during a period of imprisonment; this is managed by specially trained personnel at prisons such as substance abuse treatment instructors, psychologists and social workers.

Under the Communicable Diseases Act (583/1986), the central government is responsible for preventing the spread of communicable diseases in prisons. It is the duty of health care personnel to ensure that prisoners are instructed on how to protect themselves particularly against diseases transmitted by blood contact or sexual contact and to prevent their spreading. Communicable disease prevention is undertaken in prisons through health education and by ensuring opportunities for protection. The hygiene package issued to each prisoner contains instructions on condom use and on the cleaning and disposal of injection syringes and needles, and also a personal hygiene kit.

Finnish prisons do not distribute or exchange needles for intravenous drug users. Disinfectant suitable for cleaning needles and syringes is available at the prison clinic, as are condoms. Disinfectant should also be anonymously available in the common facilities of a prison. In practice, prisoners do not use disinfectant dispensers in the common facilities to clean their syringes and needles because they believe that prison personnel are monitoring them (MacDonald et al. 2007; Perälä 2011).

Release from prison involves particular risks, since compulsory abstinence from intoxicants or lower availability increases the risk of subsequent overdosing and death (Havio, Inkilä, Partanen 2008). According to the substance abuse services policy guidelines of the Criminal Sanctions Agency (2012), all prisoners with drug problems must be informed upon their release of the importance of using clean implements and of the risk of overdosing.

Prisoners are recommended to take tests for hepatitis A, B and C and any vaccinations thought necessary. The communicable disease situation is monitored closely together with outside parties, and if a risk of infection through shared use of syringes and needles is detected, rapid preventive action is taken.

Substitution treatment for opioid addicts, under the relevant Decree of the Ministry of Social Affairs and Health (33/2008), is a treatment where pharmaceuticals containing buprenorphine or methadone are used. According to the Decree, the need for treatment of an opioid addict may be assessed and treatment initiated at the Health Care Unit of the Criminal Sanctions Agency. So far, very few assessments and starts have been made, but treatments begun before imprisonment have been continued. At any given time, there may be 50 to 70 prisoners undergoing substitution treatment. The policy guidelines of the Criminal Sanctions Agency (2012) mention that an assessment and initiation process for substitution treatment will be set up in the criminal sanctions

sector to determine the criteria for starting substitution treatment, where to provide the treatment depending on the pharmaceutical used, and cooperation with civilian treatment institutions.

For instance, if substitution treatment assessment for an opioid addict is incomplete before the beginning of the prison sentence, the sentence may be deferred. Deferment may also be sought by reason of beginning interferon treatment for hepatitis C. Interferon treatment is not begun in prison; it is given in the prisoner's local hospital district after release. This also applies to life prisoners. Therefore, the constitutional right of prisoners to sufficient health care services is not fully implemented (Suhonen 2010).

Assessment during imprisonment, and drug rehabilitation

Health care employees assess the severity of a prisoner's intoxicant problem upon arrival. The printout from the entry interview and other data on the prisoner's state of health may, with the prisoner's written consent, be disclosed to other units. In drawing up the prison sentence plan, the Assessment Centre will take the prisoner's substance abuse rehabilitation needs and the severity of his/her substance abuse problem into account, and this will influence prisoner placement. Drawing up the prison sentence plan also involves finding out what other problems the prisoner may have that need to be addressed during the sentence. Substance abuse rehabilitation needs and motivation are established on a case-by-case basis through motivating substance abuse interviews, guidance and advisory services in prison.

In exploring a prisoner's intoxicant use, it is established whether the prisoner agrees on the necessity to address the problem and whether he/she is willing to undergo rehabilitation. Health care advice may be provided as necessary, and connections between the intoxicant problem and mental health problems, relationship problems or family problems may be explored. The assessment also surveys the prisoner's resources (strengths, availability of support) that will help him/her cope with the intoxicant problem.

Substance abuse rehabilitation in prison consists of a substance abuse rehabilitation needs assessment, substance abuse rehabilitation guidance, motivational instruction, relapse treatment, group-format rehabilitation programmes of varying intensity, personal therapy, the possibility of placement in an external substance abuse treatment facility, release training and networking services after release.

The motivation and effectiveness programmes used in prisons must be approved through an accreditation procedure. The preference is for international programmes with research findings to back up their effectiveness. In addition to group sessions, one-on-one discussions are held with prisoners for whom group work is not suitable; they can discuss substance abuse issues in confidence by appointment. One-on-one discussions are also often used as an extension of group sessions. Peer groups in prison (NA and AA groups) and KRIS-Finland are important contributors to abstinence from

substance abuse. Instead of regarding prison as an isolated bubble, contacts with the outside world must be emphasised, and services outside the prison should be available even while in prison.

Table 23. Participants in rehabilitation programmes in prisons, 2008–2012.

Participants in rehabilitation programmes in prisons	2008	2009	2010	2011	2012
Participants in accredited activities to prevent recidivism	262	288	313	424	406
Participants in accredited substance abuse rehabilitation programmes	636	444	440	355	311
Total	898	732	753	779	717

Drug use involves not only health threats but social complications too, and addressing these requires cooperation with various actors. Leveraging and developing partnerships with local authorities, the third sector and other actors will become increasingly important. Attention must be paid to the wellbeing of persons close to offenders, particularly their family and children. An open, neutral and non-judging approach is needed for encountering persons with intoxicant problems and preventing their adverse impacts. Substance abuse services in the criminal sanctions sector requires close cooperation with health care services, substance abuse services, social services and the police.

The aim is for prisoners and clients to be able to participate in an appropriately progressing and unbroken substance abuse rehabilitation process while serving their sentence. Remand prisoners are often in a vulnerable life situation and susceptible to influences, and they may be seeking a way to escape their problems and their criminal way of life.

9.4 Reintegration of drug users after release from prison

Rehabilitation during institutionalisation should progress from information and motivation to actual substance abuse rehabilitation. The imprisonment process progresses from confinement to a more open environment. A release plan must be prepared together with the prisoner in good time before probationary freedom, parole or final release. In 2012, 1,609 prisoners were released from institutions; only about half of them had a release plan in place. A release plan had been drawn up in networked cooperation for only about one third.

Bridges between prison and freedom may be built through new types of sanction, probationary freedom and electronic monitoring sentences under which the prisoner is free but monitored and required to remain intoxicant-free. In 2012, 544 prison-

ers were released on probationary freedom, more than five times as many as in 2007. Based on the experience gathered, probationary freedom appears to be an effective means of reducing the risk factors associated with release from prison, such as relapsing into substance abuse and subsequently returning to a vicious circle of crime. (Mohell 2009.) The Act on electronic monitoring sentences (330/2011) entered into force on 1 November 2011. As at 1 May 2013, there were 45 prisoners serving an electronic monitoring sentence. A person with an electronic monitoring sentence must comply with the daily programme and movement restrictions imposed on him/her. Absolute abstinence from intoxicating substances is also required, and this is monitored through tests. The ideal outcome is that probationary freedom is combined with a rehabilitating and integrating approach supporting the prisoner's functional capacity. (Probation Foundation Finland 2013.)

Becoming intoxicant-free in prison will not guarantee that the prisoner's substance abuse problem will remain under control after release unless the prisoner is provided with external support measures on the outside. Under the Prison Sentences Act, the release and monitoring plan must be prepared in cooperation with the local authority of the prisoner's home municipality or municipality of residence and other authorities so that measures begun in prison – particularly substance abuse services – may continue uninterrupted after release. Local authorities' capacity for and commitment to such services varies. Nevertheless, local authorities are required by law to provide social welfare and health care services for local residents. (Criminal Sanctions Agency 2012a; Probation Foundation Finland 2013.)

There are many NGOs involved in the integration of released prisoners into society. These, along with local government social welfare and health care services, refer substance abusers to specialised substance abuse services (e.g. A-Clinics, youth stations, detoxification units, rehabilitation institutions and Järvenpää Social Hospital) and peer groups (AA, NA, A-Guild, Probation Foundation Finland) with low-threshold meeting places. Not all NGOs approve of substitution treatment. The Probation Foundation Finland is a national expert organisation and post-care service provider whose projects combine resources from the criminal sanctions sector, local government and NGOs. The Foundation's services include instructor training for the 'Terve' prisoner course aiming to reduce the adverse impact of drug abuse and the provision of support accommodation for prisoners on probationary freedom. (Probation Foundation Finland 2013.)

The Regional Prison of Southern Finland and City of Helsinki Social Services Department engage in rehabilitation work for prisoners with substance abuse problems (Kuva); prisoners enter the system when they are transferred to open prison and continue with the same contact persons as during their imprisonment. Selected prisoners participate in work rehabilitation provided by the City and therapeutic outpatient rehabilitation provided by A-Clinic substance abuse services. The Probation Foundation Finland and Sillanpirtti collaborate on the TUVAT project, with a six-bed unit at Sillanpirtti providing accommodation and coaching services for released prisoners.

The Vahvasti tukien (Strongly supporting) project is developing a rehabilitation programme known as VAHVAT for released prisoners with substance abuse problems in the Helsinki metropolitan area. The rehabilitation is undertaken in open small group sessions in Helsinki. The Probation Foundation Finland maintains an online portal named 'Gateway to freedom' intended for convicts and persons close to them, and for professionals working with them in local and central government and in the third sector. The portal logged some 90,000 visits in 2012. (Probation Foundation Finland 2013.)

10 Drug markets

Internationalisation has had an impact on drug-related crime. Major and aggravated narcotics offences investigated by the police indicate that, in general, the drug trade is professional and strongly dominated by organised crime groups. However, despite these international trends Finland is not a prime target in the worldwide drug trade due to its remote location and relatively small population. Also, there is a very low level of corruption in the police, and society at large is geared towards rooting out organised crime. (Perälä 2011.)

In drug supply in Finland, organised crime groups from Estonia have played an important role – at the beginning of the 21st century in terms of smuggling and importing drugs and later on as collaborators with Finnish crime groups, supplying drug consignments for distribution and delivery. Estonian criminals continue to be major players in cross-border drug-related crime in the Finnish context, but criminals from Finland and other countries have been increasing their activities. (National Bureau of Investigation 2014.)

On the one hand, the drug market seems like an organised and professional operation. On the other hand, the market is made up of several levels, where upper-level importers and wholesalers, mid-level distributors and low-level street dealers operate in different ways. Research shows that drug dealing in Helsinki, whether we consider the very top or the very bottom of the pyramid, is a far from rational pursuit. It is motivated more by intoxicant addiction or multiple addictions and other problems than by any organised effort. (Perälä 2011.)²⁵

The drugs on the Finnish market are mostly cannabis products, particularly home-grown marijuana or hashish; amphetamines and ecstasy and other synthetic drugs; the substitution treatment preparation, Subutex; and many pharmaceuticals classified as narcotic substances, particularly benzodiazepines. The number of marijuana, cannabis plant and hashish seizures has grown in the 2000s, which indicates that the fairly small-scale cultivation of drugs partly intended for sale has become more common. Designer drugs are increasing in popularity in Finland. Cocaine has been appearing on the Finnish market more frequently in the past 10 years, but it remains rather a marginal drug. The volume of heroin on the Finnish market remains very low. The intoxicant use of Subutex, by contrast, remains high in Finland. (National Bureau of Investigation 2014.)

25 The study material was mostly collected through ethnographical field work, including observations and interviews. Interviews with officials and minutes of pre-trial investigations concerning aggravated drug crimes are also included. The study takes a constructionist viewpoint, according to which language shapes reality. Therefore people evince differing conceptions of reality in their speech.

10.1 Availability and supply of drugs

No truly open drug market, such as those found in some major cities in Europe, exists in Finland; most of the sale and use of illegal drugs takes place in private homes (Kinnunen 2008). Home growing of cannabis has increased considerably in Finland, and this is reflected in the volume of seizures. The number of seized cannabis plants has tripled since 2007, which is probably due to the increased popularity of home growing and the fact that seeds are easy to buy over the Internet, and also due to the authorities becoming more effective at combating home growing. Although home growing mainly involves small-scale operations, it is becoming increasingly professional in nature. A number of expertly set up cultivation facilities with more than 500 plants have been discovered in Finland. In 2013, two cultivation facilities with more than 1,000 plants were discovered. In Finland as elsewhere in Europe, criminal motorcycle gangs have taken up cultivation of cannabis. (National Bureau of Investigation 2014.)

Cases of home-grown cannabis in Finland usually involve cultivation for the grower's own use, with cultures of no more than 20 plants. In the five most severe sentences imposed by a district court for home growing in 2002 and 2003, the average number of plants involved in the offence was 11, the median being 6. The largest culture consisted of 130 plants. (Kainulainen 2006; 2011.) A study conducted among home growers of cannabis supported this, noting that the overwhelming majority of respondents were growing 1 to 5 plants at a time. These findings show that domestic production has increased in significance and that marijuana has surpassed hashish as the leading cannabis product. Using marijuana grown by the user himself/herself or obtained from a grower known to the user is now more common than buying marijuana on the market. (Hakkarainen et al. 2011a.)

Most growers order their seeds (chemically treated seeds that produce pistillate plants) over the Internet, are given them by people they know, or obtain them from their own cultivation. Detailed growing instructions may also be found online. Home cultivation is also facilitated by the availability of necessary equipment – which in itself is legal – at certain shops favoured by growers. Home growing cases are uncovered all around Finland, but particularly in the major cities. The flower of a cannabis plant of a high-quality variant and grown under favourable circumstances can have a THC content of more than 10%. In the street trade, a cannabis flower is more valuable than low-grade hashish. (National Bureau of Investigation 2014.)

No websites selling drug-like substances aimed specifically at the Finnish market have been detected. However, people are increasingly ordering cannabis seeds, designer drugs, medicines and GBL online from abroad in small quantities for their personal use. GBL or 'lakka'²⁶ in particular is ordered by mail and express cargo from the Netherlands, the UK and Poland, but also imported from Germany via Estonia. The foreign

26 Gamma-butyrolactone (GBL), known in colloquial Finnish as 'lakka', is a substance governed by the Medicines Act and used as a cleaning agent and industrial chemical.

companies selling these substances clearly state on their websites that the stuff they are selling is 100% GBL, which metabolises into GHB or 'gamma' in the body. The substance is sent to customers in plastic bottles whose labels indicate that they contain cleaning agents, for instance. Users also order batches of designer drugs for their own use over the Internet, as is shown by the considerable increase in the number of parcels containing designer drugs sent by post. (National Bureau of Investigation 2014.)

Import and the drug market

Drug-related crime has robust international connections. In recent years, 24% to 39% of those suspected of aggravated narcotics offences in Finland have been foreigners. The largest groups of suspects were Estonians and Russians or Russians living in Estonia. On the Finnish market, Finnish criminals generally manage the reception and distribution of drugs in Finland, while foreigners are engaged in import and smuggling. In 2012, foreigners accounted for about 9% of all persons suspected of narcotics offences. (National Bureau of Investigation 2014; Statistics Finland 2013.)

Drugs are imported to Finland by land concealed in cars, vans and trucks. Couriers carry drugs concealed in their clothes and luggage and, increasingly, within their bodies. Drugs are also imported by sea in cargo ships, fast ferries and private yachts. Drugs also arrive by air, although the number of large batches of drugs brought in with tourist traffic by air has decreased due to tighter security screening of both passengers and luggage. Instead, larger quantities are flown in by air cargo and through courier companies. In most cases, imported drugs are transferred via a cache, the seller hiding the stuff and then drawing a map or making a note of the GPS coordinates of the location. Cache maps are tradeable commodities on the criminal market. (National Bureau of Investigation 2014; Perälä 2011.)

The majority of drugs are smuggled onto the Finnish market through various routes, particularly from the south and west. According to the police, most of the amphetamines on the Finnish market today come from western Europe, being smuggled in through Sweden and Estonia, for instance. Today, amphetamine import is highly systematic and on a large scale. The usual scheme sees the Estonian dealers cache the amphetamine, with the Finns buying a map using which they retrieve the product. (National Bureau of Investigation 2014.)

Hashish, in turn, originates in Morocco, passing first through Spain, the Netherlands or Germany and then by sea, through Scandinavia or the Baltic countries. Hashish smuggling within the bodies of couriers has also become more common. Customs have found in criminal investigations that smuggling of khat is also an organised business involving large sums of money. Most khat seizures are made from airline passengers, but the use of airmail and overnight courier services has increased in recent years. Khat is also smuggled into Finland concealed among legitimate cargo for instance in refrigerated transport. (National Bureau of Investigation 2014.)

Russia has been a significant route, especially for smuggling heroin, but heroin also reaches Finland via other routes. However, the total volume of heroin on the Finnish drug market has been very low for years. The lack of treatment services and the decreased supply of Subutex on the illegal market may increase the demand for heroin. In addition, Finland is a potential route for the international smuggling of heroin from Russia to elsewhere in Europe. The threat of drug smuggling via the Nordic countries (including Finland) to Russia is also a point to consider, as drugs are being smuggled through the northeastern corner of the EU to Russia in particular, especially by Lithuanian criminal groups active in international cocaine trafficking. Potential smuggling of designer drugs via Finland to Russia should also be given special focus. (National Bureau of Investigation 2014.)

A study on the drug market in Helsinki reveals that the operations are separated into distinct levels. The actors and modus operandi are different on each level, albeit there may be some overlap between them. The actors on the upper level are better than other operators at avoiding being caught. There are considerably more mid-level actors than there are upper-level actors. A mid-level dealer usually operates with a small circle of mates. This consists of a handful of trusted persons. They do not have as high a status and are not as technically proficient as the actors on the upper level. They use their own product in larger quantities and in a less controlled way than the upper-level actors. Nevertheless, both in Helsinki and abroad the mid-level dealers are considered the most important people on the drug market, because it is through them that the upper-level actors gain their revenue. (Perälä 2011.)

The lower level is made up of gramme dealers and users. A batch of drugs may be resold one gramme or one pill or one 'fix' at a time. All of the lower-level actors themselves use the drugs they sell, their sales are small in volume, and there are considerably more actors on the lower level than on the other levels. The operations here are often quite brutal. Drug use brings a measure of uncertainty to the running of the system and erodes trust between actors. Everyday life becomes chaos as verbal agreements fail to be honoured. By contrast, the authorities have become very good at controlling this level with tactical means. (Perälä 2011.)

Smuggling of pharmaceuticals classified as drugs

Using intoxicating pharmaceuticals as drugs is very common among Finnish substance abusers. In response to demand, the illegal street trade focuses on tranquilisers and anti-anxiety medication intended for neurosis and depression, and on strong painkillers and analgesics. Acquiring intoxicating pharmaceuticals is done particularly by exploiting the lack of centralised monitoring of the dispensing of pharmaceuticals: prescriptions are obtained from several physicians, and the pharmaceuticals thus obtained are both sold on the illegal market and used by the users themselves. The introduction of the ePrescription will not completely resolve this

issue, but it may curb ‘doc shopping’ among problem users. Pharmaceuticals are also obtained from abroad, typically by ordering them online from a variety of countries. More than 90% of these pharmaceuticals arrive by mail; the largest amounts have been confiscated from mail arriving from the UK and the Far East. The Schengen enlargement has boosted the importance of smuggling on the illegal market in intoxicating pharmaceuticals, and smuggling particularly from the Baltic states to Finland has increased. With the end of ‘legal drug tourism’, smuggling drugs within the body has become more common in the traffic between Finland and Estonia. There is a lively tourist trade in pharmaceuticals in Estonia; substantial quantities of benzodiazepines are imported from Estonia to Finland, mainly by ship passengers. Drug tourism to the Far East is also becoming more common, and many airline passengers bring back intoxicating pharmaceuticals from Thailand, for instance. (National Bureau of Investigation 2014; Customs 2014.)

The import routes for Subutex have been realigned after Estonia and Latvia joined the Schengen zone. Subutex is now often smuggled from France to Finland via the northern route, through Sweden. Buprenorphine has gained more ground in Sweden and Norway, and smuggling from these countries to Finland has increased, as is shown by the seizure of large batches of Subutex en route to Finland in Sweden. Northern Finland has become a significant market area for Subutex, which has now become a problem drug in the northern reaches of the country too. Traditionally, the shipping route between Tallinn and Helsinki is a major channel for Subutex smuggling. For instance, batches of up to 1,000 Subutex tablets have been confiscated in border checks at passenger ports in Helsinki from Lithuanian couriers arriving in Finland. (National Bureau of Investigation 2014.)

Drug production facilities

Trade in the precursors required for drug production is often associated with legal business operations, but some legally transported chemicals may also end up in the production of drugs in Finland’s neighbouring areas. In terms of the trade in precursors, Finland occupies a high-risk position: there are illegal drug production facilities in Russia and in all the Baltic states, and Finland engages in trade in chemicals or through transport of precursors with all these countries. No significant precursor seizures have been conducted in Finland. Precursor seizures are an effective means of preventing drug production and rendering it more difficult. (National Bureau of Investigation 2014.)

10.2 Drug seizures

Data on drug seizures indicate that the situation prevailing on the Finnish drug market is fairly stable. The volumes of seizures of the most popular imported drugs are crucially affected by the results of investigative operations by the law enforcement authorities focusing on large-scale smuggling. Thus, seizures of hashish, amphetamine and ecstasy have varied considerably from one year to the next. The number of designer drug discoveries, types of designer drug and types of intoxicating herbal product remains considerable, and the increasing popularity of ordering designer drugs online is apparent in the work of the Customs authorities in particular. In 2013, Customs discovered about 100 types of designer drug, of which about 20 had never been seen before. Those most common on the drug market are GBL or 'lakka', synthetic cannabinoids, methylone, methiopropamine and ethylphenidate, which is a psychostimulant designer drug made from pharmaceuticals. (National Bureau of Investigation 2014; Customs 2014.)

Table 24. Drugs recorded as seized by the police and Customs in 2003–2012.

	2003	2004	2005	2006	2007	2008***	2009***	2010***	2011***	2012***	2013***
Hashish (kg)	423.1	467.4	430.6	282.7	360	47	440	250	860	Cannabis products (hashish and marijuana) total 714	122
Marijuana (kg)	45.3	25.8	43.4	32.9	36	56	100	80	97	See above	285
Cannabis plants (pcs)		7,840	9,460	7,510	7,600	14,000	12,500	15,000	16,400	18,150	23,000
Cannabis plants (kg)*	20.4	41.7	43.3	36.2	87	41	45	31	42	66	62.5
Amphetamine +											
Methamphetamine ** (kg)	114.6	108.6	116.6	129	152	130 + 17	110 + 5	113 + 39	71 + 28	124 + 15	84 + 7,4
MDPV (kg)							4	9.5	2.4	5.1	5.3
Cocaine (kg)	1.1	1.1	1.2	6.5	4	3	2.8	4.2	3.5	25.7	4.5
Khat (kg)	1,879	2,118	2,562	3,283	3,300	2,250	3,300	4,700	5,800	1,920	4,767
Heroin (kg)	1.6	0.2	52.4	0.2	0.4	0.2	2	0.4	1	0.07	0.2
Subutex (tablets) (all buprenorphins as of 2012)	37,284	32,970	24,478	22,979	20,600	12,000	17,000	15,000	31,700	48,700	37,078
Ecstasy (tablets)	35,216	23,243	52,210	39,185	83,000	34,000	15,100	27,000	17,800	23,623	121,595
LSD (blotters)	1,461	195	452	171	2,138	3,082	620	790	1,260	1,102	3,965
Bromo dragonfly (blotters)							1,200	7,600	1,100	2,653	649
GBL+GHB** (litres)				24	91	150 + 9	84 + 2	37 + 5	930 + 2,5	228 + 1	265 + 0,7

* = In addition to the number of cannabis plants entered; mainly plant parts.

** = Combined until 2007, separate from 2008.

*** The criteria for calculating the annual statistics have been changed. The figures up until 2011 are based on amounts summed up from seizure protocols. The figures from 2012 are based on data from the Forensic Laboratory of the National Bureau of Investigation and from Customs. The number of cannabis plants, however, is still obtained from seizure protocols.

The annual volume of drugs found by lab testing differs from the volume of all drugs seized, particularly so in the case of the most common drugs. For instance, the total amount of amphetamine found at the Forensic Laboratory of the National Board of Investigation has been about 10% to 15% (about 7 to 15 kg) smaller per year than the amount of substance seized by the police as calculated from the seizure protocols. The differences are much smaller in the case of rarer substances, being negligible with cocaine and heroin.

Source: National Board of Investigation (2014).

In 2013, the number of cannabis plants seized – about 23,000 – was again higher than ever. (National Bureau of Investigation 2014.)

Amphetamine has long been the most popular of all synthetic drugs. Investigations and intelligence suggest that amphetamine is smuggled into Finland in batches of several dozen kilos. Smaller batches of a few kilos are also smuggled in for the wholesale market, concealed in vehicle structures and in luggage. Periodic shortages in the supply of amphetamine have been augmented with methamphetamine. (National Bureau of Investigation 2014.)

Alongside and among amphetamine on the market there are increasing amounts of methylenedioxypyrovalerone (MDPV), seizures of which in 2013 amounted to slightly over 5 kilos as in the previous year. (National Bureau of Investigation 2014.)

Ecstasy has been popular in Finland for quite some time, even though the annual volume of seizures has varied considerably in the past decade. In April 2013, the National Bureaus of Investigation of Finland and Estonia publicised a jointly investigated series of criminal activities in the course of which some 82,000 ecstasy tablets and a dozen kilos of amphetamine were seized. The senior investigating officer estimated that the suspects, both Finns and Estonians, smuggled hundreds of thousands of ecstasy tablets into Finland before being apprehended. In 2013, five times as many ecstasy tablets were seized as two years before, almost 121,600 tablets. This is the highest figure since drug seizures began in 1967. The number of aggravated narcotics offences increased by some 70% in Helsinki in 2013, mainly because of the large number of ecstasy cases. (National Bureau of Investigation 2014.)

In recent years, the police and Customs have seized some 1,000 blotters of LSD per year. In 2013, however, nearly 4,000 LSD blotters were seized, the highest annual number over a ten-year statistical period. (National Bureau of Investigation 2014.)

Cocaine has grown slightly in popularity on the Finnish market in the past few years, but it remains rather a marginal drug. In 2012, an exceptionally large amount of cocaine was seized: about 26 kg. However, 20 kg of this amount was en route to Sweden. The amount of cocaine seized in 2013 was close to the long-term average, about 4.5 kg. Cocaine users are generally young adults who are well off, and it is at young people's parties that cocaine use has mainly been reported. The overall level of use is difficult to estimate, because cocaine is generally used in private contexts. (National Bureau of Investigation 2014.)

The amount of seized heroin in Finland plummeted at the beginning of the 21st century. There is still very little heroin on the market. (National Bureau of Investigation 2014.)

Intoxicant use of Subutex and other buprenorphines remains very common in Finland. Using other intoxicating pharmaceuticals as drugs is also very common among Finnish substance abusers. Recently, the intoxicating commercial pharmaceuticals most commonly encountered in the illegal street trade have included Diapam, Dormicum, Opamox, Rivatril, Stesolid, Tenox and Xanor and the buprenorphine preparations Tem-

gesic and Subutex. In addition to the above, Lyrica (pregabalin) is very popular among substance abusers. (National Bureau of Investigation 2014.)

In 2013, about 265 litres of GBL (gammabutyrolactone) or 'lakka' were seized (National Bureau of Investigation 2014.)

The volume of khat, a drug favoured by users of Somalian origin, seized in Finland in 2013 was considerably greater than in the previous year, nearly 4,770 kg. (National Bureau of Investigation 2014.)

10.3 Price and purity of drugs

The street prices of drugs remained fairly stable in 2013. The price of marijuana remained at the previous year's level: 1 g of marijuana cost about EUR 15–20 on the street. The street price for hashish also did not increase on previous years, being about EUR 10–15 per gramme. Amphetamine typically cost EUR 15–35 in the street trade in southern Finland and between EUR 30 and 70 elsewhere in Finland, depending on the location. Methamphetamine prices were at about the same level. Depending on the quality and the location, heroin cost about EUR 100–200 per gramme, while cocaine sold for EUR 70–150 in southern Finland and EUR 120–150, sometimes more, elsewhere in the country. Ecstasy tablets cost EUR 15–20 on average on the street, and LSD blotters cost EUR 10–20 each for end users. (National Bureau of Investigation 2014.)

Substantial profits are currently being made on the Finnish drug market with Subutex. In an optimum scenario, Subutex tablets are bought in France at EUR 3.50–4.00 each, while in Finland a user will pay EUR 30–50 for a single tablet in the Helsinki metropolitan area and up to EUR 100–150 in northern Finland. The price is even higher for tablets smuggled into prisons. Occasionally the law enforcement authorities learn of forged Subutex tablets being sold to users on the street. A 0.5-litre bottle of GBL costs about EUR 60 when ordered online; the street price in Finland is EUR 1 to 20 per millilitre depending on the concentration. The price for intoxicating pharmaceuticals on the illegal market is EUR 1–3 per tablet nationwide, although benzodiazepines may sell for anything up to EUR 5 per tablet. (National Bureau of Investigation 2014.) A single dose of khat is 150 to 250 grammes and costs about EUR 25 when fresh. (Perälä 2011.)

Finnish street prices for drugs vary greatly depending on the sales location: prices in the Helsinki metropolitan area and southern Finland are usually clearly lower than in provincial cities. In regional centres, the price of amphetamines, popular among hard drug users, may be well be double that of Helsinki. Cocaine and Subutex also clearly cost more outside the Helsinki metropolitan area. Unlike the prices of smuggled drugs, marijuana prices do not show regional variation. However, under special conditions, such as when drugs are smuggled into a prison, prices may be very high on a case-by-case basis. (National Bureau of Investigation 2014.)

Laboratory tests at the Forensic Laboratory of the National Bureau of Investigation or the Customs Laboratory are conducted to establish whether samples obtained in the

course of an investigation or in a seizure contain substances or preparations classified as narcotic drugs, pharmaceutical substances or doping substances, or new unclassified intoxicating substances, i.e. designer drugs. The Forensic Laboratory also investigates the illegal manufacture of narcotic drugs. Drug batches are compared to establish whether two (or more) batches were manufactured at the same laboratory or come from the same original batch. Such comparisons are frequently performed between batches of amphetamines in particular. (National Bureau of Investigation 2014.)

No significant changes in the average concentration of the drug batches analysed were observed in 2013. The average concentration of amphetamine (16% by weight) remains very low (average concentration in 2012: 15% by weight; 2011: 17% by weight; 2010: 20% by weight, and 2007: 29% by weight). Concentrations have been close to the street trade level even in imported batches weighing more than 1 kg. The same is true of methamphetamine concentrations. (National Bureau of Investigation 2013.)

Appendix 1.

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