

European Monitoring Centre for Drugs and Drug Addiction



# 2009 NATIONAL REPORT TO THE EMCDDA by the Finnish National Focal Point, THL

## FINLAND DRUG SITUATION 2009

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

REITOX

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## Foreword

*Finland – Drug Situation 2009* is an annual drug report by the Finnish National Focal Point. The report consists of two parts. Part A discusses the latest developments and research data from recent years, mainly focusing on 2008 and early 2009. 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. Part B discusses selected issues relating to drugs, this year's theme being the market for and production of cannabis and the use of amphetamines.

Planning Officer Marke Jääskeläinen (THL) wrote Subsection 1.3 concerning drug-related expenditure and Researcher Jussi Perälä (Finnish Foundation for Alcohol Studies) wrote Sections 11 'Market and production of cannabis' and 12 'Problem amphetamine use'. In addition, Researcher Tuija Hietaniemi (National Bureau of investigation) wrote a significant portion of Section 10. The report was compiled and the remaining sections written by Senior Planning Officers Sanna Rönkä and Ari Virtanen at the Finnish National Focal Point, which operates at the National Institute for Welfare and Health.

The following persons have given valuable expert comments on the report or its parts: Martta Forsell, THL; Pekka Hakkarainen, THL; Ulla Knuuti, Criminal Sanctions Agency: Kristiina Kuussaari, THL; Jarmo Kärki, THL; Outi Meriläinen, THL; Leena Metso, THL; Leena Metsäpelto, Office of the Prosecutor General; Immo Parviainen, Ministry of Education. 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 English and in Finnish.

Finland – Drug Situation 2009 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 report *The state of the drugs problem in Europe*.

Helsinki, November 2009

Sanna Rönkä Senior Planning Officer Ari Virtanen Senior Planning Officer Finland drug situation 2009

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## Summary

**Editors** Sanna Rönkä and Ari Virtanen. **Authors** Sanna Rönkä, Ari Virtanen, Marke Jääskeläinen, Tuija Hietaniemi and Jussi Perälä. Finland – Drug Situation 2009. National Report to the EMCDDA. [Huumetilanne Suomessa 2009. Kansallinen huumevuosiraportti EMCDDA:lle]. National Institute for Health and Welfare (THL) Report 45/2009. 153 pages. Helsinki 2009.

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After the mid-1990s, the drug situation in Finland deteriorated according to nearly all indicators (experimentation, problem use, health detriments, morbidity, mortality, criminality and seizures). However, since 2000, drug use and the growth in drug-related harm have levelled off; although problem use growth only stabilised some years after the other indicators. In recent years, the situation has remained stable with the exception of drug-related mortality, which has shown an increase.

According to the population study's results from 2006 and preliminary results from 2008, the share of 15–69-year-olds who had experimented with cannabis sometime in their lives was 13%. This level was almost the same as in all surveys since 2000, and three percentage points higher than in 1998. In the 2006 study, the percentage was 12% among women and approximately 16% among men. The proportion of 15–34-year-olds (22%) remained the same in 2002 and 2004. However, changes have taken place within the latter age group: between 2002 and 2006, the proportion of 15–24-year-olds decreased by 6 percentage points whereas the proportion of 25–34-year-olds grew by the same amount.

Among young people, experimentation with drugs decreased in the late 2000s. According to the ESPAD survey of school pupils in 2007, 8% of 15–16-year-olds had experimented with cannabis sometime in their lives. In 2003 and 1999, the corresponding figures were 11% and 10%.

The number of problem drug users is estimated in Finland based on the number of problem users of amphetamines and opiates, which came to 14,500–19,100 in 2005, representing 0.5–0.7% of 15-54-year-olds among the entire population. Nearly four fifths of problem drug users used amphetamines. The proportion of men was almost 80%. The majority of problem drug users belonged to the 25–34-year age group.

Studies indicate that the prominent role of alcohol as an additional substance, intravenous use of buprenorphine and co-occurring mental health disorders are typical of Finnish problem drug use. A census of intoxicant-related cases, conducted during one day in 2007 among those attending the services of social and health care units, revealed that approximately a quarter of problem users of intoxicating substances and individuals who had sought help while intoxicated or due to a single use occurrence also used drugs. Based on a study on waiting times for drug treatment, the condition of clients waiting to access inpatient detoxification at substance abuse services has deteriorated somewhat, and the number of those waiting to access substitution treatment has increased to some extent. According to studies, the number of individuals attending substitution treatment is estimated at 1,200. Bottlenecks in accessing substitution treatment include the transfer from treatment need assessment to regular outpatient substitution treatment. Substitution treatment for opiate addicts is increasingly being transferred to health centres and, in part, also to pharmacies.

The number of drug-related deaths has increased slightly over recent years, while the situation has remained stable for other drug-related harm. However, the number of new HIV and hepatitis infections among intravenous drug users has decreased since 2000. In particular, low-threshold services and their development have been essential in preventing and reducing infectious drug-related diseases. Indeed, health counselling and the exchange of clean needles and syringes have clearly succeeded in preventing HIV and hepatitis infections.

Problem drug users are usually socially marginalised. In 2008, 64% of drug treatment clients were unemployed and 11% were homeless. The number of narcotics offences entered into police records remained unchanged from the previous year. Drugs on the Finnish market are mainly cannabis products, synthetic drugs such as amphetamines and ecstasy, buprenorphine and benzodiazepines. The supply of heroin is scarce.

Keywords

drugs, drug policy, treatment, prevention, public expenditures, sanctions, drug statistics

## Tiivistelmä

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Suomen huumetilanne paheni 1990-luvun puolivälistä alkaen lähes kaikkien mittarien (kokeilut, ongelmakäyttö, terveyshaitat, sairaudet, kuolemat, rikollisuus, takavarikot) mukaan. Huumeiden käyttö ja käyttöön liittyvien haittojen kasvu tasaantuivat vuosituhannen vaihteen jälkeen, ongelmakäytön kasvu muutama vuosi muita myöhemmin. Viime vuosina tilanne on ollut muilta osin vakaa, mutta huumausaineisiin liittyvät kuolemat ovat lisääntyneet.

Kannabista joskus kokeilleiden osuus 15–69-vuotiaassa väestössä oli vuoden 2006 väestökyselyn ja 2008 kyselyn ennakkotietojen mukaan 13 %. Taso oli lähes sama kuin kaikissa 2000-luvun kyselyissä ja kolme prosenttiyksikköä korkeampi kuin vuonna 1998. Vuoden 2006 kyselyssä naisista kokeilleita on 12 % ja miehistä noin 16 %. 15–34-vuotiaiden osuus (22 %) on vuosina 2002 ja 2004 pysynyt samana. Sen sijaan muutoksia on tapahtunut jälkimmäisen ikäluokan sisällä: vuodesta 2002 vuoteen 2006 15–24-vuotiaiden osuus laski 6 prosenttiyksiköllä, kun taas 25–34-vuotiaiden osuus vastaavasti kasvoi saman verran.

Nuorten keskuudessa huumausaineiden kokeilut ovat vähentyneet 2000-luvun lopussa. Vuoden 2007 ESPAD-tutkimuksen mukaan 15–16-vuotiaista koululaisista 8 prosenttia oli kokeillut kannabista joskus elämänsä aikana. Vastaava luku oli 11 prosenttia vuonna 2003 ja 10 prosenttia vuonna 1999.

Huumausaineiden ongelmakäyttäjien määrää arvioidaan Suomessa amfetamiinien ja opiaattien ongelmakäyttäjien määrällä, joka oli 14 500–19 100 vuonna 2005, mikä on 0,5–0,7 % maan 15–54-vuotiaasta väestöstä. Lähes neljä viidestä ongelmakäyttäjästä oli amfetamiinin käyttäjiä. Miesten osuus oli lähes 80 %. Eniten ongelmakäyttäjiä oli 25–34-vuotiaiden ikäryhmässä.

Tutkimusten mukaan suomalaiselle huumausaineiden ongelmankäytölle tyypillistä on alkoholin vahva asema oheispäihteenä, buprenorfiinin pistoskäyttö ja samanaikaiset mielenterveyden häiriöt. Vuonna 2007 toteutettiin yhden päivän aikana ns. päihdetapauslaskenta, jonka mukaan sosiaali- ja terveyspalvelujen toimintayksikössä asioineista päihteiden ongelmakäyttäjistä, tai henkilöistä, jotka hakivat apua päihtyneenä tai päihteiden kertakäyttöön liittyvän haitan vuoksi, noin neljännes käytti myös huumausaineita. Huumehoidon hoitojonotilannetta koskevan selvityksen mukaan päihdehuollon laitoskatkaisuun jonottavien asiakkaiden kunto on hieman heikentynyt ja korvaushoitoon jonottavien määrä jonkin verran lisääntynyt. Tehtyjen selvitysten perusteella korvaushoidossa arvioitiin olevan 1 200 henkilöä. Korvaushoitoon pääsyn ongelmana on hoidon tarpeen arvioinnista siirtyminen säännölliseen avohoidossa toteutettavaan korvaushoitoon. Opiaattiriippuvaisten korvaushoitoa ollaan siirtämässä aiempaa enemmän terveyskeskuksiin ja osin myös apteekkien vastuulle.

Huumausaineisiin liittyvät kuolemat ovat olleet viime vuosina hieman lisääntyneet, samaan aikaan kun muiden huumehaittojen osalta tilanne on ollut vakaa. Uusien hiv- ja hepatiittitartuntojen määrä pistoskäyttäjien joukossa on 2000-luvulla laskenut. Huumeiden käyttöön liittyvien tartuntatautien ehkäisyssä keskeistä toimintaa ovat olleet matalan kynnyksen palvelut ja niiden kehittäminen. Terveysneuvonnalla ja puhtaiden välineiden vaihdolla on pystytty selvästi ehkäisemään hiv- ja hepatiittitartuntojen leviämistä.

Huumausaineiden ongelmakäyttäjät ovat usein hyvin syrjäytyneitä. Huumehoidon asiakkaista 64 % oli työttömiä ja 11 % asunnottomia vuonna 2008. Poliisin tietoon tulleiden huumausainerikoksien määrässä ei tapahtunut muutosta edellisvuoteen verrattuna. Suomen huumausainemarkkinoilla esiintyy kannabistuotteita, synteettisistä huumausaineista amfetamiinia ja ekstaasia, buprenorfiinia sekä bentsodiatsepiinilääkevalmisteita. Heroiinia on tarjolla niukasti.

### Asiasanat

huumeet, huumepolitiikka, huumehoito, ehkäisevä päihdetyö, julkiset kustannukset, seuraamukset, huumetilastot

# A. NEW DEVELOPMENTS AND TRENDS

# 1 National policies and context

Anti-drug activities are largely based on long-term policy choices and the societal structures that steer those choices. Structures for drug prevention consist of drug legislation and strategies on whose basis drug policy and action plans are steered. Anti-drug activities (prevention, treatment, reduction of drug-related harm, drug control) become concrete in the implementation of legislation, strategies and action plans.

Many national approaches and activities are related to international systems and agreements regarding drug policy. The resources allocated to these activities also play an important role in the drug policy's implementation.

The new Narcotics Act (373/2008) entered into force as of the beginning of September 2008. This reform aligned Finnish drugs legislation dating from 1994 with the corresponding EC regulations. The new legislation enhances drug control by increasing co-operation between authorities, while national drug policy guidelines remain the same in other respects. The Decree on Narcotics Control (548/2008) related to the Act lays down provisions on licence administration and its supervision under the Narcotics Act, while the Decree on substances, preparations and plants considered as narcotics (543/2008) lists the substances and preparations defined as narcotics in the UN conventions on narcotic drugs and psychotropic substances.<sup>1</sup> Provisions concerning drug precursors are laid down in Regulation (EC) 273/2004 of the European Parliament and of the Council and in Council Regulation (EC) 111/2005.

Narcotics offences are specified in the Penal Code (1304/1993), whereby they are categorised as narcotics offences, or the preparation or abetment of narcotics offences (maximum sentence 2 years' imprisonment) or as aggravated narcotics offences (1–10 years' imprisonment). In 2001, an amendment was made to the Penal Code (654/2001) which introduced the unlawful use of narcotics (maximum sentence ½ years' imprisonment) and, in 2006, the preparation of a narcotics offence and abetting a narcotics offence were defined as punishable acts (928/2006). The definitions of narcotics offences were updated and specified by the amendment (374/2008) to Chapter 50 of the Penal Code based on the new Narcotics Act.<sup>2</sup> This amendment (578/2008) concerning fines in the Penal Code rendered impossible the conversion of a fine imposed in summary penal proceedings (for instance in the context of unlawful use of narcotics) to a sentence of imprisonment.<sup>3</sup>

Provisions concerning preventive substance abuse work are laid down in the Temperance Work Act (828/1982). This Act defines the purpose of temperance

<sup>1</sup> See further information under Section 1.1.1.

<sup>2</sup> See further information under Section 1.1.2. (supply reduction).

<sup>3</sup> See further information under Section 1.1.2. (implementation of legislation).

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 the State and municipalities.

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 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. (477,478,479/2003.)

The Government Decree on welfare clinic services and school and student health services (380/2009) specifies that the general contents of health counselling must include evidence-based knowledge on the prevention of, say, alcohol and other substance abuse. Furthermore, it specifically states that student health care must include the early diagnosis and treatment of a substance problem and referral for further treatment.<sup>4</sup>

The Occupational Health Care Act (1383/2001, 376/2008) 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 (760/2004, 456/2007). The Act on the Protection of Privacy in Working Life (759/2004) and its amendments (375/2008, 511/2008) regulate employers' rights and their limitations concerning drug tests required from employees.

Treatment for drug users is regulated under 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. Decree 993/2006 issued by the Ministry of Social Affairs and Health lays down the provisions for statements rendered by a referring physician, as stated in the Act on Welfare for Substance Abusers, in the event of an individual being required to undergo involuntary treatment because their life is at risk.

A new decree was issued on the detoxification, substitution and maintenance treatment of opioid addicts (33/2008), aimed at providing a better response to the increased problem use of opioids in the current decade.<sup>5</sup> The amendment to the Decree on Prescription of Medicines (490/2008) provided specifications for the

<sup>4</sup> See further information under Section 1.1.2. (prevention).

<sup>5</sup> See further information under Section 1.1.2. (treatment).

prescription of a psychotropic or narcotic substance as a preparation requiring special authorisation in cases which involve a special therapeutic justification.<sup>6</sup>

The amendment to the Communicable Disease Act (1383/2003) 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, the Decree 421/2004 recommends free hepatitis A and B vaccines for intravenous drug users, their sexual partners and individuals living in the same household.

Drug issues are also considered in the Penal Code regarding money laundering (68–79/1998) and driving while intoxicated (1198/2002), and the amendment to the Coercive Measures Act (646/2003), which lays down the conditions for telecommunications interception, telecommunications monitoring and technical surveillance. Furthermore, provisions concerning drug issues are laid down in the amendments to the Police Act (21/2001, 525/2005), regulating undercover operations and fictitious purchases and principal information gathering methods relating to the prevention, detection and enhanced investigation of serious and organised crime or to the prevention of any preparations to commit a terrorist offence.

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 operational abilities – and where he/she does not use intoxicating substances and observes the terms and conditions stipulated for free movement.

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 (for 2004–2007) and 2007 (for 2008–2011).

According to the latest resolution, pertaining to 2008–2011, 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, so enabling early treatment for those suffering from drug problems and imposing penal liability on those guilty of illegal action. 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 2007.)<sup>7</sup>

<sup>6</sup> See further information under Section 1.1.2. (treatment).

<sup>7</sup> See further information under Section 1.2.

With respect to the drug strategy of 1997, the report of the committee for preventing drug use among young people was prepared in 2000, and the report of the working group on drug treatment in 2001. In addition, the police have produced an anti-drug strategy (2002) for 2003–2006 and the Prison Service (2002) has drawn up a substance abuse strategy (Sections I–III), which has subsequently been supplemented by a new strategy for 2005–2006. Customs have also produced a drug strategy for 2002–2005. Furthermore, a joint drug strategy (PTR) has been drawn up by the police, Customs and the Border Guard.

Drug control, the prevention of drug use and treatment for drug users are addressed in a variety of key documents relating to the current Government's action programme. In the Government Programme (2007) of Matti Vanhanen's second cabinet, the approach to substances (including drugs) forms an important element in the development of primary social and health care services. The Programme emphasises the importance of early intervention as an established part of primary health care as well as securing treatment for substance-abusing pregnant women and providing support services for the children of those with substance problems.

These objectives are shared by the Framework Act governing the restructuring of municipalities and services (169/2007), the Policy Programme for Health Promotion (Finnish Government 2007b), the Policy Programme for the Well-being of Children, Youth and Families (Finnish Government 2007c), the Development Programme for Child and Youth Policy (Ministry of Education 2007b), the Government's Decision on the Internal Security Programme (Finnish Government 2008), the National Development Plan for Social and Health Care Services 2008-2011 (Ministry of Social Affairs and Health 2008a) and the Health 2015 public health programme (Ministry of Social Affairs and Health 2001). Related to the Government programme, the following were completed during 2009: the implementation programme of the National Development Plan For Social and Health Care Services i.e. the Kaste programme (Ministry of Social Affairs and Health 2009c), the report by the Working Group considering the development of mental health care and services for substance abusers (Ministry of Social Affairs and Health 2009a), the report by the Working Group analysing the treatment of pregnant women with intoxicant problems (Ministry of Social Affairs and Health 2009b) and an interim report on the implementation of the Internal Security Programme (Ministry of the Interior 2009).8

See further information under Section 1.2.

## 1.1 Legal framework

### 1.1.1 The 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.

Under the new Act, the definition of a drug is based principally on international conventions, although a Governmental decree may extend the definition of drugs to include substances which, it has been decided, should be placed under controls pursuant to the Council of the European Union's Decision 2005/387/JHA on the information exchange, risk-assessment and control of new psychoactive substances.

The Decree on substances, preparations and plants considered as narcotics (543/2008) lists the substances and preparations defined as narcotics in the UN Single Convention on Narcotic Drugs and its Convention on Psychotropic Substances. The names of the substances in the Decree have been updated to correspond to those used in international lists and to include oripavine, added as a new substance in list I of the Convention on Narcotic Drugs. In addition, the Decree also lists substances placed under narcotics control at community level, including 4-MTA, PMMA, 2C-I, 2C-T-2, 2C-T-7, TMA-2 and 1-benzylpiperazine. In addition, the Decree them under narcotics control at community level, including 4-MTA, PMMA, 2C-I, 2C-T-2, and 1-benzylpiperazine.

Fimea (formerly the National Agency for Medicines) acts as the licensing and controlling authority under the Narcotics Act. In addition to licences required for manufacture, import and export, a licence is required for the import into and export from Finland of any substances, preparations or testing systems used for detecting a drug or containing drugs, and for the processing of drugs. The Decree on Narcotics Control (548/2008) lays down more specific provisions on the licence administration, operations subject to authorisation and their supervision under the Narcotics Act.

In addition to Fimea (the former National Agency for Medicines), the competent authorities constitute the police in matters relating to combating narcotics offences, the customs and border control authorities in matters relating to the import, export and transit of drugs, and the said authorities in matters governed by Regulations (EC) concerning trade in drug precursors.

STAKES' mandate to act as Finland's representative in the European Information Network on Drugs and Drug Addiction (REITOX) is also specified under legislation. Following the merger between STAKES and the National Public Health Institute (KTL), resulting in the creation of the new National Institute for Health and Welfare (668/2008), STAKES' duties specified under the legislation were transferred to the new institute.

Furthermore, following the amendment to the Narcotics Act, liability to punishment for an illegal act arises where said act constitutes either a breach of the Narcotics Act or a narcotics offence, based on the act's severity. Acts giving rise to penal liability due to a breach of the Narcotics Act mainly include the negligence of obligations. Unless a more severe punishment for the act is provided for elsewhere in the legislation in force, a person committing a breach of the Narcotics Act can be sentenced to a fine. Provisions concerning narcotics offences are laid down in Chapter 50 of the Penal Code in accordance with the current Act.

### 1.1.2 Other legislation concerning drugs

Since 2007, amendments concerning drugs have been made in the Decree on welfare clinic services and school and student health services, the Occupational Health Care Act, the Conscription Act, the Non-Military Service Act, the Act on the National Defence University, the Decree on the substitution treatment for opioid addicts, the Decree on Prescription of Medicines, the Child Welfare Act and sections of the Penal Code concerning narcotics offences.

### Prevention

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. Health counselling includes attempting to provide support to the individual and promote his/her psychosocial well-being, including with regard to the prevention of the use of alcohol, tobacco and other substances.

The Decree specifies that welfare clinics must adopt extensive health examinations – as in school health care – involving the entire family. Furthermore, it requires that in extensive health examinations of eighth-grade pupils in comprehensive schools, the pupils' special needs in terms of career selection and further studies be assessed and any necessary support measures be planned in co-operation with other student welfare personnel. Regarding the organisation of health care, the early diagnosis and treatment of any substance problems and referral for further treatment are specifically mentioned. Amendments to the Occupational Health Care Act (1383/2001) specified that prior to approval, the employer and employees should jointly discuss the duties in the workplace for which drug tests will be applied, as per the arrangements laid down under the co-operative procedure (Act on Co-operation within Undertakings 334/2007).

The new Conscription Act (1438/2007) lays down additional regulations according to which a conscript can be referred for examination by a physician or other health care professional concerning their fitness for service or ability to fulfil their duties. The Act includes the conditions under which drug tests may be carried out.

Correspondingly, according to the Non-Military Service Act (1446/2007), a Centre for Non-Military Service or non-military service location can, during the period of service, require an individual undergoing non-military service to undergo an examination or check-up (including taking drug tests in accordance with the Act on the protection of privacy) by a nominated physician or other health care professional in order to obtain a certificate of health, in cases where this is necessary for assessing the individual's abilities to fulfil their service duties or fitness for service.

The Act on the National Defence University (1121/2008) states that a person seeking to become a student therein is obliged to take a substance test conducted by professional health care staff prior to being admitted as a student and, if necessary, to take a substance test during a study period or related practical training if there is justifiable cause to suspect that the student is under the influence of substances.

### Drug-related treatment

The Decree governing detoxification and substitution treatment for opioid addicts (33/2008) stresses that only demanding substitution treatment cases should be dealt with by specialist health care; other cases should be treated at primary health care level. With respect to the evaluation and beginning of treatment, the focus is on outpatient rather than inpatient care.

Pharmaceuticals containing buprenorphine or methadone can only be prescribed for the detoxification or substitution treatment of opioid addicts by a physician employed by a health care unit and responsible for its operation, or by the physician who assigned this task to him/her. Medical treatment may be conducted and the medication administered to the patient only under the supervision of the health care unit. If the patient's commitment to treatment is high, the health care unit can give him/her pharmaceuticals equivalent to a maximum of eight daily doses (15 in exceptional cases under the new Decree).

However, the new Decree 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* refers to a contract 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 wider marketing authorisation.

### Measures required by the Child Welfare Act

The Child Welfare Act (583/2007), which came into effect at the beginning of 2008, emphasises the ability of adults, who receive services for substance abuse and mental health problems, to take care of and support children under their care. A child should be taken into care by social welfare authorities, and substitute care should be organised for him/her, if the child is deprived of care to an extent which seriously endangers his/her health or development, or if the child seriously endangers his/her own health or development by abusing substances, committing an offence considered greater than a minor offence, or behaving in other, similar ways. If being taken into care is considered beneficial to the child, a specific care plan is drawn up, which states the goals of substitute care and, in particular, how support and assistance will be arranged for the child, his/her parents and guardians. Such a plan may contain guidelines for special care in pursuit of breaking the vicious circle of substance abuse or crime.

#### Supply reduction

Provisions concerning narcotics offences are laid down in Chapter 50 of the Penal Code, which was amended by the issuance of further drug definitions (374/2008). This amendment introduced a prohibition on the cultivation of the coca shrub, khat plant or psilocybin mushrooms and a prohibition on the cultivation of opium poppies, hemp or cactus plants containing mescaline for use as drugs or raw material for drugs.

### Examples of implementation of legislation

Government Decree 719/2007 granted a total of €3,500,000 of state subsidies for 2007–2009 to Social and Welfare Centres of Expertise and to municipalities and federations of municipalities for the development of services for substance abusers, in order to cover the costs of treatment and for improving treatment. The regional need of substance abuse treatment and the development of co-operation among authorities as part of the national structural reformation of municipalities and services (the PARAS project) determine how subsidies are distributed. Funding programmes pay special attention to female substance abusers and those with mental health problems.

Dealing with the unlawful use of narcotics is possible in summary penal proceedings (692/1993). Said proceedings are applicable to cases where a fine can be imposed for a breach thereof, if the penal provision concerning said breach and applicable to the case 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. Processing the order requires the complainant's consent. The issuer of a summary penal judgment can also leave the judgement unissued if, under law, a prosecution may be waived for the type of breach in question. This subsection is also applicable to the unlawful use of narcotics.

Provisions enacted concerning a judgment which has gained legal force are applied to the implementation of a summary penal judgment. Through amendment 587/2008 to the Penal Code, it was decided that a fine imposed in summary penal proceedings may not be converted into imprisonment. In practice, this means that fines issued in summary penal proceedings by the police or the prosecutor for the unlawful use of narcotics can no longer be turned into prison terms. In cases of the unlawful use of narcotics, decisions may be issued waiving charges based on hearings of young people or the referral for treatment of problem users, but the number of such decisions has remained small. (Ministry of Social Affairs and Health 2009d.)<sup>9</sup>

<sup>9</sup> On interpretation of statistics, cf. more details in Section 9.3.

# 1.2 Institutional framework, strategies and policies

### Background

The Drug Policy Co-ordination Group follows the drug situation in Finland and supervises the implementation the cross-sectoral drug programme. This Group's key task is to co-ordinate the measures of various administrative sectors. Represented on the Group are the Ministry of Social Affairs and Health, the Ministry of the Interior, the Ministry of Justice, the Ministry of Education, the Ministry for Foreign Affairs, the National Institute for Health and Welfare, the Office of the Prosecutor General, the National Board of Customs and the Finnish National Board of Education.

In the spring of 2007, a final report was presented concerning the Drug Policy Action Programme 2004–2007, which was in force in Finland until 2007 during Prime Minister Matti Vanhanen's first term of office (2004–2007) (Ministry of Social Affairs and Health 2007). The report was based on accounts by various authorities and assembled by the Drug Policy Co-ordination Group.

Based on the report, the general drug situation has remained stable during the 2000s but drug use has stabilised to a clearly higher level than in the early 1990s. No significant changes have occurred in the total number of narcotics offences, nor in the number of drug-related deaths. The prevalence of diseases and infectious diseases related to drug use has remained low.

According to the final report, the measures proposed in the policy action programme have been implemented as follows: preventive substance abuse work has been reinforced in comprehensive schools, vocational schools, high schools and youth work. The Act on Welfare for Substance Abusers obliges municipalities to offer sufficient treatments, although these are not yet available in all municipalities. Inmates' substance abuse rehabilitation has been increased during the programme period. Under a decree, health counselling activities for drug users was rendered obligatory in all municipalities. Such activities include, for instance, the exchange of clean syringe needles. Employers have been increasingly drawing up their own substance abuse programmes which, in addition to drug tests, emphasise prevention and treatment referral in the workplace. Additionally, the policy action programme has strengthened co-operation between prosecutors, the police and social welfare services concerning the referral of users for treatment. The Prosecutor General and the Police Department of the Ministry of the Interior have issued operating guidelines concerning the unlawful use of narcotics. These guidelines underline the responsibility of the police in terms of treatment referral and waiving penal sanctions, if the individual in question is seeking treatment or if the unlawful use case is otherwise minor.

### Drug policy guidelines for 2008-2011

The resolution of Matti Vanhanen's second Government, which took office in March 2007, concerning co-operation on drug policy for 2008–2011 was completed in late 2007, based on the above-mentioned final report.

Pursuant to this resolution, the Government will continue to strengthen the coordination of its drug policy and co-operation among administrative sectors during the 2008–2011 administrative period. The resolution states that the basic requirements of counter-narcotics action in Finland are well ensured: the drug situation can be reliably monitored and effective interventions can be made where required. Each year, the Drug Policy Co-ordination Group provides an account to the Government on the implementation of the resolution. At the end of the period, a separate final report is prepared for the Government with respect to the potential planning of a new programme. The resolution includes the following seven action points:

### 1. Preventive work and early intervention

Preventive substance abuse work will be enhanced in social and health care, youth work, schools and educational establishments and its role in the promotion of health and well-being will be consolidated in the restructuring of municipalities and services. Early intervention will be established as part of all health and welfare services. Substance education will be reinforced throughout the educational system. Support will be provided for high-quality information and education activities. Where necessary, the provision of information will be targeted at special risk groups.

### 2. Combating drug-related crime

The likelihood of being caught will be increased with respect to aggravated narcotics offences and those involving distribution carried out in Finland. Criminal liability will be implemented through seamless international co-operation with the offender's home country or country of residence. The import of drugs into the Finnish market will be tackled primarily through seizures at national borders. Control of the distribution of drugs and pharmaceuticals classified as drugs will be integrated into the basic operations of the police. The detection of crimes accompanying narcotics offences, particularly concealment, procuration, extortion and money laundering, will be enhanced. Tracking the gains acquired from committing an offence and their comprehensive elimination shall be reinforced.

3. Treatment of drug addiction and reduction of harm from drug use The development and increased provision of treatment services will continue, with the aim of ensuring equal access to services for all citizens. A range of treatment options, appropriate to the type of addiction in question, will be offered to drug users. Treatment, health counselling and support directed at reducing drug-related harm (such as diseases, mental health problems and accompanying crime), will be increased. Access to treatment will be facilitated for opioid addicts, and treatment volumes increased to meet demand on a more comprehensive basis. Referral for treatment issued by the police will be further reinforced.

4. Intensifying the treatment of drug misuse in connection with criminal sanctions

The effectiveness of imprisonment will be improved through the better planning of prisoners' sentences and release on an individual basis, as required by the new Act on Imprisonment. The procedures of allocation units determining prisoner placement will be developed and substance abuse rehabilitation and contact work in prisons increased. Support measures for supervised probationary freedom and post-care for released inmates will be improved. Moreover, substance abuse rehabilitation included in community sanctions will be bolstered and rehabilitation opportunities for those sentenced to juvenile punishments enhanced.

### 5. EU drug policy and international co-operation

Finland will take an active role in planning and implementing the EUwide drug policy. It will participate in international anti-drug collaboration through drug policy forums established by the United Nations, the Council of Europe and the Nordic Council of Ministers. International anti-drug and drug-related harm reduction projects conducted bilaterally or multilaterally and supporting Finland's objectives will be supported through funding, within the framework of neighbouring area and development co-operation.

### 6. Information collection and research regarding drug problems

Long-term follow-up research on the drug situation will be continued and the availability of up-to-date information on this situation secured for those responsible for drug policy. The national information required by the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) for reports on the drug situation, and for the UN's data collection systems, will be produced. Research into drug use, drug markets, the treatment of drug users and methods of combating drug-related problems will be furthered and international co-operation by Finnish researchers promoted. Citizens' opinions on drugs, drug use and related harm will be monitored regularly.

#### 7. Co-ordination of drug policies

The Ministry of Social Affairs and Health is responsible for co-ordinating national measures related to drug policy. In support of this, the operations

of the Drug Policy Co-ordination Group will continue during the Government's 2008–2011 term of office. Developments in the drug situation will be followed and findings regularly reported to the Government. Co-ordination will encompass the preparation and implementation of legislation and actions taken by the authorities pursuant to the overall drug policy. Furthermore, national drug policy will be co-ordinated with alcohol and tobacco policies.

The effectiveness of the drug policy implemented in relation to the programme will be monitored using indicators including the extent of drug use by age group; the number of problem drug users; hospitalisation periods; drug-related deaths; infectious disease cases related to drug use; narcotics offences; drug seizures; and treatment referrals by the police.

Anti-drug work will also take account of measures contained in other Government action plans and those under, for instance, the Internal Security Programme.

### Measures contained in other Government action plans

Legislation on the restructuring of municipalities and services (the PARAS project) entered into force on 23 February 2007. The Framework Act (169/2007) requires that municipalities ensure the equal provision of vital social and health care services to all Finns. This goal will be met by reinforcing the municipal structure and capital base, strengthening co-operation between municipalities and ensuring comprehensive coverage by the service network.

The National Development Plan for Social and Health Care Services (the Kaste programme) (Ministry of Social Affairs and Health 2008) highlights improvements required in primary health care, social work, care provided by paramedics as well as mental health and substance abuse work. This development plan's objectives include increasing people's inclusion and decreasing their social marginalisation, augmenting their well-being and health and reducing health inequalities as well as improving the quality, effectiveness and availability of services whilst narrowing regional differences.

According to the *Policy Programme for Health Promotion* (Finnish Government 2007b), the Ministry of Social Affairs and Health will prepare a proposal for the comprehensive care of pregnant women with intoxicant problems. Furthermore, the Ministry of Social Affairs and Health is currently drawing up a national mental health and intoxicant plan creating policy outlines and operating models for mental health and intoxicant abuse services.

The *Policy Programme for the Well-being of Children, Youth and Families* (Finnish Government 2007c) aims to create a service system supporting families with children, which will form a seamless network to promote the well-being of children and young people. This system will be capable of eliminating threats to well-being in advance and enable effective intervention in the case of problems. A key priority is support services for children and young people, especially in the case of violence, mental health problems or intoxicant problems in families.

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*, for 2007–2011 (Ministry of Education 2007b), affirms 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 marginalisation. The programme underlines that co-operation between child welfare services, substance abuser 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.

The *Internal Security Programme* (Finnish Government 2008) emphasises that social marginalisation is often related to long-term problems of subsistence, but also to substance abuse and mental health problems. Breaking the cycle often requires simultaneous measures by various actors and early intervention. Since substances (particularly alcohol) and violence are often interlinked in Finland, the programme aims to reinforce existing support services in order to reduce violence towards children and young people. In addition, the programme focuses on national and international co-operation among the competent authorities in combating organised crime, and on sector-specific collaboration with business.

The Working Group considering how to enhance the fight against organised crime (Ministry of the Interior 2007) has emphasised that the most urgent measure to be implemented is the collection of information on serious organised crime and integration into the national information systems of the police. Another urgent need is to ensure that organised crime is tackled primarily using methods targeted at serious crime. An essential requirement is therefore that the fight against organised crime is explaned and implemented in a co-ordinated manner.

### Evaluation of drug policy

The first national drug strategy was prepared by the Drug Policy Committee in 1997. According to a dissertation by Tuukka Tammi (2007), two contradictory views on the drug issue were held by the 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.

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)

The follow-up of the implementation of the resolution concerning drug policy for 2008–2011 includes administrative reports prepared for the Government by a national, cross-sectoral Drug Policy Co-ordination Group. The report pertaining to 2008 (Ministry of Social Affairs and Health 2009d) states that:

- 1. Work to enhance the quality and effectiveness of substance abuse prevention was continued through the development of better methods, reinforcing the knowledge base of preventive work and by training. Responsibility for the network of municipal contact persons for preventive substance abuse work was transferred to the regional co-ordinators of the Alcohol Programme 2008–2011 (THL 2009a). On the same occasion, a developer network was separated from the original one, and featured the introduction of non-municipal representatives. The project for developing education on substance abuse prevention continued to implement the joint education recommendations issued by the Ministry of Social Affairs and Health and the Ministry of Education. Both of these ministries have also provided broad-based financing for substance abuse prevention projects.<sup>10</sup>
- 2. The Ministry of the Interior and Russia's Federal Drug Control Service signed a co-operation agreement in 2008 on combating the illegal trade in drugs and their raw materials. A new customs co-operation agreement was signed with Uzbekistan and agreement negotiations were initiated, both with Belarus and Azerbaijan. These agreements will further enhance international co-operation between Customs, for instance in combating drug-related crime. In order to intensify co-operation with Russia and Belarus, a customs delegate was placed in Moscow. In pursuit of the promotion of international co-operation, Customs has continued to conclude co-operation agreements with the private sector.<sup>11</sup>
- 3. As of the beginning of February 2008, a new Decree of the Ministry of Social Affairs and Health on the detoxification and substitution treatment of opioid

<sup>10</sup> See also Section 3.

<sup>11</sup> See also Section 9.

addicts with certain medicinal products (33/2008) entered into force, aimed at lowering the threshold for treatment and emphasising its role in outpatient settings instead of institutions. For the follow-up of the Decree's implementation, the Ministry of Social Affairs and Health drew up a summary of the status of substitution treatment for opioid addicts at the end of 2008, based on opinions obtained from Social and Health Care Departments of State Provincial Offices.<sup>12</sup> A cross-sectoral and interdisciplinary evaluation study on the effectiveness of low-threshold health counselling in Finland was published in 2008. Based on the study, the intervention of health counselling centres among intravenous drug users has constituted a significant factor in the prevention of HIV infection, hepatitis A or B infections and, to some extent, hepatitis C infections, as well as in combating epidemics. These operations have attained their original objectives. It is particularly noteworthy that the ambitious objectives set for the HIV infection situation have indeed been attained, namely stopping the epidemic and limiting the annual number of new cases below 30.13

- 4. In 2008, individual plans for the duration of their sentence were prepared for a total of 88 per cent of convicted prisoners (including participation in substance abuse programmes). The use of supervised probationary freedom has also increased in accordance with the objectives. A new type of sanction supporting the offender's social coping is currently under preparation. This sanction would be implemented in freedom and electronically supervised, and the inclusion of substance abuse rehabilitation is also planned. However, the number of decisions to waive charges for unlawful use of narcotics based on hearings of young people or treatment referrals of problem users remains low, although it is growing.<sup>14</sup>
- 5. In international co-operation on drug issues, Finland is the only Nordic country with membership of the United Nations Commission on Narcotic Drugs (CND) under the Economic and Social Council (ECOSOC) during 2008–2011, and is also among the Major Donors of the United Nations Office on Drugs and Crime (UNODC). With Finland's support, in 2008 the UNODC launched a programme for the development of drug-related laboratory services in the developing countries, based on a resolution prepared by Finland and adopted by the CND in 2007. Other key strategic projects for Finland include an information management project concerning the drug situation in northwest Russia, realised by the UNODC, and a project for developing the drug control infrastructure in Central Asia. Within the EU, co-operation is co-ordinated by the Horizontal Working Group on Drugs (HDG). In 2008, the EU adopted a Drugs Action Plan 2009–2012, based on preparations conducted by

<sup>12</sup> See further information under Section 5.3.

<sup>13</sup> See further information under Section 7.2.

<sup>14</sup> See also Section 9.2.

the HDG. Finland took part in the activities of the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) whose operations were subjected to external evaluation in 2008. On an annual basis, the EMCDDA publishes a report on the state of the drug problem in Europe, alongside several thematic reports. During the year, the key role of Europol as the joint criminal intelligence organisation of European law enforcement authorities has been further consolidated. Several projects improving the co-operation possibilities between the law enforcement authorities in the EU are underway in Europol, particularly with regard to the exchange and management of information. Finland's contact persons in Europol play a significant role, particularly in co-ordinating large, multi-country operations. The Pompidou Group of the Council of Europe has continued the operation of the EXASS Net, a network of cities launched during the Finnish EU Presidency. In 2008, Finland participated in the work of the Nordic drug forum (Nordisk Narkotikaforum) under the Nordic Council of Minsters. On Finland's initiative, the forum examined, for instance, issues related to the treatment of pregnant women with intoxicant problems and the development of said treatment.

- 6. A report on the drug situation in Finland is published annually. During 2008, drug research has focused on drug use, drug markets, drug treatment and thresholds to accessing treatment, as well as citizens' attitudes and opinions. The Substance Use and Addiction research programme launched in 2007 by the Academy of Finland has continued.
- 7. The new Narcotics Act (373/2008) and the related decrees, the Government Decree on substances, preparations and plants considered as narcotics (543/2008) and the Government Decree on Narcotics Control (548/2008), which entered into force in 2008, did not alter Finland's main drug policy outlines.

Regarding follow-up indicators describing the drug situation, the report stated that drug-related deaths decreased in the beginning of 2000s, to less than a hundred cases (97 in 2002) but then resumed their upward trend (143 deaths in 2007). In 2008, the total number of narcotics offences entered in law enforcement authorities' records remained at the level of the previous year. Drug experimentation and use have no longer increased and have even reduced among young age groups. Most other indicators of drug-related harm also suggest that the drug situation has levelled off.

The objectives related to substance abuse in the implementation programme of the National Development Plan for Social and Health Care Services (Kaste) (Ministry of Social Affairs and Health 2009c) concern information steering and expert assistance provided to municipalities, meaning the maintenance of followup indicators concerning the substance abuse situation, the production of material and the development of substance abuse strategy work and best practices. In particular, the National Institute for Health and Welfare bears co-ordination responsibility for reinforcing the regional structures of substance abuse prevention, with the help of regional developer networks and training associated with support material. It also bears such responsibility for creating peer information systems, in order to monitor the generation of results from operating practices. Essential in this respect are the quality recommendations issued to services and the collection of client feedback revealing the client perspective. The Kaste programme's objectives also include the dissemination of best practices concerning early intervention among substance abusers, particularly children and young people. In addition, the programme emphasises the integration of services into a consistent whole.

In 2009, the Policy Programme for Health Promotion (Finnish Government 2007b) generated two reports by the Working Group appointed by the Ministry of Social Affairs and Health, one concerning mental health and substance abuse work and the other the development of treatment for substance-abusing pregnant women.

The report (Ministry of Social Affairs and Health 2009a) by the Mieli 2009 Working Group, concentrating on the development of mental health and substance abuse work, underlined prevention and early intervention as well as shifting the service focus to primary and outpatient services. According to the Working Group, 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. However, this would require the modification of the service structure, and it would be reasonable to make such changes within the framework of the ongoing, broad-based PARAS restructuring project. The Working Group also proposes that the contents of the Mental Health Act, the Act on Welfare for Substance Abusers and the Temperance Work Act be updated and the possibility of grouping them be assessed.

According to the Mieli Working Group, the service structure must be developed by increasing mental health and substance abuse work carried out in primary services and by establishing outpatient units combining treatments for both mental health disorders and substance abuse. The municipalities should increase and diversify their mobile on-duty services providing consultation for people suffering from mental health and substance abuse problems, since this would reduce the number of patients treated in institutions. Another suggestion recommends that people who have themselves experienced mental health and substance abuse problems be included in planning, implementing and evaluating the services. Since the concurrence of mental health and substance abuse problems is becoming more and more common, a further proposal is made that outpatient units specialising in psychiatry and outpatient units offering services for substance abusers be combined. It is suggested that psychiatric inpatient care be principally transferred in the context of general hospitals. Improving services requires more extensive resources, which must be targeted in particular at primary and outpatient services for the enhancement of the prevention, early support and treatment of mental

health and substance abuse problems. The level of preventive mental health work and substance abuse prevention within these services must be ensured by appointing at least one full-time employee for co-ordinating such work in areas with a large population base.

The report by the Working Group examining how to ensure treatment for pregnant women with intoxicant problems (Ministry of Social Affairs and Health 2009b) states that pregnant women need to be granted a subjective right to immediate assessment of their need for substance abuse treatment and access to treatment required by the assessment. Seeking voluntary treatment must be rendered easy and the appropriate substance abuse services should be offered prior to pregnancy. While involuntary treatment cannot replace insufficient substance abuser services, this option must be used once all other measures have been tried.

The Working Group emphasises the importance of preventing substance problems and increasing public awareness of substance abuse. The issue of substances should be raised as early as possible with all clients in maternity clinics, and the spouse's alcohol consumption should be assessed. Health care services, social welfare offices, emergency social services and the police must encourage pregnant substance abusers to visit a maternity clinic, so that they can benefit from the maternity allowance and ensure the child's health. While special competences must be centralised in university hospitals and central hospitals, part of follow-up can be carried out in maternity clinics.

The Working Group is of the opinion that Finland should investigate the possibility of preparing provisions regulating involuntary treatment in accordance with the Danish and Norwegian model. A pregnant woman could commit herself to a treatment place by signing a treatment contract valid for an agreed period, even if she later changes her mind and no longer wishes to continue the treatment. The Working Group suggests a legal amendment which would also enable involuntary treatment based on the health risk posed to the unborn child. Currently, the law allows for a person to be ordered into treatment for five days, due to a health risk. According to the Working Group, this involuntary treatment period should be increased to 30 days and enable the continuation of such treatment until the end of the pregnancy.

The first interim report (Ministry of the Interior 2009) on the implementation of the Internal Security Programme (Finnish Government 2008) affirmed that alcohol and other substance-related education has emphasised the risks of accidents associated with substance abuse. Furthermore, it stated that an account had been prepared on how such a perspective is conveyed in substance-related education material. This theme was also included in the programme of the national meeting for experts working in the sector of social and health services for substance abusers (päihdepäivät) organised by the Finnish Centre for Health Promotion and the National Institute for Welfare and Health. Youth workshops and outreach work are carried out in accordance with the objectives of the Child and Youth Policy Development Programme (Ministry of Education 2007b). In the NGO field, more than 350 volunteers have committed to the Finnish Red Cross' early intervention model, designed to prevent social marginalisation and, in 2008, discussions on reducing the use of substances and minimising harm were reported to have been held with over 5,000 persons.<sup>15</sup>

On 12 March 2008, the Ministry of Education appointed a Working Group to prepare the necessary statutory amendments to legislation governing universities, polytechnics, vocational education and vocational adult education with regard to unsuitability for work due to various reasons discovered during the individual's study period, particularly in the social welfare and health care sector. One of the special tasks mentioned in the Working Group's mandate was the preparation of any statutory amendments required in order to enable drug tests during education, in all educational fields and at all levels. The Working Group will finish its work in the autumn of 2009.

The objectives stated in the drug action programme for 2006–2008 of organisations conducting substance abuse work include preventing experimentation with and use of drugs, intervention in use and increasing the versatile range of information available. Other objectives include discussion of the causes and consequences of drug use and increasing and developing services for drug users and their close friends and relatives (Finnish Centre for Health Promotion 2006). These general objectives are promoted based on four lines of action: by supporting people and their close communities in their everyday lives, influencing decision-making and attitudes in society, developing co-operation with organisations and other actors carrying out substance abuse work and developing the quality and structures of anti-drug work. A total of 31 organisations committed themselves to the programme. To ensure sound co-ordination, a steering group was appointed.

The implementation of the programme was evaluated in a follow-up report drawn up at the beginning of 2009. (Tella & Opari 2009).<sup>16</sup> As this evaluation progressed, it became evident that the stated lines of action did not form the best possible way of structuring the activities, since the latter did not significantly vary between lines of action. Mutual core areas included training, means of communication, and influencing activities. The report also presented the perspective that the third line of action, developing co-operation, was almost a prerequisite for the success of the programme. The organisations' own evaluation of the programme's implementation was fairly positive, and a lack of resources was viewed as the main barrier to implementation. Increased co-operation and interaction between the organisations and the creation of a common forum enabling discussion number

<sup>15</sup> See further information under Section 3.2.

<sup>16</sup> The evaluation initially used an electronic survey but, due to a low response rate, the organisations' work meetings were also used for data collection purposes towards the end. All evaluation results have also been discussed in the organisations' work meetings. (Tella & Opari 2009).

among the programme's achievements. Despite this, many organisations reported a need to increase co-operation. (Tella & Opari 2009.)

The part of the evaluation pertaining to the organisations' activities states that most of the organisations participating in the programme conduct primary prevention, targeting either the entire population or a population group (29 organisations of 31). Operating methods included the provision of information, influencing activities and training. More than half of the organisations (20/31) also carry out risk prevention, such as peer group activities for the parents of substance-abusing children, low-threshold services, service guidance, drug counselling through telephone help lines, web counselling and support meetings alongside the related activities. Nearly half of the organisations (15/31) also engage in corrective substance abuse work, including services addressing substance abuse harm, treatment services, preventing the recurrence of substance abuse problems and harm-reduction work. Organisations chiefly target their efforts at the entire population (24/31). More than half of the organisations (18/31) also target special services directed at people other than users, rehabilitants or relatives and close friends, this group mainly consisting of professionals and volunteers. In terms of age group, the most and the most diversified (23/31) services are targeted at young adults (aged 18-29). Clearly, the most significant activity is providing information on the organisation's activities (29/31) which is realised, for instance, through the organisations' own bulletins or website. Influencing work (25/31) emerges as another key activity in (expert) networks, regionally (organisation of events) and nationally (expert opinions). More than half of the organisations (18/31) state that they also provide trainer services. (Tella & Opari 2009.)

## 1.3 Economic analysis

## 1.3.1 Budget and public expenditure

The expenditure incurred by the state from drug-related harm are calculated based on a calculation framework established in Finland (Salomaa 1996; Hein & Salomaa 1998). Such harm-related expenditure thus calculated has been reported since 1998 in the Yearbook of Alcohol and Drug Statistics published by the National Institute for Health and Welfare THL<sup>17</sup> (formerly STAKES). The calculated public expenditure as presented in this report corresponds to the costs presented in the Yearbook in those respects where they are included in both calculation frameworks.

<sup>17</sup> On 1 January 2009, the National Research and Development Centre for Welfare and Health (STAKES) and the National Public Health Institute were merged, forming the National Institute for Health and Welfare.

COFOG	Authority	Reuter's	Budget ex- pend-itures total	Harm-related costs associated with drug use	La- belled	
03. PUBLIC	03.1 POLICING					
ORDER AND SAFETY	Policing	Enforcement	584.4	16.4		
JAFETT	Customs control	Enforcement	150.7	5.5		
	03.2 FIRE AND RESCUE SERVICES					
	Fire and rescue services	Enforcement	67.9	2.4		
	03.3 JURIDICIAL SYSTEM					
	District Court	Enforcement	129.1	1.7		
	Court of Appeal	Enforcement	35.9	0.9		
	Supreme Court	Enforcement	7.0	0.1		
	Legal aid	Enforcement	22.9	0.2		
	Enforcement Office	Enforcement	80.7	0.8		
	System of prosecution	Enforcement	32.1	1.1		
	03.4 PRISON SYSTEM					
	Prison Service	Enforcement	208.1	33.9		
	Open institution work	Enforcement	5.4	0.9		
	03.5 RESEARCH AND DEVELOPMENT RELA	TED TO PUBLIC OF	FETY			
	National Research Institute of Legal Pol- icy	Prevention	1.5	0.05		
	The European Institute for Crime Preven- tion and Control	Prevention	0.6	0.02		
	03.6 PUBLIC ORDER NOT ELSEWHERE CLAS					
	Ministry of Justice	Prevention	87.3	0.7		
	Certain paid compensations	Harm reduction	12.8*	0.1		
07. HEALTH CARE						
	National Research and Development Cen- tre for Welfare and Health (STAKES)	Prevention	23.5	0.6	Yes	
	National Public Health Institute	Prevention	34.5	1.2		
	Finnish Foundation for Alcohol Studies	Prevention	0.7	0.1		
	07.6 HEALTH CARE NOT ELSEWHERE CLAS					
	Ministry of Social Affairs and Health	Prevention	95.9	2.1	Yes	
	Finland's Slot Machine Association	Prevention	306	10.9	Yes	
	Finland's Slot Machine Association	Prevention	306	2.5		
10. SOCIAL SECURITY	10.1.1 ILLNESS (IS)					
	Sickness allowance	Harm reduction		0.9		
	10.1.2 DISABILITY	1				
	Disability pension	Harm reduction		9.6		
REVENUE TRANSFER				27.2		
COSTS, TOTAL				119.9		

Table 1. Harm-related costs from drug use incurred by the state in 2007 (EUR million).

\*) Certain paid compensations, with the exception of aid in maintaining Sámi culture and self-administration.

In 2007, public expenditure<sup>18</sup> caused by drug use totalled approximately 120 million euros. Of this amount, a total of 13.6 million euros had been earmarked for anti-drug activities. One of the largest funders of substance abuse work, Finland's Slot Machine Association RAY, allocated 10.9 million euros for drug-related work and prevention. For drug-related research conducted at the National Institute for Health and Welfare (THL), the Ministry of Social Affairs and Health allocated 0.6 million euros. The Ministry also allocated 2.1 million euros for drug prevention work.

The largest portion of public expenditure due to drug-related harm is incurred by the enforcement of public order and safety, accounting for an estimated 63.9 million euros in 2007. As in previous years, the costs attributable to the prison service (33.9 million euros) represented the largest single expenditure item.

Expenditure attributable to the prevention of drug-related harm accounted for some 18.8 million euros, mostly funds allocated to drug research and substance abuse work.

Harm reduction activities accounted for a total of 10.6 million euros. Of this amount, 9.6 million euros were assigned to drug-related disability pension expenditure and 0.9 million euros to drug-related sickness allowances. Compensation paid by the state, for instance to victims of crime, totalled 0.1 million euros.

### 1.3.2 Social costs related to drugs

In 2007, costs related to the abuse of drugs and pharmaceuticals amounted to 200– 300 million euros in direct costs and 500–1,100 million euros in indirect costs<sup>19</sup> (Table 1). Social welfare costs accounted for the largest portion, nearly one third, of all direct costs. Next came costs incurred by the enforcement of public order and safety, accounting for approximately one quarter. The largest portion of indirect costs came from the value of life lost due to premature death.

Direct costs include drug-related costs in health care, social welfare, crime control, property damage caused by crimes, research as well as substance abuse prevention. Health care costs cover drug-induced inpatient care and drug-related outpatient visits to physicians. Social costs comprise drug-related costs in substance abuse services, income support and child welfare services. Enforcement of public order and safety encompasses costs from the legal system and those from policing, rescue services and customs. Property damage refers to the monetary value of damage arising from property crimes as well as insurance costs.

<sup>18</sup> The data used is obtained from budget reports and final accounts reports for the year published by ministries, public agencies and other public bodies.

<sup>19</sup> Harm-related expenditure has been calculated based on the calculation framework established in Finland (Salomaa 1996; Hein & Salomaa 1998). Harm-related expenditure is published annually in the Yearbook of Alcohol and Drug Statistics published by THL.

Indirect costs include production losses arising from drug use and the value of life lost due to premature, drug-related death. Production losses are calculated based on the number of days of inpatient care provided due to drug use. Statistics on inpatient days are kept in accordance with the International Classification of Diseases (ICD-10), allowing differentiation between drug-related diagnoses. The value of a life lost due to premature death is calculated so that it equals the alternative costs that would accumulate if the person became completely disabled and would have to be institutionalised for the rest of his/her life.

Of direct drug-related costs, social costs again increased the most, by approximately 9% from the previous year. Costs related to the enforcement of public order and safety rose some 4%, and health care costs also increased slightly. By contrast, the costs of research and drug prevention work reduced by more than 5%. As regards indirect costs, the value of lives lost due to drug-related deaths increased markedly, by some 26%, due to the higher number of such deaths. However, production losses due to drug use remained almost unchanged.

	2006		2007	
	Min	Max	Min	Max
Direct costs	197	281	203	288
Health care costs	21	54	21	55
Social costs	72	77	78	54
Public order and safety	54	70	56	73
Property damage, research, substance abuse prevention	50	81	47	77
Indirect costs	388	851	487	1 077
Production losses	62	103	62	104
Value of life lost due to premature death	326	748	425	973
Total	586	1 132	690	1 365

Table 2. Costs of the harm caused by drugs by main group in 2006 and 2007, EUR million

Sources: Yearbook of Alcohol and Drug Statistics 2008 and 2009, STAKES and THL.

## 1.4 Social and cultural context

### Attitudes to drugs and drug use

Public attitudes toward drug problems in Finland are gauged in annual Health Behaviour Surveys among the Finnish Adult Population. Respondents have been asked how serious a problem they consider drug use to be in Finland currently, and how they believe drug use will develop in Finland in the near future.<sup>20</sup>

A large majority of respondents have continuously considered drug use in Finland a fairly serious problem, with only a few percent believing drug use will diminish in the future. While opinions have moderated somewhat in very recent years, there is still significant concern about drugs, including in younger age groups. (Piispa et al., p. 14–16.)

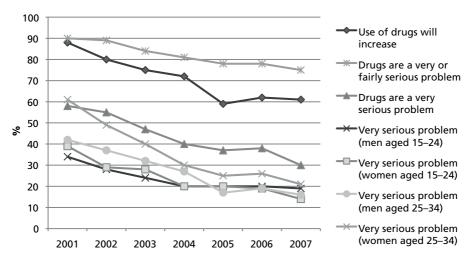


Figure 1. Opinions of the adult population on drug use 2001–2007.

According to researchers, the more moderate trend in opinions suggests that people have, to some extent, become accustomed to the presence of drugs and that drug problems have become a normal issue within the gamut of substance abuse problems. This habituation process is most marked among urban youth – in areas with the longest history and the most frequent presence of drugs. (Piispa et al., p. 24–26.)

Source: Piispa et al. 2008.

<sup>20</sup> See further information under Section 2.1.

The latest European School Survey Project on Alcohol and Other Drugs (ESPAD) depicting substance use by school pupils aged 15–16 reveals a similar trend of normalisation. The proportion of pupils who estimate that the use of various drugs (cannabis, ecstasy, amphetamine) once or twice entails a high health risk or other type of risk has decreased in the 2000s. It currently stands at slightly over a third of the respondents (35–40%). Meanwhile, differences in estimated health risks concerning various drugs have diminished. However, general concern about drugs has remained unchanged among young people, too. This is indicated by the fact that the proportion of respondents who believe that the regular use of drugs entails high risks (85–90%) has remained practically unchanged since 2000, with regard to all narcotic substances. (Metso et al. 2009, p. 73–74.).<sup>21</sup>

#### Attitudes to cannabis users

The Finnish use of drugs and cannabis' role therein have also been examined from the perspective of cannabis campaigners<sup>22</sup>. In her dissertation, Taru Kekoni asked campaigners how their use of cannabis began, what meanings they attached to their personal use, how they perceived attitudes to cannabis use in society and how those attitudes affected their own social status.<sup>23</sup> (Kekoni 2007, p. 78)

Interviewees saw social attitudes towards cannabis use as negative, stigmatising and based on ignorance about cannabis and influenced by the strong dominance of alcohol in Finnish substance use culture. In the interviews, reference was made to general 'drug hysteria' and a contrast was drawn with prevailing social attitudes to alcohol, the 'good substance'. The researcher concluded that including cannabis users in the group of 'drug users with problems' leads to the social marginalisation of the use of cannabis, since it creates problem identities stigmatised by cannabis use as well as model narratives of social marginalisation. Social bodies embracing this type of social approach are in fact pushing cannabis users outside the sphere of social activity. (Kekoni 2007, p. 169–171.)

The interviewees considered coverage by the media of cannabis as sensationalist and the way the effects of cannabis use are reported in the news was, in their

<sup>21</sup> See further information under Section 2.2.

<sup>22</sup> In the study, cannabis campaingner refers to a person who by his or her own actions (either through a cannabis association or personally) attempts to be socially active in order to improve the use of cannabis and its users' position.

<sup>23</sup> The researcher contacted the interviewees through the Finnish Cannabis Association and by distributing contact questionnaires at a hemp march held in Tampere in 2003. A total of 36 campaigners were interviewed. Common to all of them was a more or less ideological approach to cannabis, while their ways of using cannabis varied greatly (one subject did not use cannabis at all). One third of the interviewees used cannabis daily and nearly one third either a few times a week or a few times a year. Employed people accounted for 44% of the interviewees, students for 36% and unemployed for 17%. Two thirds were male. Slightly more than a third of the interviewees were aged either 15–24 or 25–34, and slightly more than 10% were aged 35–44 or 45–54. The interviews were conducted using a qualitative and activating method. (Kekoni 2007, p. 78–92.)

opinion, based on erroneous information. However, channels such as discussion forums on the Internet, which offer an alternative to the dominance of the mainstream media, enable another kind of exposure and a different perspective from mainstream culture. Based on societal reactions, remaining silent seems to be the means chosen by individuals to protect their social status – a solution which at the same time preserves the imbalance between information disseminated in the mainstream media and the perspective of users. (Kekoni 2007, p. 170–171.)

#### Attitudes to problem drug users

A survey was carried out in January 2007 concerning the attitudes of Finns toward problem drug users<sup>24</sup>. To the question of whether the respondents were willing to help a close relative or friend who was a drug addict, approximately 81% of the respondents answered 'agree' or 'somewhat agree'. A total of 73% thought that society should allocate more resources for treating people with drug problems. Indeed, drug abuse was seen as a societal problem, since only a third (32%) of the respondents felt that drug addiction is completely the fault of the drug user. Despite the desire to help and positive attitudes toward treatment, Finns react rather dubiously to drug users. Respondents felt that drug users spread infectious diseases (80%). In addition, drug users are seen as frightening (66%) and unreliable (78%). (Sormunen 2007)

A reserved attitude also emerges from a study which assessed the attitudes of people living in a fairly well-reputed district in the centre of Helsinki towards the location of the neighbouring, rather large drug treatment service centre. The service centre comprises an outpatient unit, a unit providing methadone maintenance treatment, an exchange point for needles and syringes and a day centre providing personal hygiene services. Approximately half of the respondents (51.4%) in the study's survey objected to the location of the drug treatment unit, a third (33.3%) did not object to it and the remainder did not have a direct opinion on the issue. The researcher viewed the result as slightly surprising, since the section concerning Finland in the World Value Survey 2007 suggested that the majority of Finns (82%) consider drug abusers as the least desirable group as neighbours. (Hietaranta 2009, p. 20-23.)<sup>25</sup>

<sup>24</sup> Schering-Plough Oy carried out a survey, which examined the attitudes of Finns toward drug abusers. Data was gathered through phone interviews in January 2007. Respondents to the survey numbered 500, representing the typical Finn in terms of age, sex, and place of domicile.

<sup>25</sup> The research data included articles (18) from the largest Finnish newspaper (Helsingin Sanomat) between 12 August 1998 and 2 November 2006, interviews of the local residents' association, the local police and the director of the service centre, responses to a resident questionnaire sent to people (237 households) living in the vicinity of the service centre (response rate being 45%) and the researcher's own observations (Hietaranta 2009, p. 9–10).

Based on the survey, fears do not only stem from personal impressions, since nearly three out of four were related to situations or encounters by the respondents themselves or people in the close neighbourhood. Two out of three female respondents had experienced fear or concern because of the units or their residents, while the corresponding proportion for men was approximately one half. People over 50 years of age had been less often fearful due to the unit, but had faced a smaller number of uncomfortable situations with the unit's clients. In wealthy income classes, fears related to property (vandalism and the decreasing market value of one's residence), while the fears of the middle class mainly concerned the changing environment and escalating criminal behaviour. Overall, the unit's location in a narrow, alley-like street has posed problems and is a partial reason for disturbing encounters. Nevertheless, the unit has attempted to prevent problem situations through cooperation with a private security company in the area and by hiring an environmental employee to clean up after clients. For the creation of future units, the researcher considers it important that sufficiently spacious locations be ensured. (Hietaranta 2009, p. 20–23.)

# 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.

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 proportion of those having tried drugs grew until the end of the 1990s, after which the trend clearly levelled off.

Much like in the 60s, 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. Nowadays, the recreational use of drugs connected with partying is no longer solely part of the techno and rave culture, but rather a wider youth culture trend.

It appears that the young generation born at the end of the 1980s is less interested in experimenting with drugs than that of ten years ago. Nonetheless, drug experimentation and use are still significantly more prevalent than at the beginning of the 1990s. (Hakkarainen & Metso 2007.)

## 2.1 Drug use in the general population

According to the 2006 population survey, 13% of 15–69-year-olds had experimented with cannabis sometime in their life.<sup>26</sup> The level was nearly the same as in the 2002 survey and three percentage points higher than in 1998. The percentage was 12% among women and 16% among men. The proportion of 15–34-year-olds (22%) remained the same in 2002 and 2006. However, changes have taken place within the latter age group: between 2002 and 2006, the proportion of 15–24-yearolds decreased by 6 percentage points whereas the proportion of 25–34-year-olds grew by the same amount. Thus, it seems that cannabis has lost some of its significance as part of youth culture whereas the generation that experimented with

<sup>26</sup> The target group of the study comprised 15–69-year-old Finns, among whom a random sample of 5,500 people was chosen using the Finnish Population Information System. The inhabitants of Åland, people living in institutions and those without a permanent home were excluded from the study. Half of the sample consisted of 15–34-year-olds. The aim of the oversampling was to focus the study on the most active population group in terms of drug use. In the analysis, the oversampling of young people was balanced by weighting. 3,029 people answered the postal questionnaire.

drugs at the turn of the millennium continues to use them. (Hakkarainen & Metso 2007.)

Based on the 2006 survey, a total of 3% had tried cannabis during the past year, which corresponded to the 1998 and 2002 survey results. The largest increase was seen among 25–34-year-old men: the proportion of experimenters doubled between 2002 and 2006. A total of 1% of adults had used cannabis during the last month: 4% of the 15–24 age group and 3% of the 25–34 age group. The percentages for men were somewhat higher than for women. (Hakkarainen & Metso 2007.)

Preliminary data from the drug survey conducted as part of the Drinking Habits Survey<sup>27</sup> 2008 suggests that the situation has not significantly changed since 2006. Age-specific changes are so small that they still fall within the margin of error and, thus, do not lend their support to conclusions positing the emergence of new trends. An explanation of the changes in older age groups may lie in the fact that, in comparison to older postal questionnaires, the 2008 survey was conducted in the context of personal interviews. It thereby revealed that concealment of illegal cannabis use has probably been more frequent among respondents over 35 years of age than younger respondents. (Metso 2009)

	1992	1996	1998	2002	2004	2006	2008***		
Lifetime prevalence									
All	5	8	10	12	12	13	13		
15–24	12*	14**	19	25	18	19	21		
25–34	10	16	19	19	22	25	25		
35–44	4	8	8	11	13	16	13		
45–69	1	2	3	4	5	6	5		
12-month preva	lence								
All	1	2	3	3	3	3	3		
15–24	6*	9**	10	11	8	9	10		
25–34	2	3	3	4	5	7	6		
35–44	0	1	0	1	2	2	1		
45–69	0	0	0	0	0	1	0		
*18–24 yrs **16–24 yrs *** In 2008, a different data collection method was used than previously									

Table 3. Lifetime and 12-month prevalence (%) of cannabis use by age group, 1992–2008

Source: Hakkarainen & Metso 2007; Metso 2009.

<sup>27</sup> In 1992–2006, data for the drug surveys were collected through postal questionnaires but, in 2008, data was gathered through interview visits carried out in the context of the Drinking Behaviour Survey. The interviewees were selected based on random sampling from a population including Finns aged 15–69. The sample size was 3,750 people, the final net sample being approximately 73%. Following the interview, the respondent was requested to fill in a questionnaire on drug use. The respondent sealed the questionnaire in an envelope and handed it to the interviewer. A total of 2,593 questionnaires were returned, the response rate being 69.1%. Since this different method of data collection may affect results, the results from 2008 cannot be considered fully comparable with the postal surveys of the previous years. (Metso 2009; Huhtanen et al. 2009.)

In the 2006 survey, for drugs other than cannabis, the percentages of those having experimented with drugs during their lifetime varied from 2% for those having tried amphetamines to 0.6% for opiates. A total of 1.5% had experimented with ecstasy and 1.0% with cocaine. The group with the highest proportions of people having experimented with amphetamines (9%), ecstasy (5%) and cocaine (3%) comprised 25–34-year-old men. For all drugs and among all age groups, fewer than 2% reported having tried a drug during the past year, and only a few individuals reported having tried a drug during the past month. (Hakkarainen & Metso 2007.)

According to the 2006 survey's results, hypnotics, sedatives and analgesics had been used for non-medicinal purposes by 7% of the respondents during their lifetime, by 3% during the past year and by 2% during the past month. Age and gender differences were not significant in the case of pharmaceuticals. (Hakkarainen & Metso 2007.)

In the Health Behaviour Surveys among the Finnish Adult Population<sup>28</sup>, the most important annual indicator depicting the development of the drug situation is the proportion of people of various age groups with an acquaintance who has experimented with drugs. These proportions grew until the early 2000s, but have been declining ever since. The most significant changes have occurred among 15–24-year-olds. However, the overall trend is not quite unequivocal, given that 25–34-year-old males' contacts with those who have experimented with drugs have increased during recent years. The year 2007 seemed to mark a deviation from the general declining trend for the whole of the youngest age group. (Piispa et al. 2008, p. 30; Helakorpi et al. 2009, p. 156.)

Summarising recent research findings, the researchers conducting the Health Behaviour Surveys (Piispa et al. 2008) suggest that although there may be fewer new users experimenting with or starting to use drugs compared to a decade ago, following years of growing use, drugs play a significantly stronger role in Finland in the partying habits of urban youth, recreational use (Salasuo 2005) and problem use of substances (Partanen et al. 2007).

<sup>28</sup> Data for the health behaviour surveys have been collected by a postal survey sent to a representative random sample of 5,000 persons among those aged 15 to 64 years of age and permanently living in Finland; people living in institutions were excluded from the study. Questionnaires were mailed out during the spring (in April) and those who did not respond were sent two (in 1996) or three (in 1997–2008) new questionnaires during the following two months. The number of those returning the questionnaire has varied annually between 3,200 and 3,600. (Piispa et al. 2008; Helakorpi et al. 2009.)

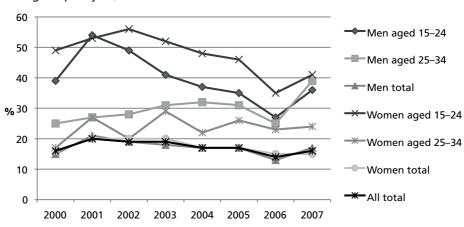


Figure 2. People who know at least one person who has experimented with drugs during the past year, %.

Source: Piispa et al. 2008; Helakorpi et al. 2009.

# 2.2 Drug use in the school and youth population

According to the ESPAD survey of school pupils<sup>29</sup>, 8% of 15–16-year-olds had experimented with cannabis sometime in their life whereas the corresponding figure was 10% in 1999 and 11% in 2003. Differences between girls and boys were not significant. The proportion of respondents who reported having tried illegal 'hard' drugs was 0–2%. For substance use, levelling or falling trends have been observed throughout the 2000s with respect to binge drinking, tobacco, cannabis and the combined use of alcohol and pills. A downward trend began in the Greater Helsin-ki area, but it is already clearly visible elsewhere in Southern Finland and Western Finland. A downward trend is particularly apparent in the Greater Helsinki area with regard to cities and cannabis. Indeed, in 2007, experimentation with cannabis was nearly as common among young people living in the countryside as among those living in cities. Regionally, however, cannabis experimentation by young people is highest in the Greater Helsinki area, at 12%. (Ahlström et al. 2008; Metso et al. 2009.)

Exceptions to this trend were, however, reflected in a growing use of glues and solvents and, among girls, an increasing use of sedatives and hypnotics. According to the 2007 study, 10% of young people had used glues or solvents in their lifetime.

<sup>29</sup> The latest of these surveys was the 2007 ESPAD survey, which involved 299 schools and 5,043 pupils in the 9th grade of secondary school. Data was collected using the same compilation method as in the 1995, 1999 and 2003 surveys. The response rate was 91% in 2003. (Ahlström et al. 2008.)

Nearly 10% of girls had also used sedatives or hypnotics to become intoxicated. The use of glues and solvents, in particular, is markedly more frequent in the country-side (15% of young people) than in cities (9%). (Ahlström et al. 2008.)

Generally, pupils doing well in school use substances of any kind less frequently than those performing poorly. Throughout the history of the ESPAD survey, drug experimentation has been low (4-5%) among pupils doing well in school and, for instance in 2007, the difference in cannabis use was high between those doing well and poorly (3% vs. 17%). A similar phenomenon emerges based on questions gauging truancy. According to the 2007 results, 4% of pupils who had not skipped a class during the last month had experimented with cannabis at some point, while among pupils who had skipped classes at least three times, a third had experimented with cannabis at some point. Additionally, pupils' home backgrounds have a certain impact on drug experiments, since among pupils living in so-called nuclear families, the occurrence of cannabis experiments (6%) remains at approximately half of the corresponding proportion in other family types. By contrast, the family's educational background does not significantly influence experimentation, notwithstanding the fact that experiments originally became common in the mid-1990s in families with a higher education background. (Metso et al. 2009, p. 79-81, 84-86.)

The questions in the national Adolescent Health and Lifestyle Survey<sup>30</sup>, aimed at 12–18-year-olds, enable the analysis of young people's 'social exposure to drugs. Respondents are asked whether an acquaintance has experimented with intoxicants or whether they themselves have been offered such substances. The 2007 survey indicates that the proportion of 14–18-year-olds 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. (Rimpelä A. et al. 2007, p. 42–44.)

The researchers conclude that the Adolescent Health and Lifestyle Survey and School Health Promotion Study, both carried out every two years, suggest that the reduction in drug use is coming to a halt. 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 does not depend solely on supply from external sources. (Rimpelä A. et al. 2007, p. 51.)

<sup>30</sup> The survey takes the form of a postal survey repeated every other year, the first being conducted in 1977. The survey sample is selected from among those aged 12, 14, 16 and 18. For those who have not responded, the survey includes two new questionnaires, the final one being available in electronic format. The 2007 survey covered a total of 5,480 youth respondents (response rate 61%). (Rimpelä A. et al. 2007.)

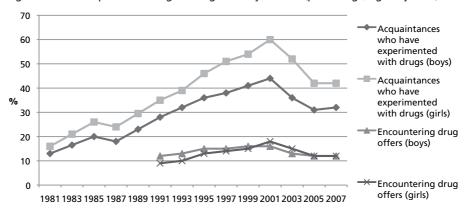


Figure 3. Social exposure to drugs among 14–18-year-olds (percentage, age-adjusted)

Source: Rimpelä A. et al. 2007.

In Finland, data on twins born between 1983 and 1987 have been gathered in the *FinnTwin 12–17* studies. This data has 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<sup>31</sup> 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

<sup>31</sup> Research data consisted of five full birth cohorts of twins from 1983 to 1987 (n=5,600 twins), baseline surveys targeted at the twins and their parents when the twins were aged 11 to 12 (coverage 87%), a follow-up survey when they were aged 14 (coverage 88%) and a second follow-up survey when they were aged 17.5 (coverage 92%). The data also included teacher assessments of twins aged 11 to 12 years. The cluster of determinants was selected based on a literature review and assessed using the baseline survey and the first follow-up survey, while drug use was gauged through the survey addressed at 17.5-year-olds. After cleaning and inspection, the final data comprised information on 3,118 persons (twins). This data was analysed using logistic and conditional logistic regression analyses by using the odds ratio as a measure of association. The sample population in the last phase consisting of discordant twins included a total of 246 twin pairs. (Korhonen et al. 2008.)

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. In particular, researchers emphasise that the phenomenon of early smoking was an even more significant determinant than early consumption of alcohol in terms of later drug experimentation. However, the researchers point out that many determinants of drug experimentation discovered in other research literature (family's attitudes, discipline, general environmental factors, availability of drugs) had to be excluded from the study's original list of variants. (Korhonen et al. 2008.)

A twin study describing the impact of early-age depression on young people's substance use<sup>32</sup> affirmed that early manifestation of the symptoms of depression (at the age of 14) predicts a higher probability of drug experimentation during youth (at the age of 17.5 years). Correspondingly, in such cases there is also a higher probability of smoking tobacco on a daily basis and of regular alcohol consumption. When the model was specified by narrowing the analysis down to those twin pairs of whom only one twin had both experienced depression and had different drug experimentation experiences as a youth, this interrelation no longer seemed significant. However, since the sample size in the latter case was very small, these results can be considered indicative at best. (Sihvola et al. 2008.)

## 2.3 Drug use among specific groups

In terms of substance abuse, young men form a particularly challenging group. Surveys among conscripts have proved an important method of gauging the health-related habits of this group. The situation among conscripts has been monitored systematically through surveys since 1968. In the 2005 survey, 20% of respondents reported having tried a drug of some kind, most often cannabis. (Meririnne et al. 2007.)

<sup>32</sup> This study examined five full birth cohorts of twins from 1983 to 1987 (n=5,600 twins) and baseline surveys targeted at the twins and their parents when the twins were aged 11 to 12 years (coverage 87%). The study's basic data was obtained based on random sampling (40% of the sample) of the above-mentioned data, consisting of a follow-up interview of the families while the twins were aged 14 years (coverage 90%) and also including the SSAGA (Semi-Structured Assessment for the Genetics of Alcoholism) questionnaire. The actual follow-up data consisted of a questionnaire sent to these twins when they were aged 17.5 years (coverage 83%). After cleaning and inspection, the final data comprised information on 1,545 persons (twins). This data was analysed using logistic and conditional logistic regression analyses by using the odds ratio as a measure of association. The sample population in the last phase consisting of discordant twins included a total of 150 twin pairs. (Sihvola et al. 2008.)

However, these surveys do not reach men not serving as conscripts, accounting for approximately one fifth of males born in any given year. In order to fill this information gap, STAKES, the Finnish Defence Forces, the Ministry of Labour and the cities of Helsinki and Vantaa conducted a survey in 2004–2005 to gather information on the health-related habits of those remaining outside the conscript service and those whose service as conscripts had been interrupted. (Stengård et al. 2008.)<sup>33</sup>

	AB men	Men outside the service	CDE men, average	Men who interrupted
Has experimented with drugs	16%	32%	43%	55%
Knows a person who has experi- mented with drugs at some point	59%	67%	75%	83%
Has been offered drugs	55%	62%	70%	78%

Table 4. Drug use among conscripts and those remaining outside the conscript service, 2004–2005

Source: (Stengård et al. 2008.)

When entering the conscript service, candidates are classified on the basis of any health-related obstacles to serving in the armed forces. For AB men, possible health problems do not prevent participation in the service. Based on the research findings, CDE men suffered more adverse life events (unemployment and subsistence-problems) and psycho-social problems (substance abuse and mental health problems in the family) than AB men. Furthermore, the CDE men had fewer social relationships and hobbies, and less support than AB men. Those with diagnosed substance abuse problems led the least healthy lifestyles. Nearly half of the CDE men were psychologically burdened (sleep disorders, depression etc.), while the corresponding figure for AB men was less than 10%. In addition, such an accumulation of problems was more frequent among those who had interrupted their conscript service than those who had remained outside it. (Stengård et al. 2008, p. 74–80.)

<sup>33</sup> The participants of the survey in 2004–2005 included a total of 356 young men outside the conscript service or non-military service, and a total of 440 young men assigned to perform public services in Helsinki and Vantaa. The data was collected through questionnaires and using register data. Health requirements for those entering conscript or non-military service are identified in a medical examination conducted during the recruitment procedure. Persons whose health does not restrict activities in field conditions are placed in military class A, while class B includes those considered to have difficulty surviving in combat forces due to health reasons, but who can be trained in various support tasks. Persons in these classes were defined as 'AB men' in the study. If a health-related obstacle to conscript service is identified in a young person, he will be exempted from the service during peacetime (class C), temporarily (class E) or permanently (class D). One in ten conscripts is identified as having a health-related obstacle to serving and, in the 2007 conscription, 80% of these were placed in class C and 11% in class D. Approximately half of conscripts who remained outside the service did so due to mental health reasons. One in ten conscripts interrupts his service, approximately half of these for mental health reasons. Those who participated in the survey but had interrupted their service were included in 'CDE men'. (Stengård et al. 2008, p. 5, 26–27.)

# 3 Prevention

Preventive substance abuse work forms part of the wider concept of promotion of well-being and health. In order to improve substance abuse work, a network of municipal contact persons for preventive substance abuse work was established in 2000. By the spring of 2007, nearly 95 % of Finnish municipalities had appointed a contact person. The duties of a contact person include the promotion of preventive substance abuse work through multi-professional co-operation in the municipality, information dissemination between the actors involved in preventive work and co-ordination of the municipal or regional substance abuse strategy.

Development of the municipal and regional networks for substance abuse prevention is carried out within the framework of the national alcohol programme. The current government has decided to continue these activities in line with the resolution concerning the alcohol policy for 2003–2007 (Ministry of Social Affairs and Health 2003), under the alcohol programme 2008–2011. STAKES was the programme's main coordinator, steering the implementation of the municipal programme, until the end of 2008. Thereafter, the National Institute for Health and Welfare (THL) filled this role. In addition, THL is developing the regional developer network for substance abuse. It also collects and disseminates best practices in the field. For the period 2008–2011, the objective is to reinforce the regional and subregional prevention of alcohol-related harm. State Provincial Offices are hiring regional coordinators to ensure that the programme's policy lines are implemented in both regional and municipal substance abuse strategies. The Government's support for the programme is provided through the Policy Programme for Health Promotion.

In municipal substance abuse strategies, preventive substance abuse work 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. Preventive substance abuse work also includes the prevention of smoking and functional dependencies.

Quality criteria have been determined for substance abuse prevention (STAKES 2006). The criteria are qualitative and suited to the prevention and reduction of harm related to substance abuse<sup>34</sup>. The practical implementation of the quality criteria is considered a central tool in improving the quality of substance abuse prevention. These quality criteria do not separate drug prevention from other substance abuse prevention.

<sup>34</sup> 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.

School curricula defined by the National Board of Education specify health education as a separate subject. Substance abuse questions are key aspects of this subject. School curricula and pupil and student welfare services should also include drug prevention. For example, strategies for the prevention and treatment of substance abuse should be included in the local curriculum.

The Ministry of Education is mainstreaming youth substance abuse prevention by supporting actors and hobbies which attempt to prevent youth substance use. Furthermore, substance abuse prevention targeted at young people is carried out in workshops that have been created to activate young unemployed people. Youth workshops are a form of early intervention, and they aim at preventing the exclusion of young people from education.

In working life, drug tests are conducted to prevent drug-related harm and for referring individuals with drug problems for treatment as early 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 involves not only municipalities: organisations 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 organisations aim to promote discussion and provide information on drugs, drug use and the related causes and consequences. In addition, organisations attempt to influence people's attitudes, organise peer support activities and provide post-care for substance abuse patients.

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.

## 3.1 Universal prevention

In Finland, municipalities and joint municipal boards are principally responsible for arranging and providing social and health care services. Promotion of well-being and health is highlighted through inclusion in legislation (Primary Health Care Act), in ongoing policy programmes (the Health 2015 public health programme) and the service quality recommendations which guide policies (for instance, recommendations concerning the quality of services for substance abusers, and quality criteria for substance abuse prevention). In 2007, STAKES conducted a survey among all municipal managers concerning the strategies, methods and follow-up used in the promotion of well-being and health.<sup>35</sup>

<sup>35</sup> A total of 177 out of Finland's 416 municipalities responded (a 43% response rate), covering nearly two thirds of the Finnish population. (Wilskman et al. 2008, 5.)

The survey found that 41% of those municipalities which responded had explicitly adopted the target specified in the Health 2015 public health programme (Ministry of Social Affairs and Health 2001) that "health problems associated with alcohol and drug use among the young will be dealt with appropriately and will not exceed the level of the early '90s". The larger the municipality, the more important targets related to substance abuse by young people become: they are included in the action and financial plans of two thirds of municipalities with more than 30,000 inhabitants. Similarly, the quality criteria for substance abuse prevention (STAKES 2006) and recommendations concerning the quality of services for substance abusers (STAKES 2002) are applied in approximately two thirds of those municipalities which responded to the survey, including nearly all municipalities with more than 30,000 inhabitants. Respondents identified future challenges for improving municipal services as including the prevention of lifestyle diseases (such as substance abuse), and also highlighted the pressures prevailing in the treatment and prevention of youth mental health and substance abuse problems and in school health care. (Wilskman et al. 2008, p. 15-16, 19-20, 32.)

In 2008, STAKES investigated how systematically municipal substance abuse strategy work was carried out by interviewing substance abuse prevention contact persons (n=16) and by analysing municipal substance abuse strategies (n=24). The investigation revealed that many municipalities had prepared their substance abuse strategies in line with national guidelines and recommendations, the main output being a document in which municipal actors had committed themselves to work according to a common vision. However, substance abuse strategies often merely consist of descriptions of the current situation and activities. In such cases, the strategies do not direct practical work, and such descriptive strategies offer little support to the development of substance abuse work and networking between the various sectors. Sometimes the strategy has been prepared by a relatively small group of persons working in the municipality's area, and other actors excluded from the process do not see themselves as responsible for the implementation of the strategy. Some interviews suggest that, to some extent, it is the substance abuse working group which prepared the strategy that is seen as the most important influence on substance policy. Indeed, the substance abuse strategy itself may be forgotten once it has been released from the municipal council, while the substance abuse working group represents continuity and, at best, participation in decisionmaking. (Kekki & Kajander 2008, p. 35–36.)

In addition to strategies, municipalities have various official and unofficial guidelines which may determine, for instance, which authority (the police / health centres) is responsible for intoxicated clients or the operating methods governing how the various authorities should operate regarding their own clientele (youth workers, physicians). Moreover, such practical operational guidelines often have a greater influence on substance abuse work than strategies do. While co-operation and innovation do not necessarily require a formal substance abuse strategy, the in-

terviewees stressed that such a strategy is useful in the implementation of innovations. A strategy facilitates the development of substance abuse work and the commitment of responsible parties to it, and this development work will benefit both clients and employees. (Kekki & Kajander 2008, p. 36–37.)

Organisations play a key role in substance abuse prevention. The activities of organisations receiving public funding for health promotion were evaluated in 2007.<sup>36</sup> The evaluation included (1) Operational Principles and Strategy (focusing substance abuse prevention according to quality criteria), 2) Implementation and Organisation of Activities (ensuring the knowledge base of the work and selection of the method of implementation); (3) Fruitfulness (the objective in relation to the focus of substance abuse prevention, monitoring and evaluation); (4) Expertise (evaluating and utilising the expertise of personnel); (5) Partnerships and Resources (objective-driven co-operation); (6) Leadership (the fruitfulness of the planning implementation and organisation of activities). (Wennberg et al. 2007, p. 8–10.)

The evaluation identified the provision of information, training and consulting as key forms of work carried out by organisations. The methods employed in substance abuse prevention are generally divided into the more known and established means (often internationally used) and those developed by organisations themselves. In practice, it is only possible to find research and evaluation data on the effectiveness of the original model when evaluating the more known and established methods. While approximately 70 per cent of the respondents considered that the organisations paid sufficient attention to evaluating the effectiveness of substance abuse prevention, it is worth noting that only 42% used systematic methodology in their evaluations. In general, systematic methodology refers to the quality criteria for substance abuse prevention drawn up by STAKES. The most frequently used means of evaluation included reporting and documentation (such as a yearly report), evaluation meetings and client feedback. (Wennberg et al. 2007, p. 24–26.)

Published in 2007, the final report of a working group established to develop training on substance abuse prevention and treatment stated that the amount of training in substance abuse and the content of that training varied from one educational establishment to another and at different levels of education. This depended on whether schools, colleges and universities had a teacher interested in the subject, whether there was a teacher responsible for substance abuse prevention and whether the establishment conducted its own research into substance abuse. In or-

<sup>36</sup> Evaluation of activities was based on the European Quality Award Model (the EFQM model). The materials used in the evaluation included interviews with representatives of organisations as well as with officials from the Ministry of Social Affairs and Health, analyses of annual reports from organisations and documents relating to the working methods employed in substance abuse prevention, an electronic questionnaire and intensive case studies of those materials as well as other supplementary documentation. The evaluation involved a questionnaire that combined self-assessment and data collection; the questionnaire was forwarded to the contact persons of the organisations. A request was made to forward the questionnaire to those people who were responsible for, or who implemented substance abuse prevention in, the organisation in question. A total of 53 people responded to the questionnaire, which pertained to the organisations' activities in 2005.

der to safeguard the level of training, the results of the working group led to a proposal for minimum training content on substance abuse. (Ministry of Education 2007a.)

The proposal by the working group states that the obligation for training in substance abuse prevention should apply to all educational fields in which employees in the social and health sector graduate. It is also important that everyone qualifying in youth work, education and teaching or becoming a deacon or police officer receives the necessary basic preparedness for substance abuse prevention as part of his or her training. In order to ensure the quality and comprehensive and systematic nature of training in substance abuse prevention, it is necessary to specify clearly defined learning objectives for qualifications and professions. Courses should take an equal approach to substance abuse prevention and mental health work, and make this approach apparent in the curriculum and teaching. Those working in the above-mentioned fields should be offered a sufficient amount of good quality further and continuing education to supplement, maintain and strengthen their expertise in substance abuse prevention. Furthermore, an educational establishment should also have an up-to-date drug and alcohol strategy to ensure that the institution's substance abuse culture develops alongside teaching substance abuse prevention. (Ministry of Education 2007a.) The development of continuing professional education in the field of youth work has been initiated in the Preventiimi programme operating under the national University of Applied Sciences (HUMAK). This programme improves the professional skills of those working in youth work and establishes networks between actors. (Preventiimi 2009.)

In her doctoral dissertation on teachers' view of education and teaching aimed at drug prevention, Outi Mäkitalo set out to identify the various ways in which teachers understand the phenomenon of substance abuse and carry out drug prevention.<sup>37</sup> The interviews employed key questions in order to examine how teachers understand the concept of 'substance', what kinds of students they think are using drugs, what kinds of families drug-using young people come from, whether there is a difference between a student using alcohol or a narcotic substance, whether the teacher can conduct drug prevention, whether drug education is the only option and how teachers see their own role at school. (Mäkitalo 2008, 60.)

According to Mäkitalo's study, teachers mainly considered the concept of substances from the health perspective. Alcohol and drugs were clearly differentiated from one another. Differences in teacher views related to how broadly they defined the concept of drugs and whether health impacts related to drug use were considered with regard to particular substances or at a more general level. In many cas-

<sup>37</sup> A phenomenographic research approach was used, including interview data from interviews of nine upper secondary school teachers (at that point, the researcher had estimated the collected data to be rich and to contain variation). All interviewees were interviewed for approximately one hour, first in the spring of 2001 and a second time in the autumn of the same year. The interviewed teachers represented various subjects. (Mäkitalo 2008, 58.)

es, the habitual perspective seemed to deem information derived from a medical frame of reference to be objective. However, medical knowledge is not the same as that which teachers and students encounter in their daily lives. (Mäkitalo 2008, p. 175–181.)

While some teachers participating in the study highlighted the importance of health impacts and the related facts, others saw drug prevention as part of a broadbased education at school. The latter involves developing traditional drug education towards life skills, ethics and value education, while the related teaching is developed based on empowerment. Under the first option, an external expert is often sought for carrying out drug education. Thus, as conducting the educational task is replaced with the presentation of facts, the development of the student's new skills and characteristics remain a secondary goal. Some teachers emphasise strong emotional experiences (such as images on the health problems caused by drugs), while others highlight fact-based teaching rather than preaching and moralising. Since the learning content offered to students consists of substance-related information, teachers do not see themselves as competent in discussing drugs because they lack special expertise in the field. Based on the second option, teachers are broadening their own role in functioning as educators, highlighting the development of young people's interactive skills and their critical ability to form a personal approach towards drugs based on versatile information and one's own thinking. These teachers felt that their own knowledge and skills (and their development) qualified them to discuss drugs. They, too, would complement their classes with external expert visits, although they expressed doubts about the relevance of such information to the educational task in hand. (Mäkitalo 2008, p. 175-181.)

According to Mäkitalo, attitudes towards drugs in Finland involve a taboo-like dimension, which influences teachers' roles in potential interventions. The interviewed teachers considered other professional groups' knowledge bases to be better suited than their own to conducting interventions. Drug prevention was primarily viewed as an attempt to help young people facing problem situations within a multiprofessional group. Teachers are, in principle, committed to participating in such a group through the requirements of the basic upper secondary school task. According to the researcher, teaching represents one side of learning, while the development of the student's critical thinking and the formation of a responsible attitude towards drugs are dependent on the learning contents proposed to him/ her in school education. In the interviews, teachers often assumed that an external drug educator's information would be correct. However, according to the researcher, the way in which such external information is related to the educational and cultural objectives of upper secondary school - i.e. the development of a sense of responsibility as well as skills and characteristics the students will need in the future – is open to question. In terms of drug prevention, an essential issue relates to how teachers view their own task, since the information transferred to students is filtered through the teacher and his/her own understanding of the issue. From an

institutional viewpoint, the teacher's role is to help students form a responsible relationship with the world. Alongside the spread of recreational drug use, teaching too must adapt in order to meet new challenges. Furthermore, teachers should be encouraged to engage in the debate on drug education in schools. (Mäkitalo 2008, p. 181–182, 185–189.)

Over ten years ago, a key organisation in the field of substance abuse treatment and prevention, the A-Clinic Foundation, created a national drug information service (AddictionLink at www.paihdelinkki.fi) to support anti-drug work. AddictionLink is a low-threshold web service providing information on addictions as well as self-help tools. The use of AddictionLink and its discussion forums are regularly monitored. According to a tracking survey conducted in the autumn of 2007, the monthly number of unique visitors averaged 42,000. A visitor survey conducted in November–December 2007 mapped the services' visitor profile and the services used.<sup>38</sup> Based on the survey, the visitors' average age was 31.7 years, females accounted for 59% of respondents and the respondents were mainly urban dwellers (30% from the Greater Helsinki area). Nearly half of the respondents were students and one third were employed. (Päihdelinkki 2008a.)

In total, more than half of AddictionLink users reported that they were seeking information and support relating to their own substance abuse or addiction problem, or those of someone close. Approximately every fifth respondent used the AddictionLink for work or study purposes. Roughly one third reported that they had sought support from the service for their own situation, 60% of these due to problematic alcohol consumption and about one fifth due to the problematic use of pharmaceuticals and drugs. Every tenth respondent was concerned about their own gambling. Among those who sought information relating to their work, nurses (27%) and social workers (12%) represented the largest individual professional groups. Those who needed information in their work followed discussion forums and searched for information in the Info bank. In addition, the AddictionLink has implemented closed discussion groups steered by professionals for drug users and mothers concerned about their own substance abuse (the Sauna forum). The objective of these groups is to stop the use of substances. (Päihdelinkki 2008a.)

In 2008, the Sauna discussion forum was visited by approximately 8,800 unique visitors per month. During peak months, the Sauna forum attained more than 30,000 visits. Based on the forum's visitor survey<sup>39</sup>, the average age of male and female respondents was 25 years and their shares of all visitors were nearly equal. The majority of respondents were urban dwellers, approximately one third coming from the Greater Helsinki area. Of all respondents, employed people and students together accounted for approximately one third. Almost half of the respondents characterised their substance abuse as occasional and, furthermore, not all visitors of the

<sup>38</sup> The AddictionLink visitor survey was conducted between 1 Nov.–31 Dec. 2007. During this period, a total of 1,421 service users responded to the survey.

<sup>39</sup> A total of 131 Sauna visitors responded to the Sauna visitor survey in 2008.

Sauna forum were substance abusers. The most frequently used substance among respondents was alcohol (75%). Other substances mentioned included cannabis (60%), benzodiazepines (50%), amphetamines (one third), buprenorphine (21%) or other opiates (one third), ecstasy (23%) and GBL (16%). (Päihdelinkki 2008b.)

The majority of respondents visit the Sauna forum regularly, read Sauna discussions selectively and spend under one hour per week at the forum. However, every fourth respondent stated that they visited the forum almost every day. In most cases, the Sauna discussions are used as a source of information (42%) or for seeking peer support (27%). According to the responses, the Sauna discussions had inspired around 40% of respondents to renounce the idea of experimenting with a substance and 30% to stop regular use. More than 40% reported that they had reduced intravenous use. On the other hand, 30 Sauna forum users stated that discussions had attracted them to use certain substances which they would not otherwise have experimented with. (Päihdelinkki 2008b.)

## 3.2 Selective and indicated prevention

Over the last few years, projects targeted at various (at-risk) groups or focusing on (personal) risk factors have produced a wide range of materials that can be applied in substance abuse prevention. These materials have been brought together on the Finnish "Ehkäisevän päihdetyön materiaalit" web portal of the Finnish Centre for Health Promotion (Tekry 2009).

National substance abuse prevention projects targeted at at-risk groups and completed in 2008, included an assessment of the project Rave Against Drugs (YAD 2008) whose purpose was to develop methods and materials of substance abuse work targeted at recreational users in 2005–2007. The project focused in particular on the creation of an operating model for preventive work at electronic music events. The idea underlying the project was to produce material and distribute it at electronic music events and to train target group representatives to conduct field work and become peer influencers. In addition, the project included co-operation with event organisers.

A particular risk factor related to substance use to emerge from the Finnish debate in 2008 was the connection between mental health and substance abuse work, which was prominently conveyed by the report of the Mieli 2009 Working Group (Ministry of Social Affairs and Health 2009a). Related to this issue, a guidebook for parents and people working with young people was produced in 2008 on how to approach anxiety and substance abuse and identify problems (Fröjd et al. 2009).

Annually, almost a hundred projects are allocated funds from appropriations to youth work. Some projects are national prevention projects, methodology development and education, while others are local events and actions on grass-root level. Local substance abuse prevention projects have focused on many different groups, including families, Romanies, immigrants, non-heterosexuals and the disabled, but evaluations are generally local, specific to the project, limited and lacking comparative or generalisable research questions.

## 4 Problem drug use

The number of problem drug users is estimated in Finland based on the number of problem users of amphetamines and opiates, which came to 14,500–19,100 in 2005; this accounts for 0.6–0.7% of 15–55-year-olds among the entire population. Nearly four fifths of problem drug users used amphetamines. The proportion of men was 80%, while the majority of problem drug users belonged to the 25–34-year age group.

According to the 2008 data from the drug treatment information system, opiates were the primary problem substance of clients entering drug treatment (representing 50% of all drug treatment clients of the substance abuse services), followed by stimulants (16%), alcohol (18%), cannabis (9%) and pharmaceuticals (7%). These results reflect the provision of treatment, since substitute treatment is so far available only to opiate users. Buprenorphine was the primary problem substance for as much as 34% of the clientele. The combined use of various narcotic substances, alcohol and pharmaceuticals typically forms part of the culture of problem substance abuse in Finland.

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 underlying problem drug use in Finland are the relatively young age of users and, consequently, a relatively short history of drug use. 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 PDU

Estimates on the prevalence of problem drug use<sup>40</sup> based on administrative statistics have been made since 1997. According to these estimates, out of the 15–54-year-old population, there were some 14,500–19,100 amphetamine and opiate problem users in the entire country in 2005. (Partanen et al. 2007.)

<sup>40</sup> The estimates of problem drug users are based on the statistical capture-recapture method in which the samples from the same group are used to assess statistically the size of the entire target population. The samples were defined based on the interventions directed by society at the target population (amphetamine and opiate users). The interventions employed by the system included amphetamine or opiate diagnoses recorded in hospitals, penal action for drug offences involving the use or possession of amphetamines or opiates, arrest for driving under the influence of amphetamines or opiates and hepatitis C cases recorded in the infectious diseases register due to intravenous drug use. The estimate intervals are based on 95% confidence intervals of the estimates. Different log-linear models were applied to different subgroups so the sum of the subgroups differs from the overall estimate. (Partanen et al. 2004, 2007.)

The number of problem users of amphetamines and opiates<sup>41</sup> increased noticeably between 1999 and 2002. Since then, the proportion of problem users of amphetamines and opiates seems to have stabilised. The majority of problem users, 75–80%, consisted of amphetamine users, and they accounted for 0.4–0.7% of 15–54-yearolds in Finland in 2005. The estimated proportion of problem users of opiates was 0.13–0.18% of the population. The proportion of women was 20–30% in both substance groups. While the proportion of 15–24-year-olds came to 25–35%, they were no longer clearly the largest user group, the proportion of 25–34-year-olds having already attained the younger age group's proportion. (Partanen et al. 2007.)

	1998	1999	2001	2002	2005
Overall estimate	0.4–0.55	0.4–0.5	0.5–0.6	0.55–0.75	0.52–0.69
Amphetamine users	0.26-0.45	0.29–0.43	0.35–0.54	0.38–0.65	0.43-0.74
Opiate users	0.06–0.09	0.09–0.11	0.14–0.17	0.15–0.21	0.13–0.18
Men	0.54–0.70	0.54–0.66	0.58–0.71	0.77–1.03	0.74–0.98
Women	0.20-0.58	0.14–0.24	0.20–0.31	0.29–0.57	0.20-0.31
15–25-year-olds	0.67–1.12	0.73–1.02	0.81–1.04	0.93–1.30	0.63–0.95
26–35-year-olds	0.51–0.71	0.46–0.59	0.64–0.82	0.74–1.13	0.68–0.94
36–55-year-olds	0.14–0.25	0.19–0.46	0.22-0.36	0.25-0.50	0.30-0.54

Table 5. Development of the population share (%) of amphetamine and opiate problem users in Finland in 1998–2005.

Source: Partanen et al. 2004, 2007.

Some 50–60% of all problem users were from Southern Finland and more than half of them from the Greater Helsinki area. According to the data from 2005, the upward trend in the number of problem users in Southern Finland has stopped, and the number of problem users has even dropped outside the Greater Helsinki area in Southern Finland. The proportion of women among problem users seems to be on the constant decline everywhere in Finland, possibly excluding the Greater Helsinki area. The aging trend among users is most evident in the Greater Helsinki area. In the light of data from 2005, it seems possible that the drug problem as well as specialised treatment services (substitution treatment, health counselling) will be concentrated in the Greater Helsinki area and possibly some other large cities. (Partanen et al. 2007.)

In international comparisons, it should be borne in mind that the estimated number of problem users in Finland is based on a fairly broad definition of prob-

<sup>41</sup> According to the national definition used in the study, problem use refers to the use of amphetamines and opiates to such an extent that it causes social or health problems to the user. Furthermore, the authorities have had to intervene in one way or another and this has been recorded in administrative registers.

lem use, particularly concerning amphetamines, and the estimate may also include occasional users. However, temporal comparisons of problem users involve uncertainties because changes have taken place during a short period of time and at the same time, the service system of society has undergone great change. (Virtanen 2004). For example, the substance abuse service system has been strongly developed in the 2000s, which may have reduced the number of people entering hospital care; the increased number of health counselling centres has reduced the occurrence of infectious diseases; the registration procedure for cases of driving while intoxicated has become stricter, which has increased the proportion of drug use in the register of cases of driving while intoxicated; and the introduction of the offence of unlawful use of narcotics has indirectly affected the way the police record different substances in their register. (Partanen et al. 2007.)

# 4.2 Data on PDUs from non-treatment sources

Finnish drug use and the role of cannabis therein have been examined, in addition to the perspective on the generalisation of use, from the viewpoint of cannabis campaigners. In her doctoral dissertation, Taru Kekoni questioned campaigners on the meanings they associated with their personal use of cannabis.<sup>42</sup> Of the interviewees, approximately 70% were under the age of 35. Among the interviewees' narratives, the researcher distinguished six types of meaning: recreational use, use which broadens one's consciousness, medical use, lifestyle use, ritual use and addiction-based use. For one in seven interviewees, these meanings were determined through the concept of addiction. Generally speaking, addiction is identified based on the ample daily use of cannabis. As problems in cases of addiction-based use, users mentioned difficulty in stopping and, in certain cases, social, psychological or physical problems arising from use. Addiction-based cannabis use was also reported as representing a financial burden. Penal sanctions for use and the fear of sanctions was reported as a significant use-related problem and, in many cases, the primary reason for wishing to stop use. The researcher states that the interviewees included individuals who acknowledged that cannabis was a substance which caused addiction while simultaneously affirming that they did not regard this as a problem. According to such respondents, cannabis use makes a user feel good whereas, without use, they reported unpleasant feelings of one kind or another. When the issue of addiction was broached in interviews, the comparison between addiction caused by cannabis and by other substances emerged frequently. Addiction caused by cannabis was nearly always described as insignificant in comparison

<sup>42</sup> The researcher contacted the interviewees through the Finnish Cannabis Association and by distributing contact questionnaires at a hemp march held in Tampere in 2003 (cf. Section 1.4).

to that entailed by other substances – with many interviewees having experience of such addictions, most frequently those related to alcohol or psychopharmaceuticals. (Kekoni 2007, p. 78, 138–143.)

In a study analysing self-conceptions of young female problem drug users, various identity types of drug users were assessed.<sup>43</sup> Based on an interview of a 17-yearold problem female user, selected as the 'ideal type', the study suggested that the toplayer identity was founded on the concept of a 'junkie'. Associated with this concept are attributes such as "ceding to the impossibility of change", "outsider", "passive drifting", "social marginalisation" and "isolating oneself". However, the problem user feels that she is also more than just a junkie: an "ordinary young girl" who is happy, sensitive and determined by nature. In the interview, she feels that she understands why her brother and mother find it difficult to get along with her and, thus, indicates that the stigma of a 'selfish junkie' unequivocally associated with a problem user is not always so self-evident. A third central identity type emerging from the interviews is the identity of a "calculating gambler" playing against parents and school personnel and identifying with his or her own peer group (other drug users). This identity is clearly distinct from the two previously mentioned types, since it characterises the problem user as an active participant - not as a passive victim or an ordinary John or Jane. The role of a gambler leads to conflicts between actors, since while the family and school teachers should try to understand and believe the juvenile, in practice they are unable to do so. This role is also played out in relation to treatment personnel. Due to such conflicting messages, the drug problem is not easy to deal with. The interviewed girl also wondered why no-one had noticed anything, indirectly blaming others for the failure to intervene early enough. The last identity type to emerge was that of a "drug-free individual". This identity emphasises arguments on the dangerousness of drug use and one's own active role (or battle) in changing one's life. It also consisted of cooperation with treatment and support personnel as well as a willingness to break free from the role of a deviant and socially marginalised person. Given that the interview took place while the interviewee was already at the final stage of her treatment period, this identity type was dominant in the interview. The researchers accentuated how problematic it is to interpret a young problem drug user solely from the perspective of a single, deviant individual identity. Treatment and interventions require the understanding of a

<sup>43</sup> The analysis was based on 17 individual interviews of children and young people, conducted during 1999–2002 in a treatment institution located in the Greater Helsinki area and targeted at problem drug users. The interviewees were aged 14 to 18. Cannabis was the drug most frequently used by these juveniles, but all of them had also experimented with other substances. The duration of each treatment period in the treatment unit was 4–6 months. From among these interviewees, the researchers selected a certain individual who was capable of describing her life and the role of drugs in it in a particularly open and multidimensional manner. She had an exceptionally severe background in drugs, including regular intravenous heroin use. During the interview, however, she had a positive view of her goal of becoming completely free of drug use. Other interviews were used as support in interpreting this individual interview. Given that the interviews were conducted at the beginning of the 2000s, measures under the harm reduction policy (substitution treatments, health counselling) were not yet established phenomena in Finland and, thus, could not have had an impact on the interviewes' self-conceptions corresponding to that which such measures might have had towards the end of the 2000s. (Suoninen & Virokannas 2008, p. 47–49.)

problem user's various identities and roles, in order to enable genuine interaction with him or her. This then creates an opportunity to build a connection between the problem user's individual experience and adult helpers' understanding of juveniles' everyday lives. (Suoninen & Virokannas 2008.)

In her dissertation, Sinikka Törmä examined the position of the most marginalised drug users within the care system - particularly from the perspective of access to treatment.44 The study concluded that substances are not the only fundamental issue, individual problems rendering the treatment of the most marginalised drug users difficult. It became necessary to separate out the factors influencing the treatment threshold and related to general marginalisation, since such factors often underlie the most acute need for help. According to the study, these factors include homelessness, physical and psychological weakness and difficult life experiences. With regard to treatment, they complicated communicative interaction with the treatment system and weakened the client's ability to concentrate on and commit to treatment. Threshold factors related to substance abuse in general included clients' state of intoxication during visits, their use of multiple substances, a deviant diurnal rhythm, appearance, shame and various substance cultures. These factors impeded the search for treatment in treatment units with traditional opening hours and in units providing treatment for people representing another substance culture. Clients who had visited a unit in a confused state of mind did not necessarily remember what had been agreed and, unawares, acted in breach of their promises. According to the study, drug-related threshold factors included fear of stigmatisation and a criminal identity, fear of the police and other enforcement agencies and fear of creditors. These factors prevented people from seeking drug-related services where the benefit of the treatment provided was not clear in relation to their stigmatisation as junkies. In fact, certain problem drug users relied on the services of users who were more courageous and in better condition, for instance, with regard to syringe and needle exchange. (Törmä 2009, p. 107–115.)

Individual factors related to the problem user had a fundamental influence on access to care, but so too did the treatment itself. Particular problems arose in traditional treatment units and the excessively high requirements or motivational levels underlying their treatments; in the specialisation of services and fragmentation of problems; demanding procedures (reserving appointments, calling during telephone consultation times, strict screenings) and regarding the time or place of service provision (a location too difficult to approach). Even in low-threshold services, the threshold was not always sufficiently low for the most marginalised clients. In certain cases,

<sup>44</sup> The doctoral dissertation comprised four articles from 2006–2008 and a conclusion. Data for the dissertation dated from 2003–2005 and consisted of (1) Client visit data (n=2,933) from a mobile unit providing health counselling, structured interviews of its clients (n=212), thematic interviews with the service's clients (n=20) and its providers (n=13) as well as an e-mail questionnaire submitted to the employees of the health counselling ambulance (n=29); (2) Structured interviews of clients (n=81) of a day centre within the substance abuse service system and five thematic interviews of the service's providers; and (3) Client and patient data on 11 drug users attending the day centre and a drug clinic. (Törmä 2009.)

low-threshold services actually set too strong an emphasis on empowerment in line with the ideology of harm reduction and on being an actor. This, in fact, raised the threshold to treatment for the most marginalised. On the other hand, the lowering of the threshold had the side effect of raising the threshold in traditional substance abuse treatment units. Indeed, it is easy to turn away clients approaching traditional services with a low threshold and, instead, direct them towards the specific low-threshold services designed for them. (Törmä 2009, p. 116–128.)

## 4.3 PDU in a wider context

According to the 2008 data of the drug treatment information system<sup>45</sup>, the mean age of drug treatment clients was 29.9 years. Men were on average 2.4 years older than women. The mean age of those seeking treatment for the first time was 26.2 years. The clients of substance abuse inpatient units were the youngest, with a mean age of 24 years. In substance abuse outpatient and inpatient units and in outpatient drug treatment units, the mean age was approximately 30 years. In prison health care units, the mean age of drug treatment clients was 28 years. (Ruuth & Väänänen 2009.)

Among all drug treatment clients of the substance abuse services, opiates were the primary problem substance of clients entering drug treatment (50%), followed by stimulants (16%), alcohol (18%), cannabis (9%) and pharmaceuticals (7%). Buprenorphine, an opiate, was the primary problem substance of 34% of the clientele (Table 5). The proportion of buprenorphine as the primary substance of those entering treatment has increased the most. Buprenorphine is already the primary substance for a third of drug treatment clients. (Ruuth & Väänänen 2009.)

The proportion of those seeking drug treatment for the first time has decreased steadily since 2000. In 2008, they accounted for 12% of those who sought treatment, while in 2000, their proportion was nearly one third. Meanwhile, the mean age of everyone entering treatment has increased from some 26 years to nearly 30. In 2008, the most common single substance among clients entering drug treatment for the first time was buprenorphine (20%) and cannabis (19%). Other common primary problem substances were stimulants (19%), opiates (19%) and the combined use of alcohol and drugs (29%). (Ruuth & Väänänen 2009.)

<sup>45</sup> This data is based on anonymous data collection through the voluntary participation of treatment units. In 2008, data was obtained from 114 units (from 110 in 2007; 133 in 2006) and from a total of 4,109 drug treatment clients (4,141; 4,865). Correspondingly, the number of new patients seeking care has reduced to 501 (655; 884). (Ruuth & Väänänen 2009). The number of units participating in data collection has decreased since the beginning of 2000s, weakening the coverage of data and, to some extent, annual comparability.

	Primary problem substance								
	2000	2001	2002	2003	2004	2005	2006	2007	2008
Opiates	29	28	28	31	37	37	41	46	50
-heroin	20	13	6	3	2	2	2	2	2
-buprenorphine	7	12	20	24	29	29	31	33	34
Stimulants	28	26	28	28	22	22	21	19	16
Cannabis	17	20	18	16	14	14	13	10	9
Alcohol	18	19	20	19	19	19	17	17	18
Pharmaceuticals	5	6	5	6	7	7	7	7	7

Table 6. Substances used by clients entering treatment for the use of narcotics and pharmaceuticals (% of clientele) in 2000–2008

Source: Drug treatment information system, THL.

According to the data on seeking drug treatment for the first time, the accumulative deterioration leading to problem drug use seems to reach its tipping point after a lag of 3 to 5 years from the commencement of use. In light of this, the sharp increase in drug experimentation at the end of the 1990s seems to have led to the growth in the number of problem users at the beginning of the 2000s, while the stabilisation of experimentation at the beginning of the 2000s is reflected in the latest estimates on the number of problem users. Correspondingly, the observed slight ageing of drug treatment clientele also manifests itself in the estimated age distribution of problem drug users and people experimenting with drugs.

Table 6 shows a cross tabulation of the drug treatment clients' primary substance alongside the secondary and tertiary substances they used. Using a parallel review of the primary, secondary and tertiary problem substances enables the definition of typical polydrug use profiles. These profiles have remained relatively unchanged throughout the 2000s. Additional use of stimulants, cannabis and pharmaceuticals was most common in opiate users. Those entering drug treatment due to stimulants use cannabis, pharmaceuticals, opiates and alcohol in parallel and on an even basis, whereas the most frequent additional drugs for those who sought treatment due to cannabis no longer included pharmaceuticals or opiates.

Primary drug			Use of a second and a third drug in addition to the pri- mary drug (%)					
	No. of users	%	Opiates	Stimulants	Cannabis	Pharma- ceuticals	Alcohol	
Opiates	2036	50	12	37	50	50	13	
-heroin	93	2	33	51	41	34	8	
-buprenorphine	1371	34	12	39	35	53	14	
Stimulants	675	16	31	7	43	34	30	
Cannabis	372	9	18	42	2	17	44	
Pharmaceuticals	285	7	27	25	26	9	49	
Alcohol	718	18	17	33	60	46	0	

Table 7 Secondar	and tortion	druge used	with the prime	nu drug in 2000 0/
Table 7. Secondal	y and tertiary	uluys useu	with the prina	ry drug in 2008, %.

Source: Drug treatment information system, THL.

The majority (81%) of drug clients in services for substance abusers had injected drugs some time in their life; more than half of them (58%) had injected drugs during the past month and one in six (19%) had shared needles and syringes. Opiates were most commonly used intravenously (84%). Stimulants were also injected by 82% of their users. (Ruuth & Väänänen 2009.)

Health counselling centres in Helsinki, which offer intravenous users an opportunity to anonymously exchange their dirty syringes and needles for clean ones, collected information on their clients' drug use with a voluntary anonymous questionnaire during two weeks in 2005. About 30% of the clients responded. According to the results, their mean age was 27.8 years. One fourth were women and they were on average 1.5 years younger than the men were. Nearly three out of four respondents said that buprenorphine was the most common drug that they used intravenously and one in four mentioned amphetamine or methamphetamine. However, only 28% used buprenorphine alone; the others could be classified as polydrug users. Some 55% of the clients reported that their polydrug use included amphetamine or methamphetamine. About a fourth of the respondents mentioned the use of benzodiazepines together with buprenorphine. The clients had used opiates intravenously for an average of 7.3 years, but the most common period of use was 4 years. The intravenous use of buprenorphine had lasted a considerably shorter period of time, i.e. 4.2 years. Two out of three had used buprenorphine and naloxone intravenously. The survey sample was estimated to cover 5-10% of all intravenous drug users in the Greater Helsinki area (Alho et al. 2007.)<sup>46</sup>

<sup>46</sup> During the survey, 589 questionnaires were distributed; 176 of them were returned. However, the response percentage is probably higher as the clients visit the units anonymously and therefore the same client may have visited the unit several times during the survey period.

In drug-related death statistics, which indirectly reflect problem use, the most striking phenomenon is the increase of buprenorphine findings associated with deaths. From less than 10 cases in 2000, the number of such findings has risen annually and reached nearly 100 in 2007. Meanwhile, the number of cannabis and amphetamine findings has increased by half, from 60 cases to some 90. By contrast, the number of deaths caused by either heroin or cocaine were restricted to a few cases every year during the same period. Thus, the death statistics also indicate that the proportion of buprenorphine in problem use has increased in relation to other key drugs throughout the 2000s. Drug-related death statistics also reveal the ageing of problem drug users, as according to the Cause of Death Register, the proportion of under 25-year-olds has decreased from more than one third in 2000 to approximately one fifth in 2007.<sup>47</sup>

<sup>47</sup> Cf. Section 6.1.

# 5 Drug-related treatment

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 both in their content and coverage. All substances that are used for intoxication are considered intoxicants: alcohol, substitutes, pharmaceuticals and drugs. The social and health care sector must develop primary services to meet the needs of substance abuse services and provide services that are intended specifically for substance abusers, when needed. Units providing specialised services for substance abusers include outpatient care (A-Clinics, youth centres), short-term inpatient care (detoxification units), longer-term rehabilitative care (rehabilitation units) and support services (day centres and supported housing) and peer support activities. Units providing specialised services for substance abusers include outpatient care (detoxification units), rehabilitation units and support services (day centres 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, child welfare units, mental health clinics, health centre clinics and wards, hospitals and psychiatric hospitals. 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.

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 developing low-threshold services and related training. The first health counselling centre intended for the exchange of needles and syringes was set up in Finland in 1997, and substitution and maintenance treatment was introduced as an official part of substance abuse services in 2000. As far as possible, the most difficult-to-treat substance abuse patients (multiple-diagnosis patients) are treated centrally in units providing specialised services.

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 patients face an increased risk of exclusion from the service network. In particular, the most socially marginalised substance abuse patients face a high risk of exclusion from the service network.

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. Since 2000, the drug treatment situation has stabilised; for example, health counselling and the role of medical treatment have become firmly established. 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 specialised level to primary level in order to generate savings.

In addition, the substance abuse service system is facing a challenge of another type: the need to reallocate resources between the treatment of harm caused by increased alcohol consumption, traditional alcohol abuse services and drug treatment.

## 5.1 Strategy and treatment systems

According to the government's resolution concerning the drug policy for 2008–2011, treatment services will be developed and their provision increased, in order to ensure equal access to services for all citizens. Drug users will be offered a range of treatment options, appropriate for the type of addiction in question and, for instance, access to treatment will be facilitated for opioid addicts. In addition, the objective is to increase the types of treatment, health counselling and support directed at reducing drug-related harm such as diseases, mental health problems and crime. (Finnish Government 2007a.)

#### Organisation of services

In Finland, the provision of services for substance abusers is realised both within social welfare and health care. Päihdehuollon erityispalvelut sijoittuvat pääosin sosiaalihuollon puolelle. In Finland, the provision of services for substance abusers is realised both within 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 commitment by the social welfare office of the client's home municipality. The provision of services for substance abusers currently takes multiple forms: it can form part of a municipality's own operations or co-operation with the major provider of services for substance abusers (A-Clinic Foundation). Moreover, it can also be arranged within a federation of municipalities or foundation for treating substance abusers or through purchase agreements with other organisations or private companies. For instance, among A-Clinics (n=75) providing outpatient substance abuser services for adults, 61 are municipal and 14 are maintained by the A-Clinic Foundation. In all, the A-Clinic Foundation has concluded agreements with approximately a hundred municipalities for the provision of substance abuser services. Federations of municipalities providing substance abuser services total three, each involving from 24 to 71 member municipalities. Providers of institutional, detoxification and rehabilitation units most often include foundations, organisations or private service providers. (Kekki & Partanen 2008, p. 48.)

Organisation method Administration	Municipality	Federation of municipalities for substance abuser services	Foundations for treating sub- stance abusers	A-Clinic Founda- tion, national sub- stance abuse ex- pert organisation	Other provid- ers of treat- ment services
Relationship with the municipality	Municipality as a provider and organiser	Member	Member	External provider of services, partner	External pro- vider of ser- vices
Administration	Part of munici- pal administra- tion structure	Separate, formal organisation	Separate, thin ad- ministrative or- ganisation	Separate, thin ad- ministrative organ- isation	Separate ad- ministrative organisations
Frequency	Most frequent- ly a municipali- ty is responsible for outpatient services	Three federa- tions, each in- cluding 24 to 71 municipalities	Two	Agreements with 100 municipalities	Information not available
Capital base	Municipality / state subsidies	Municipality / state subsidies	Municipality / RAY (Finland's Slot Machine As- sociation) & state subsidies	Municipality / RAY & A-Clinic Foun- dation	Municipality / RAY & organi- sations
Services	Usually outpa- tient services, some inpatient services	Regional spe- cialised servic- es for substance abusers	Out- and inpa- tient treatment services for sub- stance abusers	Specialised servic- es for substance abusers on a part- nership agreement basis	Various tar- geted ser- vices
Strengths	Consistent ad- ministrative structure	Large popula- tion base	Involvement of municipalities, multi-stakehold- er approach, re- gional special ex- pertise	National and re- gional special ex- pertise, wide range of services	Diversity of services
Weaknesses	Sufficiency of population base	Narrow task, limited to inpa- tient treatment	Development of the service system as a whole is chal- lenging	Administrative de- velopment of the service system is challenging	Integration of the provid- ed services in a treatment continuum

Table 8. Methods of organising services for substance abusers in the service system

(Source: Kekki & Partanen 2008, p. 51.)

According to the framework legislation on the restructuring of municipalities and services (the PARAS project), municipalities are required to organise primary health care and closely related social welfare services when their population base is at least 20,000. Municipalities with less than 20,000 inhabitants may select the method they wish to use for reaching the population base required under legislation (through municipal annexations, federations of municipalities, co-operation districts etc.). In such cases, universal services which must be implemented locally for substance abusers comprise assessment of the risk of substance abuse, health counselling aimed at risk reduction, primary-level detoxification in health centres, referring substance abusers to specialised services for treatment, participation in long-term further treatment and the treatment of acute problems. Furthermore, mandatory services requiring a large population base include the following: specialised services for substance abusers, consultation services complementing local services, demanding institutional detoxification and rehabilitation treatment for substance abusers (pregnant women, dual-diagnosis patients, drug users) and inpatient services for certain small special groups (such as language minorities, immigrants or the disabled). (Kekki & Partanen 2008, p. 30-32.)48

The aim of the PARAS project is that municipalities retain responsibility for organising social welfare and health care services, and that private providers of services as well as organisations and other elements of the third sector complement municipalities' own service provision. When services are organised based on larger population bases, it is expected that service quality and availability will improve and that substance abuse clients can be served more consistently throughout the country. According to the report by Kekki and Partanen, the fact that the numbers of clients among municipalities are unevenly distributed is primarily influenced by practices in referring clients for treatment and an emphasis on outpatient treatment. For instance, downscaling inpatient services is not due to a reduced need for treatment, but is in part influenced by municipalities' attempts to restrict social welfare costs. Instead of using specialised health care and specialised services for substance abusers, the current trend involves moving a greater share of treatment to primary health care. (Kekki & Partanen 2008, p. 55–56.)

Emphasising outpatient care is a characteristic feature of social welfare and health care during the 2000s: the elderly are supported in order to enable them to remain at home and people with mental health problems are offered independent housing, outpatient support and peer support groups rather than institutional rehabilitation. Such changes are also affecting treatment practices. The use of com-

<sup>48</sup> For their study, Kekki and Partanen analysed written material produced by parties organising services for substance abusers as well as information obtained through a total of 21 telephone interviews and 2 e-mail messages during 2008, concerning the methods of organising substance abuse services and topical phenomena of substance abuse work at municipal level. Most interviewees were directors, project managers or coordinators in substance abuse work or social welfare. However, these results cannot be generalised for application throughout Finland, since the study analysed municipalities and regions (and their representatives) whose substance abuse work is diverse and organised. (Kekki & Partanen 2008, p. 10–11.)

munity support, individual therapy and social support has reduced as the medical approach has gained ground. At the moment, municipalities are debating over how to respond to an increased need for treatment among alcohol abusers, with the development of services for drug abusers receiving less attention. Needs exist for detoxification units, emergency detoxification stations, housing service units and certain special group services (pregnant women), rather than rehabilitation units. However, development projects for the implementation of the PARAS project remain at the planning phase in many municipalities, as do administrative specifications of services for substance abuse and mental health problems. A challenge for the future lies in the fact that substance abuser services are not considered core services within the service system. Indeed, substance abuse problems are seen as marginal, and people with such problems are deemed a source of disturbance rather than clients needing treatment. (Kekki & Partanen, p. 55–56.)

### Availability of treatment

The Finnish Ministry of Social Affairs and Health has produced reports on the availability of inpatient detoxification, withdrawal and substitution treatments in ten large cities in 2007 and 2008.<sup>49</sup> Based on these reports, a patient was able to access inpatient alcohol detoxification treatment on the same day or within a few days. Alcohol detoxification treatment periods ranged from one day to a few weeks, with the average period being 5-7 days. When the respondents were asked about any changes in demand for services, nearly everyone considered that their clients' condition had worsened after 2004 or 2005. Furthermore, the proportion of older people among the clientele has increased. (Korhonen 2007; Heiskanen & Korko 2008.)

For drug-related inpatient detoxification treatment, waiting times were much longer, averaging 1–3 weeks. Waiting times vary considerably by locality. The duration of treatment ranged from a few days to four weeks, while the average was two weeks. Among drug-related clients, the number of dual or triple diagnosis patients was estimated to have somewhat increased, which was interpreted as reflecting the deteriorating condition of the clientele. (Korhonen 2007; Heiskanen & Korko 2008).

The situation in substance treatment for opioid addicts varied considerably by city. In all major cities but one, an individual had to wait for months to access substitution treatment. According to all units, the problem lies primarily in overly-restrictive quotas for outpatients. Even if the substitution treatment could be initiated for instance in a university hospital, the quotas for outpatients in local units

<sup>49</sup> The report was based on telephone interviews with unit directors, physicians, head nurses and nurses working in some 20 units providing inpatient detoxification and/or withdrawal treatment and substitution treatment, in ten cities with more than 75,000 inhabitants (Korhonen 2007; Heiskanen & Korko 2008).

providing substance abuse services do not allow substitution treatment to be carried out over several years. In fact, some localities have attempted to transfer the provision of substitution treatment to primary health care units, but this has not yet become standard practice. The respondents considered that more difficult access to Subutex<sup>®</sup> medication since Estonian accession to the Schengen area had resulted in more clients seeking substitution treatment and longer waiting times for treatment. (Korhonen 2007; Heiskanen & Korko 2008).

In order to improve the availability of medical treatment, a new Decree on substitution treatment was adopted at the beginning of 2008, enabling pharmacies to distribute substitution treatment medication containing buprenorphine and naloxone. At the beginning of 2008, the number of substitution treatment clients using buprenorphine averaged 650, of whom some 500 used a combined preparation. At the time, the number of clients in substitution treatment was estimated to be 1,000. (Ministry of Social Affairs and Health 2008b).

An assessment conducted at the end of 2008 estimated the number of opioid addicts undergoing substitution treatment to be approximately 1,200. According to the assessment, in most parts of the country there is no demand for withdrawal and substitution treatment for opioid addicts. Indeed, opioid addicts are centralised in major cities, particularly in the Greater Helsinki area and the city itself. In most parts of the country, no queues for treatment exist. The time limits imposed by the treatment guarantee (for non-urgent cases, assessment of treatment needs within 3 days and access to treatment within 3 months and, for specialist health care, assessment of treatment needs within 3 weeks and access to treatment within 6 months) are only exceeded in certain major cities, in which, however, plans exist for the fulfilment of the treatment guarantee. The most frequently used substitution treatment medication is a combined preparation of buprenorphine and naloxone, the second most frequently used being methadone. However, buprenorphine alone is used very rarely. Since the amendment of the decree, some changes have been made in the service system in order for it to attain its goal - the appropriate scaling of treatment (demanding patients being allocated to specialist health care, others to primary level; long-term care at a level which enables a normal life for the patient and is cost-efficient for the system). (Ministry of Social Affairs and Health 2009e)

One possible explanation for the unchanged situation relates to the cost of substitution treatment: a decision on whether the combined preparation of buprenorphine and naloxone should be included in the list of medicinal products carrying an entitlement to higher-rate reimbursement is pending. Since the average treatment dose of the combined preparation is 19 mg per day, the annual price of the product as delivered from a pharmacy would be approximately 8,000 euros. Due to its high price, very few patients could pay for the preparation themselves and, in this case, the municipality providing the substitution treatment would largely remain responsible for paying the cost of the medication. If the combined preparation is granted the status of a medicinal product carrying an entitlement to higher-rate reimbursement, the medication costs arising from its use would not create such a large burden on municipalities and their spending limits. This would allow municipalities to increase their patient quotas in accordance with the Government's drug policy guidelines. (Ministry of Social Affairs and Health 2008b)

#### Priorities in treatment services

In Finland, substance abuse problems have traditionally been seen as social problems to be dealt with by the social welfare services. In Finland, substance abuse problems have traditionally been seen as social problems to be dealt with by the social welfare services. However, the increase in drug problems at the end of 1990s resulted in the creation of a specialised drug treatment system in which medicine and particularly medical treatment of opiate users have had a key role. Antti Weckroth has analysed professional discussion within substance abuse services and concluded that actors in substance abuse services view their clients simultaneously as biological, psychological and social beings.<sup>50</sup> The analysis suggests that the traditional holistic approach, which has been termed a psychosocial approach, has lost some of its importance in evidence-based medical treatments. Nowadays, attempts to explain the nature of patients' problems only rarely rely on the 'psychosocial' perspective. Simultaneously, substance abuse work is increasingly being defined and interpreted based on health care objectives. (Weckroth 2007, p. 431–433.)

Weckroth states that the Current Care guidelines on the treatment of alcohol abusers and drug abusers (Duodecim 2006), drawn up by the Finnish Medical Society Duodecim and Finnish Society of Addiction Medicine, mention 11 different psychosocial therapies: dynamic psychotherapy, twelve-step facilitation therapy, cognitive behavioural therapy, motivational interviewing, service guidance, solution focused brief therapy, relapse prevention, systemic family and network therapy, therapeutic community treatment, community reinforcement approach and supportive interaction. While the guidelines define these therapies as forming the cornerstone of the treatment and improving the patients' quality of life, they also acknowledge that evidence on the methods' effectiveness remains scarce. Discussion, therapeutic activity, peer activities and co-operation with the patient's close network are emphasised as basic working methods. A repeated conclusion in the guidelines is that medication can significantly improve the outcomes of psychosocial therapies. While with substances other than opiates the importance of psychosocial therapies is highlighted, drug-free psychosocial therapy, even if intensive, is not described as improving the therapeutic outcome for opioid addiction. (Weckroth 2007, p. 430–431.)

<sup>50</sup> Weckroth retrieved the research data by searching the collections of the University of Helsinki and four major professional journals related to substance abuse (Tiimi, Suomen Lääkärilehti, Duodecim, Sosiaaliturva), using keywords beginning with 'psychosocial' (Weckroth 2007b, 426).

#### Treatment services for specific groups

The essential aim of substance abuse treatment is for the clients' problems and the availability of services to meet. Some of the largest obstacles to receiving treatment were waiting times, the lack of knowledge and skills and negative attitudes towards substance abusers within the primary services and the physical distance of the treatment units within specialised services.

According to a study by Sanna Väyrynen (2007), using drugs causes women in particular to feel disconnected from themselves, their own gender and the dominant culture.<sup>51</sup> The drug scene is fairly male-dominated, as only about a fifth of users are women. The proportion of women in outpatient and inpatient rehabilitation is also smaller than that of men: approximately a third of new clients are women. For women, drug use often means living among drug-using men, and sometimes on their terms. The physical violence or abuse taking place within the drug scene makes the women feel ashamed and becomes part of their sexual identity. This poses a challenge for society to develop rehabilitation methods and units that cater for the special needs of women.

The special problems of pregnant substance-abusing women have been studied at the Department of Obstetrics and Gynaecology of the Helsinki University Central Hospital (HUCH) since 1983. In August 2002, an enhanced care model was introduced, in which the hospital's maternity clinic has a drugs, alcohol and pharmaceuticals clinic and a special care team, which handles the treatment of the substance abuse patients.<sup>52</sup> The patients come to the clinic every 1 to 4 weeks to visit their personal nurse and physician who monitor their pregnancy and give them psychosocial support for quitting drugs and reorganising the fundamentals of their life. (Halmesmäki et al. 2007.)

A study dealing with the treatment at the clinic stated that the shame the pregnant women or mothers feel over their substance abuse problems and fear of the child welfare authorities may prevent them from seeking proper help. For this reason, the treatment should be made easily accessible. Many patients have also felt that being treated in a somatic treatment unit is less stigmatising than having to seek help from a substance abuse or psychiatric unit. The best treatment results were achieved by combining pregnancy monitoring and substance abuse treatment, which allowed early contact with child welfare authorities and facilitated the referral for follow-up treatment. The post-natal check-up and birth control were al-

<sup>51</sup> The study is based on interviews conducted in 2003–2006 with fifteen 17–27-year-old young women who had used drugs. All the women in the study had been in outpatient or inpatient rehabilitation (or both) for drug use.

<sup>52</sup> By the end of November 2005, 312 pregnant drug abusers had been treated under the model. Of substance abuse patients, a total of 32% had used drugs intravenously during pregnancy, the primary substance of abuse being opiates or amphetamine for 43% of them, while 105 (33%) only used opiates. Twenty-nine of them (28%) had been in buprenorphine or methadone substitution treatment or buprenorphine detoxification in another treatment unit before becoming pregnant. Twenty-two (21%) women started buprenorphine substitution or detoxification treatment at the clinic.

ready planned at the hospital. The patient group is very mobile: they move around frequently and their maternity clinic may change a couple of times during the pregnancy. They may spend time in prison or seek substance abuse treatment at another locality, so it is important to co-ordinate the pregnancy monitoring in one place. Thus, it is also easier to monitor the patients' medication. (Halmesmäki et al. 2007.)

Rehabilitation units aimed at alcoholics, drug addicts or mental health patients are unsuitable for the most socially marginalised substance abusers, according to Törmä and Huotari. Some of the clients do not use other services at all; others are major users of services who fluctuate between substance abuse rehabilitation, prison, health care clinics and the street. The most problematic are the socalled dual-diagnosis patients who are clearly in need of psychiatric services but do not have access to them because of their substance use. Because clients with multiple problems are unable to commit to normal treatment or its requirements, they would benefit from treatment plans expecting more realistic goals and supported housing services. Because clients with multiple problems are unable to commit to normal treatment or its requirements, they would benefit from less goal-oriented treatment plans and supported housing services. This approach would also require bringing low-threshold services to the clients. Linking the entire treatment chain so that a patient could advance in the treatment system according to his or her own abilities and needs would be of major use to clients with multiple problems. (Törmä & Huotari 2005.)

### 5.2 Characteristics of treated clients

The drug treatment information system refers to a voluntary information collection system destined for treatment units. The system involves the anonymous collection of information concerning problem substance users who have sought treatment due to drugs.<sup>53</sup> Based on information from 2008, a treatment period had begun during that year for 61% of patients. For 17% of clients, treatment had begun the year before, while 22% were pursuing longer treatment periods. Only 12% had absolutely no previous treatment contacts due to drug use. Other simultaneous treatment contacts were reported for 45% of clients. Of these, 53% were in substance abuse outpatient units, 27% in general outpatient units of social welfare and health care, 23% in health counselling centres and 15% in peer support groups. Of these, 53% were in substance abuse outpatient units, 27% in general outpatient units of social welfare and health care, 23% in health counselling centres and 15% in peer support groups. (Ruuth & Väänänen 2009.)

<sup>53</sup> See further information under Section 4.3.

A total of 61% of the clients included in the drug treatment information system were in outpatient care, the most frequent treatments including a period of assessment of treatment needs and outpatient rehabilitative treatment. In inpatient treatment, the most frequent treatment forms included withdrawal treatment and inpatient rehabilitative treatment. A total of 36% of clients who had sought treatment primarily for opiate addiction received medical outpatient or inpatient treatment designed for opiate addicts. Buprenorphine (55%) was more commonly used for opiate addicts than methadone (43%). Of the buprenorphine used in medical treatment, 83% was administered as a combined preparation containing naloxone in addition to buprenorphine. (Ruuth & Väänänen 2009.)

Men account for 70% of treated clients. Women's share is emphasised in younger age groups but, for over-30s, they represent only some 20%. About one third of the female clientele were married or cohabiting and, in these cases, nearly 80% with a spouse who also had substance abuse problems. For men, marriage or cohabitation was the case for approximately one fifth, approximately half of these with another substance abuser. There were no significant gender differences between the substances used or use methods. (Ruuth & Väänänen 2009.)

#### Community-based rehabilitation

In community-based drug rehabilitation, various frames of reference and models are used for specifying the client's position and forms of interaction within the community. Instrumental and hierarchical communities primarily promote lifestyle changes with the help of the community, whereby the main effort lies in making the client adapt to the unit's social order and operational structure. Thus, the client does not have many opportunities to influence the community's everyday activities but, rather, behavioural changes are believed to occur, in part, involuntarily and through compulsion. In such hierarchical models, the difference between staff and clients is clear and client control is strict. This approach is countered by a client-oriented perspective, the 'confrontation with reality' model, whose purpose is to contribute to two-way communication. This means reduced control, a more even distribution of power and responsibility among all community members as well as the clients' participation in decision-making. While some studies<sup>54</sup> concerning hierarchical communities have been conducted in Finland, research on the confrontation with reality model is harder to come by. (Santala 2008.)

Santala's study concerned a fairly large substance rehabilitation centre seeking to abide by the key principles of a democratic and client-oriented therapeutic communi-

<sup>54</sup> For instance, cf. Ruisniemi 2006; Rönkä & Virtanen 2008, Section 5.2.

ty.<sup>55</sup> A common meeting for everyone in the rehabilitation centre is held twice a week, and a meeting among everyone's own sub-community once a week. The community began each day with a morning briefing, while the afternoons saw therapeutic and functional group activities around various themes. Compared with the instrumental rehabilitation model, clients in a client-oriented community do not have to admit to being drug addicts, nor were clients considered addiction patients but primarily young adults, of whom responsible behaviour was required in all activities. The community's pedagogical dimension was not emphasised, but the required tasks were related to duties relevant to the community, such as cleaning and cooking. The counsellors in the community self-evaluated their own actions while working and often in the presence of clients. They also discussed the community's situation and clients' integration. Furthermore, clients had access to their own client data and treatment summaries were often drawn up together with them. As a main rule, the clients' and community's issues were decided in joint meetings. 'Confrontation with reality' meant that the community continuously discussed the feelings and attitudes arising from everyday crisis situations and conflicts - rather than creating a regulated ritual of feedback at a certain place and hour. In this way, conflicts were considered learning opportunities - not problems - and disturbing behaviour entailed discussion rather than punishment. (Santala 2008.)

In client-oriented community rehabilitation, democracy is primarily a tool for inclusion. In fact, communities are not genuinely democratic since the staff always bear responsibility and wield the final decision-making power, but while attempting to exercise this power as little as possible. The objective is to pass the initiative to the clients and reduce their dependency on professionals. In addition, the researcher avers that democracy can be found in the fact that the rehabilitation aims to avoid the 'malign' effects of traditional institutional psychiatry and an instrumental approach related to the impersonal treatment of clients and rendering them passive. Some Finnish opinions hold that rehabilitating drug users in more democratic communities is difficult and that a hierarchical approach is best for them. In Santala's view, however, follow-up findings indicate that drug users do not have common personality or behavioural characteristics which would prevent the implementation of democratic principles in everyday rehabilitation. Moreover, the successful rehabilitation of drug users does not seem to necessitate an expert-oriented and strict treatment culture. Although significant differences between the effectiveness of substance abuse rehabilitation models, in terms of post-rehabilitation intoxicant-free behaviour, have not been

<sup>55</sup> The community can offer rehabilitation for a total of 40 patients at a time, in 8 sub-communities. One of these sub-communities is a home-like unit for drug users, offering long-term drug-free rehabilitation for young adults aged 18 to 30 in a safe and motivating environment. The sub-community is hosted in two flats in a terraced house, each patient being provided with their own room. The sub-community can accommodate 8 clients and employs 3 staff, two of whom have a college-level degree in social welfare and one with a degree in specialised psychiatric health care. Using means of participative observation, Santala studied the sub-community over three months in the spring of 2005, during which it hosted a total of 12 clients. Half of the clients had used opioids or amphetamines intravenously. A common factor for all of these was a drugcentred way of life, but crime did not necessarily play an important role in this. (Santala 2008.)

established in many national and international studies, it is possible that drug users are subject to more paternalistic treatment and rehabilitation methods than other social welfare and health care client groups. Santala suggests that if no significant difference can be detected between the effectiveness of two rehabilitative models, it would be ethically justifiable to select the most positive option for the client. (Santala 2008.)

A study comparing treatment administered to Finnish and U.S. problem users of substances assessed the impacts of the clients' capability for change (motivation for treatment) on the continuity of treatment and its cessation.<sup>56</sup> In Finland, the clientele included in the comparison followed a community-based inpatient treatment while the U.S. target involved outpatient clientele. When entering treatment, the Finnish clientele was clearly more marginalised and the combined use of substances among Finns was common. In general, both groups' clientele profile was more or less similar. For the purposes of the comparison, each set of clientele was divided in two groups based on how willing or unwilling the clients were to change upon entering treatment. While the profiles of these two groups were similar in both countries, the share of those objecting to any change in their substance use habits was larger among the Finnish than the U.S. clientele. To some extent, this may be due to the selection of clients in the Finnish clientele. However, both countries' outcomes reinforced the conclusion obtained previously in other studies that a reluctance to change one's own substance use behaviour increases the probability of cessation of treatment. The study shows that, in terms of treatment results, this emphasises the importance of discussions on increasing the motivation for treatment. However, it should be borne in mind that an interruption of treatment does not necessarily entail its failure since, in practice, very few problem users of substances overcome their addiction during a single treatment process. (Saarnio & Knuuttila 2008.)

#### Substitution treatment

The evaluation study of the OHJAT project at the Järvenpää Addiction Hospital investigated changes in the psychological and social situation and quality of life of clients in substitution or maintenance treatment, during their follow-up period. Initial

<sup>56</sup> The Finnish data was collected in 2000–2003 from four samples (totalling 780 clients) in an institutional unit within substance abuser services (A-home). The unit conducts controlled, community-based 12-step facilitation therapy. Its clients were alcoholics (42%) and polydrug users (58%). The treatment programme includes a one-week arrival phase and basic rehabilitation period of approximately three weeks, following which the client had the possibility to take up longer-term, further treatment. The data was collected during the arrival phase. The study was based on the Transtheoretical Model (TTM), originally designed for monitoring the change process during recovery from the problem use of substances. The model identifies four stages (precontemplation, contemplation, action and maintenance) and the related data was collected using a URICA questionnaire originally developed for following up psychotherapy clients' capability for change. The change analysis was based on hierarchical cluster analysis. The comparison target in the U.S. included clients (953) of outpatient services designed for alcoholics in Project MATCH. (Saarnio & Knuuttila 2008.)

interviews<sup>57</sup> revealed that the patients had begun using drugs when they were approximately 15 years old. Most of the interviewees (65%) were under 30 years of age at the time of the interview, the youngest being 19 and the oldest 50. Their initial substance used had been cannabis or benzodiazepines, after which they had rapidly moved on to amphetamines or heroin. Polydrug use had also begun at an early stage in the interviewees' substance use histories. Half of the patients had begun opiate use under the age of 18, and continued their use for 7 years, on average, before beginning treatment. All interviewees had used substances intravenously, with the average duration of intravenous use being 10 years. The youngest age at which intravenous drug use had begun was 10; the oldest was 30. On average, users had started injecting drugs at the age of 18. (Harju-Koskelin 2007.) The project's results have been analysed from the viewpoint of the clients' psychosocial rehabilitation process (Harju-Koskelin 2007) and by evaluating the rehabilitation practises (Koivisto 2007).

The psychosocial rehabilitation in the OHJAT project was analysed based on client interviews at the start, when seeking treatment, and half-yearly during follow-up treatment. Attained development has been reported by comparing the initial interviews with follow-up interviews using the same methodology and taking place one and two years after the initial interviews.<sup>58</sup> The results did not indicate any significant changes in the interviewees' employment and study situation during the two-year follow-up period. A total of two-thirds of the interviewees took part in some form of psychosocial rehabilitation activity during the two-year follow-up period, but the participation periods were often brief and fragmented. Many of the interviewees seemed to lack a long-term plan for what they wanted to achieve through the rehabilitation activity. (Harju-Koskelin 2007, p. 47–55.)

Additional abuse of other substances and intravenous drug use reduced markedly during the two-year follow-up period. While the initial interviews indicated that more than half of the clients had abused additional substances during the preceding month, the corresponding share in the two-year follow-up had decreased to one-third. Similarly, a third of the clients reported in the initial interviews that they had shared needles and syringes during the preceding half year but, after the twoyear follow-up, this had dropped to zero. The clients' substance-free periods had also become more frequent and longer. According to this study, it seems that among those in substitution treatment, both risk use and additional use will reduce slowly over time. (Harju-Koskelin 2007, p. 60–67.)

<sup>57</sup> In the study conducted in 2003–2005, the data used comprised interviews with 60 individuals in substitution or maintenance treatment in the Helsinki area. The interviews were based on structured questionnaires (EuropASI, SCL-90 and CEST). The initial interviews were conducted 1–1.5 years from the beginning of treatment.

<sup>58</sup> The initial interviews were conducted during 24 June 2003–1 July 2005 and the latest follow-up interviews in June 2006. While the initial interviewees numbered 60, three-quarters of them accepted a follow-up interview after one year and, after two years, two-thirds of those for whom a two-year follow-up was possible agreed to an interview. In all, 8 persons dropped out of the follow-up group. (Harju-Koskelin 2007, p. 27.)

The study's conclusions showed that changes in many psychosocial areas are very slow and small. It is, therefore, evident that at some point in substitution treatment, clients will have to weigh their own expectations against improvement achieved. This constitutes a potential crisis point in their lives, which may result in increased substance problem use and criminal behaviour or weakening psychological health and deteriorating human relationships. This phenomenon emerged particularly during the one-year follow-up interviews, but the two-year follow-up indicated clearly more positive developments. Factors which may explain the slowness of change include the frequency of additional substance abuse by the clients and the assumption that only one-third of the clients regarded a substance-free life as the aim of their treatment, judged on the basis of their abuse of additional substances. (Harju-Koskelin 2007, p. 78–82.)

Many small treatment units include psychosocial treatment in their plans, but it is questionable whether they can reach the treatment targets, given existing human resources. The fact that more than 90% of the care personnel providing substitution treatment are health care professionals reduces the possibilities of addressing clients' social problems effectively. It is worth asking whether treatment could be implemented from another starting point, one where the first objective of treatment would be harm reduction, achieving commitment to care and providing a gradual preparation for rehabilitative substitution treatment. Particularly at the beginning, key targets would include adult social work, ensuring a livelihood and housing as well as seeking social support to foster recovery. Through this approach, it would be important to progress according to the client's situation and personal treatment goals. (Harju-Koskelin 2007, p. 94–96.)

The rehabilitation practices in the OHJAT project were evaluated in feedback discussions with the personnel in the participating units as well as using questionnaires targeted at patients.<sup>59</sup> Feedback from personnel revealed that confusing terminology and the objectives of medically assisted detoxification, substitution and maintenance treatment had at first hindered co-operation between the parties involved: the patient, the person who had made the referral for treatment, the payer and the treatment units. For instance, "improving the quality of life" of the client as mentioned in the Decree on substitution treatment (2002) was seen in some treatment units as merely requiring daily medication to be given, while other units understood it more widely as including active treatment measures, such as appointments with a personal nurse. According to the different disciplinary perspectives adopted, the impact of collecting a restricted dose of medication every day was seen in a very different light. Depending on the point of view, the impact of col-

<sup>59</sup> Personnel views were collected using questionnaires and requesting feedback during 5 development and training days common to the units as well as in 7 themed meetings of the OHJAT project's contact persons (themes included e.g. treatment of intravenous use problems and treatments during waiting time). Patients' views were examined using questionnaires given to the clients of different treatment units immediately after the distribution of medication. A total of 70 responses were obtained, and 20 of them were collected during separate follow-up interviews within the OHJAT project. (Koskelin 2007, p. 29–33, 51–53.)

lecting a restricted dose of medication every day was seen in a very different light. Some considered it as restoring the patient's rhythm of life and thereby improving his or her quality of life. Others saw it as controlling the patient's behaviour and, thus, even reducing the motivation for treatment and resulting in a poorer quality of life. (Koivisto 2007, p. 33–36.)

The evaluation showed that practically all treatment units conclude a treatment agreement with the patient. The previous Decree on substitution treatment (2002) specified a condition for giving a maximum of eight treatment days' doses of replacement medication to the client at any one time: the patient must "show good compliance with treatment". The interpretation of this condition varied from one treatment unit to another, and even internally, as well as according to the stage the patient's treatment had reached. These various interpretations concerned, for instance, the individual's progress in treatment or his or her adaptation to the treatment system. Similarly, control practices used in treatment (screenings etc.) varied according to the treatment unit and were also based on what impacts they were considered to have, according to the theoretical basis followed. Problems also arose due to the patients' own withdrawal targets, since the personnel often regarded them as leading to disappointment and hindering the continuity of treatment. (Koivisto 2007, p. 36–40.)

A total of 59% of patients reported that withdrawal from replacement medication was their target, but only a quarter had been prepared a practical withdrawal plan and only half of them had some sort of timetable for achieving withdrawal. A functioning and interactive relationship with the treatment unit's personnel, in particular, was considered as the second most important factor supporting rehabilitation. Negative feedback from the patients often included the inconsistencies in activities, situation-specific definition of treatments, unexpected changes to rules and inconsistent practices. These factors weakened interaction and trust-building between patients and personnel. In the light of this, the researcher emphasises that it is crucial that the targets and the rehabilitation plan be defined together with the patient and that attainment of agreed targets be monitored regularly. This would enable the targets of the treatment unit and those of the patient to meet. Realistic targets enable positive experiences from the treatment while supporting commitment to treatment. (Koivisto 2007, p. 67–71.)

In the Hospital District of Southwest Finland, substitution treatment has been organised on a shared basis so that the Addiction Clinic of Turku University Hospital chiefly conducts substitution treatment assessments and initiates treatments, while further treatment for patients is provided in their home municipalities' treatment units.<sup>60</sup> The Addiction Clinic always organises a transfer meeting in the transfer phase. In addition, the clinic hosts monthly a steering group meeting which the

<sup>60</sup> The population base of the hospital district is approximately half a million people. The number of opioid addicts at the beginning of 2008 was estimated at 380, of whom 242 were in substitution treatment, meaning that the coverage of treatment was 64% (Mikkonen et al. 2008.)

personnel of units providing further treatment can attend. There are 15 units providing further treatment in the district. Cessation of treatment has been rare and the annual rate of remaining in treatment has been 95%. For pregnant women, attempts are made to provide them immediate access to treatment (without waiting times) and, for dual-diagnosis patients, an integrated treatment model will be used, meaning that both substance abuse treatment and psychiatric treatment for the patient are always centralised in one unit. (Mikkonen et al. 2008.)

In the treatment model applied internally in the City of Turku, part of the Hospital District of Southwest Finland, patients are referred, depending on the stage which their individual rehabilitation has reached, to rehabilitative or harm-reducing substitution treatment in psychiatric specialised health care or to basic-level treatment in a health centre. Buprenorphine-naloxone treatments are initiated in an outpatient clinic if the patient does not have a major polysubstance addiction, while methadone substitution treatment is always commenced with a two-week inpatient period. The initiation period in a university hospital ranges from 3 to 6 months, depending on availability under the City's quota for further substitution treatment. In 2008, however, attempts are made to begin new patients' treatment directly in the City's quota for further treatment. (Mikkonen et al. 2008.)

A criterion for rehabilitation treatment is that the patient would benefit from psychosocial rehabilitation and commits to it. The long-term objective is for the patient to attain a substance-free lifestyle and to improve control of his or her life. Every two months, an assessment is made of the patient's current need and progress with regard to his or her targets. The achievement of these targets is supported through weekly meetings with the patient's personal nurse. The target schedule for rehabilitative substitution treatment is two years. Criteria for accessing harmreducing substitution treatment include poor commitment to treatment, chaotic additional substance use or the fact that rehabilitation is currently not the patient's own target. In such cases, the key goal is obtaining a commitment to treatment and medical treatment is conducted in a separate unit distributing medication. In this approach, the proportion of psychosocial treatment is minimised, treatment meetings are arranged every 3 to 4 months and a personal nurse is not assigned to the patient. Once a patient feels ready to take up rehabilitative treatment, he or she needs to draw up an application in which he or she defines his or her own rehabilitation targets. It should be acknowledged that for some patients, however, harmreducing treatment is a permanent and sufficient form of treatment. In health centres, the treatment is mainly medical. A personal physician takes responsibility for treatment and, during a weekly visit to a nurse, the patient is handed a weekly dose of replacement medication to take with him or her. (Mikkonen et al. 2008.)

A challenge in the treatment system in Southwest Finland is posed by those opioid addicts who remain excluded from treatment. Some of them are only beginning to consider a change process and are not actively interested in substitution treatment, others visit a private physician to obtain codeine treatment or seek treatment abroad, mostly in the Baltic countries. Under the new Decree on substitution treatment, patients with a stable treatment situation can be provided more flexible treatment. This increases the overall availability of substitution treatment since those who only need pharmacies to distribute their medication will free up places under the quota for rehabilitative treatment. One alternative to improve the availability of substitution treatment is to provide medical treatment for the patients who are still on the waiting list, instead of having them wait without medication. In this 'medical approach to waiting lists', the harm-reducing substitution treatment process can be initiated immediately for those eligible for treatment, who would then move on in the shared treatment system once vacancy in a treatment unit arises. The medical approach to waiting lists could also be applied in a case where withdrawal treatment has failed. (Mikkonen et al. 2008.)

The various models of implementing substitution treatment emphasise different aspects of the relationship between psychosocial and medical treatment. Particularly in university hospitals, medicine and rehabilitation are highlighted. The staggered treatment focuses on the idea that psychosocial treatment is prioritised when the patient feels ready for rehabilitative treatment and is able to define realistically his or her own rehabilitation targets. An alternative to the above-mentioned model is a holistic approach of commitment to treatment and preparation for rehabilitative substitution treatment which includes, particularly at the beginning, basic social work, ensuring livelihood and housing as well as seeking social support to foster recovery. Both of these models find support in various follow-up studies. Common to the models is, however, that both of them highlight how important it is to progress according to the particular circumstances of the client and his or her own treatment targets – in other words, the client's motivation for treatment.

#### Peer support

In her doctoral dissertation, Elina Kotovirta has studied the non-profit, peer-support-based fellowship of Narcotics Anonymous (NA), its recovery programme, and the former drug users who regard themselves as members of the fellowship.<sup>61</sup>

<sup>61</sup> The study data consists of NA fellowship's programme texts, episodic interviews (n = 24) and questionnaires (n = 212). 11 women and 13 men were interviewed. At the time of the interview, the interviewees were between 20 and 49 years old and had all been members of NA for at least a year. To discover the recovery status of the interviewees, they were contacted again one year after the initial interview. 23 of the original group could be reached. One of them no longer participated in the NA programme. Questionnaire data was collected in NA's annual jubilee conventions in 2003 and 2004. Kotovirta herself participated in the NA events, where she told about her research and distributed questionnaires to be completed on site. Some of the more interested people took questionnaire forms to those who had been unable to participate in the convent. The objective of the questionnaires was to collect data from all those who regard themselves as members of NA, on their views of their personal recovery and the NA programme. The questionnaire was divided into five subsections: participation in the NA programme, treatment history, personal history of substance abuse, assessment of situation in life, and social relationships. Collected data was analysed using the explorative factor analysis. (Kotovirta 2009, p. 24–30.)

According to Kotovirta, at its simplest NA's recovery theory can be described in two sentences: (1) There are drug dependent addicts who have an addiction disease, and (2) through an NA way of life recovery is possible. In her study, Kotovirta describes addiction through recovery stories shared at NA and how the way of life offered by NA supports recovery from drug addiction. She also depicts the way of life which recovering addicts have adopted and how they have done so. According to Kotovirta, NA may appear as strictly normative viewed from the outside, but in practice each member can adapt the programme in the way that best suits him/her. However, in the absence of more extensive knowledge of the fellowship, the norms reflected in NA texts or the fanaticism of individual NA members may drive some people away. (Kotovirta 2009, p. 5.)

A recurring observation of the study was that a fellowship can help fill the void left by the absence of drug use and contributes strongly to the building of social capital. Fellowships offer uninterrupted support, but cannot replace acute treatment. NA has been shown to be a significant factor supporting abstinence in parallel with, and as an extension of, an official treatment system, but seldom independently. NA can never fully replace professional support, neither should it be left with sole responsibility for treatment. The interaction between NA and the official treatment system is clearly demonstrated in the study. NA receives new members through treatment units and recommendations by individual professionals, while participation in NA improves the results of the official treatment system by supporting abstinence and community involvement. Simultaneously, fellowships significantly reduce the expenditure of the official treatment system. In the opinion of the interviewees, the NA programme is suitable for everyone and can be applied to anyone's life. They also regarded NA as being best capable of fulfilling its fellowship function as a single-issue movement focusing solely on drug addiction, and not on mental problems, for example. None of the interviewees mentioned the spirituality of the 12 steps recovery programme as an obstacle to joining NA, although for some this had contributed to a negative first impression of NA. (Kotovirta 2009, p. 168–172.)

The recovering drug addicts' desire to return to a normal, ordinary life surfaced from the study. For the interviewees, accepting the identity of an addict may feel stifling at the outset of recovery, but can later become a resource as temperance progresses. A member of NA doesn't necessarily see any contradiction in pursuing a normal life on the one hand, and defining himself/herself as abnormal on the other. As progress is made, the self-perception of a recovering addict often alters so that he/she begins seeing himself/herself as abnormal regarding substance use, but otherwise as an ordinary human being. For some, the identity of an addict is a necessity for maintaining abstinence and control over their lives. According to the NA programme, narcotics are not doomed to use drugs for the rest of their lives, but have the option of becoming productive members of society. As a disease, addiction is chronic but can be managed, and a recovering addict must make an effort to manage the addiction for the rest of his/her life. (Kotovirta 2009, p. 173–175.)

## 5.3 Client trends in substance and drug treatment

A census of intoxicant-related cases took place in 2007. The census is conducted during one day and collects information concerning clients who used the services of social welfare or health care units due to an injury caused by substance abuse or while intoxicated. This census is carried out every four years and, since 1995, in a format allowing comparison. The proportion of drug users among all clients included in the census of intoxicant-related cases was 11% in 1995, 16% in 1999, 27% in 2003 and 24% in 2007. (Nuorvala et al. 2008a.)<sup>62</sup>

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 shows as an increase in the use of outpatient substance abuse services. Substitution treatment was initiated on a wider scale only in 2002, which is reflected in the number of drug treatment clients using substance abuser services or outpatient health care in 2003 and 2007. While the range of substances abused also included drugs in 20% of the outpatients in substance abuse services in 1999, in 2003 this figure was 35%, and 40% in 2007. On the other hand, a cut in alcohol tax in 2004 increased the consumption of alcohol, and its delayed impact is manifest in the increased relative proportion of alcohol abusers in the 2007 census of intoxicant-related cases. This impact is particularly visible in the increased proportion of those over 50 years old. In the 2007 census of intoxicant-related cases, relatively little information was retrieved 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.)

Based on the findings, drug-related problem use manifests itself in approximately 40% of the users of outpatient or inpatient substance abuse services, 25% of the users of outpatient health care and 20% of the users of using inpatient health care. Among the clients included in the census, female drug users accounted for some 30% of those in outpatient care and 20% of those in inpatient care. In comparison to problem users of other substances, drug-using clients were relatively young. Among patients in substance abuse treatment, two-thirds of those aged under 35 abused drugs in addition to other substances, while among 35–44-year-old or older clients, drugs were abused by only one-third and by significantly less than 10%, respectively. (Huhtanen 2008.) In addition to age, 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

<sup>62</sup> Intoxicant-related visits refer to visits which either directly or indirectly involve intoxicants. The data was based on reports made by service unit personnel. The most recent census was carried out on 9 October 2007, when intoxicant-related cases reached a record high of 12,045.

users than other client groups, and over half of clients with a history of drug abuse suffered from depression or other mental disorders (Nuorvala et al. 2008b).

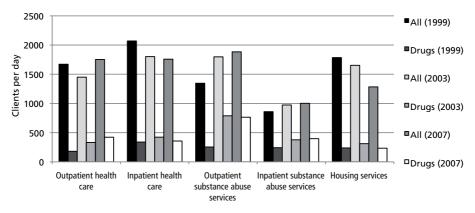


Figure 4. Intoxicant-related cases in social and health care 1999–2007.

Source: Huhtanen 2008.

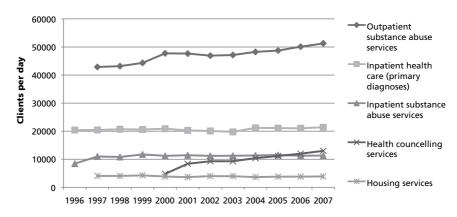


Figure 5. Intoxicant-related clients in social and health care services 1996–2007.

Source: Statistical Yearbook on Social Welfare and Health Care 2008.

The overall trend suggested by long-term client monitoring in substance abuse service systems is in accordance with the census findings. The greatest changes include the increased number of low-threshold health counselling centres and their higher number of clients since 2000; more frequent use of outpatient substance abuse services (including substitution treatment) throughout the 2000s; and the higher number of inpatients within health care, particularly in 2004. (Statistical Yearbook on Social Welfare and Health Care 2008.)

## 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 infectious diseases register has clearly declined over the past decade. Health counselling centres and hepatitis A and B vaccinations have played an important role in reducing the spread of drug-related infectious diseases.

An increase in the number of vasculitis cases and amputations has been reported, due to the intravenous use of pharmaceuticals including excipients, such as lime and starch, which are harmful to the veins. Drug-related mental health disorders have increased fourfold since the beginning of the 1990s.

The number of drug-related deaths grew along with other detriments at the turn of the millennium (Figure 3), which was a consequence of the increased drug use in the 1990s. In the early 2000s, the number of deaths remained at this higher level. Over the past few years, the number of drug-related deaths has shown signs of rising again.

### 6.1 Drug-related infectious diseases

#### HIV

According to the HIV infection statistics maintained by the National Institute for Welfare and Health, 148 new HIV infections were reported in 2008 (188 cases in 2007). Since 2000, the number of HIV infections has increased, due to the rise in sexually transmitted HIV infections. By contrast, the number of infections transmitted due to intravenous drug use has remained low: in 2007, only 7 infections caused by intravenous drug use were reported, which is only 5% of the reported to-tal (6% in 2006).

In addition to this passive monitoring required for the infectious diseases register, the National Public Health Institute (currently the National Institute for Health and Welfare) has been co-ordinating prevalence surveys<sup>63</sup> conducted approximately once a year. These surveys have aimed to assess the prevalence of infections among

<sup>63</sup> The survey has been conducted seven times during 1998–2007. Generally, the survey has been arranged in several health counselling centres during 2–4 weeks. The respondents were clients of health counselling centres, numbering 150–700. Each participant completes a form anonymously and gives a gingival fluid sample which is examined for antibodies to hepatitis C and HIV. 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. Those who know that they are HIV or hepatitis C positive are encouraged to participate in the survey.

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 1-2%, which by international standards is a very low proportion. (Arponen et al. 2008.)

In 2008, 71% of drug treatment clients had taken an HIV test. Of those tested (n=2491), approximately 1% had reported themselves to be HIV positive. No significant difference was observed between the client reports and confirmed data. (Ruuth & Väänänen 2009.)

According to a recent study<sup>64</sup>, HIV positive intravenous drug users who live in the Greater Helsinki area (Helsinki, Espoo and Vantaa) are marginalised both socially and regionally. There was an HIV epidemic among intravenous drug users in the Greater Helsinki area in 1998, but the epidemic took a downward turn in 2000. All areas outside the centre of Helsinki, where users said that they had spent time or used drugs at the time of the HIV diagnosis, were areas in which men had the lowest rate of employment (less than 70%). The HIV infections of intravenous drug users were concentrated in areas described as poverty areas. The conclusion drawn from the study was that when the HIV prevalence is low, preventative measures should be targeted, especially at socially marginalised drug users who practice risky behaviour and spend their time outside the city centre. (Kivelä et al. 2007.)

#### Hepatitis C

In 2008, the number of new hepatitis C infections reported was 1,144 (1,157 in 2007). The means of transmission was identified in approximately 55% of the cases, and in the majority of these (80%) the infection had been contracted through intravenous drug use. For cases where the means of transmission could not be identified, there is great reason to suspect intravenous drug use, since hepatitis C is known not to be readily transmitted in sexual contact and no community infections have occurred. (THL 2009.)

The overall number of new hepatitis C cases has declined slowly but surely since 2000 and, at the same time, the number of infections caused by intravenous drug use has decreased. However, acute infections are not easily distinguished from older cases, and therefore caution should be practiced when interpreting results. Nevertheless, the prevalence of hepatitis C among intravenous drug users is at such a high level that any changes will occur slowly, even when the risks are controlled. (THL 2009b.)

<sup>64</sup> The material for the study consisted of HIV positive drug addicts who visited the clinic for infectious diseases at Helsinki University Central Hospital at least once between 1998 and 2003. Of the 213 clients, interview data on 176 (82.6%) clients was available for the study. The data related to drug use, sources of income, living conditions, education, employment, substance abuse treatment and imprisonment. The clients were also asked to name a maximum of four areas where they had spent time or used drugs at the time their HIV infection was diagnosed.

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Injection drugs	1047	1001	928	822	710	627	603	621	571	416	508
Sexual exposure	55	35	41	42	45	46	59	61	70	63	68
Perinatal	4	10	6	3	3	1	10	5	8	4	9
Blood products	27	23	25	19	18	22	18	24	7	17	15
Other	24	40	31	31	28	34	31	35	37	23	31
Not identified	646	643	708	574	567	533	517	497	486	634	513
Total	1803	1753	1739	1492	1372	1264	1238	1244	1181	1157	1144

Table 9. Hepatitis C according to physicians' reports, arranged by means of transmission, years 1998 to 2008\*)

Source: The National Infectious Diseases Register, the National Institute for Health and Welfare.

\*) In the period from 1995 to 2003, four known cases of HBV infections transmitted via the transfusion of Finnish blood components have been reported. Since 2000, no HCV infections transmitted via the transfusion of Finnish blood components have been reported. Monitoring the means of HCV transmission was initiated in 1998.

Based on the prevalence surveys<sup>65</sup> of the National Public Health Institute (currently the National Institute for Health and Welfare), the prevalence of hepatitis C is 50-70% among intravenous drug users. According to the 2008 material of the drug treatment information system, 63% of clients who had used drugs intravenously and had been tested (n=2,658) had hepatitis C. (Ruuth & Väänänen 2009.)

A review by age group indicates that, regarding hepatitis C infections, the share accounted for by 15–19-year-olds has lowered and that of 20–24-year-olds is showing some indications of decline. The National Institute for Welfare and Health (2009) concludes that health counselling and harm reduction work has most probably been effective among younger age groups and that, nowadays, infections are contracted at an older age if drug use is continued. Among the individuals who had continued intravenous drug use for ten years and who were registered in the drug treatment information system, nearly 80% have hepatitis C (Ruuth & Vään-änen 2009).

Regional differences exist. The number of infections has declined in Southern, Western and Eastern Finland whereas in the northern province of Oulu the situation is alarming - infection prevalence has increased steadily since 1995. The reasons underlying this increase require further study, since active testing can not sufficiently explain the clear increase over the past few years. To reduce the number of infections in Northern Finland, provision of health counselling for intravenous drug users should be increased, as necessary. (THL 2009b.) Indeed, health counselling is available in only a few localities in Northern Finland.

<sup>65</sup> For more details on the surveys, see Subsection 'HIV' above.

#### Hepatitis B

The number of acute hepatitis B cases recorded in the infectious diseases register has shown a significant decline over the past decade, and infections contracted through intravenous drug use have decreased the most. In other words, hepatitis B vaccinations for risk groups and the work conducted at health counselling centres aimed at drug users have produced results. As in the previous year, in 2008 only one new acute infection had been contracted through intravenous drug use. Altogether there were 45 new infections, and the means of transmission was identified in 16. During the peak in 1998, the number of new infections was 256. (THL 2009b.)

#### Hepatitis A

In 2008, the number of new hepatitis A cases reported totalled 21. Twelve had been contracted abroad and three in Finland, while the originating country was unknown in 6 cases. During the past few years, the number of infections has remained low. (THL 2009b.)

In 2002–2003, a hepatitis A epidemic emerged among intravenous drug users in the Greater Helsinki area, causing the number of new cases to soar (393 cases reported in 2002 and 243 in 2003). This growth levelled off in 2004, after which the prevalence has remained low owing to the vaccination of risk groups. As of 2005, intravenous drug users are entitled to the hepatitis A vaccine under the national vaccination programme. Seeking a hepatitis A vaccination is also common among those who are planning to travel abroad.

#### Sexual risk behaviour in intravenous drug users

Kivelä et al. (2009) studied the prevalence of sexual risk behaviour and factors associated with inconsistent condom use of Finnish intravenous drug users. Data for this study<sup>66</sup> comprised two cohorts: HIV positive and HIV negative intravenous drug users. In the HIV positive group, 96% had hepatitis C while the corresponding figure in the HIV negative group was 51%. The HIV negative users were sexually more active than the members in the HIV positive group. During the past six

<sup>66</sup> HIV negative users (N=207) were recruited by health counselling centres in Helsinki in 2000– 2002. Saliva tests were used to determine negative HIV test results. Members of the other cohort were selected in the Helsinki University Central Hospital, to which all HIV positive intravenous drug users of the Greater Helsinki area are referred for treatment following diagnosis. This cohort included users who had tested positive between 1998 and 2004, and who had previously (max. two years) tested negative. Members of both cohorts were over 18 years old. Participants were interviewed based on a structured interview form. Logical regression was applied in risk factor analysis. The model included variables which were significant in single variable analysis. The small sample limits the generalisation of these study results.

months, 13% of the HIV negative group and 32% of the HIV positive group had not had a single partner. Some 63% of the sexually active HIV positive and 80% of the sexually active HIV negative users used condoms irregularly<sup>67</sup>. The importance of safe sex is explained to each HIV positive patient on his/her first visit to the infectious diseases clinic after being diagnosed with HIV. This might have an effect on risk behaviour.

According to this study, irregular condom use could not be independently associated with age, sex, marital status, number of partners, prostitution, sexually transmitted infections, drug use density, visits to health counselling centres or duration of intravenous drug use. Furthermore, inconsistent condom use could not be independently associated with education, living conditions, unemployment, recent imprisonment (within the past 6 to 12 months) or the number of prison sentences either. Thus, rather than targeting efforts at the socially marginalised or those engaged in prostitution, for example, attempts should be made to reduce sexual risk behaviour in all intravenous drug users. (Kivelä et al. 2009.)

Inconsistent condom use was associated with recent treatment periods (within 6 months). For the HIV positive, inconsistent condom use was associated with treatment periods in institutional and outpatient care. For the HIV negative, this association existed only for those who had been in institutional care. Explaining this association was beyond the scope of this study. (Kivelä et al. 2009.)

#### An interview study with HIV positive women using intravenous drugs

The objective of this study<sup>68</sup> was to interview women who had been infected with HIV when under 26 years old and who were using or had used drugs intravenously, to examine their opinions and views on sex, drugs and HIV infection. These topics were applied to determine the development that led to HIV infection. The majority of the women had begun sexual relationships at a very young age (12 to 13 years). They had had a relaxed attitude towards contraception, in particular not using condoms prior to contracting HIV. Substance abuse had started at an early age (12 to 15 years) based on alcohol, cannabis or amphetamine. The interviewees' personal history of intravenous drug use varied between 4 and 10 years. Initially, contracting HIV was considered a distant possibility, but the increased number of infections

<sup>67</sup> Condom use was determined as inconsistent, in cases where condoms were never, sometimes or often used. Condom use was determined as consistent when a condom was always used.

<sup>68</sup> The interviewees were recruited from among the clients of HUS Aurora Hospital's policlinic for infectious diseases and the Helsinki Deaconess Institute's Munkkiniemi Service Centre for HIV positive drug users. Of the 17 women who matched the research criteria, 12 could be contacted and 8 agreed to participate in the study. Participants were interviewed during the interval between August and December 2003. At the time of the interview, the interviewees were between 20 and 30 years old. When they had tested HIV positive, the women were 17 to 25 years old. They did not receive any remuneration for their participation in the study. The interviews were recorded, transcribed and analysed. The applied analysis method was inductive content analysis.

among intravenous drug users raised awareness. Some preventive measures were taken, but addiction and general indifference towards oneself reduced their interest in infection prevention. (Kaivola et al. 2007.)

For the interviewees, substance abuse and despair were contributing factors in their contraction of HIV. Their lives were controlled by drugs, which rendered them unable to attend to their own well-being. Psychological malaise, homelessness and accumulated problems increased their indifference towards themselves. Sharing needles and syringes was common, and many had never realised that sharing a mixing dish could constitute an infection risk. Due to the withdrawal symptoms, opioid users in particular were usually in such a hurry they no longer cared what they used for injecting the substance. In these cases the only method for minimising the infection risk was to ask if others were HIV positive. Access to clean needles and syringes is limited in prisons (see Section 9.4) and elsewhere during the night when pharmacies do not sell needles and syringes, for example. Furthermore, the interviewed women criticised the health counselling centres' quotas on needles and syringes - one successful injection may require as many as three needles if veins are in poor condition. Some had been infected soon after starting intravenous drug use while they were still practicing usage routines. In the early stage of intravenous use, injections had been given by someone else with their needles and syringes. Exchanging needles and syringes in pharmacies or health counselling centres was often considered to stigmatise users, and visits were shunned. (Kaivola et al. 2007.)

The random as well as the more permanent sexual partners of the interviewed women were often drug users. Sudden mood swings, violence, abuse and sharing needles and syringes were characteristic of these relationships. Many of the women had been infected by their partner. For some users, the infection diagnosis had resulted in abstinence or reduced substance abuse, while in others it had had no impact. However, the positive result had been a shock to everyone and did have a cooling effect on their sex lives at first. Being infected themselves, the women became better aware of their partners' infection risk, which resulted in more consistent condom use. (Kaivola et al. 2007.)

According to the interviews, these women were strongly indifferent to themselves and to their lives. This indifference was associated with their past, present and future. The connection between mental health and substance abuse problems is not fully understood – do mental health problems lead to substance abuse problems or vice versa, or is there a third factor in this equation? It is suggested that untreated adolescent depression could underlie drug abuse. Due to personal development during the years of adolescence, and its effect on the symptoms and personal experiences of young people, adolescent depression often remains undiagnosed. Young people may resort to drugs to alleviate their anxiety, but the abuse of prescription drugs, amphetamine and hallucinogens cause panic symptoms and anxiety, contributing to phobias and depression. (Kaivola et al. 2007.)

# 6.2 Other drug-related health correlates and consequences

#### Vasculitides and amputations

In 2000–2005, two hospitals in Helsinki69 treated 24 patients who had entered care due to either infections (8 cases) or acute limb ischaemia (16 cases) arising from the injection of medicine tablets. The medicines had been crushed and diluted in hot tap water, with only one patient mentioning the use of a filter prior to injection. During the same period, the hospitals received only one other patient with a similar condition, whose injuries had been caused by injecting so-called traditional drugs (amphetamines). During the intra-arterial administration of tablets, their solid binding agents such as starch or chalk decelerate the blood flow, which may lead to arterial thromboses. In many cases, the solution also contains micro-organisms, which only adds to the risks. Since, on several occasions, previous intravenous use has caused veins to clot, instead of injecting into a vein the user may hit an artery or subcutaneous tissue, entirely missing the blood vessels. (Partanen et al. 2008.)

The patients' average age was 26 years (the age range from 20 to 39 years), 5 of them being women and 19 men. All of the patients had been using drugs intravenously for years. Most of those included in the study had injected crushed tablets into the inside side of the elbow. The most frequent substance involved benzodiazepine derivatives (11 patients). A total of 10 patients had injected buprenorphine, either solely or combined with another sedative medical agent or narcotic substance. Such injections – some patients having performed several of them – had hit an artery (16), vein (2) or subcutaneous tissue (10). The time from injection to arrival at the emergency services ranged from 3 hours to 10 days. Referral ensuing from seeking treatment had been slow and complicated, usually taking more than 24 hours. (Partanen et al. 2008.)

The patients spent an average of 14 days in inpatient care and 0 to 6 surgical procedures were performed on them, the average being 2. Such procedures included abscess incision, the fasciotomy of limbs if necessary and surgical debridement of gangrenous tissue. Embolectomy was attempted in three cases, but in spite of these efforts the cases resulted in amputation. The total number of amputations was nine, including the amputation of a finger (5), toe (1), elbow joint (1), forearm (1) and thigh (1). (Partanen et al. 2008.)

<sup>69</sup> The study was conducted by assembling all cases entered in the care notification registers of Töölö and Meilahti Hospitals during 1 January 2000–31 December 2005 and corresponding to the ICD-10 codes X44, T40.4, 174.2, 174.3 and L02. Among these patients, those who had injected crushed tablets into a vein or subcutaneous tissue were selected. The case records were analysed by defining the socio-demographic background, date of seeking treatment as well as examinations and treatment procedures conducted. (Partanen et al. 2008.)

#### Drug-related care periods in hospitals

In 2008, inpatient wards registered 6,668 drug-related care periods in which a drug-related disease i.e. a disease related to narcotics or medicines, was the primary diagnosis, and 9,508 care periods in which a drug-related disease was the primary or secondary diagnosis. The number of care periods for drug poisoning increased sharply compared with 2007, by some 19%. A major increase has been observed over several years in treatments administered for medicine poisonings where the active agent is not reported. From 2005 onwards, these periods of care have been classified separately as "Poisonings with unspecified medicine". Drug-related periods of care represent one fifth of all hospital care periods involving substance abuse; however, the proportion is more than a half for under-35s. (Yearbook of Alcohol and Drug Statistics 2008.)

Year	State of in- toxication	Drug addiction	Behavioural and mental health disorders caused by drugs	Drug poisonings	Total
1999	509	485	886	208	2088
2000	429	660	912	175	2176
2001	384	573	873	132	1962
2002	355	637	786	112	1890
2003	274	468	705	128	1575
2004	267	575	601	109	1552
2005	270	577	571	103	1521
2006	247	664	542	126	1579
2007	273	625	551	122	1571
2008*)	296	726	553	145	1720

Table 10. Care periods for drug-related diseases in 1999–2008, drug-related disease as the primary disease

\*) Preliminary data

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

#### Psychiatric co-morbidity (dual diagnosis)

A survey<sup>70</sup> conducted among patients receiving substitution treatment in the Hospital District of Helsinki and Uusimaa (HUS) in 2000–2002 suggested that more than 90% of patients on substitution treatment displayed psychiatric disorders, in addition to their substance problem. For the majority of these patients, polydrug

<sup>70</sup> The study included all patients (70) who began on opioid substitution treatment in 2000–2002 at the HUCH Outpatient Department for Opioid Addiction. The retroactive study was based on case histories. All of the patients in the study received methadone treatment. (Vorma et al. 2005.)

use was common: in addition to opiate addiction, nearly everyone was diagnosed as being addicted to, or abusing, benzodiazepines (94%). More than half were also diagnosed as being addicted to, or abusing, amphetamines (59%) and approximately half as being addicted to, or abusing, cannabis (51%). Alcohol addiction or abuse was diagnosed in a tenth of these patients (10%). Nearly all substance diagnoses were related to addiction and only some referred to abuse. The most common psychiatric disorders co-occurring with substance abuse were various personality disorders (86%) and affective disorders (23%). The most typical personality disorders included antisocial or unstable personality disorders. For one in ten patients, the disorder had reached the level of psychosis. The proportion of dual diagnosis patients in the data was significant, and the frequency of psychiatric disorders among patients on substance treatment clearly exceeded the levels observed in the general population. More research on dual diagnosis patients is required, and this group should also be considered in the planning of treatment. (Pirkola et al. 2007a; Vorma et al. 2005.)

Figure 6 shows the number of mental disorder diagnoses co-occurring with drug diagnoses, according to the hospital patient discharge register. The number of diagnoses grew throughout the 1990s, but the trend has levelled off since 2000.

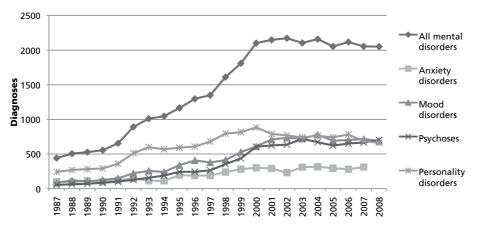


Figure 6. Mental disorder diagnoses co-occurring with drug diagnoses in 1987–2007 according to the hospital patient discharge register.

Source: Hospital patient discharge register, STAKES

In her recent dissertation<sup>71</sup>, Solja Niemelä (2008) has examined how psychological symptoms in childhood and psycho-social factors in early adulthood correlate with substance abuse and related crimes. According to the study, childhood hyperactivity, conduct problems and co-morbid conduct-emotional problems were predictors of heavy substance use and substance-related offences in early adulthood.

While childhood psychiatric symptoms were predictors of a future narcotics offence record, they did not correlate with self-reported drug use at the age of 18. Psychiatric disorders in early adulthood were common among those using drugs. Teacher reports on the boys' psychiatric symptoms predicted later substance use more accurately than parents' reports. (S. Niemelä 2008.)

According to the findings of the thesis, substance-use-related outcomes accumulate in boys with psychiatric problems both in childhood and in early adulthood. The researcher suggests that targeted early interventions should be developed in school health care systems, particularly for boys with childhood hyperactivity, conduct problems or co-morbid conduct-emotional problems. (S. Niemelä 2008.)

## 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 protocol<sup>72</sup>, under which drug-related deaths include cases of poisoning (i.e. overdosing). In accordance with the operative definition, data is extracted from national causes of death statistics for cases where the basic cause of death is either a mental and behavioural disorder due to drug use or drug poisoning (ICD 10). In Finland, the causes of death statistics are produced by Statistics Finland. The statistics on drug poisonings indicate the number of overdoses, i.e. deaths directly caused by drugs.

<sup>71</sup> The study population included 10% of all Finnish-speaking boys born in Finland in 1981 (n=2,946 or 97% of the target population). In 1989, these boys were 8 years old and any psychiatric symptoms were assessed using validated questionnaires (the Rutter questionnaire, Children Depression Inventory) completed by teachers, parents and the boys themselves. A follow-up was conducted in the military recruitment examinations in 1999 when the boys were 18 years old (n=2,348 or 80% of those who had participated in the study in 1989). Questionnaires were used in order to assess the subjects' substance abuse, psychological condition, functional ability (Young Adult Self-Report) and use of mental health services. Data on psychiatric diagnoses were collected from the Military Register (at the age of 18–23) and data on offences were retrieved from the National Police Register (at the age of 16–20). These data were available for a total of 92% of those who participated in the study in 1989.

<sup>72</sup> The protocol is available as a pdf document at: http://www.emcdda.europa.eu/?nnodeid=1419.

These statistics are based on data extracted from the Forensic Medicine toxicology register on deaths by poisoning due to the pharmacological effects of drugs, analysed using forensic chemistry.

Figure 7 illustrates the development of drug-related deaths in 1995–2007, using the above-mentioned statistical sources<sup>73</sup>. In these three drug-related death statistics, changes occurring since 2000 are highly consistent. An exception to this rule arises in the sharp increase in the number of findings in 2007. The reasons for this development are unknown.

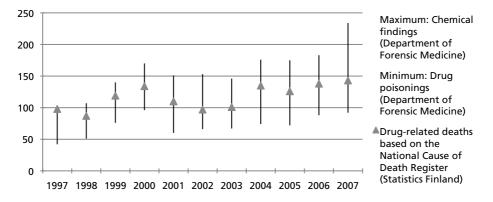


Figure 7. The number of drug-related deaths based on causes of death and chemical drug findings in 1997–2007.

Source: Statistics Finland; Department of Forensic Medicine at the University of Helsinki

In 2007, the number of chemical findings increased by 46 cases compared to the previous year. According to information on forensic chemical findings, there were 234 drug-related deaths. Amphetamine was found in 92 (64)<sup>74</sup> cases and cannabis in 92 (99) cases. The number of deaths caused by either heroin or cocaine has remained at a few cases every year. In 2007, heroin was detected in 1 (2) cases and cocaine in 3 (1) cases. Buprenorphine abuse was detected in 97 (88) deaths. The number of buprenorphine findings has risen from 7 in 2000 to nearly 100 currently. Other opioids – tramadol, oxycodone or fentanyl – were detected in 21 (29) cases. During the years 2005–2007, the largest age group in which findings were made was 20 to 24-year-olds. During these three years, drugs were found in only two cases were the deceased was over 60 years old. In both cases this drug was amphet-

<sup>73</sup> All three statistics are prepared annually concerning the previous year. Unfortunately, at the time this report was prepared, statistics for 2008 were not yet available.

<sup>74</sup> Figures in brackets are the corresponding figures from 2006.

amine. The majority of findings were in men. In 2005, the share of women was 15% and in the years 2006 and 2007 it was 12%. (Vuori et al. 2009.)

According to forensic analysis, polydrug use was typical. In 2007, in connection with the 98 buprenorphine findings, of other illegal drugs cannabis was detected in 14 cases, amphetamine in 26 cases and both in 13 cases. Alcohol (over 0.5‰) was detected in 40% of the cases. Medicines are also often detected: in 129 cases of deaths by poisoning where traces of drugs had been identified, benzodiazepines were detected in 82% of cases. (Vuori et al. 2009.)

In opioid use there has been a shift away from traditional drugs towards the use of medicines for intoxication purposes. Based on forensic findings, in addition to buprenorphine, codeine, tramadol and oxycodon, methadone and fentanyl are among substances of abuse. Abused methadone often originates in substitution treatment. The normal daily dose of methadone in substitution treatment is many times the lethal dose for inexperienced users. Fentanyl cases are related to the misuse of fentanyl pain patches. When misused, fentanyl patches are chewed, releasing fentanyl inside the mouth which is then ingested through the thin mucosa substantially faster than when the patch is used as intended. The result is often poisoning. One patch contains a large amount of fentanyl. Hence, the extracted fluid may comprise several lethal doses when injected as a single dose. A new finding in samples from young opioid users was pregabalin, which is used as a pain killer and to treat epilepsy. (Vuori et al. 2009.)

In 2005–2007, misused buprenorphine was the most significant finding in every third death by poisoning. Amphetamine was the most significant finding in 10% of deaths by poisoning. In deaths by poisoning, concentrations of effective opiates such as morphine, methadone and fentanyl were on therapeutic levels. The levels of detected tramadol and codeine were very high. This may be explained by the fact that the effects of these drugs are milder and users probably tend to overdose to achieve a sufficient intoxicating effect. (Vuori et al. 2009.)

## 7 Responses to health correlates and consequences

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. To prevent overdosing, awareness has been raised of the importance of the correct dosage and calling for help in time. The issue is also dealt with in drug treatment units with users, when necessary. Some training concerning the prevention of drug-related deaths is provided as part of basic training in social welfare and health care.

The treatment and prevention of infectious diseases related to drug use is carried out 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 in university hospitals and in central, regional and psychiatric hospitals in the area.

Low-threshold services in particular have been essential in preventing and reducing infectious diseases spread by intravenous drug use. Drug users can exchange used syringes and needles for clean ones at health counselling centres. An essential part of this operation is health counselling on drug-related infectious diseases and other serious risks related to drug use, such as overdoses and sexually transmitted infections. Health counselling centre services are free of charge for clients, who can visit the centres anonymously.

Under the Communicable Disease Act 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.

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

In February 2008, the Ministry of Social Affairs and Health hosted a seminar on the prevention of drug-related deaths. Following presentations on this subject, users' possible fear of the authorities and the possible negative impacts such fear might have, such as avoidance of calling the emergency number in an overdose case, was

discussed. The seminar also included a presentation of peer group activities which can reach drug users who are not currently using or not entitled to use the services offered. (Ministry of Social Affairs and Health 2008)

The seminar concluded that a project should be initiated to alleviate users' fear of the authorities and lower the threshold to calling emergency numbers. For this purpose, the number and versatility of telematic services should be increased. The Ministry of Social Affairs and Health will enhance Emergency Response Centre operations so that the advice provided emphasises health-related issues. Furthermore, security service employees' knowledge of drug poisoning should be updated and enhanced through training. To this end, the Ministry of the Interior and the Ministry of Social Affairs and Health will encourage and support police involvement in drug-user treatment referrals. Snowball training projects organised by A-Clinic Foundation's Vinkki Health Advice Centres should be municipally funded, while problem drug users' admission to treatment needs to be made easier and less time consuming. Additional procedures will be considered upon the completion of the study on drug-induced deaths in 2007. (Ministry of Social Affairs and Health 2008)

During the period from 2004 to 2008, the A-Clinic Foundation carried out the Linkki Project, in order to reduce drug-related harm through peer group activities in the Vinkki Health Advice Centre in Helsinki (see Section 7.2). This project was implemented in the form of tutor training – the training of peer educators, overdoses and first aid numbering among the training topics. Participants cited learning how to act in overdose situations as a key motive for participating in training. (Malin-Kaartinen et al. 2008.)

## 7.2 Prevention and treatment of drug-related infectious diseases

#### Guidelines on outreach work

Correlation Network (2007) has also issued the publication<sup>75</sup> "Outreach work among marginalised populations in Europe. Guidelines on providing integrated outreach services." These guidelines cover both the principles of outreach work and practical implementation. Training for employees working in outreach services and their well-being at work is considered a key issue. In order to succeed, outreach work also requires co-operation with the other actors in the social welfare and health care sector.

<sup>75</sup> These guidelines have been created based on discussions within a working group assembled by Correlation Network.

#### Vaccination coverage of users as part of drug abuse treatment

There have been no major changes in the vaccination coverage of users in drug abuse treatment over the past year. 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, approximately two-thirds (72%) had received at least one of the vaccine doses for hepatitis B. A total of 51% had received all three vaccine doses, and 5% had received a booster dose. (Kuussaari & Ruuth 2009.)

#### Services in health counselling centres

Health counselling centres 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, in more than 35 localities.

In 2005, a total of 44% of the Finnish population lived in municipalities providing health counselling services. By correlating the recorded total number of clients visiting health counselling centres in 2005 (11,800 clients) with the estimated number of problem users in the same year (14,500–19,100 users of amphetamines or opiates), it is estimated that health counselling reaches 60–80% of problem users. However, in the Greater Helsinki area, the reported number of clients was 9,315 while the estimated number of problem users was 5,100-8,200 in 2005. This disparity in comparison with the rest of the country is due to the fact that in the densely populated Greater Helsinki area, up to 20% of the clients attend several centres. These overlaps cannot be eliminated in the data analysis, since the clients can obtain services anonymously, by providing a pseudonym. According to an estimate, the services of health counselling centres reach 80% of problem users in the Greater Helsinki area. (Arponen et al. 2008.)

The operations of health counselling centres have been monitored since 2001. Throughout the centres' period of operation, the number of clients, visits and exchanged syringes or needles has increased, although in recent years, the number of clients and visits has been levelling off<sup>76</sup>. (Anturiverkosto 2008.)

<sup>76~</sup> The health counselling centre statistics for 2008 had not been completed at the time this report was under preparation.

	2000	2001	2002	2003	2004	2005	2006	2007
Health care counselling centres	12	18	22	24	24	34	38	38
Clients	4 800	8 400	9 300	9 300	10 400	11 800	11 900	13 000
Visits	32 900	44 500	55 300	70 600	83 400	80 500	73 900	92 000
Exchanged syringes or needles	564 500	950 500	1.1 million	1.4 million	1.8 million	1.9 million	2.3 million	2.6 million

Table 11. Activities of health care counselling centres, 2000–2007

Source: Anturiverkosto 2009.

According to the operating statistics from 2006, health counselling centres carried out a total of 1,409 HIV tests and 582 hepatitis C tests. These tests were available in four out of every five centres. A total of 1,091 of the HIV tests were rapid tests. Several centres also provided tests for detecting hepatitis A or B, chlamydia, gonorrhoea or pregnancy. The number of vaccine doses administered totalled 1,950, representing a 3% increase over the previous year. The centres also distributed 58,991 condoms, up 50% from the year before. (Anturiverkosto 2008; Arponen et al. 2008.)

The National Public Health Institute (currently the National Institute for Health and Welfare) has conducted an evaluation study<sup>77</sup> examining the effectiveness of the health counselling centres' operations. According to the study, the services of health counselling centres have played a central role in the prevention of HIV infection, hepatitis A and B and, to some extent, hepatitis C, as well as in combating epidemics among intravenous drug users and, indirectly, among the entire population. 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. This is evidenced not only by the data in the infectious diseases register of the National Public Health Institute (currently the National Institute for Health and Welfare), but also by targeted prevalence surveys. (Arponen et al. 2008.)

The model of health counselling centres has proven to be a very cost-effective health intervention, and safeguarding its continuation and further development is very important. These services represent a significant social innovation combining low-threshold health services with drug-related harm reduction – a model which has been successfully implemented in parallel with Finland's restrictive drug policy. (Arponen et al. 2008.)

<sup>77</sup> The data used in the study was obtained from the National Public Health Institute's infectious diseases register; test results obtained and sampling studies conducted in the health counselling centres; the centres' operating reports and statistics as well as in-depth interviews with 11 employees working in the health counselling centres.

#### Drug-related harm reduction through peer group activities

During the period from 2004 to 2008, the A-Clinic Foundation carried out the Linkki Project to reduce drug-related harm through peer group activities in the Vinkki Health Advice Centre in Helsinki. The modus operandi of the Linkki Project was to develop versatile peer group activity models for peer educators. Snowball training is the key approach to training<sup>78</sup>. It comprises approximately five meetings and a one-month field work period during which each trainee interviews 10 drug users belonging to his/her personal network. These training instructors are professionals in the field, and the meetings are arranged around the following topics: sexually transmitted and blood-borne infections, risks related to drug-use, overdose situations and first aid. Attitudes towards and opinions on drug-use are openly discussed in the meetings. These discussions provide the instructors with information on the drug users' views, opinions and beliefs. Referral for treatment does not form part of the training, although some people were referred for treatment during it. In preparation for work in the field, interviews are rehearsed in advance and a feedback meeting is held after the field work period, at which the participants receive a small financial payment for their efforts. The trainees are also granted a larger needle and syringe exchange quota at health counselling centres. Customised snowball training has been organised for specific target groups, such as women and Russian speakers. One snowball training session included editorial work for the Vinkki Health Advice Centre's customer magazine Veturi. (Malin-Kaartinen et al. 2008.)

Passi satoihin (Finnish for 'passport to hundreds') is a form of peer training organised as part of the Linkki project, but comprising only two meetings (safe injections and infectious diseases). Many users found it easier to commit to a shorter training period and organising Passi satoihin training was also facilitated by the fact that the instructors were employees of the Vinkki Health Advice Centre. Following the training, users were entitled to a larger needle and syringe exchange quota, providing access to hundreds of needles and syringes as the name of the training implies. In Verto training, long-term clients of the Vinkki Health Advice Centre were trained in health counselling and needle and syringe distribution to users who do not visit Health Counselling Centres. This type of peer work in the field was initiated upon the discovery that the field operations of the Vinkki Health Advice Centre were no longer able to reach users as they had before. Continued co-operation with the peer workers who had received training prior to the project's initiation formed the third subsection of the Linkki project. Peer workers, or Helpers, have been regularly or sporadically active, exchanging needles and syringes with their personal networks, participating in outreach work with employees, and providing assistance in the contact café. (Malin-Kaartinen et al. 2008.)

<sup>78</sup> Correlation Network (2008) has published a report on snowball training in English: "Peer training in a multicultural environment. Snowball and individual training at the Vinkki Health Advice Centre in Helsinki during 2005-2006." See http://www.correlation-net.org/products/snowball.pdf.

The success and effectiveness of the peer activities was assessed<sup>79</sup> by the project's final report. According to the assessment, the key objectives were achieved – the training sessions enhanced clients' involvement and empowerment. Customised training was successfully utilised to enable clients in poor condition to commit to peer activities. Furthermore, peer operations provided an information channel to drug-user networks not accessible through other methods. New models for peer activities and new peer work terminology and concepts were developed during the project, in order to facilitate the development of future models. (Malin-Kaartinen et al. 2008.)

For peer workers, the training was an empowering experience. This was demonstrated by the workers' greater openness, their improved perception of their own lives, their enhanced ability to care for themselves and their entry into care and training courses. The employees viewed peer activities as a positive experience, although the new situation did create some tension within the working community. Clearly defining the role of peer workers was viewed as a prerequisite for the activities in question. Key issues for further development include the improvement of customised training and recreational activities, and focusing on peer activities at service points and in field operations. Future challenges include integrating peer activities with basic operations, maintaining a low threshold to services and appropriate resourcing. Following the termination of this project, the development and improvement of peer activities has continued within the Vinkki Health Advice Centre and peer activities now form an essential part of basic operations. (Malin-Kaartinen et al. 2008.)

#### Health counselling in health centres

As of 2003, health centres were also rendered legally responsible for conducting work against infectious diseases and exchanging syringes and needles. However, a survey<sup>80</sup> indicates that drug-related health counselling and the exchange of syringes and needles are seldom carried out: only 9% of responding health centres reported that they exchanged clean syringes and needles for drug users. More than half of the health centres are providing health counselling for instance on infectious diseases or the reduction of risks related to intravenous drug use. More than a third of the responding centres (38%) stated that intravenous drug users visit their health centre weekly. Particularly in small localities, the role of health centres in the pre-

<sup>79</sup> The data comprises interviews of 11 persons who participated in snowball training between 2004 and 2006 and interviews with 10 employees of the Vinkki Health Advice Centre in Helsinki in 2006. The content analysis method was applied in the recording, transcription and analysis of the interviews.

<sup>80</sup> The A-Clinic Foundation and STAKES conducted a survey to assess the health centres' practices in exchanging syringes and needles for drug users. The survey also investigated how well health counselling related to drug use is implemented in health centres. The survey was carried out in December 2006 and sent to all 596 health centres in Finland (including main and sub health centres). A total of 202 replies were obtained, from 188 municipalities spread evenly around the country.

vention of drug-related infectious diseases and drug-related harm reduction is crucial, since establishing separate health counselling centres in very small localities is not necessarily feasible. (Malin-Kaartinen & Rönkä 2008.)

In the survey, health centres also evaluated their personnel's skills and knowledge of drug-related issues. Based on the responses, the majority of health centres are very well or fairly well prepared for providing information on infectious diseases. Moreover, knowledge of treatment options within the locality is good. By contrast, health centres' weaknesses include their inability to deal with individuals who use drugs intravenously, to recognise drug-related health problems and their knowledge of the various narcotic substances. Only 33% of the health centres stated that some of their personnel had participated in intravenous drugs-related training during the preceding two years. Increasing the skills and knowledge of employees is a key factor in shaping attitudes to the importance of work with drug users within primary health care. (Malin-Kaartinen & Rönkä 2008.)

Some 56% of the health centres reported that they provide health counselling related to drug use. More specifically, the health centres provide information on infectious diseases (51%), drug treatment locations (41%), reducing the risks related to injection (36%), health counselling centres (37%) and sexual health (36%). In those health centres providing health counselling, two-thirds provide counselling orally and one-third both orally and in written format. Hepatitis tests are available in 86% of the responding health centres, free of charge in most of them (99%). Drug users may obtain a free hepatitis A and B vaccination in nearly half of the health centres. An HIV test is available at 88% of the health centres, but only two reported offering rapid HIV tests. (Malin-Kaartinen & Rönkä 2008.)

The survey also assessed health centres' views on who should be responsible for distributing clean syringes and needles. Most of the respondents considered that health counselling centres should be in charge. Other suggested exchange locations included the network of pharmacies, health centres and mobile exchange units. A total of 44%, however, considered that exchange should be carried out through cooperation between all the parties concerned. (Malin-Kaartinen & Rönkä 2008.)

# 7.3 Prevention and treatment of other drug-related health correlates and consequences<sup>81</sup>

At the beginning of 2002, Finland's Slot Machine Association RAY began contributing to the dual-diagnosis projects of four organisations. These projects terminat-

<sup>81</sup> A working group report on securing treatment for substance-abusing pregnant women (Ministry of Social Affairs and Health 2009b), see Section 1.2.

ed between the years 2004 and 2007. An assessment<sup>82</sup> was commissioned to determine how specific care and rehabilitation were organised within these projects. The majority of the clients concerned were young homeless men with severe substance abuse and various mental health problems. They were also unemployed and did not have families of their own. The clients' situation posed an extreme challenge to care and rehabilitation efforts. All of the projects showed that, to be successful, it was necessary to maintain abstinence. If the unit was unable to maintain an intoxicant-free lifestyle for the client, other rehabilitation efforts were also bound to fail. (P. Niemelä 2008.)

According to the assessment, the best results were achieved through a staged rehabilitation approach for clients with dual or multiple diagnoses. Following the initial step of specialised care, there is a need for rehabilitative care organised in care homes or similar group settings as the second step. A separate rehabilitation unit for care and a group home offering peer support and peer control comprise the third step. The fourth consists of outpatient rehabilitation and living independently. The fifth and final step comprises independent living, with support available when necessary. (P. Niemelä 2008.)

Based on a review of the literature, Mauri Aalto (2007) suggests that the treatment of a dual-diagnosis patient should be integrated, meaning that the individual's disorders should be assessed holistically and treatment measures addressing the disorders in question initiated simultaneously. Based on the integrated treatment model, the persons providing treatment must have the necessary treatment skills and research knowledge concerning both substance abuse problems and mental disorders. Integrated treatment is not, in itself, a specific treatment but a model for organising treatment services for dual-diagnosis patients. Such treatment involves a multi-professional team and a wide array of approaches ranging from medical addiction treatments to psycho-social therapies. Any treatment should involve a long-term approach and allow some tolerance of substance abuse relapses. In some cases, use-related harm reduction can be regarded as a sufficient objective as such, since the benefits of treatment also include improving the patient's functional capacities and quality of life.

<sup>82</sup> Three types of materials were used in the assessment: 1) documents and other written material available on the unit; 2) expert interviews; 3) interviews, observations and questionnaires within organisations. The employees, management, clients and some elected officials of the organisations were interviewed for the assessment. The general assessment method applied was the so-called multi-actor evaluation model. An indicator system was designed for client interviews, which was used from the initial mapping stages on-wards. This indicator system is based on standardised and other suitable screening and measurement systems (ADL, Activities of Daily Living; GHQ-12, General Health Questionnaire; Alderfer 1972; Johansson 1970). changes in the housing situation, employment and subsistence, safety index, working capacity and functional capacity, self-management, personal finances, personal relationships, self-expression, self-respect, self-esteem, locus of control, coherence and planning for the future, changes in values and attitudes, hobbies and behavioural changes on different levels.

# 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. More than three out of five drug treatment clients are unemployed and approximately one tenth are homeless, and clients have a low level of education. As drug use is punishable under criminal law, many clients are also in a vicious cycle of crime and prison.

Multi-professional co-operation between authorities has been emphasised in after-care adjustment activities. This includes social rehabilitation, employment and supported housing services. Education authorities are also involved, particularly in work aimed at helping young problem users.

The planning of education and vocational guidance are automatically included in the treatment of young people. However, the educational system does not include much training leading to a normal working career that would be adapted to the problem user's abilities. In addition, not enough employers employ these young people. One example of employment activities is youth workshops which are designed for all young people, from non-users to problem users.

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.

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 arrange co-operatively 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.

### 8.1 Social exclusion

The drug information system annually provides information on the socio-demographic situation of drug treatment clients and reveals that the situation has remained surprisingly unchanged for years. According to the 2008 data (N=4,109), 64% of drug treatment clients were unemployed and the clients' level of education was low. For two thirds, the highest level of education achieved was comprehensive school and four per cent had dropped out of comprehensive school. Eleven per cent of the clients were homeless. About a quarter were married or cohabiting, approximately half of these with a partner who also had substance abuse problems. One in three had children under the age of 18. Two thirds of these children did not live with their parents. (Ruuth & Väänänen 2009.)

A recent assessment reviewed the social situation and health of the homeless in the Greater Helsinki area. The data83 consists of a representative sample of homeless people in the Greater Helsinki area who spent the night outside or in an overnight shelter. According to the assessment, 82 of these people have a substance abuse problem84. Substance-abusing homeless persons were categorised in three groups: those with alcohol problems (59%), those abusing alcohol and pharmaceuticals (8%) and drug or polydrug users (15%). Most of those in the last-named group are users of both drugs and alcohol, since a mention of alcohol problem use is assigned to most of them (20/24). Of the 24 persons in this group, 14 had been diagnosed with a multiple substance dependence (F19). (Erkkilä & Stenius-Ayoade 2009.)

The use of substances among the homeless varies by age group. Drug or polydrug use is most frequent among the under-30s. Of the 21 homeless persons under 30 years of age included in the data, ten were problem users of drugs. The over-59s included no problem drug users, but had the highest relative share of alcohol problem use (82%). Among problem drug users (N=24), opiates were entered as the problem substance for 15 persons. However, heroin is not mentioned at all, but buprenorphine is almost always in question. One person's entry refers to the misuse of painkillers containing opiates. Amphetamines are almost as frequent as opiates, and their problem use was referred to with respect to 14 persons. For six persons, cannabis only was entered as the problem substance or the substance was not specified. (Erkkilä & Stenius-Ayoade 2009.)

<sup>83</sup> The study sample comprises 158 homeless persons who had stayed overnight in a reception centre in the Greater Helsinki area on two dates (16 June 2008 and 16 September 2008). Electronic client and patient information systems of the cities of Helsinki, Espoo and Vantaa were used to assess the social situation and health of these homeless people, and the register data thus obtained was analysed through classification and tabulating. The register data was supplemented with interviews of a social worker and a physician, and a clinical examination. For the supplementary section, 64 of the 158 homeless persons in the original data were reached and 36 of them consented to an interview. The data is a representative sample of people who have spent a night outside or in overnight shelters i.e. reception units, and who numbered 162 in November. According to statistics by the Housing Finance and Development Centre of Finland ARA, there were 4,247 homeless persons in the Greater Helsinki area in November 2008. Thus, the sample represents some 4% of the people in the Greater Helsinki area who lack a permanent home.

<sup>84</sup> Estimating the number of substance abusers is challenging since physicians are reluctant to enter diagnoses on patient registers and since patients do not readily bring up the subject due to its sensitivity. In the study, substance abuse problems were defined based not only on substance abuse diagnoses but also based on any mentions of addictions and unambiguous references (such as "an alcoholic", "a professional alcoholic", "exhibits problem drug use"). References subject to interpretation (such as "smells of alcohol") were not included. In addition, primary health care register data was compared with social welfare registers, and if entries concerning referral to / seeking institutional detoxification or substance abuse rehabilitation or visits to emergency detoxification centre were found, the person was defined by this study as a substance abuser.

Homeless people without a substance abuse problem visited a physician around as often as the average Helsinki resident. In contrast, homeless people with substance abuse problems visited a physician on clearly more frequent occasions. The highest number of visits to a physician were by homeless people who had both an alcohol and pharmaceuticals abuse problem. Drug or polydrug users had the second highest number of visits, approximately 6.1 times a year. The number of alcohol abusers' visits was clearly lower. This is probably due to the fact that people abusing pharmaceuticals or drugs have a subjective need for sedatives, and have more mood or anxiety disorders. (Erkkilä & Stenius-Ayoade 2009.)

The most frequent reason for visits to physicians by substance-abusing homeless people is mental health and substance abuse problems, which, during the last three years, led to an average of 10.6 visits by abusers of alcohol and pharmaceuticals, 7.6 by drug or polydrug users and 1.5 by those abusing alcohol only. The average number of visits by alcohol abusers is close to that of the average Helsinki resident. Consequently, it seems that mental health and substance abuse problems are causing visits to the physician by polydrug users in particular. The number of visits to the physician due to traumas or inflammations of the skin was approximately equal for all homeless substance abusers. Overdoses led to visits, mainly for those abusing alcohol and pharmaceuticals, totalling approximately 2.6 visits during the last three years. For alcohol abusers and drug or polydrug users, the corresponding figure was 0.5. (Erkkilä & Stenius-Ayoade 2009.)

The health and social circumstances of the homeless was previously studied in the early 1970s, when Rauno Mäkelä investigated homeless alcoholics in Tampere. Although research methods were slightly different at the time, some conclusions can be drawn on changes in the profile of homeless people. While the data for the early 1970s covered only 1% of drug users, their share in the recent study was 15%. Combined use of alcohol and pharmaceuticals has also become more frequent. (Erkkilä & Stenius-Ayoade 2009.)

### 8.2 Social reintegration

#### Reception units for the homeless in the Greater Helsinki region

In the Greater Helsinki area, temporary housing and accommodation services for the homeless are provided by reception units. In 2008, these comprised the Herttoniemi shelter and housing unit on Myllypadontie in Helsinki; the Olarinluoma reception unit in Espoo; and the Koisoranta service centre in Vantaa. The fact that 82% of homeless people living in overnight shelters in the Greater Helsinki area have substance abuse problems (see subsection 8.1) renders these units largely providers of housing services for substance abusers. (Erkkilä & Stenius-Ayoade 2009.) Among the reception units, the Herttoniemi shelter primarily provided85 temporary overnight accommodation for men aged over 18 and often suffering from substance abuse and mental health problems. In Herttoniemi, 50 beds were provided in an overnight shelter and a substance-free shelter. Clients were not allowed to remain in the overnight shelter during the day and accommodation meant sleeping on a mattress on the floor. In the afternoon, they had the opportunity to return to the shelter for a meal of porridge. Residents of the substance-free shelter had a kitchen in shared use, equipped with a refrigerator. Spending time on the substance-free side was allowed during the day. The staff consisted of 11 permanent counsellors, one social worker and two assistant employees. (Erkkilä & Stenius-Ayoade 2009.)

The 25 beds on the Myllypadontie unit were targeted at women suffering from substance abuse or mental health problems and at couples in need of last-resort accommodation. Temporary accommodation was also provided to persons who had been living in social welfare residences which had been damaged by fire or water. This reception unit employed only one social worker and received visits by the social worker for Herttoniemi. (Erkkilä & Stenius-Ayoade 2009.)

Espoo's reception home in Olarinluoma is intended for inhabitants of Espoo who are over 18 and who, in the main, have substance problems. Like Herttoniemi, Olarinluoma also has two sides, one for those under the influence of intoxicants and the other for substance-free residents. The 25-bed reception home is designed for short-term accommodation and entry is possible around the clock. Those spending the night there are given breakfast, lunch, coffee and an evening snack. The staff includes a director, nurse, eight counsellors and two assistant employees. A physician specialising in substance abuse issues also pays regular visits to the reception home. In connection with the reception home, there is a housing unit which provides housing for reception unit residents whenever possible. (Erkkilä & Stenius-Ayoade 2009.)

In Vantaa, the Koisonmaa service centre is a housing service unit providing substance abuse rehabilitation and whose quotas are reserved for substance abuse rehabilitants domiciled in Vantaa. The centre's quotas include emergency overnight beds and short-term accommodation services (the Arvi residents). In addition to these short-term places, the service centre has a contract-based resident quota (the Koisokoti home). The service centre employs a director, social worker, occupation-al therapist, four nurses and 16 counsellors. In total, 39 clients can be provided with accommodation. (Erkkilä & Stenius-Ayoade 2009.)

<sup>85</sup> The shelter's activities were transferred to a new service centre on Hietaniemenkatu in June 2009. On the same occasion, the unit on Myllypadontie became a unit offering rental-based housing.

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

Documented drug-related crime increased alongside use and other detriments in the 1990s but, in the 2000s, this increase has slowed down and crime levels reported by the police have stabilised. Crime accompanying drug use, such as crime against property and driving under the influence of drugs, also increased in the 1990s. The statistical increase in the proportion of drug driving cases was boosted by the zero tolerance approach with regard to drugs while driving, adopted in 2003.

Money laundering offences in Finland are mainly associated with drug-related or financial crime. Money laundering is an international crime, meaning that money laundered in Finland may have been obtained as a result of offences committed outside the country. Every year, money worth hundreds of millions of euros is laundered in Finland.

The amendment to the Penal Code concerning unlawful use of narcotics (654–657/2001) introduced the possibility of alternative penal sanctions. The focus was on two special groups: underage offenders should be referred to a multiprofessional hearing instead of imposing a fine on them, and problem drug users should be referred to treatment. A multi-professional hearing is considered a more efficient sanction for young offenders than a fine. Treatment referral reduces the social exclusion of problem users as well as drug-related crime. According to studies and surveys, both of these measures have seldom been used.

According to Act 878/1995, prison health care must be organised so that inmates have equal opportunities with the rest of the population to improve their health and prevent illness. They must also have access to sufficient health care services. Prison health care provides inmates with information on the effects of intoxicants, health risks related to substance abuse and treatment programmes available in prison as well as outside prison after release. Withdrawal symptoms that accompany quitting substance use are usually treated in prison in line with the instructions given by the prison physician. If an inmate suffers from severe withdrawal symptoms, he/she can be placed in a prison hospital or hospital care outside prison. No new substitution treatment periods are initiated in prisons, but for prisoners whose substitution treatment period began before imprisonment, treatments are continued.

In co-operation with the relevant organisations, the Prison Service has prepared various alcohol and drug programmes for inmates in prisons and for drug users released from prisons. Nowadays, there are rehabilitation programmes as well as contractual wards supporting an intoxicant-free lifestyle in almost all prison institutions. Rehabilitation programmes are also available in open institutions. Alcohol and drug programmes are usually based on the cognitive-behavioural theory. Community treatment programmes are also implemented in prisons. Prisons aim at close co-operation with substance abuse services outside prison, and in some prisons substance abuse services are outsourced. Inmates have the possibility to participate in AA and NA groups.

On average, inmates serving a sentence of over six months are referred to an assessment and placement unit where a personal risk and service need assessment and a plan for the term of sentence are drawn up. The risk and service need assessment considers factors related to the inmate's life situation and personality that sustain criminal behaviour. Special attention is paid to inmates' substance abuse. Based on the assessment, a preliminary plan for the term of sentence is drawn up in the assessment and placement unit, and specified and updated in placement institutions. The aim is to enable systematic use of the sentence term to improve the inmate's capability to cope after release without committing further crimes. The plan also includes a release plan compiled well in advance of an inmate's release and a surveillance plan compiled by the Probation Service for inmates who will be released on supervised probation.

A probationary freedom system was adopted at the end of 2006, with the aim of promoting an inmate's reintegration into society after release. During probationary freedom, the inmate lives at home and he/she must make commitments involving e.g. an intoxicant-free life, respecting the obligation to remain in contact and participating in an activity, such as work, studying or rehabilitation. Supervised probationary freedom can be accessed, at the earliest, six months before release. During probationary freedom, the inmate can be supervised through technical surveillance tools.

### 9.1 Drug-related crime

#### Narcotics offences

In 2008, the overall number of narcotics offences remained almost unchanged from the previous year. A total of 15,482 narcotics offences became known to the police in 2008, against 15,448 in the previous year. However, the proportions of various types of offence did undergo changes. The number of narcotics offences grew by 15%, while the number of aggravated narcotics offences decreased by 10% and the number of cases of unlawful use of narcotics by 5%. Of narcotics offences committed in 2008, cases of unlawful use of narcotics accounted for 63% (9,823), narcotics offences for 31% (4,835), aggravated narcotics offences for 5% (789) and other narcotics offences for 32%. (Statistics Finland 2009.)

	2000	2001	2002	2003	2004	2005	2006	2007	2008
Narcotics offences in total	13,445	14,869	13,857	15,058	14,486	14,425	13,317	15,448	15,482
Narcotics offence	12,687	12,092	5,821	5,202	4,672	4,589	4,168	4,206	4,835
Unlawful use of narcotics	-	1,899	7,240	9,084	9,217	9,248	8,480	10,333	9,823
Aggravated narcotics offence	741	859	760	742	582	561	657	883	789
Preparation or abetment of narcotics offences	17	19	36	30	15	27	12	26	35

Table 12. Narcotics offences reported by the police and Customs in 2000-2008.

Source: Statistics Finland

In 2008, the police suspected a total of 16,388 persons of narcotics offences. Women accounted for 16% (2,543) of all suspects. Underage people (under 18 years of age) represented 3% (507) of suspects and, of these cases, 81% (411) were related to the unlawful use of narcotics. (Statistics Finland 2009.)

### Money laundering

The Financial Intelligent Unit of the National Bureau of Investigation has assembled Finnish money laundering cases for the period 1994–2006 into a report<sup>86</sup>. The related study comprised 61 judgments ending in the conviction of a total of 137 persons. Of the convicted persons, 53 were punished for aggravated money laundering. No individuals were convicted for professional money laundering. Of the 61 judgments issued, 30 involved a narcotics offence as a predicate offence. With respect to the rest of the cases, many judgments involved a financial crime as a predicate offence, other predicate offences including hormones trade, the smuggling of alcohol, bank robbery, appropriation, means of payment fraud, fraud or usury. The most common sentence included in the study was conditional imprisonment. Of unconditional prison sentences, nearly all were joint sentences involving several offences – chiefly including narcotics offences. (National Bureau of Investigation 2007a.)

A money laundering offence generally consists of three phases: the investment, diversion and return phases. In the investment phase, cash is introduced into the legal monetary system. Drug traffic is typically based on cash, whose use

<sup>86</sup> The study data included judgments issued by District Courts and Courts of Appeal. The collection of cases began as of 1994, the year money laundering was criminalised in Finland. The data covers nearly all cases during 1994–2002 and contains some judgments from 2003–2006. A challenge in data collection lay in the fact that, until 2003, no essential elements required were specifically defined for money laundering crimes, but these were punished as receiving offences.

makes it difficult to track either party involved. However, since cash is difficult to deal with, the most usual investment method comprises its deposit by various persons in small batches in different credit institutions. Money can also be disguised as legal business profit. In the diversion phase, money is recycled through various companies and countries in order to make it very difficult to decipher the connection between the predicate offence and the laundered money. In the return phase, money is masked as legal property and returned to the offender's use. (National Bureau of Investigation 2007a.)

In money laundering offences related to narcotics offences, cash funds are typically introduced into the banking system, then exchanged into another currency or transformed into another asset type – into any kind of valuable asset, for instance, cars or properties. Usually, the form of funds obtained is altered several times. (National Bureau of Investigation 2007a.)

#### Driving while intoxicated

In 2008, the total number of so-called ordinary cases of driving while intoxicated remained almost unchanged and the number of cases of driving while seriously intoxicated decreased 8% from the previous year. The proportions of various substances used when driving while intoxicated did not undergo major changes from the previous year. In 2008, as in 2007, alcohol was used in 85% of cases, drugs in 12%, while polydrug use was detected in 3%. Of so-called ordinary cases of driving while intoxicated, alcohol formed the basis in 74%, drugs in 23% and polydrug use in 3% of cases, representing an increase of 1 percentage point for alcohol cases and a decrease by 2 percentage points for drug cases, over the previous year. For cases of driving while seriously intoxicated, the respective proportions of substances were 95%, 2% and 3%, indicating no changes from a year ago. (Statistics Finland 2009.)

All suspected cases of driving while intoxicated are centralised in the alcohol and drug laboratory at the National Institute for Health and Welfare (THL). In 2008, it investigated a total of 4,419 cases and identified drugs in 67% of them. The most frequently used drugs in such cases in 2008 included amphetamines (63%) and cannabis (23%). (THL 2009c.)

A recent register study<sup>87</sup> assessed the manifestation of, and trends in, driving under the influence of drugs or pharmaceuticals in Finland in 1977–2007. During this period, driving under the influence of drugs or pharmaceuticals increased 18-fold. Of all suspects during the monitoring period, a total of 89.6% were men, but the annual proportion of women slightly increased. Women accounted for 6.9% of suspects in 1977 and 10.3% in 2007. This trend has statistical significance.

<sup>87</sup> The study was conducted as register-based research, including all cases of driving under the influence of drugs or pharmaceuticals (n=31,963) in Finland in 1977–2007. All toxicological analyses were conducted on blood and/or urine in the same laboratory (alcohol and drug laboratory of the National Institute for Health and Welfare, formerly under the National Public Health Institute).

The most frequently detected substances included bentsodiatsepines (75.7%), amphetamines (46%), cannabis (27.7%) and opioids (13.8%). The most frequent narcotic substances, namely amphetamines and cannabis, began to appear during the late 1980s, with the majority of samples (77.1%) including multiple substances. Moreover, 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.)

### Other drug-related crime

During recent years, the number of robberies involving a break-in in order to obtain narcotic pharmaceuticals has been at a slightly lower level. While the annual number of such offences in 2002–2004 was 109–110 cases, in 2005–2007 the annual numbers were 81, 72 and 77, respectively. In 2008, the number of robberies involving a break-in came to 102, thus resuming the level prior to the previous years' lower figures. Allegedly, the increase in robberies is due to the reduced availability of Subutex. This is also suggested by the growth in seizures of narcotic pharmaceuticals (see subsection 10.2) and the increase in street prices (see subsection 10.3). (National Bureau of Investigation 2009.)

Offences of violence under the influence of alcohol still remain much more frequent than those committed under the influence of other substances. The category of 'other substances' mainly includes cases involving drugs. A total of 61% of all assaults (assault, petty assault and aggravated assault) were committed under the influence of alcohol, 0.3% under the influence of other substances and 1% under the influence of both alcohol and other substances. A total of 41% of robberies and 26% of aggravated robberies were carried out under the influence of alcohol, while for other substances, these figures were 1.2% and 2.9%. A total of 6% of robberies were committed under the joint influence of alcohol and other substances and 7% for aggravated robberies. (Statistics Finland 2009).

For property offences, the difference is not so prominent. Regarding theft offences (petty theft, theft, aggravated theft), 14% of suspects were under the influence of alcohol, 2% of other substances and 1% of both alcohol and other substances. Of cases involving stealing a motor vehicle for temporary use, 26% involved the use of alcohol, 8.1% other substances and 5% both alcohol and other substances. (Statistics Finland 2009).

#### Study on habitual offenders using drugs

Kekki and Noponen (2008) have studied the criminal history of habitual offenders using drugs<sup>88</sup>. Their analysis confirms the results already suggested by other studies: the first suspected narcotics offence occurs 3-4 years after an individual is suspected of a first crime of any sort. During the year of their first criminal entry in police records on suspicion of having committed a crime, 66% (n=33) of these persons had been suspected of property offences at least once, commonly more than once. During this year, over half were aged 15 or under. Generally, these offences were committed with an accomplice of similar age or in a group of 4 or 5 people. The second most common (n=6) first entry was an offence involving violence.

Generally, the number of the young people's suspected offences did not rise during the first year but, rather, the accumulation began only later. The most common crimes in these persons' criminal careers included property offences and fraud (n=20), narcotics offences (n=12), offences of violence (n=9) and traffic offences (n=9). Of all other offences, theft was the only offence type of which each person had been suspected at least once. The data indicated that certain individuals had continued to commit similar types of offence from the beginning of their criminal history, with no criminal career 'development' towards increasing the benefit from their crimes or getting caught less often. (Kekki & Noponen 2008.)

All those included in the research data had been suspected of possession of drugs. Drug use entries concerned 82% of the persons, while 68% had an entry referring to trading, supplying or handing over drugs. The most frequent substance-specific entry referred to pharmaceuticals classified as drugs. As many as 80% of the persons had been suspected of illegal possession, use, trading or attempts to obtain pharmaceuticals other than buprenorphine. The second most frequent substance entry concerned hashish (78%), followed by illegal buprenorphine (70%) and amphetamines (68%). The fact that all had been caught for use or possession of more than one substance suggests polydrug use. (Kekki & Noponen 2008.)

Crime planning became less frequent for some persons as their drug use increased. They committed crimes under the influence of drugs or whenever the opportunity arose, although to an outsider, such acts would seem hopeless and the risk of getting caught very high. In all phases in the persons' criminal histories, crimes were committed together with friends, mostly even with the same circle of friends. Those committing crimes had often been targeted by the authorities, who

<sup>88</sup> For the study, the information system (PATJA) of the police was used in order to identify all those suspected of unlawful use of narcotics or narcotics offences in Helsinki during 2002 and who had, in addition to drug entries, at least 15 criminal entries in their record. The search was limited to persons aged 25 or under at the time of the first entry. A total of 162 persons fulfilled the criteria in 2002. Using random sampling, 50 of them were chosen and their criminal data were saved as data for the study. These 50 persons had been suspected of a total of 7,627 crimes. The persons in the sample included 42 men and 8 women, born in 1969–1986. Although the criminal entries made by the police do not correspond to the actual criminal history of criminals, the data enables an indicative analysis of the early stages and the intensity of habitual offenders' criminal careers.

had offered support as well as punishment. However, on the basis of the data, it was impossible to evaluate whether these support measures had been sufficiently intensive or long-lasting. (Kekki & Noponen 2008.)

# 9.2 Prevention of drug-related crime

### Police investigation into changes in drug-related crime and police operations

Tuula Kekki's (2009) study<sup>89</sup> examined police officers' views on the changes in drug-related crime and police operations. These interviews suggest that police officers are in favour of a zero tolerance approach to drug use, justifying this based on the criminalisation of use currently in force, the investigation of the user's accompanying crimes and revelations of the users' acquaintances in their drug milieus. Drug use is deemed part of organised crime and, consequently, a factor undermining public order and safety. Police officers considered their most important objective to be increasing the safety of the streets. Among various police units, patrolling police encounter drug users most frequently, often in connection with an accompanying crime committed by the user. Individuals with a criminal background are more prone to draw the attention of street patrols.

According to the police officers, prioritisation has led to a smaller number of staff participating in the prevention of actual drug crime. Such prioritisation is based on lack of resources, investigational capability and the assessment of the degree of harmfulness. Experienced police officers emphasised that in order to increase job satisfaction, professional skills and effectiveness, the police should resume traditional crime prevention methods: intelligence operations, observation and establishing contacts with the underworld. Now, they spend time preparing reports on offences and conducting hearings, leaving no time for investigation. (Kekki 2009.)

International studies highlight the role of the police in preventing the visible drug culture and abolishing drug dealing locations. However, Finnish police officers do not feel that such objectives are appropriate in the Finnish context since drug use and dealing mainly takes place indoors in Finland. Police officers did not view the attempt to raise drug prices or wind down dealer organisations as a goal of their work. Neither did they assess the effectiveness of their work in relation to the structure of the drug market or the availability or price of certain substances. (Kekki 2009.)

<sup>89</sup> The study data included police interviews (n=23), a police survey (n=165), pre-trial investigation records of unlawful use cases in Tampere during 1 Sept. 2001–31 Aug. 2002 and notices of investigation concerning drug-related and accompanying crime in Helsinki during 2002–2003. The interviews were conducted in 2003–2006, and following their lettering, thematic analysis was used. The police survey used a question-naire issued to police officers serving in Tampere, and a quantitative analysis of the data was made. Pre-trial investigation records and notices of investigation were coded and analysed using SPSS statistical analysis software.

### 9.3. Alternatives to prison

### Referral for treatment, and hearing

Alternative sanctions to prison have been developed for drug users: a hearing procedure for young users and referral for treatment for problem users. Based on the amendment to the Penal Code concerning unlawful use of narcotics, the Prosecutor General's instructions for prosecutors in autumn 2002 (Prosecutor General 2002), which were updated in autumn 2006 (Prosecutor General 2006), recommend that prosecutors arrange a hearing 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 hearing where 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 hearing, the prosecutor can decide to waive charges.

In the same instructions (Prosecutor General 2002; updated in Prosecutor General 2006), the Prosecutor General encourages prosecutors to agree on appropriate treatment referral procedures in their own localities. Especially problem drug users should not be fined for unlawful use of narcotics until the offender's willingness to seek treatment has been examined. In October 2006, the Prosecutor General updated the guidelines and issued instructions whereby in minor cases the police should confiscate the substance, give an oral warning and waive most charges. (Prosecutor General 2006).

Nonetheless, surveys and research indicate that the numbers of hearings and treatment referrals have remained relatively low. According to a survey pertaining to 2008, the number of hearings and treatment referrals conducted numbered 40 in each case. (VKSV 2009).

### A dissertation on the criminal control of drug users in Finland

In her doctoral dissertation, Heini Kainulainen (2009) examined the criminal control of drug users in Finland. The dissertation contains multiple sections, and its empirical section discusses alternative sanctions such as waiving measures and waiving prosecution, as well as referral for treatment and hearing which were added to alternative sanctions during the reform concerning the unlawful use of narcotics during the 2000s. The analysis indicates that, among the processes in use, no proper consideration of sanctions has been possible. For instance, drug users have repeatedly been fined in summary penal proceedings.

The data indicates that the waiving of measures has been used very seldom, although a special need exists, particularly with respect to narcotics offences. For decades, the police have been reluctant to apply this sanction, since intervention in users' actions has been considered crucial. Prosecutors followed similar lines during 1960–1980. Waiving punishment was common in the beginning of 1970s, but practices were tightened up after a few years. In the 1990s such waivers were 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 waivers of prosecution reduced. According to Kainulainen, the reform in question did not succeed, since waiving measures based on seeking treatment remains extremely rare. (Kainulainen 2009.)

# 9.3 Drug use and problem drug use in prisons

No recently published data is available on the prevalence of drug use in prisons. A study is currently ongoing on the health, ability to work and treatment needs of clients of the criminal sanctions system, whose results will cast light on the prevalence of substance addiction and infectious diseases among inmates. Preliminary results were published as early as 2007, but the figures will change in the final results to be published in the near future<sup>90</sup>. Seizures conducted in prisons mainly concern cannabis, amphetamines, buprenorphine and other narcotic pharmaceuticals. (Criminal Sanctions Agency 2009c.)

In 2008, a narcotics offence was the cause of imprisonment for 16.1% of prison inmates<sup>91</sup>. This share has remained at 15–16% in 2005–2008. However, in 2009, the share of those imprisoned for narcotics offences decreased to 14.1%, a record low since 2000. The number of prison inmates convicted of narcotics offences was 461 in 2008 and 413 in 2009, representing a decrease of 10%. (Criminal Sanctions Agency 2009a; 2009b.)

# 9.4 Responses to drug-related health issues in prisons

Since 2002, the Criminal Sanctions Agency has used an accreditation procedure for action programmes. The purpose of accreditation is to ensure that action programmes targeted at clients function as desired i.e. hinder social marginalisation

<sup>90</sup> These research findings will be reported in several publications and doctoral dissertations, but no results had been published by the time of writing this report.

<sup>91</sup> The census is conducted on 1 May. The total number of prison inmates in 2008 was 2,865 and 2,924 in 2009.

and decrease recidivism. The accreditation procedure includes three phases, which are evaluated by a designated accreditation group. In addition to effectiveness, the group pays attention to the repeatability of the programme, since it should be usable across the country. The programme's consistency is important to the reliable evaluation of its results. In 2008, the Criminal Sanctions Agency outlined that, by 2010, prisons should use only accredited programmes. (Criminal Sanctions Agency 2009a.)

The various rehabilitation programmes in prisons involved 1,835 inmates in 2008 (705 in 2007). A total of 636 inmates participated in substance abuse rehabilitation programmes, 262 in programmes to minimise recidivism and 937 took part in other types of social rehabilitation. Moreover, 37 inmates were admitted to external institutions for substance abuse treatment or to other institutions for rehabilitation. (Criminal Sanctions Agency 2009a.)

Finnish prisons do not distribute or exchange needles for intravenous drug users. On arrival, inmates receive a cleaning package which includes disinfectant for cleaning needles. In addition, disinfectant should be available at all times on the premises, enabling its discreet use but, in practice, this is not always possible. (Criminal Sanctions Agency 2009c.)

Prisons carry out some 1,200–1,300 HIV tests annually. In 2006, positive cases amounted to 2, and 1 in both 2007 and 2008. Results of hepatitis tests include both new and old infections. During 2006–2008, some 500–800 hepatitis B tests were conducted each year, with the number of positive cases ranging from 4 to 6. On an annual basis, hepatitis C tests were conducted 916, 786 and 662 times during 2006–2008 and the number of positive cases showed a corresponding decline: 240, 188 and 170, respectively. The share of positive results of all test results remained approximately 24–26%. (Criminal Sanctions Agency 2009c.)

#### Health education and peer support project for drug-using inmates

In co-operation with actors in the prison administration and health counselling, the Probation Foundation Finland's project called *TERVE* (Finnish for 'healthy') developed a model for low-threshold health counselling for prisons in 2005–2008. As the project was launched, morbidity rates among inmates had been increasing during recent decades, particularly with regard to blood-borne contagious diseases, substance addictions and mental health problems. The project aimed to reduce the health risks arising from drug use during imprisonment and to improve capabilities for harm-reducing behaviour after release. In this case, the target group involved inmates who had used or were still using drugs and prison administration employees to be trained in harm-reducing operating methods. (Probation Foundation Finland 2009a).

Final outputs from the TERVE project included an operating model recommendation and continuing professional education for surveillance staff, an operating model and trainer training for rehabilitation and health care staff and TERVE courses and a guide for inmates. The project emphasised multi-professional co-operation between staff in health care, substance abuse rehabilitation, surveillance and administration, as well as interaction and peer support among inmates. According to the project evaluation, the project was successful and received positive feedback with respect to ensuring transferability and sustainability. (Probation Foundation Finland 2009a).

# 9.5 Reintegration of drug users after release from prison

### Supervised probationary freedom

A probationary freedom system was adopted at the end of 2006, with the aim of promoting an inmate's reintegration into society after release. The maximum length of probationary freedom is six months, and it comprises a measure between imprisonment and parole. During probationary freedom, the inmate must participate in an activity, such as work, studying, rehabilitation or completing compulsory military service, and commit to e.g. an intoxicant-free life and respecting the obligation to remain in contact. While in probationary freedom, the inmate can be supervised using technical tools. Currently, GSM surveillance is used. (Mohell 2009)

Before probationary freedom is granted, the prison in which the inmate has been placed will assess whether the required conditions are met. In particular, this assessment focuses on the inmate's capability to comply with the rules of probationary freedom and his or her risk of committing new offences. If the conditions are met, the allocation unit draws up a written probationary freedom implementation plan, the details of whose contents depend on each inmate's situation. Some inmates may have work or a residence awaiting them, while others need more help with arranging accommodation, subsistence or daily activities. In drawing up such a plan, the prison's key partners include the inmate's home municipality, educational institutions, municipal employment services as well as social welfare and health care associations. Probationary freedom can be cancelled if its conditions are breached. (Mohell 2009)

In 2008, the daily number of inmates in probationary freedom averaged 50. 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 the often occurring re-entry into the vicious circle of crime. The Criminal Sanctions Agency's target is to raise the daily number of inmates in probationary freedom to 200 by 2010. (Mohell 2009)

### The project 'Placement into Controlled Housing'

Currently, the Probation Foundation Finland has an ongoing project, Placement into Controlled Housing (2007-2010). The aim of the project is to create a co-operation model for an intensively supported release period between the foundation, prison administration and the municipality. According to the co-operation model, the inmate is first placed in a steered and rehabilitative housing phase and, after release, is transferred either to a housing community or some other form of supported housing. An inmate's transfer to the steered and rehabilitative housing phase can occur, at the earliest, six months prior to release. Then, an inmate will live in the foundation's housing service unit, where they will have their own room. Daily activities consist of rehabilitative employment activities in youth workshops, training provided by educational partner institutions or work/studies arranged independently. Intoxicant-free behaviour is verified using breathalyses and substance screening. This co-operation model is a new way of linking rehabilitation during imprisonment with planned release, which prevents the high risk of relapsing and recidivism associated with the release period. (Probation Foundation Finland 2009b).

# 10 Drug markets

The drugs on the Finnish market are mostly cannabis products, particularly homegrown marijuana or hashish; amphetamines and ecstasy and other synthetic drugs; the substitution treatment preparation, Subutex\*; and many pharmaceuticals considered narcotic substances, particularly benzodiazepines. Heroin is still fairly rare in Finland. Among cannabis products, the number of marijuana and cannabis plant seizures has grown in the 2000s, which indicates that the fairly small-scale cultivation of drugs partly intended for sale has become more common. The quantity of synthetic drugs seized has remained fairly constant. Furthermore, the new substance on the market, GHB (gamma-hydroxybutyric acid) and particularly its precursor GBL (gamma-butyrolactone), continue to grow increasingly common. The amount of seized heroin plummeted after 2001 and, at the same time, seizures of Subutex\* tablets began to increase. However, the number of Subutex\* seizures has also lowered since 2005. (National Bureau of Investigation 2009.)

In drug supply in Finland, organised crime groups from Estonia have played an important role – at the beginning of the 21<sup>st</sup> 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 chiefly function outside Finland. The importance of criminals of other nationalities in the drug trade directed at Finland is also increasing. The group of foreign players importing drugs in Finland has become more diverse and, in particular, the role of Lithuania in the Finnish drug trade is clearly strengthening. (National Bureau of Investigation 2009.)

# 10.1 Availability and supply of drugs

The import of drugs is an international crime and, in recent years, 15–30% of those suspected of aggravated narcotics offences in Finland have been foreigners. In 2008, their proportion rose from 17% in the previous year to 25%. Among foreigners suspected of aggravated narcotics offences, the largest groups in 2008 consisted of Estonians (40%) and Russians (21%). (National Bureau of Investigation 2009.) Organised Estonian crime groups play an important role in acquiring drugs from abroad and smuggling almost all drugs into Finland. Merchandise on the criminal markets includes maps of hidden wholesale drug batches which Finnish criminals purchase from their foreign collaborators.

Finnish professional crime has typically been loosely structured, but is now closing ranks and becoming more disciplined. In particular, criminal motorcycle

gangs have an established role in Finland as wholesale distributors and deliverers of illegal substances. The prominent role played by organised crime groups in Finnish drug crime can be seen, for instance, in the more frequent presence of weapons, particularly gas sprays, as well as in the larger amounts of cash seized in the context of narcotics offences. Organised drug crime groups have expanded their activities into financial crime and fraud in particular, which is used as a means of financing drug crime (National Bureau of Investigation 2009.)

The majority of drugs are smuggled onto the Finnish market through various routes, particularly from the south and west. About 90% of the amphetamines on the Finnish market come either from Estonia or via Estonia and mainly from Lithuania. Hashish, in turn, originates in Morocco, passing first through Spain, the Netherlands or Germany and then by sea, through Scandinavia or the Baltic countries. Russia has been a significant route, especially for smuggling heroin, but heroin also reaches Finland via other routes. The lack of treatment services and the decreased supply of Subutex<sup>®</sup> on illegal markets 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. It is also possible that drugs are smuggled into Russia through the Nordic countries, Finland included. The popularity and supply of cocaine seem to have risen slightly since 2006, but it is still quite rare on the Finnish drug market. (National Bureau of Investigation 2009.)

The latest extension of the Schengen area has enabled drug users living in Finland to import Subutex<sup>®</sup> legally from, for instance, Estonia, from where it has been imported under prescriptions signed in Estonia. Larger batches of Subutex<sup>®</sup> have been smuggled into Finland mainly from France, but due to the exhaustion of imports from Estonia, smuggling may increase and find new routes. Finnish users continue to acquire other intoxicating pharmaceuticals from Estonia which are registered as prescription drugs in Finland. Seeds for growing cannabis plants as well as GBL are often ordered from abroad, using the Internet.

Since 1997, the annual Health Behaviour Survey among the Finnish Adult Population has asked people if they have been offered drugs during the past year. The number of drug offers increased in the youngest age groups until 2000; the figure decreased from 23% to 15% among 15–24-year-old men between 2001 and 2007. In addition, an upward trend in the 1990s and the downward trend in the 2000s are evident among young women. The number of drug offers encountered by 15–24-year-old women rose to 20% by 2000, but in recent years it has returned to 12%, the level observed in the first surveys. Among 25–34-year-olds, the proportion of those who had been offered drugs is larger than before. This indicates that those who belonged to the younger age group during the upward trend have reached this upper age group. (Piispa et al. 2008.)

# 10.2 Drug seizures

According to data on drug seizures, the situation prevailing in the Finnish drug market seems fairly stable. Criminal cases concerning cannabis cultivation and narcotic pharmaceuticals have become more common in 2008.

In 2008, the overall volume of hashish seizures remained exceptionally low due to the timing of large criminal investigations. On the basis of other data available, the supply of hashish seems to have remained somewhat unchanged. The price level of hashish seems to have risen slightly, while that of marijuana has decreased to some extent. Seizures of marijuana and cannabis plants have continued to increase and, in particular, the number of cannabis plants seized by the police has risen. Nowadays, growing cannabis plants at home for personal use, but also for sale to some extent, is becoming more frequent in Finland. (National Bureau of Investigation 2009.)

	2001	2002	2003	2004	2005	2006	2007	2008
Hashish	566.6	482.0	423.1	467.4	430.6	282.7	360.0	47.0
Marijuana	13.7	32.0	45.3	25.8	43.4	32.9	36.0	56.0
Cannabis plants (kg)	16.0	15.5	20.4	41.7	43.3	36.2	87.0	41.0
Cannabis plants (number)*	-	-	-	7,840	9,460	7,510	7,600	14,000
Amphetamines + Methamphet- amines**	149.7	129.2	114.6	108.6	116.6	129.0	152.0	130.0 + 17.0
Cocaine	7.3	0.4	1.1	1.1	1.2	6.5	4.0	3.0
Khat	624	1 039	1,879	2,118	2562	3 283	3,300	2,250
Heroin	7.9	3.0	1.6	0.2	52.4	0.2	0.4	0.2
Subutex® (tablets)	38,200	18,700	37,284	32,970	24,478	22,979	20,600	12,000
Ecstasy (tablets)	82,900	45,100	35,216	23,243	52,210	39,185	83,000	34,000
LSD (doses)	95	4,629	1,461	195	452	171	2,138	3,082
GHB + GBL (litres)						24	91	150 + 9

\* = In addition to the amount of cannabis plants indicated in kilograms

\*\* = Total for 2001–2007, separately for 2008

Source: National Bureau of Investigation

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Hashish	1,997	2,259	2,482	4,011	3,012	2,796	2,626	2,408	2,599	1,900	1,500
Marijuana	382	463	663	1,223	1,275	1,712	2,067	2,305	2,269	2,400	3,000
Cannabis plants	-	-	-	612	923	1,170	1,406	1,633	1,378	1,900	2,100
Amphetamines/ methamph.	1,641	1,956	2,369	3,792	3,399	3,687	3,392	3,732	3,101	2,990	2,900 + 120
Cocaine	24	49	40	55	45	49	65	79	82	92	107
Heroin	210	342	437	557	145	90	45	58	25	20	25
Subutex®	-	-	-	727	741	1 008	844	777	840	800	850
Ecstasy	57	159	393	465	329	316	328	363	297	340	250
LSD	-	15	34	14	10	20	21	17	15	50	73
GHB/GBL									54	184	170 + 80

Table 14. Number of drug seizures recorded by the police and Customs in 1998–2008\*

\*) In 2003–2005, the statistics were adjusted in order to take account of seizures related to those unlawful use cases which remained unregistered.

Source: National Bureau of Investigation

The volume of seized amphetamines (147 kg) was of a similar order to a year ago. The largest amphetamine seizure in 2008 involved 26 kg of amphetamines and, additionally, a total of more than 20 seizures of over 1 kg were carried out, the largest of them involving 14 kg and 9 kg. Temporary supply shortages of amphetamines led to the replacement of amphetamines with methamphetamines, whose seizures remained at the previous year's level (17 kg). Law enforcement authorities have intervened effectively, particularly in the wholesale trade in amphetamines, which has also led to a higher price level for amphetamines in street trading. Ecstasy seizures decreased from the exceptionally high volume of the previous year. Furthermore, the volume of cocaine seized remained at the previous, relatively low level. The price of cocaine was also slightly higher than previously. An emerging problem in the Finnish market for synthetic drugs is GHB and, in particular, its precursor GBL. Once again, the total volume of GHB and GBL seized increased significantly in 2008 from the year before. The long, continued increase in khat seizures levelled off in 2008 as the volume of seized khat plants remained at 2,250 kg. (National Bureau of Investigation 2009.)

The amount of seized heroin in Finland plummeted at the beginning of the 21st century (2004: 0.2 kg). In 2005, a single seizure on the Russian border led to a fundamental increase in the total amount of heroin seized. In 2006, the amount of heroin seized (0.24 kg) returned to the previous low level, and remained there in 2008 (0.2 kg). According to the information obtained, the street price of heroin is now even higher than before. (National Bureau of Investigation 2009.)

The amount of the buprenorphine preparation Subutex® seized declined markedly (12,000 tablets). (National Bureau of Investigation 2009.) Seizures conducted in Estonian traffic have been decreasing and acquisition is undergoing a redirection process. Due to reduced supply, it seems that the street price of Subutex<sup>®</sup>, too, has somewhat increased. In parallel to France, the non-Schengen UK may be becoming a country of acquisition. The importance of Sweden and Norway will most probably increase, and Subutex is also available as a prescription drug in Lithuania. The potential offshoring of Subutex production to the Far East will probably increase online sales, in particular. (Finnish Customs 2009). Estonian accession to the Schengen area is entailing a redirection of 'pharmaceutical tourism'. Concerning other narcotic pharmaceuticals, opportunities for 'legal drug tourism' were also reduced and their smuggling from the Baltics has increased. The quantity seized of other pharmaceuticals classified as narcotic drugs (mainly benzodiazepines and some opiates) was markedly higher than in the previous year, reaching some 180,000 tablets. A third of the seized pharmaceuticals were related to one major case. (National Bureau of Investigation 2009; Finnish Customs 2009.)

No synthetic drugs production facilities have been discovered in Finland. Overall, during recent years, only a handful of small facilities for the precipitation of amphetamine sulphate have been found. These have been procuring the necessary chemicals by ordering them from players in the chemistry field or by stealing them from research institutes or workplaces in the chemistry sector. Thus, combating illegality is also highly dependent on the alertness of the sector's players. 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 area. Indeed, Finland's location is particularly vulnerable in terms of precursor trade: illegal drug laboratories exist in Russia and in all of the Baltic countries, and Finland is involved in chemicals trade or precursor transit with all of these countries. No significant precursor seizures have been conducted in Finland. (Finnish Customs 2009.) Precursor seizures are an effective means of preventing drug production and rendering it more difficult.

Quantities destined for personal use are mainly ordered via the Internet. During 2008, the Finnish Customs Laboratory analysed an increased volume of various design drugs and intoxicating pharmaceutical products. (Finnish Customs 2009)

# 10.3 Price and purity of drugs

In 2008, the price level of drugs in street trade seemed to increase somewhat from the previous year. In 2008, the average street price per gram was 6–20 euros for hashish, 120–200 euros for white heroin, 15–50 euros for amphetamines, 60–150 euros for cocaine and 10–20 euros for ecstasy tablets. Finnish street prices vary highly depending on the sales location: in Helsinki and the Greater Helsinki area,

prices are clearly lower in general than in regional centres. A study conducted in the autumn of 2008 suggests that, in regional centres, the price of amphetamines, popular among hard drug users, may be well be double that of Helsinki. The prices of hashish and Subutex<sup>®</sup> are also clearly higher outside the Helsinki region. No corresponding differences exist for home-grown marijuana. Under special conditions, such as when drugs are smuggled into a prison, prices may be very high on a caseby-case basis. (National Bureau of Investigation 2009.)

The laboratory identification of drugs and testing the purity of drug consignments take place at the Crime Laboratory of the National Bureau of Investigation or at the Customs Laboratory.

In Finland (in the Forensic Laboratory of the National Bureau of Investigation), routine analyses of concentrations of seized drugs are only conducted for amphetamine and methamphetamine, if the seized quantity exceeds 10 grams or, for heroine, 2 grams. On request, concentrations of cannabis plants and marijuana are analysed for consignments exceeding 150 grams. In other respects, concentrations are not analysed.

The average concentration of analysed amphetamine consignments was somewhat lower than in the previous year, while for methamphetamines the average concentration was higher. Average concentrations based on analyses of cannabis plant and marijuana seizures have slightly increased during recent years, but since the number of samples is small and differences between averages are minor, no conclusions should be drawn based on these results. Finland drug situation 2009

# **B. SELECTED ISSUES**

# 11 Market and production of cannabis

### History and legislation

The Finnish history of locally cultivated cannabis is very low key. During the first cannabis arrest in Finland in 1966, green plant crush was found in the suspects' possession and identified as cultivated cannabis in police laboratory tests. The first cultivation case reported by the police, however, dates from 1972. In this case, a couple had cultivated cannabis on a field at their home farm and brought the mowed cannabis to Helsinki for sale. In the seized consignment, the thc concentration in the plant's inflorescences was approximately 0.2%. It was not until 1975 that the next cultivation case was detected. (Koskinen 1997.)

The use of drugs was criminalised in Finland for the first time in 1966 and, under the Narcotics Act entering into force in 1972, cannabis was defined as completely prohibited (Hakkarainen 1992). However, the cultivation of cannabis had already been prohibited since the late 19<sup>th</sup> century, when poison legislation imposed fines for the unauthorised production, sale and import of Indian hemp (Utriainen & Hakonen 1985).

All cultivation of cannabis for use as an intoxicant still constitutes an act subject to penal liability. A person cultivating or attempting the cultivation of cannabis for use as a drug or as raw material for drugs is committing a narcotics offence (Kainulainen 2007). Furthermore, if a person is discovered cultivating cannabis, he/she may, in many cases, be charged not only for cultivating a narcotic substance, but also for possessing, using or obtaining one. The most common judicial sanction for cannabis cultivation is a fine, with an average of 30 day-fines imposed. Those accused of cannabis cultivation have sometimes criticised the pre-trial investigation for not measuring the plants' the concentrations or on the basis that the weight of the entire plant is stated on the charge sheet. Further criticisms refer to the failure to include the exact number of seized plants in the related documents. Of judgments issued by district courts, cases of cannabis cultivation accounted for approximately 11% of all narcotics offences in 2002–2003. (Kainulainen 2006.) Today, the share of cultivation cases among district court judgments may be larger.

Under the legislation in force (Chapter 50, Section 4 of the Penal Code) selling and buying cannabis seeds for drug-related purposes is prohibited. Thus, in Finland there are no shops selling cannabis seeds. However, there are five companies in Finland with ten outlets in the largest cities, i.e. Helsinki, Turku, Tampere and Oulu, whose product ranges include equipment for growing plants, which is also suitable for growing cannabis. Such equipment includes plant lights, growth trays and growth and plant nutrients. Currently, only one company based in Finland sells growth equipment and accessories on the Internet. (Perälä 2009.)

### 11.1 Cannabis markets

In Finland, cannabis use has mainly involved the use of imported hashish. Generally speaking, dealers functioning on the Finnish drug markets focus on the use and sale of one main drug. Some drug dealers are 'devout hashish men', who do not supply other substances, as a matter of principle. For others, the main article is some other drug, while they also supply hashish. The Finnish drug market does not seem very organised with regard to hashish, allowing free entry onto the market for willing newcomers. (Kinnunen 1996; Junninen 2006; Hakkarainen et al. 2006.)

By contrast, major narcotics offences investigated by the police indicate that, in general, the drug trade is professional and strongly dominated by organised crime groups. In 2008, as many as one fourth of people suspected of committing aggravated narcotic offences were foreigners. The largest groups of suspects were Estonians and Russians/Russians living in Estonia. Estonian criminals still play a major role in smuggling hashish into Finland. Finnish criminals, particularly criminal motorcycle gangs with international contacts to e.g. the Netherlands, have also been active in smuggling hashish into the Finnish drug markets. (National Bureau of Investigation 2009.)

Based on police interviews, interviews of dealers and users and pre-trial investigation records, the price of hashish per kilogram varies between €2,000–3,500. When sold in smaller quantities, often in 100 gram batches, its price is approximately €400–600, the price per kilogram reaching up to €6,000. For a user, the price of hashish per gram has long been €5–10. (Perälä 2009.) The police gather wholesale drug price information from informants, crime suspects and experts in various fields, learning about prices through documents seized and investigations. Based on information from these sources too, the price of hashish per kilogram varies between €2,000–3,500 while the price per gram is between €6–20, the average being approximately €13. (National Bureau of Investigation 2009.)

The majority of sales and use of cannabis, as well as of other illegal drugs, take place in private residences. No truly open drug market, such as those functioning in some major cities in Europe, exists in Finland (Kinnunen 2008). In certain bars, clubs and parks in the Greater Helsinki area, relatively open trade of cannabis by the gram is pursued, chiefly by immigrants. Cannabis prices in these places and sales situations are generally higher than when the substance is sold in private residences. (Perälä 2009.)

During recent years, signs have emerged of increasing cultivation of cannabis at home (Kainulainen 2006; National Bureau of Investigation 2009). However, the most desired product from home-grown cannabis, inflorescence, does not play a major role in the actual drug market. No large growth facilities producing inflorescences for sale on the drug market have been discovered in Finland. Groups classified as belonging to organised crime have not participated in the cultivation of cannabis to any significant extent and only certain, larger cultivation cases have involved individuals who have previously been engaged in drug dealing (National Bureau of Investigation 2009).

The selling price of inflorescences has varied between  $\in 5-25$ , most typically at  $\in 10-15$ . However, this price is markedly influenced by the grower's motives and the relationship between grower and purchaser, among other factors. Generally, inflorescence is sold by the gram, if the seller possesses a scale. In larger batches, of 10 grams or 100 grams, the price is somewhat lower. A sales consignment of 100 grams or larger is, however, extremely rare. Indeed, a factor indicating the rarity of large inflorescence batches is that users have no idea of their prices. (Perälä 2009). According to police estimates, the price per kilogram of cultivated inflorescence is  $\notin 9,000$  and its price per gram  $\notin 10-20$  (National Bureau of Investigation 2009).

Through their activities, most home-growers are dissociating themselves from the actual drug market. Often, the backgrounds and motives of home-growers and persons with a criminal history do not coincide since, in terms of their activities, home-growers wish to remain free of any activities they consider organised crime. They do not wish to purchase imported hashish but, rather, to grow their cannabis flowers themselves. Thus, inflorescence can be obtained inexpensively and, after learning about its cultivation, the produced quality often exceeds that of imported hashish circulating on the drug market. Most growers do not make money by selling the flowers they have grown. Rather, they offer or distribute inflorescence to friends. (Hakkarainen et al. 2006.)

The decline in the quality of imported hashish together with the ease of home growing may contribute to the increase in the cultivation of cannabis at home. Seeds can be acquired by ordering them on the Internet, and they are also obtained or purchased from other grower friends, or exchanged. Occasionally, seeds are also available on the Internet free of charge. A grower can also use, for instance, cuttings instead of seeds. The acquisition of cultivation equipment is easy and relatively inexpensive. Growers familiarising themselves with the issue can safely build a relatively discreet cannabis farm. In particular, home-growers who are not caught can be very absolute about the fact that they do not use substances other than cannabis, often as an alternative to alcohol consumption. (Perälä 2009.)

Demand for inflorescence still outstrips supply, at times to a considerable extent. This is suggested by the relatively high prices paid for home-grown inflorescence (National Bureau of Investigation 2009). From the actual drug market, hashish and hard drugs such as amphetamines are markedly easier to acquire than home-grown inflorescence. According to the statistics for 2006, a total of 19% of 15–24-year-old and 25% of 25–34-year-old Finns had experimented with, or used, cannabis (hashish or inflorescence) (Hakkarainen & Metso 2007).

The most typical cannabis farm location is a small space within the grower's residence, such as a closet or cupboard, with less than ten cannabis plants growing. By far the majority of cannabis growers are men who live alone. They primarily live in the largest cities in Finland, are aged under 30 and only involved with mild drugs. Individuals convicted for cannabis cultivation often have very modest cultures, the number of plants in more than 40% of cases totalling only 1–5. (Kainulainen 2006.) The police estimate that cannabis is growing in approximately 10,000 Finnish homes (National Bureau of Investigation 2007b). However, this figure is only indicative since the actual number of growers is unknown.

### 11.2 Cannabis seizures

Based on seizure data, the police took possession of a total of 7,510 cannabis plants and 36.2 kg of plant sections in 2006 and, in 2007, a total of 7,600 plants and 87 kg of plant sections. In 2008, the number of seized cannabis plants rose to 14,000, while seized plant sections remained at only 41 kg. From individuals suspected of a narcotics offence, in addition to plants the police seized a total of 33 kg of fully developed inflorescence in 2006, a similar amount i.e. 36 kg in 2007 and slightly more i.e. 56 kg in 2008.

In 2006, the police seized a total of 283 kg of hashish and, in 2007, slightly more i.e. 360 kg. In 2008, the amount of seized hashish was only 36 kg. The supply of hashish has not, however, decreased but the dramatic fall in seizure data is due to the phasing of investigation operations. (National Bureau of Investigation 2009.)

In 2008, the police conducted a total of 1,500 hashish seizures, 3,000 marijuana i.e. inflorescence seizures and 2,100 cannabis plant seizures. According to the police, the cultivation of cannabis seems to have increased slightly during recent years. The seizure data, in turn, indicates that the increase in cultivation has been more robust. (National Bureau of Investigation 2009.) On the other hand, it can be clearly observed that the police have targeted cannabis home-growers more than previously (Kainulainen 2009). Often, the police learn about cannabis cultivation within the context of another criminal investigation or case. The police will react if they learn about a case of cannabis cultivation and target measures at it based on the available resources (National Bureau of Investigation 2009). The strategy of the Ministry of the Interior makes no mention of any obligation to intervene in cultivation in the home. Based on their strategy, the police are seeking to combat organised crime. (Ministry of the Interior 2007.) At local police level, cannabis cultivation cases mainly involve the possibility to refer users for treatment, but in many cases the latter do not believe they need such treatment (for treatment referral, see subsection 9.3.) (National Bureau of Investigation 2009).

The seizure data indicates that the majority of cannabis cultivation is smallscale. Based on seizure data from January–June 2008, a total of 87% of cultures included 1–20 plants, 12% included 21–100 plants and only 1% included more than 100 plants. Among the 570 cases of cannabis cultivation investigated, 409 involved 1–10 plants. In Finland, there are no indications that cannabis inflorescence is imported to Finland or exported from it. Cannabis seeds are usually ordered from other countries through the Internet and mail. Most seed consignments seized include fewer than 20 seeds. (National Bureau of Investigation 2009.)

Estimates suggest that the Finnish police are able to seize some 10–25% of cannabis circulating on the drug market (Hakkarainen et al. 2006). In general, seized hashish imported to Finland originates from Morocco. Transit countries include Spain, the Netherlands, other Nordic countries and, among the Baltic countries, Estonia and Lithuania, the latter functioning as an important hub for hashish smuggling within the Baltic Sea region. Current hashish consignments are larger in size than before and are often transported together with ordinary, legal freight. (National Bureau of Investigation 2009.)

The primary motive of cannabis home-growers seems to involve obtaining self-produced cannabis for their own or friends' use instead of using imported hashish. If inflorescence is sold, the motive may involve making a little extra money. The actual sale of home-cultivated cannabis has been encountered in only certain, rare cannabis cultivation cases discovered by the police. Sometimes, these cases have also involved the sale of amphetamines and prescription drugs. (National Bureau of Investigation 2009.)

# 12 Problem amphetamine use

## 12.1 The history of amphetamine use

In Finland, amphetamine first appeared under the name of Pervitin, in 1941. Pervitin was a metamphetamine shipped in large quantities from Germany for the Finnish Army at the beginning of the Finnish Continuation War. When the ensuing offensive was at its height, 850,000 Pervitin pills were available for dispensing; the Finnish Army administered Pervitin to front-line soldiers, commanders and reconnaissance patrols as well as medical corps. During the war, Pervitin was not used as an intoxicant, but for the purpose for which it was designed. Twice as strong as amphetamine, Pervitin reduced the need for sleep and sensitivity to hunger, spurring the soldiers on to improved physical performance. It also dulled their sensitivity to pain, while heightening their alertness, increasing their self-confidence and concentration, and lowering their threshold to taking risks. However, sleeplessness due to Pervitin use could induce paranoia, hallucinations and aggressive behaviour, while long-term use increased the likelihood of substance addiction and could even lead to fatalities. Little proof exists of recreational use of metamphetamine on the front line. (Ylikangas 2009.)

During the war, both amphetamine and metamphetamine were used by many Finnish families. At the time these drugs were regarded as stimulants and were distributed under the names of benzedrine, stimulan, pervitin and beramin. This habit survived the war, with stimulants remaining popular among students and motorists in particular. Metamphetamine was a prescription drug rather lavishly prescribed by physicians. Indeed, during the war and the post-war period, Pervitin was not regarded as a narcotic. Hence, its use was not monitored and abuse went unidentified. At the time, it was opiate users who were considered the problem drug users. (Ylikangas 2009.)

In the mid-1950s, opiate abuse decreased while amphetamine use began to increase. Sweden, where amphetamine was gaining a stronger foothold on the drug markets, was an influence on the post-war generation. It was at this point that Finland saw its first problem use of amphetamines. Even in those early days, amphetamine was used intravenously. Postulated reasons for this include relatively easy access to liquid amphetamine and Finnish drug use practices' history of favouring intravenous drug use in order to enjoy the strongest effects. Amphetamine use was not restricted to the capital city, the drug being available and used in all parts of the country. (Ylikangas 2009.)

However, it was not until the late 1960s that amphetamine became more widely familiar. Kosti Kustaa Kartiokari, a businessman, imported large amounts of amphetamine to the Nordic countries (Salasuo 2004). In a relatively short period, he is thought to have importing 200 kg of amphetamine to Finland and Sweden. In the late 1960s, changes in the Finnish drug market saw the outbreak of amphetamine smuggling in Finland. Such smugglers were professionals compared to criminals involved in smuggling hashish, for example (Hakkarainen 1992).

In late 1990s, the so-called second drug wave struck Finland, signalled by a clear increase in the supply and use of illegal drugs (Partanen & Metso 1999; Hakkarainen & Metso 2003). At the same time, the number of problem amphetamine users grew. Since at least 1997, amphetamine use has outstripped opiate use (Partanen et al. 2007). Indeed, it seems that the peak in drug use and drug-related harm had been reached by the mid-2000s (Hakkarainen & Metso 2007).

### 12.2 Current amphetamine use

Amphetamine is the predominant stimulant among the users of the 2000s, although metamphetamine has occasionally been used to compensate for an insufficient amphetamine supply (National Bureau of Investigation 2009). Recently, MDPV, which has amphetamine-like effects, has been encountered on the drug markets. When it first surfaced, MDPV was soon classified as a medicine and its import to Finland is now prohibited. However, some amphetamine users switched to MDPV at least momentarily, although MDPV is not an amphetamine but a research chemical. MDPV as sold on the street is a white or yellowish fine-grained powder. Its price per gram is greater than amphetamine and its effects not as long lasting. Since the required MDPV doses are very small, it is easily administered in excess, increasing the risk of an overdose. MDPV has also caused users other problems, such as feelings of paranoia (Vinkki Health Advice Centre).

After cannabis, amphetamine is the second-most common illegal intoxicant used in Finland (Hakkarainen & Metso 2007). According to the most recent estimate, Finland had 14,500 - 19,000 problem users of amphetamine and opiates in 2005. This accounts for approximately 0.5 to 0.7 percent of the total 15 to 55 year-old age group. The vast majority of problem users, estimated at 75 to 80 percent, use amphetamine as their primary drug. Of all problem drug users, an estimated 50 to 60 percent live in Southern Finland and over half in the Greater Helsinki area, where the estimated number of problem amphetamine users was between 4,000 and 6,000 in the mid-2000s (Partanen et al. 2007).

Intravenous use of amphetamine is predominant among problem users. Currently, 82% of users availing themselves of substance abuse services take stimulants intravenously. Some 82% of those who, at some point in their lives, have taken drugs intravenously admitted to sharing needles and/or syringes. (Ruuth & Väänänen 2009). However, no new HIV cases have been encountered in noticeable numbers among the young (in the 15 to 24-year-olds age group), and the incidence has decreased considerably over recent years. The prevalence of HIV among intravenous drug users has never exceeded 5% (Arponen et al. 2008).

During the last few years, there has been a rising frequency of amphetamine findings in forensic autopsies. In 2003, there were 51 while in 2007 the total was 94 (Department of Forensic Medicine 2008). However, this does not necessarily indicate an increase in amphetamine-induced deaths, but could be a result of the increase in polydrug use leading to the more frequent discovery of amphetamine residues (see also Section 6.3).

On the drug markets, amphetamine is sold in powder form. The buyer seldom receives pure amphetamine, because it is usually diluted in the country of origin. Thus, an amphetamine user may be accustomed to low quality amphetamine which produces a specific, desired effect. According to user estimates, the maximum purity of amphetamine is 40%. Additionally, amphetamine is likely to contain a variety of impurities, such as traces of acetone. Furthermore, if inappropriately packaged, amphetamine is likely to expire, especially when exposed to the elements for a lengthy period. (Perälä 2009.)

Amphetamine is further diluted in Finland through a process involving visual estimation. Dilutants used include maltodextrin, glucose, icing sugar, medical-grade calcium oxide, creatine and powdered caffeine. Of these dilutants, at least medical-grade calcium oxide is dangerous when used intravenously. The only measurement tool used by some amphetamine sellers is a pH meter. However, a pH meter only measures alkalinity, not amphetamine purity. An experienced seller can assess the type of amphetamine through visual inspection and by smelling the sample. Amphetamine is often characterised by its "almond paste", "marzipan" or "nail polish" smell, for example. It can also be assessed by its colour: its white, pink, brownish, greenish, yellowish or even black base colour reveals some of its characteristics. An experienced seller knows that not all amphetamine types are suitable for intravenous use, while others should not be sniffed or swallowed. (Perälä 2009.)

The effects of amphetamine are relatively long lasting; a single use period can last several days. Users are very talkative and hyperactive, perhaps simultaneously watching TV and listening to music while reading. It is common to have multiple "projects" underway. Users focus intently on whatever project they have in hand, feverishly laying out the components involved. However, due to the effects of the substance, these projects are usually left unfinished and users' homes are frequently littered with an array of disassembled parts. Of course, some projects may actually reach completion. Users do not feel hunger and meals may be replaced by a yoghurt or chocolate bar. There are exceptions to the rule, with some users trying to ensure that they eat meals regularly and maintain a normal, daily routine. During periods of use, amphetamine users' days are highly eventful, social and exciting. However, problems accumulate during extended amphetamine use, due to lack of sleep, if nothing else, and the user may become paranoid and aggressive. (Perälä 2009.) Users take 0.5 to 5 grams a day, depending on the purity of the amphetamine and personal tolerance levels. In the Greater Helsinki area, the price of one gram of amphetamine can be as high as EUR 30. Hence, problem amphetamine use is often accompanied by crime, such as theft. Bicycles and other vehicles are popular targets as well as clothing, cosmetics, tools and other construction site equipment, computers, phones and other consumer electronics, and car parts and older cars which are easy to steal. It would seem that some of the "accessories" distributed on the drug markets, such as phones and bicycles, have maintained their popularity during the last decade. However, some illegally accessed items distributed on the amphetamine markets have no value. (Kinnunen 1996; Kinnunen et al. 2005; Perälä 2009.)

Other intoxicants are used to boost or alter the effects of amphetamine or due to polydrug use. They are also taken to enable sleep and rest following extended hours of hyperactivity and wakefulness. For this purpose, amphetamine users resort to alcohol, cannabis, medications or buprenorphine. They may also begin using buprenorphine in order to gain easier admittance to care. Amphetamine use and the life of amphetamine users are exhausting. However, proper care based on amphetamine use only is hard to come by, since the use of other substances is often a prerequisite for admission into care (Perälä 2009).

Furthermore, many use amphetamine to treat depression and ADHD. Problem users alternate between several substances, depending on availability – when amphetamine is unavailable, buprenorphine can be used as a drug of choice and vice versa, one being used to break addiction to the other. It is estimated that very few problem users take only amphetamine and that the typical primary drug of Finnish problem users varies, depending on personal feelings, motives and substance availability (Arponen et al. 2008).

### 12.3 Treatment demand for amphetamine users

In Finland, problem drug users are treated in health care, in units providing specialised services for substance abusers, and as part of social care. Long-term outpatient care is typically arranged close to the patient's permanent place of residence (Arponen et al. 2008). Treatment using replacement medication is typically linked with opiate users. For amphetamine users, on the other hand, no specific detoxification or replacement medication exists.

According to the drug treatment information system, 20% of clients entering treatment for substance abuse named amphetamine as their primary intoxicant. For those entering treatment primarily due to amphetamine, normal amphetamine was by far the most commonly used stimulant. Only 3% named metamphetamine as their primary drug. Those who named amphetamine as their primary substance, mentioned cannabis (52%), alcohol (43%), benzodiazepines (43%), opiates (36%)

and ecstasy (8%) as additional intoxicants. (National Institute for Health and Welfare 2009.)

Upon admittance into care, 63% of users who named amphetamine as their primary drug lived in their own or a rental apartment, 11% lived at home with their parents and 4.5% lived with friends. Some 17% of problem amphetamine users entering treatment were homeless. While 66% had completed comprehensive school, 29% had graduated from high school or a vocational school. Of those using amphetamine as their primary substance, 66% were unemployed and 14% had a job. 8% were students, and another 8% were pensioners. (National Institute for Health and Welfare 2009.)

Of those clients who had sought treatment primarily for other substances, 36% named amphetamine as their 2<sup>nd</sup> to 5<sup>th</sup> placed intoxicant of choice. In socioeconomic terms, clients using amphetamine as their primary drug differed little from other problem drug users. The unemployment rate among problem users who named some other substance as their primary intoxicant was 66%, while 13% had jobs, 8% were students, and 7% were pensioners. In this group, 64% had completed comprehensive school, and 30% had graduated from high school or a vocational school. Of those using some other intoxicant as their primary substance, 30% had taken the initiative in seeking treatment, 27% had been referred by substance abuse outpatient services, 7% by health care centres, 8.5% by hospitals, and 7% by child welfare services. (National Institute for Health and Welfare 2009.)

Of those using amphetamine as their primary substance, 38% had taken the initiative in seeking treatment. Some 18% had sought treatment for amphetamine abuse through substance abuse outpatient services, 7% through health care centres, 8% through hospitals and 5% through child welfare. (National Institute for Health and Welfare 2009.)

Some problem amphetamine users are sporadically admitted to psychiatric hospitals to receive treatment for amphetamine psychosis. However, no longterm psychiatric care is available for such users. (Törmä 2009.) Non-pharmaceutical treatment and short-term detoxification are available, but access to continued treatment is much more difficult to obtain. In order to be admitted to care, amphetamine users must often use other substances in addition, for which reason they may begin using opiates. However, in many cases the onset of opiate use does not see the discontinuation of amphetamine use. As a consequence of seeking care, an amphetamine user may become addicted to opiates in addition (Perälä 2009).

According to a study conducted in one treatment unit, other clients – usually opiate users – did not regard amphetamine users as being in need of substitution therapy. Indeed, they viewed amphetamine users as having arrived purely for a rest. From the point of view of personnel, restless behaviour could lead to suspicion that the client primarily is using amphetamine and is therefore in the wrong place, being at worst on the way to becoming an opiate user. (Weckroth 2006.)

In 2004, the world's first clinical study of the pharmacological treatment of amphetamine addiction was initiated in Finland. According to the 2005 intermediary analysis of this study, methylphenidate seemed to work well in reducing amphetamine use (Tiihonen et al. 2007.). Although pharmacological treatment of amphetamine addiction is still in its developmental stages, amphetamine users seek treatment almost as often as opiate users (Arponen et al. 2008). According to interviews with problem users, very few have access to pharmacological treatment for their amphetamine addiction. Because the development of pharmacological treatment for amphetamine addiction is still in its early stages, some users say they have been offered methadone when seeking treatment (Perälä 2009).

In Finland, fairly little is known about excluded, socially deprived problem users, and the tendency to conceal problems of this type further contributes to the scarcity of information. Therefore, services intended for this group mainly comprise a few low-threshold units offering basic care (Törmä 2009). Problem users who cannot be reached through normal channels of communal help are reached through peer activities successfully organised by the A-Clinic Foundation's Vinkki Health Advice Centre since 2001. Peer activities include outreach work, such as the distribution of clean needles. Peer workers, or "Helpers", are themselves substance users who use their personal networks to reach out to old and new users, occasional users, users with families, and students as well as users who have regular day jobs. Peer activities can cover substance abusers who are unlikely to visit health counselling centres to exchange needles and syringes, or to seek advice. These and similar approaches have been successful in reducing drug-related harm. Clients are welcome to visit Vinkki Health Advice Centres all over the Greater Helsinki area to exchange used syringes and needles for clean ones, to receive health counselling, to obtain hepatitis A and B vaccinations, to be tested for HIV, hepatitis, chlamydia or pregnancy, and to receive help in seeking treatment (Malin et al. 2008).

## 12.4 Amphetamine production, trafficking and penalties

In Finland, slightly over 100 kg of amphetamine is confiscated annually. In 2008, the amount was 130 kg. In the same year, the amount of confiscated metamphetamine was 17 kg. A total of 110 to 150 kg of amphetamine and metamphetamine is confiscated annually. (National Bureau of Investigation 2009.)

In Finland, only a few disconnected attempts at producing amphetamine in the local market have been discovered. Some 90% of the amphetamine distributed in the illegal drug market enters Finland from Estonia or is smuggled through Estonia. Amphetamine is also trafficked from Russia to Finland, while a small percentage comes from other European countries via Germany, Holland and Sweden. Currently, amphetamine and metamphetamine, in particular, are also produced in Lithuania and trafficked to the Finnish markets by Estonian dealers. Lithuanians have also begun to smuggle their amphetamine products to Finland themselves. Lithuanian criminal gangs have become interested in establishing amphetamine laboratories in Poland, where high quality precursor chemicals for amphetamine production are easily accessible at low cost (National Bureau of Investigation 2009).

Today, amphetamine import is highly systematic. Typically, Estonians bring the amphetamine to Finland and Finns distribute the drug within the country. 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 2009). In Estonia, the maximum price of 1 kg of amphetamine is approximately EUR 1,000 (Perälä 2009). Once it is imported to Finland, the price of 1 kg rises to somewhere between EUR 4,000 and EUR 9,000. The average price is EUR 6,500 (National Bureau of Investigation 2009).

In the drug markets, by the time the amphetamine reaches its end-user its price has risen five-fold from its import price. For persons involved in the beginning of the distribution chain, amphetamine may be a profitable business. According to police estimates, it is possible to make a profit of EUR 6,000 per kg. However, several factors affect the profitability of dealing in amphetamine, such as product purity and the effectiveness of the authorities. For users dealing in amphetamine per gram, the business is not profitable. Personal use, product purity, effective control by the authorities and selling on credit are factors that help erode such income. Nevertheless, overall supply and demand for amphetamine and the related by-products can be viewed as propelling the Finnish drug market. (Perälä 2009.)

Under the Finnish Penal Code, amphetamine is classified as a very dangerous narcotic drug. It was the most common narcotic drug involved in aggravated narcotics offences processed by the court of appeal of Helsinki in 2005. For narcotic offences to be aggravated, the established threshold quantity is 100 grams of amphetamine (Kainulainen 2007). The penalty for dealing in such quantities is one to two years and four months of imprisonment (Helsinki court of appeal jurisdiction 2006).

Due to their obtrusive behaviour and involvement in petty crime, some amphetamine users are under relatively tight police supervision and are repeatedly fined when coming into contact with the police (Kainulainen 2009). As a result of tighter supervision due to drug dealing and related offences, amphetamine users are imprisoned every now then. For most, amphetamine consumption decreases while in prison, due to limited availability and higher prices (Kinnunen 1996). However, in prison health care units, the percentage of clients entering treatment due to stimulants was especially large (Kuussaari & Ruuth 2008). Next to buprenorphin (Subutex), amphetamine is the second most common intoxicant used in prison. There are several reasons for this. Requiring little space, amphetamine is easily smuggled in, it has monetary value, and drug tests are unable to detect this water-

soluble drug after a relatively short period of time (Perälä 2009). No treatment for amphetamine addiction is available to problem users in prison. While prisons are also the scene of intravenous drug use, needle and syringe exchange programmes are not employed there. Drug use related equipment is prohibited, but equipment disinfectant (Virkonia) is made available (Arponen et al. 2008). However, inmates may be reluctant to take advantage of this service for fear of being identified as users when visiting disinfection stations. According to the authorities, this is a method used to trace substance abuse in prisons (Perälä 2009).

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