



European Monitoring Centre
for Drugs and Drug Addiction



STATENS
FOLKHÄLSOINSTITUT

**2009 NATIONAL REPORT (2008 data) TO THE
EMCDDA**

by the Reitox National Focal Point

Swedish National Institute of Public Health

Sweden

**New Development, Trends and in-depth information
on selected issues**

Contents

Foreword

Summary

Part A: New Developments and Trends

1. Drug policy: legislation, strategies and economic analysis
2. Drug use in the general population and specific targeted-groups
3. Prevention
4. Problem Drug Use
5. Drug-related treatment: treatment demand and treatment availability
6. Health correlates and consequences
7. Responses to Health Correlates and Consequences
8. Social correlates and social reintegration
9. Drug-related crime, prevention of drug related crime and prison
10. Drug Markets

Part B: Selected Issues

11. Market and production of cannabis
12. Problem amphetamine and methamphetamine use, related consequences and responses

Part C

Bibliography

- Alphabetic list of all bibliographic references used
- Alphabetic list of relevant databases available on internet
- Alphabetic list of relevant Internet addresses

Annexes

- List of tables and graphs used in the text
- List of Maps used in the text
- List of full references of laws in original language

Foreword

The 2009 National Report on the Drug Situation in Sweden has been produced for the European Monitoring Centre for Drugs and Drug Addiction. With the exception of part B the report is mainly an update of previously delivered data in areas where new information has developed or where the guidelines has been changed. The report has been prepared in cooperation with national agencies, institutions and experts.

Contributors to part A are, from the Swedish National Institute of Public Health, Ms Anna Bessö, Mr Mats Blid, , Mr Mathias Jansson, Mr Håkan Källmén, Ms Helena Löfgren, Ms Monica K Nordvik, Mr Anders Persson, Mr Bertil Pettersson, Mr Matt Richardson and Mr Joakim Strandberg.

External contributors are Ms Ylva Ginsberg, Stockholm County Council, Ms Anna Fugelstad, Karolinska Institute, Mr Roger Holmberg and Mr Niklas Karlsson, National Board of Health and Welfare, Mr Björn Hibell and Mr Thomas Hvitfeldt, the Swedish Council for Information on Alcohol and Other Drugs, Mr Steve Alm, the Police National Criminal Investigation Department, Ms Helena Rosen at the Ministry of Health and Social Affairs,

The section on Cannabis Markets and Production in part B is written by Johan Nilsson, Swedish National Criminal Intelligence Service. The section on Problem amphetamine and methamphetamine use, related consequences and responses, also in part B, was written by Mr Bengt Svensson, Malmoe University.

For possible need of clarification of the reports and publications in Swedish referred to in this National Report you are welcome to contact the Swedish National Institute of Public Health.

.

Sarah Wamala
Director General
Swedish National Institute of Public Health

Part A: New Developments and Trends

Chapter 1: Drug Policy: Legislation, strategies and economic analysis

Introduction

Laws on illicit drugs

In Sweden, narcotic drugs are defined as "drugs or goods dangerous to health, with addictive properties or that creates a state of euphoria, or substances that with ease can be converted to products with such properties or effects, and that, on such basis, are objects for control according to international agreement that Sweden has supported, or, of the government explained product to consider as narcotics according to the law"(SFS 1968:64).

The aim with this legislation is to legally regulate "illicit drugs and other products, that because of its intrinsic properties means a danger to people 's lives or health and that is used or can be assumed to be used in aim to achieve drunkenness or other". Illicit drugs/narcotics may be used only for medical, scientific or other for the society useful purpose that is particularly urgent (SFS 1968:64). All other possession or use is punishable.

Section 3 b in the Swedish narcotics punishment act (SFS 1968:64) states as amended (SFS 2006:46): Any person who intentionally:

1. Transfers, manufactures, acquires, procures, processes, packages, transports or in some other similar way handles narcotic drugs which are intended for illegal manufacture of narcotic drugs, or
2. Keeps, possesses or otherwise handles such narcotic precursors shall be sentenced for an illegal handling with narcotic precursors to imprisonment for not more than two years.

If, having regard to the nature and the quantity of narcotic precursors involved and other circumstances, an offence is judged to be petty, a fine or imprisonment for most six months shall be imposed.

If the offence is judged to be grave, the sentence shall be imprisonment for at least six months and at most six years. In judging whether an offence is grave, particular consideration shall be given to whether it has been part of large-scale or professional activities, has involved especially large quantities of narcotic precursors or has in any other way been of a particularly dangerous or unscrupulous nature.

All illicit drugs/narcotics is included in the Medical Products Agency's register of Illicit Drugs and only the substances that are on this list is considered as narcotics in the sense of the law. In total the list of illicit drugs includes almost 290 substances and, indirectly, a number of different mushrooms that contain psilocybin or psilocin (the number of such species have been estimated to more than 50). In practice, though, there are only around 30 illicit drugs that are misused in any larger extent in Sweden. The so called precursors are listed in a special registry. A precursor is, according to the law on control of illicit drugs, a substance that can be used for illegal production of illicit drugs (SFS 1992:860).

In 2006, the government appointed a special investigator (Socialdepartementet, 2006) in order to do an inquiry of the laws concerning illicit drugs in Sweden. One reason for this was the new substances entering the market, substances with similar effects as the narcotics drugs, or as precursors, but is not classified as such. The review was completed late 2008 and includes proposals on statute changes or other improvements of current system. Some examples of the proposed improvements are:

- Protective confiscation of new, uncontrolled substances of abuse that can be suspected to be harmful and that presumably can become classified as narcotics or as goods dangerous to health
 - Increased surveillance of drug related activities on the internet in order to identify new substances of abuse
 - The Swedish National Institute of Public Health (SNIPH) is given authorization to purchase goods marketed as legal options to controlled substances of abuse in order to have them analysed regarding content and active ingredients
 - The surveillance of uncontrolled substances of abuse will be expanded
 - Classification of the substances GBL and 1,4-butandiol as narcotics
- So far, this is only proposals.

Laws concerning harm reduction

In July 1st 2006 the new act on exchange of syringes and needles came into force (SFS 2006:97). The purpose of the act is to prevent the spread of HIV and other blood carried infections through the exchange of syringes and needles, and this is to be carried out in connection to interventions aimed at motivating the individual for care and treatment. The activity must not be performed without the permission from the National Board of Health and Welfare.

National Action Plans and public health objectives

The first Swedish National Action plan considered the years 2002 to 2005. According to the government bill, the aim was to create a clearer priority of the drug issue on all levels in the Swedish policy. In the plan, the government also announced the intention to appoint a National Drug Coordinator that would implement and to coordinate initiatives on this area (Regeringen, 2001). 360 millions SEK was assigned for the implementation of it.

When the plan was evaluated a number of positive outcomes were noted, some examples being that:

- The drug issue has received a higher priority and the coordination of initiatives have been improved on national, regional and local level
- Most municipalities have increased their initiatives against illicit drugs
- The treatment of drug users has been improved
- The control of drug related crimes has been intensified.

In November 2005 the government presented the new National Action Plan against drugs, which was adopted by the parliament during the spring 2006 and runs during the period 2006-2010.

In this plan it is established that the overall objective for the drug policy in Sweden – a society free from illicit drugs - will continue to be the same and that political initiatives will be aimed towards the access and demand on drugs in order to:

- reduce the number of people who will start using drugs
- More persons with addiction problems will receive treatment
- decreased access to illicit drugs

In the present action plan, certain measures are stressed as particularly important in order to:

- improve the cooperation between different authorities as well as between authorities and non-governmental organisations
- improve the preventive work through, among other things, method - and skill development
- develop the treatment care
- render a more effective control system
- improve the methods to follow drug use development and the society's initiatives
- develop the treatment perspective within the correctional system.

The work on the local level is considered crucial for successful results and the municipalities' work is emphasized. At the same time, the cooperation within EU and internationally must increase. Children, young adults and parents are particularly prioritized target groups. The government has allocated near 260 millions SEK a year 2008-2010 for work against alcohol and other drugs (Socialdepartementet, 2005).

The Swedish National Institute of Public Health (SNIPH) has been given the task to evaluate the action plan 2006 – 2010 and to present the results in January 2010.

The policy governing the work in the areas of alcohol, narcotics, tobacco and doping includes a part on treatment. In the treatment of dependence and abuse three overriding goals for the work of the government are set up, *i*) improved quality, *ii*) increased equity and *iii*) increased access to support for groups that have difficulties in getting their interests considered (for example minority groups). Also in the sectors of correctional care, police, customs and coastguard the government points to the need for improved contributions and cooperation between several sectors of the society.

Public opinion

In two consecutive public surveys (2004 & 2005) the aim and strategies of the Swedish drug policy was investigated and received a massive opinion support.

In September 2006 the UNODC presented an evaluation of the Swedish drug policy stating "...in the case of Sweden, the clear association between a restrictive drug policy and low levels of drug use is striking...".

National coordination.

The Government has also decided to establish a Council on Alcohol, Narcotic Drugs, Doping and Tobacco. Besides its chairperson the Council has 20 members, all of whom represent central-government agencies or civil society. Some of its members are researchers. The Council is chaired by Ms Ragnwi Marcelind, State Secretary at the Ministry of Health and Social Affairs. The duties of the Council include advising the Government on issues of alcohol, narcotic drugs, doping and tobacco as well as providing the Government with information about research and investigation findings of relevance to the design of policy in those fields.

Cooperation among the various ministerial subdivisions and ministries involved in prevention is very important to ensure that the direction exercised over the various government agencies active in this field will be more effective and more explicit. An inter ministerial working group, SAMANT¹, has been established as a forum for the exchange of experiences and information as well as for the development of cooperation across policy areas in order to ensure the achievement of the overall objectives of alcohol and drug policy, the objective of society's efforts in the field of tobacco and the Government's objective of a doping-free society.

A new coordinating function, the ANDT Secretariat, has been established at the Ministry of Health and Social Affairs. It will carry out secretariat duties for the Council on Alcohol, Narcotic Drugs, Doping and Tobacco as well as for SAMANT. The ANDT Secretariat is part of the Public Health Division of the Ministry. One of its duties is to draw up an annual action programme within its field and to compile a follow-up and evaluation of the work done to achieve the objectives set. It has also been given the tasks of assisting the Government and of facilitating and inspiring the efforts of local and regional actors to implement the national action plans of alcohol and drug policy and to help achieve the objective of society's efforts in the field of tobacco.

Drawing up the annual action programme is the main task of the ANDT Secretariat. This programme will summarise Government policy in the fields of alcohol, narcotic drugs, tobacco and doping. It will contain an overall analysis and follow-up of developments in these fields. It will also indicate the orientation of policy and describe ongoing measures and actions. The development of the action programme is illustrated in the figure above. The materials on which the programme is based derive from several sources: the ministries concerned, the Council established by the Government, various government agencies and documentation of outreach activities at the regional and local levels.

The SNIPH has a central role for implementing the Swedish national action plans on alcohol and narcotic drugs; its tasks include supporting the county-level coordination functions of the county administrative boards in the fields of alcohol and narcotic drugs, and suggesting ways to ensure that the work carried out will encompass tobacco use as well. The SNIPH has also been given the task of supporting the health-promoting and preventive work carried out at institutions of higher education in the fields of alcohol, narcotic drugs, doping and tobacco. Further, the SNIPH has a duty to implement information campaigns to ensure that the objectives for the lifestyle issues of alcohol, narcotic drugs, doping and tobacco are met. In this context, the SNIPH will examine possible ways of making use of information materials produced by the Alcohol Committee and the Office of the Swedish National Drug Policy Coordinator². The SNIPH is also in charge of the Responsible Serving of Alcohol project, projects taken over from the MOB.

The National Board of Health and Welfare (NBHW) has been entrusted by the Government with the task of further developing, within its remit, efforts to achieve

¹ The letters 'ANT' stand for 'Alcohol, Narcotic drugs and Tobacco'.

² The Alcohol Committee and the Office of the Swedish National Drug Policy Coordinator were two central-government committees in charge of implementing the action plans of alcohol and drug policy, respectively. They became operational in 2002 and ceased to exist at the end of 2007.

the objectives laid down in the national action plans on alcohol and narcotic drugs. The NBHW will make use of the knowledge and experience gained through the work of the Alcohol Committee and the Office of the Swedish National Drug Policy Coordinator. This regards skills, methodology development and cooperation mechanisms capable of promoting development towards knowledge-based substance-abuse and addiction services where coordinated interventions are made based on the needs of each individual.

All government agencies that have been given tasks by the Government in relation to the new organisational structure will monitor their work on a regular basis and report to the Government on developments.

Cooperation with the non-governmental sector.

Non-governmental organisations (NGOs) give people a voice and help develop the services offered in society, among other things by detecting unmet needs – sometimes before others do. Their overall objectives are often the same as those of the government sector, for example in popular education or as regards social responsibility and public health. Members of NGOs may have direct experience of substance abuse – their own or that of close relatives – or of being vulnerable and living at the margins of society. NGOs also help increase diversity and expand the range of choices available to people by running important operations in various sectors of society.

The services offered in society will be enhanced by the development of an even wider diversity of service providers as well as by the encouragement of innovation and alternative methods in various fields. The Government intends to review the conditions under which certain organisations in the social field may receive government grants as well as the feasibility of offering such grants. At the same time the Government is striving to offer the non-governmental sector more opportunities to exercise influence over important processes, one example being so called “Drug user councils”.

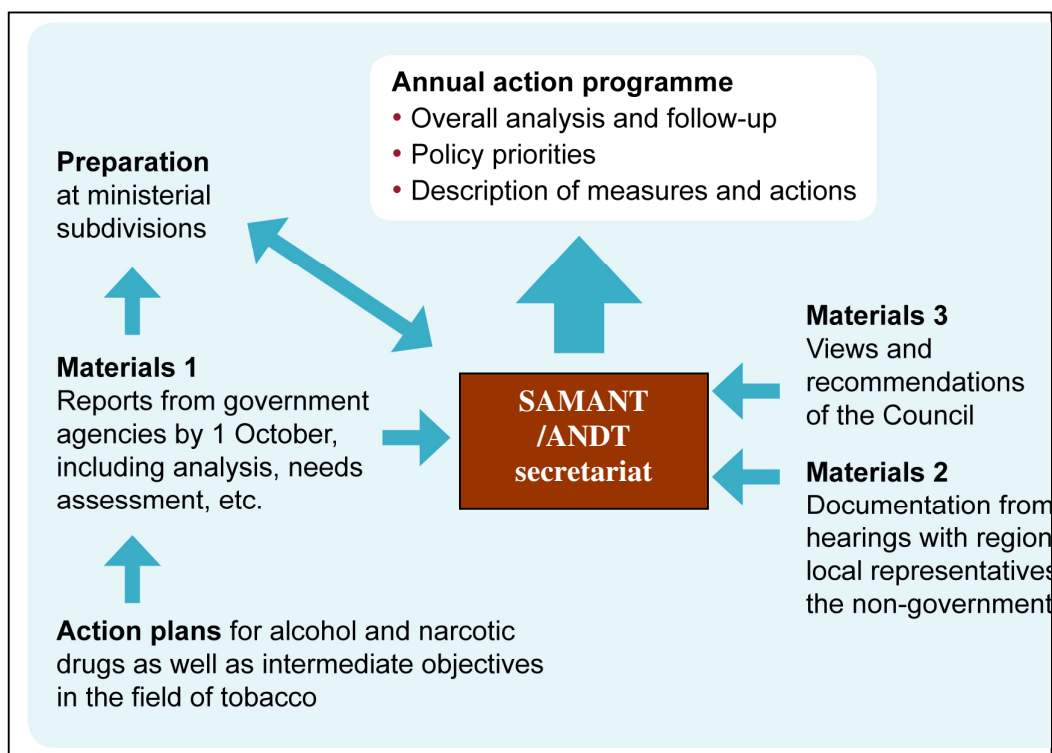


Figure 1.1. An illustration to the national co-ordination, analysis and governing structure in the areas of alcohol, narcotic drugs, tobacco and doping.

Legal Framework

- *Laws, regulations, directives or guidelines in the field of drug issues (demand & supply)*

No changes for any of the above issues since the previous national report to the EMCDDA according to experts in the legal framework contacted by the NFP.

Laws implementation

Classification of new substances

Until October 2009, no substance has been added to the list relating to the Act on the Prohibition of certain Goods Dangerous to Health, SFS 1999:42. The list of goods dangerous to health is published as an appendix to the Ordinance on the Prohibition of certain Goods Dangerous to Health, SFS 1999:58. In October 2009 the list cover the following 22 substances:

MBDB; BDB; BZP; 5-MeO-DMT; 5-MeO-DIPT; 5-MeO-AMT; 2C-E; AMT; 2C-C; 2C-D; 4-AcO-DIPT; 4-HO-DIPT; GBL; 1,4-BD; Methylone; 4-AcO-MIPT; 4-HO-MIPT; 4-AcO-DET; 4-HO-DET; TFMPP; 2C-T-4 and Salvinorin A.

Until present (October 2009), nine substances have been classified as narcotics and one substance is pending Government decision. The regulation is an amendment to the Ordinance on Control of Narcotic Substances, SFS 1992:1554. The substances that have been listed as narcotics until October 2009 are:

4-methylmethcathinone (Mephedrone); 4-Fluoroamphetamine (4-FMP); CP 47,497 (analogues C6, C7, C8 and C9); JWH-018; JWH-073 and HU-210.

4-methylmethcathinone (Mephedrone) was since 15th December 2008 on the list of Goods Dangerous to Health but since May 25th 2009 this substance is listed as a narcotic substance, list I. The substance pending Government approval to be listed as narcotics is bk-PMMA (Methedrone).

National action plan, strategy, evaluation and coordination

National plan and/or strategies

There are no changes to the national action plan on drugs 2006 – 2010; (presented in previous NRs and the Introduction above). The purpose of the policy is to reducing the recruitment of new drug abusers, inducing more drug abusers to kick the habit and reducing the supply of drugs. The government policy governing the work with the national action plan was published in June 2008 (Socialdepartementet, 2008) and presented in the 2008 NR

Implementation and evaluation of policies and strategies

In March 2009 the government presented the annual (2009) action programme in the area of alcohol, narcotics, doping and tobacco (*Fri från missbruk. Regeringens åtgärdsprogram för alkohol-, narkotika- och tobakspolitiken 2009*) (ANT-sekretariatet, 2009). Part I consists of an analysis and actions of priority 2009 while Part II is an overview of the alcohol-, narcotics-, doping- and tobacco areas giving a historical and policy background and covering preventive work, crime fighting- control- and supervision efforts and finally care and treatment.

Part I gives a broad description of measures in different policy- and activity areas with relevance for the alcohol, drugs, tobacco and doping issues. The programme underline that the main responsibility for developing and running drug preventive work is at the municipality level and that this work must be characterised by a long term engagement in order to reach the quality goals. One issue in the 2009 action programme is thus the implementation of reliable and evaluated preventive methods in the regular work. The SNIPH is given the task to stimulate the implementation of such preventive methods at the local and regional level.

Other targeted issues in the annual action programme with specific relevance on illegal drugs is the new national strategy for the treatment of abuse and dependence, drug related drunk driving, children in families with drug problems, cooperation to fight drug related crime, a restrictive and public health based policy in EU and globally, international cooperation in the drugs area and support to research in the drugs area.

An intra governmental evaluation of the 2002 – 2005 action plan on drugs was presented to the parliament in 2005 and described in the 2005 NR. An evaluation in a global perspective of the policies and strategies as expressed in the national action plan on drugs is not at hand. The SNIPH is given the task to evaluate the action plan 2006 – 2010 and present the results in January 2010.

Economic analysis

Public expenditures

Over the years, a number of different projects have tried to estimate the cost of the drug problem in Sweden. The results of these are shown in Table XX. As shown, the estimates have varied between 330 million Euros in 1991 up to a highest level of 1474 million Euros in 2007.

Previous estimations:			
<i>Year of the estimate:</i>	<i>Sectors included:</i>	<i>Estimate:</i>	<i>Reference</i>
1991	health care, treatment, probation care, social service, the correctional system, the judiciary system, the social welfare system	330 million Euro	Riksrevisionsverket 1993
1996	treatment, probation care, social service, the correctional system, the judiciary system, the social welfare system, police, customs	660 million Euro	Fölster and Säfsbeck 1999
1999	not clear	847 million Euro	Narkotikakommissionen 2000
2002	"All institutions dealing with drug users"	495-1385 million Euro	Ramstedt 2006 <i>Update of the 2002 estimate using the</i>
2007	"All institutions dealing with drug users"	528 -1 474 million Euro.	<i>consumer price index</i>

Table 1.1. Previous estimations of drug-related public expenditure in Sweden.

Public expenditure in 2008

One of the problematic things about doing these kinds of estimations in Sweden is that the budget for many of the areas is a concern of the municipalities and not the state, the estimation of public expenditures for the drug policy is not one, but a number of approximations. This year (2008) data has been collected through personal communication with Mr Åke Zetrens, Ulf Malmström and Carl Orestedt at Swedish National Board of Health and Welfare. The data concerning costs for hospitalization were collected from Mr. Leif Lundstedt at the Swedish Association of Local Authorities and Regions. Expenditure concerning the drug use of individuals in the Swedish prison and probation service was collected from Geir Varlid.

- According to Swedish Association of Local Authorities and Regions the expenditures for hospitalization of patients with drug related problems 2008 summed to 50, 9 million Euros.
- According to the Swedish National Board of Health and Welfare the expenditures for research projects in the drug area summed to 1, 7 million Euros in the year of 2008 and the municipalities social care and support of drug users summed to 673, 3 million Euros. Support to organizations and county councils for drug related projects was the same amount as 2007 i.e., 41 million Euros.
- According to the Ministry of health and social affairs the budgetary expenditures for the drug area summed to 28.9 million Euros year 2008.

- According to the Swedish prison and probation service the cost for alcohol and drug care was 34, 6 million Euros.
- The costs for primary health care concerning drug users is not possible to estimate or even approximate, and there is unfortunately no information of costs for the legal system. This means that this year's approximation of the expenditures is a clear underestimation.

This under-approximation of the public expenditures summed to 830, 4 million Euros. This is clearly within the confidence bands for the last years updates of the numbers from Ramstedts estimation for 2002, and it also leaves room for this last number being an under approximation.

Funding for prevention

The Swedish National Board of Health and Welfare (SNIPH) has been commissioned by the government to allocate funding within the alcohol, drugs, tobacco and drug prevention. The aim is that these funds will contribute to the implementation of national action plans on alcohol and drugs, including doping, and efforts to achieve the goal of society's efforts in the tobacco field.

Efforts to support local activities and projects carried out in cooperation with NGOs are prioritised. Basic research, data collection, aimed at mapping and monitoring of developments in this area can also be awarded funds.

An equal distribution of funds to the four activities is the aim but this must be weighed against the application pressure and quality of applications received.

In 2008 the SNIPH allocated a total of over 40 million SEK to a total of 51 projects.. This was distributed as follows:

Main Area	Amount (SEK)
Alcohol	12.9 million
Illicit Drugs	4.1 million
Tobacco	2.6 million
Doping	6.7 million
Alcohol/Illicit drugs	8.7 million
Alcohol/Illicit drugs/Tobacco	1.5 million
Alcohol/Illicit drugs/Tobacco/Doping	3.9 million

Table 1.2. Distribution of funds to the ANDT-area allocated by the SNIPH in 2008.

The National Board of Health and Welfare also allocated, via the County administrative boards 7.5 million Euros (including administrative costs) to support projects aiming to prevent alcohol- and drug problems the year 2008. Some of the County administrative boards have had money left from previous year, so a total of

8.4 million Euros were allocated. Thus, a total of 7.9 million Euros (excluding administrative costs) were allocated.

The supported projects were divided as follows:

- Approximately 3.1 million Euro for preventive projects,
- Approx 4.5 million Euro to early interventions aimed towards children in families where substance abuse, psychiatric illness or violence is prevalent,
- Approx. 0.3 million Euro to projects aimed towards abused women with addiction problems.

In total, 355 projects have been given monetary support to work with alcohol- and drug preventive measures.

- 155 projects have been supported to work preventive. The money has mainly been used for education and coordination. The schools, after-school centres and student councils are the main cooperation partners here.
- 193 projects have been supported to work with early interventions for children. 83 of these are aimed at children in violent families and 73 at children in families with psychiatric illness. Cooperation partners in this group are mainly school, pre-school and after-school centres.
- 7 projects have been supported to work with abused women who have addiction problems. Among other things, prevention- and intervention methods have been developed. The main cooperation partner here is women's support centres. (Socialstyrelsen, 2009a)

Chapter 2: Drug use in the general population and specific target groups

Introduction:

Concerning the general population, cannabis has been the only illegal drug studied in the over the last years (2004-2008). The question on the use of cannabis is included in the annual public health survey conducted by the SNIPH. Before year 2004, data of the drug use in Sweden was mainly collected in the form of drug use assessments performed by the Swedish council for information on alcohol and other drugs (CAN) in cooperation with the SNIPH. However, the wording of the questions is not exactly the same and, consequently, the comparability can be questioned. What can be said is that Sweden, from an international perspective, is a low-prevalence country when it comes to both the experimental and regular use of illicit drugs.

The SNIPH has, however, recently been conducting a very large-scale prevalence study both in the general population and among specific groups thought to be of higher risk. The methodology and results of this multi-faceted study are presented under each heading below.

A number of other regularly conducted surveys are also helpful in estimating the prevalence of narcotics use in various populations. Most of these surveys are, however, directed to youths, with questions concerning use over the past 30 days, the past 12 months, and over their lifetime. The latter category is interpreted as temporary or experimental use, and use during last 30 days is interpreted as a more regular pattern of drug use.

Annual surveys are also conducted in class 9 (middle secondary school) and since 2004 in the second year of upper secondary school as well. Annual surveys among military conscripts ceased in 2007 due to changes in national recruitment methods.

In addition to these more regular surveys, several other local or temporally irregular surveys are conducted.

Drug Use in the general population (based on probabilistic sample)

Cannabis

Since 2004 data about cannabis use is collected by the SNIPH as part of the annual public health survey as reported above. The cross-sectional method used in data collection implies that general trends should be considered as more important than differences between two following years. The total number of individuals selected is yearly around 20 000.

Age	♂/♀	Lifetime					Last year					Last month				
		04	05	06	07	08	04	05	06	07	08	04	05	06	07	08
16-64	♂	17.6	15.5	15.6	16.4	14.6	3.0	2.8	2.6	2.8	2.6	1.2	1.2	0.9	0.8	0.7
	♀	10.0	9.7	8.9	9.0	8.4	1.5	1.0	1.4	1.3	1.4	0.3	0.4	0.3	0.3	0.3
16-34	♂	25.5	22.1	23.7	22.3	19.7	6.6	6.6	6.7	6.3	5.8	2.5	2.7	2.3	1.8	1.5
	♀	16.3	16.0	15.3	13.8	13.5	3.8	2.5	3.6	3.3	3.6	0.7	1.8	0.9	0.7	0.7
16-24	♂	23.4	18.7	16.2	15.5	11.8	9.6	10.2	6.2	5.9	4.8	4.0	4.7	1.8	2.3	1.5
	♀	14.7	13.3	15.4	13.3	12.3	4.8	3.8	6.2	4.7	5.0	1.0	1.4	1.8	0.7	1.0

Table 2.1. Lifetime, last year and last month prevalence (%) of cannabis use in age groups year 2004 - 2008 for Men (♂) and women (♀). From SNIPH public health surveys.

The figures show that the *lifetime of cannabis use prevalence* in the ages 16-64 decreased somewhat during the period among both women and men, this again after the small increase reported by men in 2007 compared to 2006. In the ages 16-34 the prevalence was higher but both sexes showed a downward trend in lifetime use during the period, the changes for men being more uncertain.

An oscillating development in the *prevalence of cannabis use last year* was reported by both men and women in the ages 16-64 during the period. In the ages 16-34 the prevalence was higher and rather stable for men with a small decrease for 2008, but oscillating for women.

A downward trend for men in the age 16-64 was reported in *last month prevalence* during the period but women in those ages reported a more stable development. The difference between men and women in cannabis use last month was reported to be smaller 2008 than 2004. This convergence in the prevalence's was due to a decrease in use by men and a stable trend by women.

A downward trend in last month prevalence was reported among men 16-34 years during the period. The prevalence among women in the ages 16-34 increased 2004 – 2006, decreased to the 2004 level year 2007 and stayed at the same level in 2008.

In summary, although there were small differences over time in cannabis consumption, some of the differences were statistically significant due to the large sample. Some differences shown between the samples over time are very large and do probably mirror unreliable measurements. (FHI, 2009)

Other drugs

A large-scale postal survey of the use of illicit drugs was conducted among 58 000 individuals between the ages of 15-64 in the Swedish population; the number of individuals in the general population estimated to be represented by the survey was 6 058 288. The survey was conducted in 2008 in cooperation with a nationally respected university and the Swedish Statistics Agency (SCB) over a four-month period, with two postal reminders sent-out to non-responders. The results from this study is also reported in ST1, but not yet published in any other way.

Although the survey contained questions about other substances (alcohol, tobacco, steroids) the main focus of the questions was the use of illicit drugs, in terms of type (category options were cannabinoids, amphetamines, cocaine, opiates, ecstasy, hallucinogens, and “other” requiring specification), quantity, frequency and latest period of use (lifetime, last 12 months, last 30 days). Questions designed to assess problematic use were also included.

The survey population was based on stratified response rates of cannabis use in previous national surveys (see above) in order to ensure minimal loss of response data, and the subsequent responses were weighted to accurately represent the composition and size of the general population, according to accepted methods. (Lundström and Särndal, 1999, Lundström and Särndal, 2001)

A follow-up study of 1000 of the non-responders from the original survey was also completed by telephone interview, to compare the response rates between the two.

The response rate for the survey was 52.1 %, with the male response rate somewhat lower (46.7 %) than the female response rate (57.8 %).

Results

It is clear that drug use is higher in males, although use varies by age category in both males and females. For both sexes the use of drugs was most common in the age group of 25-34 years where a little less than one third of the men and one fifth of the women had used drug at some point during their lives. For females, this was also the age group with the largest group of individuals stated that they had used any illicit drug in the last 30 days, 1.8%, while the males had the largest proportion of this group in the ages of 15-24 (4%).

The use of drugs was generally more common among those who lived in larger cities than those from more rural areas. For males the largest proportion stating that they used any drug in the last 30 days was found among those unemployed, for females this was true for the group who had an early retirement due to sickness.

The most common drug used was cannabis, the second one being amphetamine. Cocaine was also common, especially among those who had used in the previous 30 days. The simultaneous use of prescribed sedatives was very high, especially among women. Among those who had used drugs previous in life, but not during the last year before the survey, it was most common only to have used one type of drug, but in the other two groups (last 12 months and last 30 days) almost half stated that they had used three or more different substances. A very small proportion of the drug users (0.0-4%) stated that they had injected drugs.

Those who used any type of illicit drug had, generally, a more risky behaviour when it comes to the use of alcohol and tobacco. They were more frequently binge-drinking and a much higher proportion than in the general population were daily smokers. The group of users also rated their psychological health lower.

Drug Use in the school and youth population (based on probabilistic samples)

School population

Also in 2008, national school surveys regarding drug use were carried out among students turning 16 and those turning 18. The methods and results are presented in the EMCDDA Standard Table 02. The lifetime prevalence's for 16 year-old boys and girls were 7 and 5%, respectively and the last 30 days prevalence was 2% for boys and 1% for girls, all of which are similar to the previous years. Cannabis was by far the most common substance in the surveys among 16 years old, irrespective of sex. The lifetime prevalence (2008) of ever having used an illegal drug among the 18 year old students was 17% for boys (+- 0% from last year) and 15% for girls (+ 2% from last year) The last 30 days prevalence was 4% and 2% respectively which are the same as in previous year. Among those who had used an illegal drug, the choice of drug was cannabis but ecstasy, amphetamine and benzodiazepine are also reported. (Hvitfeldt and Nyström, 2009)

Students at the university

A postal survey of the use of illicit drugs was conducted among 4 000 students between the ages of 15-64 in the Swedish population; the number of individuals in the general population estimated to be represented by the survey was 192 005. Since over 90% of the students included were between 18 and 34 we chose just to include these ages in the analysis. The students must have been registered at a Swedish post-secondary educational institution, and have been studying during the 2008 spring semester with a minimum course load of 22.5 points (where 30 points is considered a "full" course load). Students studying by distance or in online courses were excluded from the survey.

The survey was conducted in 2009 in cooperation with a nationally respected university and the Swedish Statistics Agency (SCB) over a four-month period, with two postal reminders sent-out to non-responders. The survey methods and questionnaire was identical to the above-described survey of the general population, although the student questionnaire had some additional questions regarding student affairs.

The response rate for the survey was 54.8 %, with the male response rate lower (44.1 %) than the female response rate (62.1 %).

Results

The results from this study is so far only preliminary, thus it is not reported in the ST. What can be said in a more general way is that the use of drugs was generally more common in this group than the general population. The rate of using several different types of drugs use was also higher. The Swedish FP has the intention to report the detailed results from this study in 2010.

Drug Use among targeted groups / settings at national and local level

Drug use in the Swedish prison and probation system- a study

In accordance with Swedish regulations any use of drugs is delinquent and classified as abuse. The funding for drugs also generates other crimes. Therefore, there is a need

to assess the prevalence of drug abuse in prisons and probation. In 2002, the goal to combat drug use among clients in the prison and probation system was given by the government. The Swedish prison and probation system also decided to establish a database to describe the investigated clients. This work was continued beyond 2004 and is aimed mainly to obtain a basis to encourage addicts to attend drug detoxification and offer adequate care to drug users in prison. In 2006 the project expanded to include probation. The work includes making interviews with suspected drug users among clients. As an instrument to support the interviews the Addiction Severity Index (ASI) was used.

The proportion of drug users among inmates in prison establishments was estimated to 61% and among those supervised in probation 29% (Krantz and Elmby, 2007). The drugs that were reported to be the main problem was Amphetamines while the largest proportion of clients had used Cannabis. Håkansson (2009) has made a description of the material up to August 2006. Data from the 7493 ASI interviews from 7085 individuals were analyzed. Håkansson reports that until 2006 the database consisted of a greater proportion of clients in prison than probation, a greater proportion convicted of drug trafficking and acquisitive crime than other crimes. Women were also overrepresented in the database.

The purpose of this study was to describe the ASI investigated inmates in 2007 with respect to background variables, physical problems, drinking, drug use, smoking and consumption of health care.

Participants

Around three-quarters of both men and women were born in Sweden which can be due to the inclusion criteria. Most men and women had not completed primary school. The percentages not completing primary school was slightly higher in men. Just over one percent of those interviewed in 2007 had an academic background. The majority of interviewed men and women indicated either non-skilled or skilled manual worker as profession. It was also shown that about 1 in 3 men had been working full time in recent years while a third had been unemployed. The women reported a lower proportion of full-time employment and a higher proportion of unemployed than men did.

Result

It was shown that more women than men reported that their lifestyle was affected by physical problems. The men reported an average of 7.6 days with physical problems in the last 30 days compared to 9.0 for women. Amphetamines, cannabis and alcohol were used for the longest time in life and, among men for the greatest number of days during the last month. The women also reported frequent use of Benzodiazepines during the last month before the interviews were made.

Over half of the interviewed women, and just over 40% of the men replied that they had ever injected any drug. They were not asked what kind of preparations they had injected. Around three-quarters of both men and women responded that they smoke daily. About a quarter said they received at least one detoxification in inpatient care, while a slightly smaller proportion received outpatient detoxification. Between 15 and 20% of the interviewed men and women had received treatment for their addiction in the somatic or psychiatric care. Both genders said that they on average had 4 close

friends who they can trust; exactly how a close friend was defined was not explicit. More than one-sixth of the men had been worried every day this month, while over one quarter of the women said they were worried daily.

Visitors of music festivals

Purpose

The drug-survey conducted at music-festivals is a part of the Swedish “Prevalens-projektet”³ (“prevalence-project”), concerning drug-use in Sweden. The purpose was to reach a group of people among which a lower rate of participation, and maybe a higher rate of drug use, could be expected if an ordinary postal-survey was conducted.

Sample

At two Swedish music-festivals a total number of 1200 (600 at each festival) questionnaires were collected. During a couple of hours, everybody who visited the festival-toilets was asked to participate in the survey. Those who didn't want to participate were noted as missing. As a reward for completing the questionnaire, the participants were given a bottle of water and a fruit.

Results

1070 out of 1200 questionnaires were answered by 396 men and 672 women. Of these, 62 % of the men and 50 % of the women (in total 55 %) said they have used drugs once or more. The experience of drug-use was most common in the age-group 25-34 years, where 77 % of the men and 69 % of the women responded that they had used drugs once or more during their life

The participants could note their experience of drug-use according to how long ago they used, more than 12 months ago, within the last 12 months or within the last 30 days. Most common among men were use in the last 30 days, while among women where use for more than 12 months ago was most common.

Among those who had used drugs once or more, it was most common to have experience of only one type of drug (45 %). Among those who had used drugs in the last 30 days, the experience of different types of drugs was more common. For example, more than twice as many of the regular users (36 %) had experience from four or more different drugs, than the experimental users (16 %). Regardless the participants' experience of drugs, cannabis was the most common drug to have used.

³ Other studies included that are also reported in this NR are the GPS, University students, prison inmates and the PDU estimation.

Chapter 3: Prevention

Introduction

Organisational framework of prevention

Apart from the governmental efforts (see chapter 1) there was, in 2008, a so called “county coordinator” in each of the 21 counties in Sweden, with the role to support the preventive work with alcohol, narcotics, tobacco and doping in the region. As from 2008 the coordinating responsibility for the county coordination lies on the Swedish National Institute of Public Health.

In Sweden, the implementation of prevention is generally the responsibility of the municipality where the preventive work often is coordinated through so called “drug coordinators”. According to the County Report 2008 (Statens folkhälsoinstitut, 2009b) almost 80 percent of the 290 municipalities have, by governmental support, been able to appoint local drug co-ordinators for the alcohol and drug preventive work.

On local level, the preventive work is normally summarized in a municipal policy for alcohol and drugs. In 2008 almost 90 percent of the municipalities had such a political programme for alcohol and drugs.

In 98 percent of the cases these programmes contained preventive measures, 60 percent contained access restriction, and care and treatment initiatives was included in 55 percent of the cases. In a mapping of the situation the municipalities was also asked about to what extent they use evaluated evidence-based methods in their work against drugs. 38 percent stated that they *often* use methods that are evaluated and just over 15 percents stated that they *always* use evaluated methods. A relatively big proportion (37 percents) stated that they do not know about the methods that are used have been evaluated or not (Fender, 2006).

Monitoring tools

The SNIPH annually distribute questionnaires to the local and regional drug co-ordinators to mirror the supervision of the alcohol- and tobacco legislation but they simultaneously give some information on illegal drugs and the preventive work at the local level. The support of the municipality management is a key component in the preventive work. Indicators of the priority of drug prevention are e.g. the adaptation of a drug policy, the appointment of a drug co-ordinator and the allocation of funds for preventive work. The information collected through the above mentioned questionnaires is reported yearly in the so called County Report.

Universal prevention

As reported previously drug prevention activities have increased continuously during a series of years, and continued to increase during 2008. An effective structure has been built for the preventive work within the national action plan on drugs (2006 – 2010).⁴ National efforts have been committed to research, development and dissemination of preventive methods, regional coordination and local activities. As of 2008, SNIPH is responsible for the national coordination of prevention efforts in the areas of alcohol, narcotics, doping and tobacco. Supporting and developing regional prevention efforts are included in this assignment.

As reported above, the structure of the preventive work in the municipality level has been strengthened the last few years. Results from the SNIPH annual questionnaires to the 290 local authorities displayed that also the cooperation between the local authorities and other operators has improved. The share of the local authorities that cooperate with e.g. the health care, the police, restaurant owners and NGO's has increased the last few years. Also the level of activity has increased, i.e. more preventive activities have been carried out. In particular the percentage of the municipalities that reported of programs on alcohol and drugs for parents has increased, from approx. 50 % in 2006 to more than 70 % in 2008 (Statens folkhälsoinstitut, 2009b). The preventive work performed by the local authorities is still more dominated on health education than activities to limit the supply, which isn't consistent to current knowledge (Statens folkhälsoinstitut, 2009a). Since all narcotic products are illegal in Sweden the police's activities to reduce the supply on local level is crucial. During 2008 the Police continued its commitment to fight the drug related crime, which resulted in an increased number of reported drug offences (Polisen, 2008).

School

The school has for a long time acted as the premier arena to prevent and reduce drug use among students during the school years as well as later in life. Swedish schools have a long tradition of offering education about alcohol, drugs and tobacco. Research has shown that school based drug education is not likely to have any lasting effects, as a result an increasing number of school's now focus on preventive programs instead. As reported previously the School Project was completed at the end of 2007. In mid 2009 the SNIPH was instructed by the Government to convey information about how Swedish compulsory schools' efforts in alcohol and drug prevention can be reinforced.

According to the County Report the development towards more drug preventive school based programmes continued during 2008. Still more than half the local authorities report activities to promote the psychosocial climate in school. The spread of the method SET (Social and Emotional Training) continued to increase among the Swedish municipalities and was reported by almost half the municipalities. The method aims to develop children's social and emotional capacity. This promotes psychological health and prevents the use of alcohol and drugs. A Swedish study of the method has been conducted with a control group and shows positive effects on the promotion of aspects of self-image, including well-being and the hindering of

⁴ To read the National Action plan on Drugs: <http://regeringen.se/content/1/c6/05/33/44/c3f9abcd.pdf>

aggressiveness, bullying, attention-seeking and alcohol use. The method Komet för lärare (Skolkomet) is another example of a method that aims to develop children's social and emotional capacity. According to the SNIPH County Report the method had been carried out in about 20 percent of the municipalities in 2008 which means an increase from 2007. A Swedish evaluation of the method shows that the program in relation to a control group reduces behavioural problems among the pupils.

Motivating Interviewing (MI) is one of the methods that had the largest spread during the School Project. The method MI aims at bringing individuals to independently take a position and change certain behaviour. The method was spread through the SNIPH to the Pupil Health Care's staff (Elevhälsan) among others. According to the SNIPH County Report, training in MI to the Pupil Health Care's staff had been carried out in almost half of the municipalities in 2008 which means an increase from previous year (Statens folkhälsoinstitut, 2009a, Statens folkhälsoinstitut, 2009b).

Family

During the last few years there has been an increase in the number of municipalities that report on activities for parents in a drug preventive purpose. As reported previously COPE is one of several preventive methods that focus on parents and in 2008 44 % of the municipalities reported having worked with the method according to the SNIPH County Report. The method has been spread nationally by the School project. The COPE method aims at giving parents with children of ages 3-12 years instruments to understand and handle their children's behaviour, strengthen the parents in their parenthood, improve the interplay in families and create promoting networks. The program is built upon empowerment and intends to inspire parents to find solutions by themselves to everyday situations. A Swedish study of the method has been conducted with a control group and shows significant effects for the children's problematic behaviour as well as the parents' ability to handle the child, their experienced level of stress and their feeling of control in the parenthood (Statens folkhälsoinstitut, 2009a). Parental programs that are carried out in less extent, i.e. reported by less than 20 % of the local authorities are: FöräldraStegen, Aktivt föräldraskap, Nya STEG, De otroliga åren, Steg-för-Steg och Föräldrakraft (Statens folkhälsoinstitut, 2009b).

Community

An important part of the work to prevent illegal drug use is to create and supply positive recreational settings. In Sweden these activities usually take place in the voluntary sector. According to the SNIPH County Report a majority of the municipalities for example cooperate with sports organisations, temperance movement and various churches in the drug preventive work. Many municipalities also support organisations with activities for youth financially and according to the County Report 40 % of the municipalities claim an alcohol and drugs policy action plan from the organisations to allow the subsidy (Statens folkhälsoinstitut, 2009b).

Mentor Sverige (Mentor Sweden) is a method that aims at strengthening young people to resist violence and drugs. The mentor program turns to youth between the ages 13 to 17 who want more adult relations. The young people meet with its mentor a couple of times per month. Between 2007 and 2010 an extensive controlled evaluation of the effects of the method is carried through by STAD (Stockholm Prevents Alcohol and

Drug Problems). Factors that are to be studied are youth consumption of alcohol and drugs, grades and peer relation (Statens folkhälsoinstitut, 2009a).

As reported previously the Swedish National Board for Youth Affairs (SNBYA) has been commissioned by the Government to between 2006 and 2008 promote the development of preventive activities, among others drug free meeting places, with the purpose to prevent youths from getting into criminality, addiction and social exclusion. The final report of the project was presented to the Government by the end of 2008.⁵ The final report shows that the commission has involved among other things the distribution of grants consisting of 113 million SEK to 229 different projects, the development of a review⁶ of public economic analysis of preventive youth activities, national training of personnel working with youth and the organizing of several seminars and conferences about the commission. The commission as a whole has been evaluated⁷ externally and to sum up it points to a successful project that has performed its objectives, but to reduce social exclusion more extensive activities are needed (Ungdomsstyrelsen, 2008).

Most of the Swedish municipalities run activities to create a drug free upbringing for children and youths and in 2008 more than 80 % reported organizing drug free activities according to the County Report (Statens folkhälsoinstitut, 2009b).

The Swedish Police Authority is also an important participant in the making of a drug free environment and a common partner of the local authorities together with the Social services. The Police works for example by a method called "Linköpingsmodellen" that focuses on controlling drug use among youths. At the slightest suspicion of a youth's drug use the parents are contacted and the district-level narcotics police make a visit (usually together with a representative from the Social services) at the youth's home (Polisen, 2008) (Statens folkhälsoinstitut, 2009a). About 90 % of the Swedish municipalities report to cooperate with the Police in matters of illegal drugs.

Selective prevention in at-risk groups and settings

At-risk groups

Several projects are running in different parts of the country with the aim of early intervention when individuals are suspected of drug abuse. The previously reported MUMIN project is proceeding and has generated other cities to conduct similar activities. The Police, as mentioned above, e.g. works with the method "Linköpingsmodellen" based on the idea that the Police immediately contact the parents when their children have had any kind of contact with illegal drugs. Another method directed to at-risk groups is the so called "Skelleftemodellen". The method is founded on cooperation between the Police, the Social services and the health care for

⁵ To read the final report:

http://www2.ungdomsstyrelsen.se/butiksadmin/showDoc/4028e5951d76f57e011d76f59b2d0002/insats_er_for unga.pdf

⁶ The results are summed up in this report:

http://www.ungdomsstyrelsen.se/order_item/0,2568,,00.html?itemId=4028e595132a25c501132a311d7f0007

⁷ To read more about the evaluation: Kassman, Anders (2008). Mot en kunskapsbaserad ungdomspolitik? – Processutvärdering av Ungdomsstyrelsens satsning på förebyggande och främjande ungdomsverksamhet.

addicts in connection to the apprehension of intoxicated drivers. The basic idea is that drivers under influence of drugs (DUID) are as most susceptible to receive support immediately after the apprehension. Hence the DUID - directly after the interrogation and samples taken – will be referred to an initial contact with the Social services or the health care for addicts – preferably within 24 hours. The Swedish National Road and Transport Research Institute conduct a national evaluation of the method that will be presented in 2009 (Vägverket, 2009). Approximately 85 % of the municipalities have reported using the method (Statens folkhälsoinstitut, 2009b).

At-risk families

Interventions for children who are living in families where one or both parents is addicted to either alcohol or narcotics has increased the last years and in 2008 about 65 % of the municipalities reports offering some kind of activity for these children (Statens folkhälsoinstitut, 2009b).

In 2009 the SNIPH will allocate 75 million SEK to children at risk.

Recreational settings

Restaurants, bars and clubs are considered important settings for the fight against drugs. The previously reported project “Restaurants against drugs” was initiated and developed in Stockholm a few years ago and a study published in the Journal of Substance Use and Misuse in 2007 shows that it has become more difficult for drug-impaired patrons to enter those nightclubs/restaurants that are involved in the project in Stockholm city (Gripenberg et al., 2007). The evaluation of the project in Stockholm is ongoing and in 2008 the results from a recent study from the restaurants (to be published) was summed up. The sum up present a situation in 2008 compared to 2001 when the project started where illegal drugs is less common in the restaurants in Stockholm, where the restaurant’s staff have taken a more restrictive attitude against drugs and where the staff significant have decreased their own consumption of illegal drugs (Gripenberg, 2008).

In 2007 the NDPCo initiated a national venture in spreading this method and supported 11 municipalities in Sweden in the work to prevent illegal drugs in recreational settings. The focus lay on mapping the illegal drug situation in the restaurants, policy work and training of the restaurant’s staff. The activities have in 2008 expanded to comprise further municipalities. The national network now consists of representatives from restaurants and authorities in 21 municipalities. The network has a web page containing information about current activities and local studies and evaluations: www.krogarmotknark.se.

Indicated prevention

Since a few years the numbers of Swedish municipalities that report on offering programs for children (preschool) at risk have increased to approximately 30 %. Some of the preventive methods that generally focus on all parents are also possible to implement on parents to children at risk, for example, the above mentioned, method COPE. Another example of a preventive method is the “Komet för föräldrar” for parents with children between 3 to 18 years. The method aims specifically at those who have children showing externalizing behaviour problems and who has additional difficulties establishing positive peer relations. The method has been spread nationally by the School project and more than 30 % of the municipalities report having offered the method to parents in 2008, an increase from last year (Statens

folkhälsöinstitut, 2009a). As reported previously the method has been evaluated in several Swedish studies showing effects on reduced behavioural problems.

National and Local Media Campaigns

In 2008 the SNIPH was given the assignment by the Government to convey information to the public about drug preventive issues. In 2008 18 million SEK was granted for information activities to be carried out both nationally and regionally. In 2009 the same amount was distributed. The priority lays on the target groups which are pregnant women and families with small children, parents of teenagers, young adults (18-25 years) and women between 45 and 55 years old. Several different activities are carried out but activities specific for illegal drugs are more limited. Among other things an educational material about drugs for compulsory school are being developed, support is given to national conferences with illegal drugs in focus, to the web page “Drogportalen” run by the Swedish Council for Information on Alcohol and Other Drugs and to the method Local Hero which aims at engaging youth to take an active part in drug preventive work.

Chapter 4: Problem Drug Use

Introduction

There is no clear-cut definition of the concept problematic or harmful drug use in Sweden. Individuals with a drug use that could be categorized as such are generally also very difficult to reach via surveys, which makes it difficult to estimate the numbers and the development over time. In order to achieve a more correct picture of the problem, three nationwide mappings have been implemented; 1979, 1992 and 1998. In these surveys data has been gathered with the aid of persons that in their daily work meets individuals with drug use related problems, persons within the social service, the healthcare, the police, the correctional system, the customs and different treatment centres. These professionals reported, within a given time period, all their clients or patients that either injected drugs at some point during the last 12 months or used drugs daily or almost daily during the last 4 weeks. Individuals meeting these criteria were classified as problematic drug users (Olsson et al., 2001).

In 1979 it was estimated that the number of problematic drug users in the country was approximately 15 000, in 1992 approximately 19 000 and 1998 around 26 000 persons (including an estimate of the number not known by the authorities). Using these calculations the number of problem drug users increased by 25-30% between 1979 and 1992 and by 35-40% between 1992 and 1998 (CAN, 2006).

Since 1998 there has been no such nationwide mapping of the problem. The latest estimate from 2004 is 25 600 PDUs and imply a decrease. It should be noted that the used method (Chao's estimator) imply a "conservative" estimate, built on treatment register that could be affected by structural changes in the treatment sector.

A number of studies on the prevalence of problematic drug use in different groups of the population are presently running (this is the so called *Prevalence Project*). These studies are coordinated by the SNIPH and the results are presented in this chapter and chapter 2.

Prevalence and incidence estimates of PDU

Indirect estimates of problem drug users

Included in the *Prevalence Project* described above and in previous chapters, is also an indirect estimation of the number of problematic drug users in Sweden. The main purpose with this project is, apart from delivering a steady, reliable estimate, to develop a method to measure this effectively, a method that can be used in the years to come.

Method

The method used in this study is a one-sample method where a frequency distribution of events (the event of being included in the sample) that is assumed to follow the Poisson distribution. The model also estimate the number of assumed non-events, in this case the hidden population of drug users that is not in contact with the society and thus not included in the sample.

The formula used for the estimation of the size of the population is the so called Chao's Estimator. What can be said is that this estimator assumes that those included in the sample once or twice during the time period studied are more alike those not included at all (the hidden population) than those included more than twice. Other assumptions in this model is a) a closed population b) a homogenous population and c) the probability of being included in the sample is constant over time.

A common way to meet the first assumption is to study a defined time period, and the second assumption is met because of the definitions of the population being estimated. The most difficult one is the third, that the probability to be included in the sample is constant over time. This is not the case if an individual, for example, is undergoing treatment during a point under the year studied, and one of the samples included is based on prison records. The probability of being included then is 0 when being in treatment and non-zero when being out of treatment.

This problem is dealt with partly in this study by combining two sources of data, one being the inpatient registry and the other the data from the correctional system. The overlap between the two data sources was very limited (only 494 individuals during the 2007) something that strengthens the method used. After removing these double-counted individuals a total of 12 158 were remaining in the study.

Result

The estimations were calculated first on a regional basis and then added together. This was also a strategy used to make the estimation more correct. In total, the number of problematic drug users were estimated to be 29 500. This number is *not* comparable to the ones made previously in Sweden, this due to differences in both the data sources and the methods used. (Svensson and Arvidsson, 2009)

Data on PDUs from non-treatment sources

In the Stockholm Baseline study (reported about in detail under the section "Drug related infectious diseases") the goal was to find and interview approx 10% of the active injecting drug users in the county. The report from the project states that the number of IDUs in the county was in 1998 estimated to be around 7 800 individuals, with a reference to the CAN study in 1998 and personal communication.

After the baseline study was conducted, the responsible writes in the study report: "We believe that the 10 year old estimate that there is 7800 active IDUs in Stockholm need to be re-considered. Our view is that they probably are much fewer."

This is, however, a statement that needs to be supported with further estimations since the above mentioned study not was set up with the objective to estimate the number of IDUs.

Information from the CRD-system

The perceived changes in the number of users is also monitored in the CRD system described in the *Introduction* of Chapter 10.

Drug	Not occurring	Increase	No change	Decrease	Don't know
Cannabis	0	41	76	1	6
Amphetamine i v	4	8	83	28	21
Amphetamine not i v	0	11	84	2	27
Heroin i v	5	10	71	8	30
Heroin smoking	3	11	62	7	41
Cocaine	2	34	58	2	28
Ecstasy	3	8	53	17	43

Table 4.1. Change in the number of drug users, local (national) reported view. (CRD). April 2008 – September 2008

What could be noted is that cannabis is the drug which has been perceived as being increasing the most when it comes to the number of users, and this was also the case the report before this one. This is an opposite trend to the one in Europe where the use of cannabis is decreasing. (Nyström, 2009)

The response to the questions in the questionnaire should mirror the personal knowledge acquired by the respondent in the daily work at the local/regional level. Since the selection of municipalities is not randomised the investigation is not claiming to be representative for the country. The strategic selection brings however good possibilities to get some information on drugs and trends relatively quickly, which is the primary purpose of the inquiry.

Intensive, frequent, long-term and other problematic forms of use

In 2008 the CAN, Swedish council for information on alcohol and other drugs, conducted a review of what is known about the use of cocaine in Sweden. The review consisted of information from many different sources such as population surveys, the customs, the Police, the health-care system and the CRD information gathering system run by the CAN (also see chapter 10). The main conclusions from this review are listed below.

- Cocaine is probably more common now than it was in the beginning of the 90's, but it is still relatively uncommon compared to cannabis and amphetamines.
- The price of cocaine (as for many other types of drugs) was decreasing during the 90's but has since then stayed quite stable.
- The information that is available today is not sufficient to estimate the number of cocaine users in Sweden today.
- The use of cocaine is more common among males than females.
- Among conscripts, the lifetime prevalence is higher among those born abroad than among those born in Sweden
- Cocaine seems to be most prevalent in restaurants and bars and among younger people. This does not necessarily mean that it is not prevalent elsewhere but the information available about this is limited.
- The use of cocaine is most prevalent in the large cities.
- Because of the "upper-class feeling" surrounding the drug and the increasing use there is a great need to keep an eye on the situation. (CAN and Hibell, 2008)

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

Introduction

The treatment system

Drug treatment can be arranged by the social services in the local community (within ordinary service or at specialized units such as outpatient clinics), hospitals (detoxification or treatment for certain complications to drug abuse such as infectious diseases, i.e. hepatitis, HIV/aids, psychiatric symptoms, etc) or therapeutic communities. In severe cases drug users might be committed to an institution for compulsory treatment. Such treatment is arranged by the National Board of Institutional Care and it is regulated in the Care of Alcoholics, Drug Abusers and Abusers of Volatile Solvents Act, LVM. Still another treatment milieu is the prison and probation system. As roughly half of all prisoners have drug problems treatment for drug abuse is now offered during prison terms. Persons in detention often have acute abstinence symptoms, so all custodies has access to a physician to help with a detoxification procedure. After-care after a period in hospital, therapeutic community or prison is arranged by the social services.

Guidelines for treatment

The NBHW has published evidence-based national guidelines for the treatment of persons with substance abuse and dependence problems (also see *Substitution treatment* below) (Socialstyrelsen, 2007b). The section on narcotic drugs deals with topics such as: abstinence treatment, specific treatments for misuse of cannabis, hallucinogens, stimulants, opiates, and also social support issues and ethical aspects of treatment. Other sections present evidence-based methods for

- prevention, detection and early/brief intervention,
- assessment and documentation
- pregnancy and substance misuse
- psychiatric co-morbidity.

Several regional conferences have been held to inform about the guidelines, and a special guide as a tool for the local implementation has been published. The guide stresses the need for close cooperation between health-care and social services in drug treatment.

Also for the drug users a guide to treatment has been published. It is a booklet titled "*Your Rights and Options in Treatment and Care of Drug Addicts*" aimed at informing substance users about how to get access to help. By support from the NDPCo the booklet was produced by RFHL, a client-oriented NGO, and the Swedish Association of Local Authorities and Regions and published in 2008. It addresses drug users directly and is published in 5 different languages, among them English (RFHL and Svenonius, 2008).

Responsibilities

From the above mentioned booklet the following information on the society's responsibilities when it comes to treatment for drug abuse can be retrieved:

“Municipalities are responsible through the social services for overall long-term rehabilitation. This is set out in the Social Services Act. The Social Services Act is an outline law. This means that it must be interpreted and it provides scope for individual judgments. Therefore it is not an absolute law governing rights – you can appeal against social services decisions in court.

Medical care is responsible for the treatment of withdrawal symptoms (detox) and psychiatry. It also provides maintenance therapy with methadone or Subutex. Medical care operates according to the Health and Medical Services Act, HSL, and the regulations of the National Board of Health and Welfare (Socialstyrelsen). If you do not receive the care you want in time, for example, then you cannot appeal in court. But medical care still has far-reaching obligations to admit you. And once you are a patient, you have many rights. They must not refuse you admission in an emergency. Both laws emphasise that it is important that care is given on a voluntary basis - as far as possible.

Treatment of offenders is also responsible for the treatment and care of drug addicts, for example in drug free sections. Even if you are serving a sentence, you are covered by the principles and rights described in this booklet.”(RFHL and Svenonius, 2008)

Data collection for the Treatment Demand Indicator

Data collection for the Treatment Demand Indicator is done by pooling data from a couple of separate information systems which all function on a voluntary basis. There is no legal obligation for treatment units to deliver TDI-data. There is an explicit goal for the National Board of Health and Welfare, which is responsible for collecting TDI-data, to make TDI the core element of all of these various systems.

One data-source is KIM (“Clients in Substance Misuse Treatment”), which is directly tailored from the TDI-guidelines, and which only collects epidemiological information from as many treatment units as possible that do not already belong to another information system. All known units have been asked to participate. Today KIM covers about 25 % of existing units of inpatient and outpatient centre type from all regions of the country.

Another source is DOK, which is a system for quality development: assessment and follow-up of clients and the services provided. This system is integrated with KIM, and therefore contains all of the TDI-variables. About 130 units of inpatient and outpatient centre type, mostly in the southern part of the country, have joined this system, but not all of them deliver TDI-data.

A third source is a newly established “quality register”, called SBR (“Swedish Dependency Register”), specifically for substance-dependence treatment units – both inpatient and outpatient – in the health care sector. This system is also integrated with KIM/TDI. A few inpatient units have begun to register patient data in this system during 2009.

And finally, some data are obtained from units – mostly prison units – doing ASI-interviews with their clients. Today ASI is not fully integrated with KIM/TDI, but work is going on to achieve this.

Strategy/policy

In the autumn of 2008, a comprehensive government investigation of substance misuse treatment was started, and is to publish its report by November 15th 2010. The mission is to make an overview of the whole of the Swedish treatment system – all services that are provided by the municipalities, the counties or the state, and includes both its content, availability, responsibilities, and organization – and to make suggestions for improvements (and possibly also re-organization of the treatment system). The goal is to establish a knowledge-based system for the treatment of persons with substance misuse and dependence, based on the needs of these individuals.

Treatment systems

Inpatient treatments

In 2008, the National Board of Institutional Care, which runs all compulsory residential treatment, has launched a new “treatment journey-system”. The idea is to offer a long-term and durable treatment for adolescents with heavy substance misuse. The system comprises 25 slots from intake to after-care.

Treatment starts at a locked intake- and motivational ward at either of two residential centres. Afterwards there is the possibility of treatment in a more open form at one of the centres, followed by after-care at a halfway-house in a major city. There are also three apartments that can be used in the after-care phase. If there is a relapse in the treatment process, there is the possibility to go back to a previous, more closed, treatment phase.

Treatment is focused on interrupting a destructive substance misuse, but also on work to counter criminal attitudes and to strengthen pro-social behaviour. The adolescent are helped to social re-integration by education and vocational training. Both centres use the same treatment methods in order to facilitate transition between the various phases in the treatment journey. 12-step treatment forms the basis, but relapse prevention, motivational interviewing and family therapy are also used.

There are hopes that this project shall serve as a national resource-centre within the National Board of Institutional Care, and transfer knowledge of substance misuse treatment to other centres for adolescents.

Withdrawal treatment

The comprehensive government investigation (see above: Strategy/Policy) is conducting a special survey in order to find out whether the resources for withdrawal treatment are adequate in all parts of the country.

Substitution treatment

In 2008, the National Board of Health and Welfare (NBHW) is in the process of revising its regulation document concerning medically assisted maintenance treatment for opiate users after it has been in use for 5 years. The aim of the revision is to make the regulation more in accordance with ICD10/DSM4, and also to simplify for opiate-dependent persons to get access to maintenance treatment. The new regulation will come into use at the earliest from January 1st 2010.

In 2005 a general “treatment guarantee“ was put into practice for all kinds of health care provided by the counties, for instance treatment with Antabuse, methadone or buprenorphine. For substance misusers the guarantee meant that they should be able to get into contact with an health care facility by telephone on the same day, see a doctor within seven days, get a specialist assessment within 90 days, and then come into treatment within another 90 days.

A survey in 2007 showed that only 11 of 21 counties were able to hold the guarantee concerning medically assisted drug-treatment. In some cases patients had to wait for three years to get treatment, in some other cases only buprenorphine or methadone was offered, and in a couple of other cases there was no substitution treatment at all. There were also other problems concerning waiting times, planning and resource allocation, and lack of treatment-guidelines.

However, in 2007 the National Board of Health and Welfare issued guidelines for substance misuse treatment (see above), and with these as a basis, the government has made an agreement with the Swedish Association of Local Authorities and Regions (SALAR) on building a long-term support for the further development of treatment for substance misuse and dependence. Besides spreading knowledge, the intention is to find structures for co-operation between all parties involved: social services agencies, treatment facilities, psychiatry, and primary health care units. Many counties were interested, and in 2008 SALAR made agreements with 13 counties. The agreement means that SALAR assists in surveying the present situation, to see what might be missing in relation to the guidelines. In each county, SALAR educates a process-leader and local “teachers“ in certain treatment methods and working methods. They also give economic support to some of the local services.

This project is scheduled to last for three years, and the goal is that all counties shall have started this work during 2010.

In a parallel process, grants have been allotted to the municipalities in order for them to be able to develop a local treatment guarantee in the social services sector.

Other medically assisted treatment

According to our TDI-data, amphetamine is the single most frequently used drug among clients seeking treatment for drug misuse. So far, the only treatment methods used have been of a psycho-social character. However, in a randomized, placebo-controlled, clinical study conducted at the Karolinska Institute in Stockholm, a trial has been made using the opioid antagonist naltrexone for the treatment of amphetamine dependence.

The aim of the study was to investigate the efficacy of naltrexone in comparison with placebo in reducing relapse to amphetamine use in amphetamine-dependent patients. Eighty patients who met DSM-IV criteria for amphetamine dependence were randomized to 12 weeks of double-blind naltrexone (50 mg) or placebo treatment. All eighty patients also were given relapse-prevention treatment by a trained psychologist for one hour per week during the 12 weeks of the trial.

The main outcome measure was abstinence from amphetamine use, as indicated by the total number of negative amphetamine urine samples during 12 weeks of treatment. All missing urine samples were defined for the analysis as positive for amphetamine

Overall, 55 patients (68.8%) completed the trial. The intention-to-treat analysis showed that the naltrexone group had a significantly higher number of amphetamine-negative urine samples compared with the placebo group. Survival analyses showed that the treatment groups differed in rate of continuous abstinence, in both the intention-to-treat and completer samples, in favour of naltrexone treatment.

There was a significant reduction in craving levels and self-reported consumption of amphetamine in the naltrexone group compared with the placebo group. It could also be seen that treatment with naltrexone was well tolerated in this sample.

The conclusion drawn by the researchers was that this trial demonstrated the efficacy of naltrexone in reducing amphetamine use in amphetamine-dependent individuals.

In another, on-going, placebo-controlled study, the central stimulant methylphenidate (Concerta) is used for clients in two prisons who both are diagnosed as having ADHD and a misuse of amphetamine (for comparison: see the study described in Chapter 9). This group of persons is quite common in the prison population (at least 20 % according to some estimates).

Medication starts two weeks before release from prison and continues for six months afterwards. Patients' obligatory urine samples are tested twice a week. Besides medication, patients also are given individual counselling, which focuses on relapse-prevention and ADHD.

The underlying hypothesis is that persons with ADHD often self-medicate with amphetamine (in unnecessarily large doses) in order to cope with their problems and that proper medication with Concerta will prevent the use of amphetamine.

For information about another ongoing study concerning ADHD among prisoners, please see Chapter 10, *Responses to drug-related health issues in prisons*.

Characteristics of treated clients and trends in number of clients in treatment

The overall picture

Data on problematic or heavy drug use is available from the TDI (ST 03) and ST 12. This year, data is available from a higher number of reporting treatment centres (ST 03). The reporting system covered 32% of all inpatient and 25% of all outpatient treatment centres this year. A total of 1256 patients of 4298 were in first treatment. The main drugs of choice by new clients are cannabis and amphetamine, closely followed by the summary category opiates. Most IDUs in the population of new clients use amphetamine. For all clients undergoing treatment, the use of amphetamine is most prevalent, followed by heroin. The prevalence of amphetamine IDUs are higher than the prevalence of heroin IDUs.

By substance used

The distribution of drugs remains the same for the clients that were reported from treatment units in 2007. Amphetamine is still the most commonly used drug (31%) among the reported drug clients in treatment outside prisons, followed by heroin (20.3%), cannabis (19.9%) and benzodiazepines (11%). Cocaine misuse is rare (1.6%) among treated clients, and crack cocaine is non-existing.

By centre types

The pattern of distribution of primary drugs differs markedly between the various treatment centre types. Inpatient treatment centres reported 2497 patients and outpatient units reported 1801 cases in 2008. The most common primary drug in inpatient treatment centres is amphetamine (32.5%) and in outpatient treatment centres cannabis (31.7%)

Chapter 6: Health correlates and consequences

Introduction

There are a number of so called health correlates and consequences of drug use. This chapter, and thus also this introduction, deals with three of them; drug related infectious diseases (including risk behaviours), other drug-related health correlates and consequences such as non-fatal overdoses and drug-related emergencies, psychiatric and somatic co-morbidity, pregnancies etc.

Drug Related Infectious Diseases

Reporting routines/system

The surveillance of communicable diseases in Sweden is carried out by the Swedish Institute for Infectious Disease Control (SMI), in close collaboration with the County Medical Officers of Communicable Disease Control. The basis for this surveillance is the registration of 54 notifiable diseases (55 pathogens) according to the Communicable Disease Act. These pathogens are notifiable in parallel to the SMI and the County Medical Officers, both by the clinicians and the laboratories.

The surveillance data are collected and analyzed, with the help of a computerized reporting system, SMI-Net. After further data processing and analysis, the surveillance information is fed back via a webpage, the Yearly Report of Department of Epidemiology, and the weekly bulletin EPI-aktuellt (in Swedish). Longer reports are published in the bimonthly periodical Smittskydd (also in Swedish). Despite advanced computer system, mere collection of data would have been of limited use. Numerical data must always be related to circumstances that affect these data, such as introduction of new laboratory methods, shifting indications for sampling, ongoing research projects or screening programs, etc. This analysis requires firm knowledge of the diseases under surveillance. A large number of experts, within and outside the SMI, are engaged in an ongoing discussion on the circumstances that lie beyond the figures. For this reason, the Yearly Report of Department of Epidemiology is a key document, where the statistics from the past year are accounted for and discussed. Unfortunately, due to legal reasons, SMI-Net can't collect behavioural surveillance data, which limits its capacity to monitor trends in risk behaviours over time.

According to the Communicable Disease Act (SmL 1988:1472), physicians are obliged to notify cases (diagnoses) of certain communicable diseases that are grouped as follows:

- Group 1.1 Diseases dangerous to society. Diseases for which legal action concerning infected persons is regulated. Individual reporting by patient name by physicians and laboratories. Cases notified to the County Medical Officers and to the SMI. This group contains, for example, HBV, HCV and Tuberculosis.

- Group 1.2 Diseases dangerous to society. Diseases for which legal action concerning infected persons is regulated. Individual reporting by patient name by physicians and laboratories. Cases notified to the County Medical Officers, to the SMI, and to the local Health Inspectors. In this group we find, for example, Hepatitis A and Cholera.

- Group 1.3 Sexually transmitted infections. Diseases for which legal action concerning infected persons is regulated. Individual, anonymous reporting by physicians and numerical reporting by laboratories to the County Medical Officers and to the SMI. In this group HIV is included.

- Group A.1 Other notifiable diseases

Diseases with no particular action required. Individual reporting by patient name by physicians and laboratories. Cases notified to the County Medical Officers and to the SMI. In this group we find, for example, MRSA and Malaria.

- Group A.2 Other notifiable diseases. Diseases with no particular action required.

Individual reporting by patient name by physicians and laboratories. Cases notified to the County Medical Officers, to the SMI, and to the local Health Inspectors. Included here is, for example, EHEC.

The HIV/Aids and STI unit at the National Board of Health and Welfare is, among other things, working with the overall prevention work for HIV/Aids and STI on national level. Apart from the overall preventive work, the unit also works vertically and in-depth with the most common most at risk populations (MARPs).

In relation to the most at risk group, IDU, the activities of 2009 has focused on developing a comprehensive national 2nd generation surveillance systems in order to further enhance the capacity to monitor both biological and behavioural surveillance for the IDU group. This as a compliment to the core biological surveillance carried out by the SMI (see above). The system, a sentinel surveillance system, is developed in collaboration with the Swedish Prison and Probation service, the county councils and the Karolinska University. In August 2009, the system covered 2 out of 6 potential regions in Sweden. The intention is to roll-out a 3rd region by the end of the year.

The sentinel surveillance system, in brief, comprises of nurses who systematically tests, vaccinates counsels IDUs taken into custody for HIV/Aids and hepatitis, at the same time conducts a behavioural oriented interview targeting the knowledge, attitude and practise areas. Since needle exchange only exists in one county in Sweden and 80% of all IDUs are estimated to be taken into custody over a 3 year period, the custody setting has been chosen for data collection. Furthermore an evaluation has concluded that the IDUs themselves appreciate counselling, testing and vaccination while in custody.

Overview of the situation

HIV

HIV-infection is included in group 1.3, Sexually transmitted infections, as described above. None of the infections in this group, including HIV, is reported by full identity to the authorities in Sweden. This means that Sweden has a very high level of protection for the individual identity, which also limits the possibilities to interpret the statistics and to follow individuals over time leaving that it, from time to time, can be necessary to make minor adjustments to previously reported data.

Compared to many other European countries Sweden has a relatively small proportion of IDUs infected with HIV. During the last 5-10 years the proportion of IDUs among the newly infected in Sweden has been between 15 and 25%. Local studies have shown a prevalence of HIV among IDUs of between 0 and 8.4% (EMCDDA, 2009).

HBV and HCV

Both hepatitis B and C are classified under group 1.1, diseases dangerous to society. The “statistical” problem with anonymous reporting for the HIV statistics doesn’t exist for the hepatitis B and C groups. The total number of HCV-cases increased slightly for 2008, thus returning to the levels of 2001-2004.

In Sweden the prevalence of hepatitis C among injecting drug users is very high. In various studies conducted during the last 15 years, the prevalence has been reported to be between 60 and 92% (EMCDDA, 2009). The number of new infections via injection drug use in 2008 was reported to be 1071, a slight increase as compared to 2007 with 1014 new cases, yet still being one of the lowest proportions in the last 15 years (SMI, 2009b). Noteworthy is that in 2008, 1347 new cases were classified as ‘Other’ or ‘Unknown’ when it came to ‘route of transmission’, i.e. 54% of all cases reported.

Hepatitis B is a somewhat smaller problem in the IDU group, this being said the number of new infections was reported to be 61 in 2008 as compared to 62 in 2007. During the last years the vaccination against HBV has increased substantially, something that can further lower the number of infections in the population (SMI, 2009a).

Drug related deaths and mortality of drug users

Reporting routines/system

Data on drug-related deaths in Sweden are collected either from the National Cause of Death Registry (NCDR) or from forensic data on “deaths with illegal drugs present” (DIDP). Forensic investigations are performed routinely in Sweden at fatal accidents or when there is a suspicion of unnatural death, suicide or crime.

The national cause of death register

The cases of drug related deaths in the NCDR have to be correctly coded strictly according to the ICD-10 system, but the ICD-10 diagnosis T40.4 (dextropropoxyphen) has been excluded. The Selection B, version 3.1 was implemented from 2005 and includes all deaths with drugs as an underlying (=main) cause, with exclusion of T40.4 (see above). Since the new version included three new diagnoses, an increased number of deaths could be expected. A comparison between the 3.0 and 3.1 versions of the data for 2005 showed 28 fewer cases with the 3.0 version.

The forensic toxicity registry (DIDP).

Forensic investigations are performed routinely in Sweden at fatal accidents or when there is a suspicion of unnatural death, suicide or crime. Approximately 5 500 deaths are investigated each year. The SNIPH has supported the research and development of data on deaths with illegal drugs present (DIDP). The figures are based on detection

of drugs in body fluids and emanate from the forensic data bases of the National Board of Forensic Medicine. Data is available until 2005. When the method is fully developed it is estimated that a trend could be mirrored within months.

If several illegal substances were present simultaneously, the death was placed in the highest ranked substance category. For instance, if both cocaine and amphetamine was detected, the death was placed in the amphetamine category.

The categories of substances analyzed in drug-related cases of death based on forensic data are:

1. Verified heroin: 6-monoacetylmorphine (6-MAM) present. After intake, heroin is rapidly transformed into (6-MAM), which can only originate from heroin. If 6-MAM is present, it can be assumed that death occurred close to the intake of heroin.

2. Heroin/morphine: Deaths with morphine but no 6-MAM present, where morphine levels are equal to or higher than codeine levels. Codeine is usually present as a contamination product at a low concentration in illicitly produced heroin. After ingestion, heroin is transformed into 6-MAM. The 6-MAM is further transformed into morphine, which can also originate from legally prescribed medicine. In this manner, the simultaneous presence of both codeine and morphine strongly suggest death caused by heroin. To further ensure deaths caused by legal medicine were not included, deaths occurring among persons older than 50 were excluded from this specific category. In this manner, suicides with legally prescribed medicine among elderly people were excluded.

3. Amphetamine

4. Other illegal drugs: Cocaine, ecstasy-type substances, GHB, LSD, DOB, methamphetamine, 4-methylthioamphetamine

5. Cannabis only: Deaths were only attributed to this category if no other illegal drugs were present.

The short delay in data availability makes the forensic data a very useful tool when looking at DIDP trends, though somewhat costly. It must be kept in mind that the mere presence of an illegal drug in forensic analyses does not imply causation. Additionally, the chain of causation (of drug-related deaths) also varies for different substances.

Drug related infectious diseases

HIV/Aids

The large influx in number of HIV-cases among IDUs during the first 6 months of 2007 compared to the period 2004-2006, dropped significantly during the first 6 months of 2008. A total of 16 new cases of HIV were reported during the first 6 months of 2008. This to be compared to an average number of 21 cases during the last 5-year period before the peak in 2007, indicating a return to previous years with low incidence levels (SMI, 2009c). The 2006-2007 outbreak among IDUs which occurred mainly in the capital region, seems to have stopped and all in all, a total of 29 new

HIV cases were reported for 2008 compared to the peak in 2007, with a total of 61 new cases. During the first six months of 2009 only 12 persons are reported to have contracted HIV through injecting drug use, corresponding well to the average number of cases in the previous lower years.

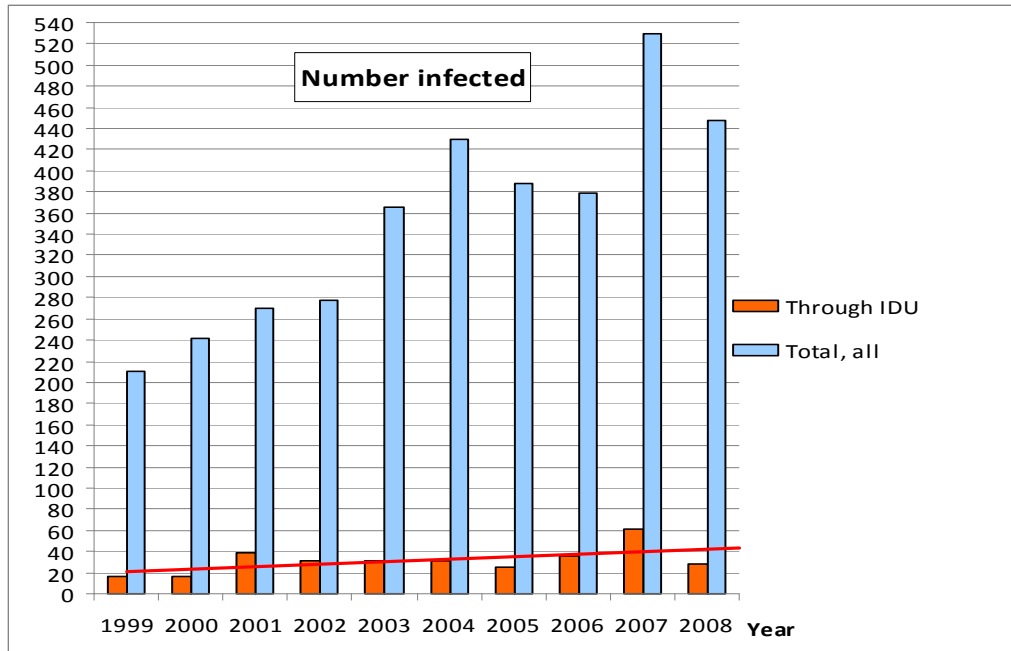


Fig 6.1. Number of individuals annually infected with HIV in Sweden 1999 – 2008. (IDUs shown separately). Source: SMI

Hepatitis C

In 2008, the decreasing trend in number of HCV-infections in Sweden (1994-2006) continued to reverse, where a small increase was seen with a total of 2520 cases as compared to 2097 in 2007. Injecting drug use was the most common route of transmission with a total of 1071 new cases, an increase from 1014 new cases in 2007.

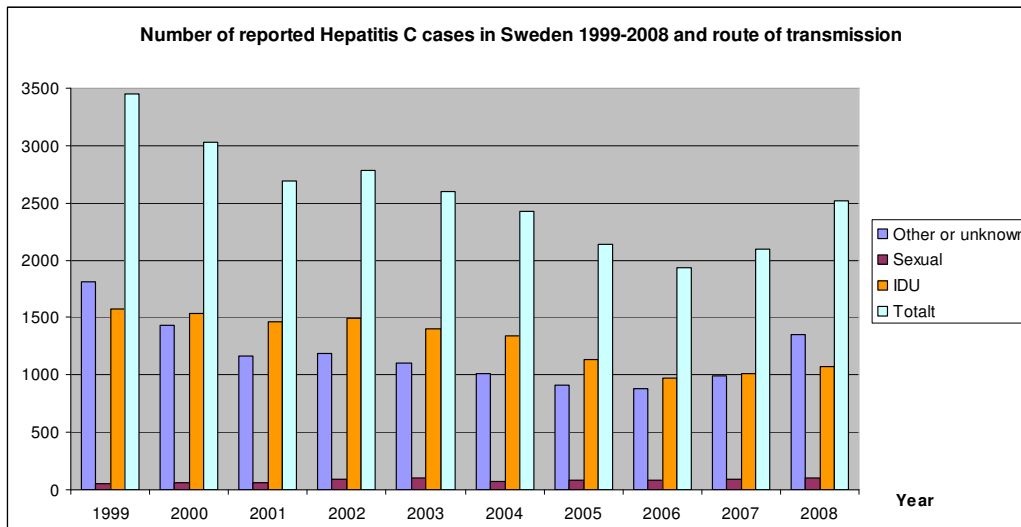


Fig. 6.2. Number of reported cases infected with HCV annually in Sweden 1999 – 2008. By transmission route. Source: SMI

The 2008 increase is believed to be the direct result of a screening targeted towards people who received blood transfusions and/or blood components between the years 1965-1991. A targeted screening which was recommended by the National Board of Health and Welfare in 2007, in an attempt to identify previously undiagnosed cases and to offer them proper treatment. By the end of 2008, approximately 45000 samples had been taken, out of which an approximate 0,8% of the tests had turned out to be positive, compared to an expected yearly national estimate of 0,5%. Noteworthy are the 62 new cases reported for the age group 15-19 years, for which only 33 new cases were reported in 2007. A similar increase was detected in the age group 20-29 years, where in 2008, a total of 426 new cases were reported, to compare to 386 new cases in 2007.

Hepatitis B

As with HCV, the small decrease of new HBV-cases that was seen between the years 2004-2006 and which stopped in 2007 continues to increase with 1533 new cases in 2008 compared to 1465 in 2007. However, injecting drug use as a route of transmission continues to remain stable with 61 cases in 2008 as compared to 62 cases in 2007 (acute HBV) . In total 178 acute HBV-cases was reported in 2008, a small decrease compared to 2007, with its 201 cases. 1190 cases with chronic infection were also reported where a large majority of them, approximately 90%, were infected before immigrating to Sweden from high endemic countries.

In 2007, 69% of the 62 cases attributable to IDU were males, and the median age for men was 29 and for women 26. In 2008, 71% of the 61 cases were male with a median age of 33 years where the median age for women was 22.5 years. As last year, molecular typing concluded that sexual transmission among IDUs is still a very important factor in the spread of acute HBV.

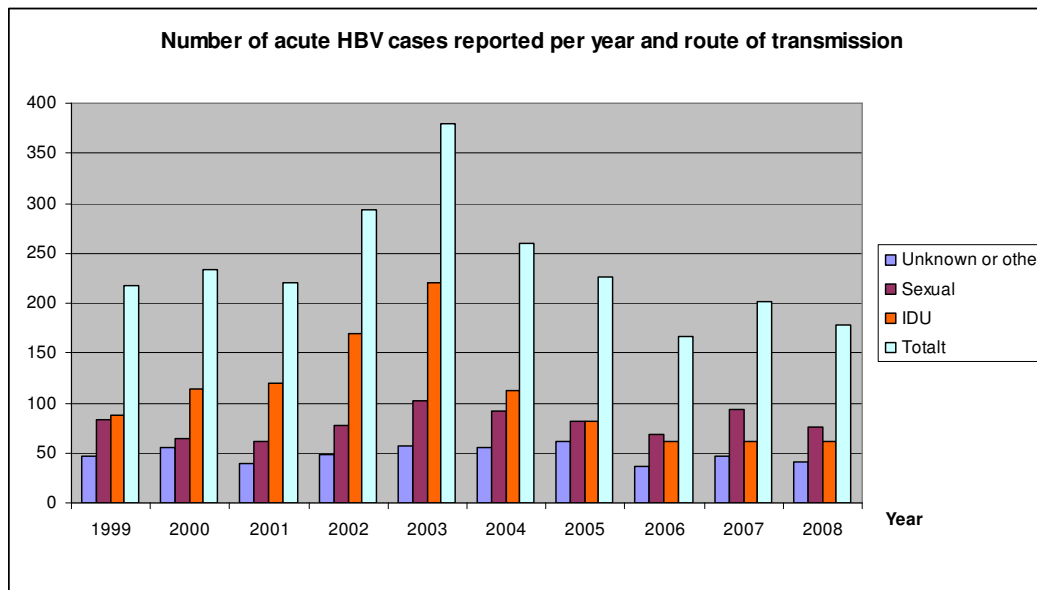


Fig. 6.3. Number of reported acute cases infected with HBV annually Sweden 1999 – 2008. By route of transmission. Source: SMI

Hiv among IDUs

Since 2005, the remnants of Stockholm and Gothenburg (the two major cities of Sweden) have participated in the Social Medicine Remand Study. The individuals kept in remand are also offered clinical screening of HIV and hepatitis as well as asked questions regarding their possible use of drugs. The data from this project have been reported in previous Swedish National Reports. This year, because of the ongoing work with implementing the new sentinel surveillance system mentioned in the *Introduction*, means that we have a little less comprehensive data than previous years.

The data reported for 2008 in ST9 comes from three prison remands in the Stockholm County. Nurses screen enrolled inmates for IDUs on a daily basis in all 3 sites, using a daily generated list, covering inmates in transition, inmates who are steadfast within the setting, inmates who are/about to enrol in the prison service. They are then offered diagnostic testing and counselling. During 2008 a total of 369 Injecting Drug Users (last 12 months) were included in the study. 9.1% (27 individuals) tested positive for hiv, three of them being women. A majority of the hiv-positive IDUs were over 34 years old. The most common primary drug both in the sample and among the hiv-positive, was, as is usual in Sweden, amphetamines.

Other local studies

Between July 2007 and September 2008 the first so called “baseline study” on blood-borne infections among injecting drug users was conducted in Stockholm County. The results from this study is also reported in ST9. The English summary of the study is provided below.(Hillgren and Britton, 2009)

“This Baseline study included 1145 persons who were tested for the blood-borne infections HIV, hepatitis B (HBV) and hepatitis C (HCV) between July 1, 2007 and

August 31, 2008. Almost all participants were interviewed about their drug and sexual habits. Serum Antibodies against hepatitis A virus (HAV) were also analysed. Since HAV, however, contaminates via the oral route and not via injections, these data are not reported in this study.

Of the 1145 study participants, 720 fulfilled the inclusion criteria, i.e., they reported to have injected a narcotic substance at least once during the last 12 months (Active Injecting Drug Users). The primary focus of the study is on this group.

In the study, 148 additional persons are included who had injected drugs, but not during the last 12 months (Not Active Injecting Drug Users). In addition, 182 persons who had never, or practically never, injected drugs were included (Non Injecting Drug Users). The latter group consisted of persons with social problems and other addictions, mostly alcohol use. They appeared in the same environments as the active narcotics injectors. Some of these persons were partners of injecting drug users. Ninety-five persons were tested but gave incomplete answers or did not answer the interview questions (Not or Incompletely Interviewed).

The study has used active case-finding in order to contact drug users. A mobile team, consisting of physicians /nurses/nursing auxiliaries /biomedical analysts and the team leader, a psychologist, contacted, interviewed and tested drug users. The interviews and tests were conducted in parks, illegal camping places, night shelters, treatment centres and medical and social institutions. The size of the team was adjusted to the conditions prevailing at the study sites.

The study participants were notified of their test results through a personal encounter with a team doctor or nurse, who also advised them about safe sex and how to be cautious when injecting drugs. The ones who needed vaccination against hepatitis B were vaccinated. A medical consulting room for the above purpose was open daytime and evening 1-2 days per week. In addition, the mobile team worked on site in places frequented by drug users in order to notify them about test results and offers of vaccination. The mobile team also made appointments with drug users to meet in places of mutual consent.

The mobile phone has been an invaluable means of reaching and maintaining contact with the drug users. To date (June 2009), ninety percent of the 1145 persons have been notified of their test results and 75 % of the hepatitis B negative persons are undergoing, or have been fully vaccinated, i.e., received all three vaccinations.

The average age of the Active IDUs was 40 years; 73 % were men. Ninety-two percent of the Active IDUs were unemployed. More than 2/3 had been detained in custody and/or been imprisoned, women significantly less than men. The proportion of non-native Swedes was 17 %. These are persons born abroad or with one or both parents born in a country other than Sweden

The average age for starting drug use was 15. This applied to boys as well as girls. The debut drug was often cannabis/hashish/marijuana (in the study termed THC, the abbreviation for tetrahydrocannabinol, the active component in these substances). The injection drug use started, in general, four years later; three quarters of the injection drug users reported amphetamine as the debut drug and one fourth reported heroin. Poly drug use was frequent.

Risk behaviour was common in conjunction with injections (sharing of needles, pumps, solution, filters and wads) as well as with sexual activities (unprotected sex and several partners). Women were especially prone to these risky habits. Four percent of the women reported to have had at least 20 different sex partners in the past 12 months, as compared to one percent of the men.

In the Active IDU group, 171 (23%), i.e. the majority of the participants with a dominant heroin injection use, answered that they participated in a Methadone/ Subutex/ Suboxone program, the medication-assisted maintenance therapy for opiate dependency. A substantial number stated that they had injected drugs after entering the program.

Fifty-one of 720 (7.1%) Active IDUs and sixty-three (5.5%) of all tested persons (1145) were HIV positive. Somewhat less than one third, 17 persons, of the 63 HIV positive were newly diagnosed with HIV infection, i.e. their infection was revealed through the study.

All newly-diagnosed HIV positive persons were notified of their test results in a personal encounter with a medical doctor. All – with one exception – were escorted within 24 hours to the infection clinic, Karolinska University Hospital, Huddinge, where they had a pre-booked meeting with specialists at the unit for HIV and other blood borne infections. Of the newly diagnosed HIV positive persons, one claimed that he had never injected drugs. Three stated that they had not injected drugs during the past 12 months and two persons had uncertain drug use history.

Participants in the Baseline study		HIV Positive participants		
Category	Number	Newly diagnosed	Already known	Total
Active Injecting Drug Users	720	11	40	51
Not Active Injecting Drug Users	148	3	6	9
Non Injecting Drug Users	182	1	0	1
Not or Incompletely Interviewed	95	2	0	2
Total	1145	17	46	63

Tabel 6.1. Participants in the Stockholm Baseline Study. IDU and HIV-status.

In the Active IDU group, 82 % were HCV positive as compared to 11 % of the interviewees who stated that they had never injected. The majority of the Active IDUs (50%) had been infected with HBV and one percent of the group were chronic carriers of the virus, i.e. contagious. Eleven percent had been vaccinated against HBV before being tested within the study. The remaining HBV negative Active IDUs (38 %) were offered vaccination and so were the 84% HBV negative persons in the group that had never injected drugs.

The age of the IDUs, the time for their drug debut and how long they had been injecting drugs correlated significantly ($p < 0.01$) to the degree of the infections with HIV, HBV and HCV.

Surprisingly, there was no significant correlation between the extent of risk behaviour relating to injection habits (sharing needles and pumps) and infection with HIV, HBV or HCV. IDUs who knew of their HIV infection shared needles and pumps less and

used condoms more often than other IDUs. Thus, awareness of being infected seemed to result in a more careful lifestyle.

For HCV (but not for HIV and HBV) there was a significantly higher risk ($p < 0.01$) of becoming infected for those who shared paraphernalia (solution, filter, wads). Since the narcotic debut generally starts at lower teen-age, preventive measures are needed very early in life. Generally, it took four years before the young drug user started injecting drugs. This interval needs to be used intensively by the community to prevent the conversion to injection drug use. Regular testing of IDUs and preventive information together with notification of test results ought to have an effect on the spread of blood-borne infections, at least of HIV. The more laborious notification process is just as important as the testing process in this regard.

In May 2009, 1018 (90 %) of the tested persons had been notified of their test results, 530 of these needed vaccination against hepatitis B. “

In May 2009, 1018 (90 %) of the tested persons had been notified of their test results, 530 of these needed vaccination against hepatitis B.

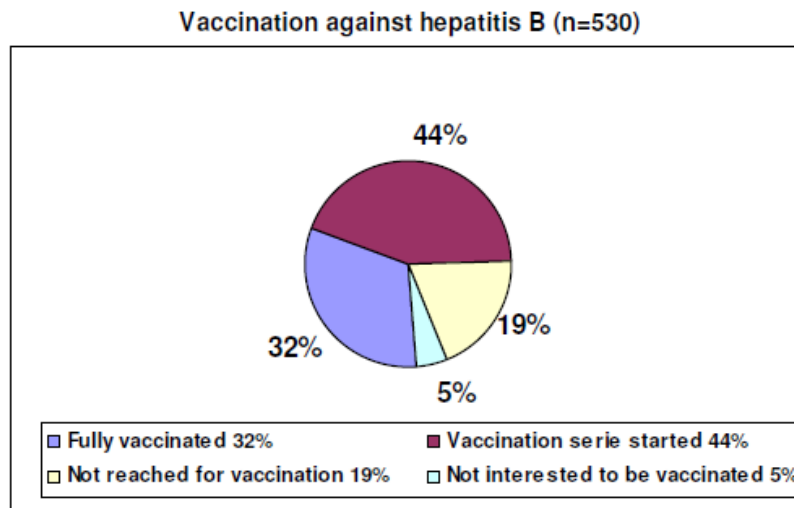
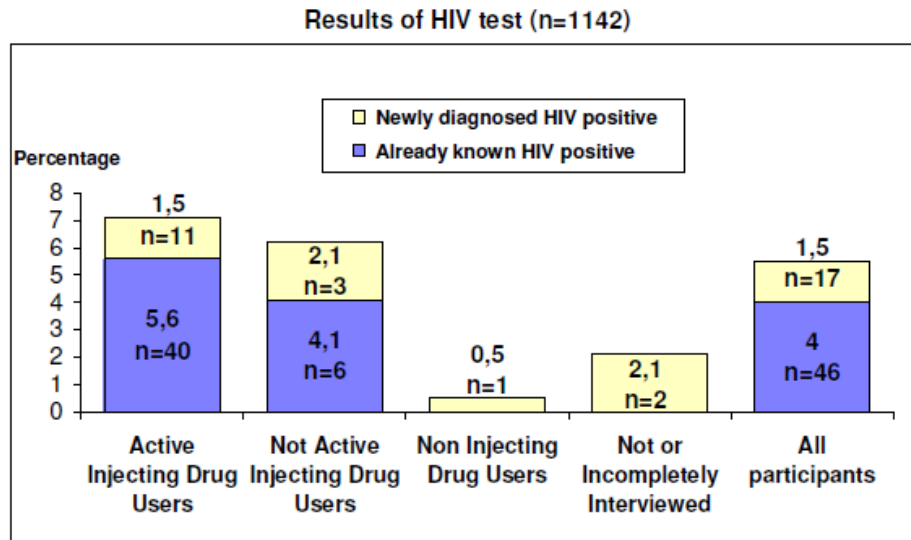


Fig 6.4. Results of the HIV-tests taken and vaccination statistics for HBV in the Stockholm Baseline Study.
(Hillgren and Britton, 2009)

Other drug-related health correlates and consequences

Somatic and psychiatric comorbidity

The use of drugs is often closely related to more or less severe health problems. Psychiatric diseases and various infectious diseases are quite common among drug users. It has been known for a long time that the morbidity and the mortality among drug users is many times higher than among the general population in the same age groups. The reasons for the increased risks can be divided into three categories:

- Damage related to the pharmacological effects of the drugs used
- Damage related to the way the drug is distributed (injection, sniffing etc)
- The conditions under which the drug users live

Somatic co morbidity

As was also reported in 2008, there are difficulties to find statistics on somatic co-morbidity for drug users since the statistics normally are presented combined for alcohol and drug users. An exception is the SNIPH-report on the drug prevention work in Sweden during 2008. The report shows that female drug users are overrepresented within somatic care compared with male drug users. Between 35 and 40 percent of those that have been in somatic care for drug related diagnosis are women, even though their proportion of the population of heavy drug users is around 25 %. The figures for 2007 (no figures are available for 2008) shows also a slight rise compared with the last years in consumption of somatic care for drug users as shown in figure 6.4. The figures for 2007 are approximately 120 per 100 000 men and around 70 per 100 000 women.



Figure 6.5. Men and women treated in health care for drug related diagnoses. 1998 - 2007. Number per 100 000 inhabitants .

Psychiatric co-morbidity

The results from the yearly public health survey shows a connection between the use of cannabis and psychiatric health, with a large number of those using cannabis reporting problems like anxiety, feeling worried. A larger proportion of the users also reported use of antidepressant medication and also suicide attempts. The connection is probably two-way: you use cannabis because you feel bad and you end up feeling bad if you use cannabis (Statens folkhälsoinstitut, 2009a).

Several Swedish studies have shown that psychiatric problems are much more common among youth using drugs than among those who have not used any drugs (Fahlke, 2006, Tengström, 2006). Research shows that youth who use drugs regularly often also have at least one psychiatric disorder, such as for example depression or conductive disorder. One study of youths and their parents who visited a centre for

youths with addiction problems (Maria Ungdom) in Stockholm compared the psychiatric status of these youths with a reference group of youth and parents in a smaller town in Sweden. The results indicate that around 70-95% of the groups from the centre in Stockholm at some point fulfilled the diagnostic criteria for at least one psychiatric diagnosis (including addiction-related ones). Depression was the most common diagnose for the girls and the women and antisocial personal disorder together with conductive disorder was most common among the boys and the men (Tengström, 2006).

In summary, the various studies indicates that the use of drugs is more common among socially vulnerable individuals and that those who use drugs have a less good health than those who never used drugs (Hensing, 2008).

Drug related deaths and mortality of drug users

Data from the National Cause of Death Registry (NCDR), according to EMCDDA Selection B, version 3.0 and 3.1.

The Selection B, version 3.1 was implemented from 2005 and includes all deaths with drugs as an underlying (=main) cause, with exclusion of T40.4 (as previously, due to the extent of poisonings with dextropropoxifen). The numbers of drug related deaths 1997 – 2007 are shown in table 6.2 and figure 6.3.

EMCDDA, Selection B, version 3.0 (until 2004) and 3.1 (from 2005)

	1999	2000	2001	2002	2003	2004	2005	2006	2007
Number with opiates	161	208	155	128	113	86	104	112	168
Number with any drug without opiates	13	17	24	29	32	24	20	31	31

Table 6.2. Number of drug related deaths by opiats occurring or not, according to the EMCDDA, Selection B, version 3.0 and 3.1 (from 2005) 1997 - 2007. Figures ST 05.

Since the new version included three new diagnoses, an increased number of deaths could be expected. A comparison between the 3.0 and 3.1 versions of the data for 2005 showed 28 fewer cases with the 3.0 version. This results in a “jump” in table 6.2 and figure 6.1. In 2007 an increase in the number of deaths could be observed (figure 6.1). There are at the moment no clear explanations for this increase.

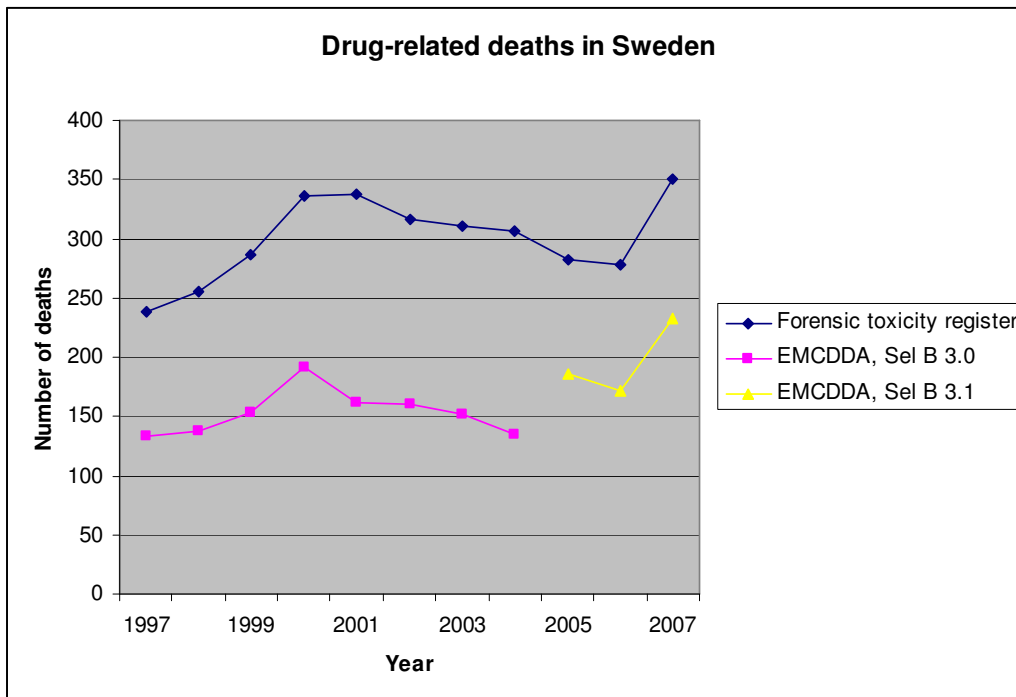


Figure 6.3. Number of drug related deaths per year 1997 – 2007. Based on the EMCDDA, Selection B, version 3.0 (until 2004) and 3.1 (from 2005) (T40.4 excluded) and the annual number of deaths of DIDP (deaths with illegal drugs present). Figures in ST06.

Mortality and causes of deaths among drug users (mortality cohort studies)

Introduction

There are a number of methodological problems with mortality cohort studies. A major one is that the risk of dying varies between different groups. Therefore it is very important that the groups are chosen in a similar way. Often drug users in some kind of treatment are included and in this group the risk of dying varies considerably. Individuals selected from health care registries probably also have a higher risk of dying than individuals in substitution treatment. Other factors also having an effect on the mortality is age, health status and risk behaviours such as polydrug use or the prevalence of especially toxic substances.

Apart from following the mortality, cohort studies can also be used to monitor changes in causes of death over time. It is well known that many drugs can damage the inner organs and also lead to (directly or indirectly) diseases that leads to death only after a long time. IDU for example often leads to HCV and HIV infections.

As one of the few countries in the world, Sweden has had a large population of amphetamine users since the 1960's. Earlier follow-ups of known drug users who visited the addiction clinic at the Sabbatsberg hospital and a mapping of the causes of death for drug users in Stockholm shows that amphetamine users often die from heart- and cardiovascular diseases which is assumed to have a connection to their long-time use of amphetamine.

In the forensic toxicity register (DIDP) (described in the Introduction of the chapter), the number of deaths with amphetamines detected in the body fluids is increasing, this at the same time as the mean age of the deceased also is increasing. This is probably related to an increase in the cardiovascular diseases which is increasing the risk of dying when using.

Eight ongoing cohorts

A total of eight different cohorts have been included in study, this to get as comprehensive picture as possible. Important things are: where and how the cohorts are selected, the number of individuals included, the number of years they are being followed, access to individual background information and that the definitions of what is a “case” is the same.

None of the eight cohorts described below have a consistent high quality in all these areas. Information on intensity and number of years of drug use is also missing, at the same time as it is impossible to ignore the fact that other risk factors than the use of drugs can be affecting the mortality. Hopefully the different cohorts are complementary and can give a good picture of the damages and diseases that follow a long-term drug use.

Cohort 1

This is the youngest of the cohorts and it also differs from the others in that the cases were not selected from any treatment or special definition of a drug user. The cohort consists mainly of drug users that have been in contact with the social services in Stockholm and builds on a mapping of known drug users done by the city of Stockholm. It can be an advantage that the individuals included are not selected in a defined manner, this since most of the more problematic drug users are in contact with the social services for their economic survival. The cohort was gathered during three years (2000-2002) and consists of 2986 individuals with full identity known. Information on dominating drug, other drugs used and the year of inclusion is available. Follow-ups have been done several times, the latest in 2009. Up until December 2008 the number of deaths was 338.

Cohort 2

This cohort includes 151 individuals who were the first ever treated under the law of compulsive treatment of drug users (LVM). The institution Serafen was the first one of its kind and was operating between 1986 and 1988. Since the criteria for being under compulsory treatment was that there was a risk for the individual’s health and life, the mortality in this cohort was very high the years following the inclusion. The inclusion criteria for this cohort are very consistent and there is good information available about the drug user’s background and current situation. There is also information about criminal records. There have been several follow-ups of this cohort, the latest in 2008.

Cohort 3

The purpose of this cohort was mainly to follow the mortality related to HIV-infection. All drug users who had been treated at the addiction centre at the Sabbatsberg hospital between 1981 and 1988 were included in the study, a total of

1640 individuals. The mortality is, however, only controlled from 1985 since this was when the hiv-testing of drug users became more common.

There is information available about hiv-status and the date of the first positive test for a majority, 82%, of the individuals in this cohort. There is also information on dominating drug and a lot of background information.

Follow-ups concerning the mortality have been done several times, the latest in 2008.

What today is unusual about this cohort is that the mortality continues to be as high today as it was in the beginning.

Cohort 4

This is a quite small but very well studied cohort. It consists of 135 amphetamine users and was the basis of a dissertation written by Kerstin Käll. The main focus of this dissertation was the sexual behaviour of amphetamine users, and so all included was thoroughly interviewed about their sexual habits, but also about their drug use and various risk behaviours for hiv. The mortality has been followed up several times but has not yet been analysed. It seems that the causes of death for the majority are different diseases and damages to the inner organs.

This is the only cohort that consists of amphetamine users only and there is a very good background material from the interviews.

Cohort 5, 6 and 7

These three cohorts were created during the late 1960's and the 1970's. The main advantage of these cohorts is the long follow-up time, close to 40 years. The background information is less extensive; something that maybe is compensated by the long follow-up time. One can assume, but this is not quite clear at the moment, the majority is amphetamine users since heroine became available for the first time in the 1970's in Sweden. The mortality in these cohorts was followed up in 2009. Apart from information about deaths occurring, we also have the causes of death-certificates.

Cohort 8

This cohort includes 80 666 individuals and started by dr Nils Bejerot in the 1980's at the remand in Stockholm and was terminated in December 2006. The follow-up time is around 40 years for the oldest, but there is little or none background information available. The data from this cohort is now being matched against the cause-of-death registry and hopefully this information will be available later this year.

Specific causes of mortality indirectly related to drug use

No new information available

Chapter 7: Responses to health correlates and consequences

Introduction

The national action plans on drugs (2002–2005, 2006–2010) have markedly vitalised the fight against drugs. The action plans have promoted tests and implementations of new methods and strategies, improved the quality, increased the resources and introduced new and specialised projects. This chapter includes examples of prevention projects.

The National guidelines for addiction treatment, presented in 2007 (Socialstyrelsen, 2007b), have initiated efforts towards further professionalization of the field and to the integration of treatment. The guidelines have clarified where the responsibility lays in assessing and treating patients with psychiatric and somatic co-morbidity.

The national guidelines are also implemented through the development of regional guidelines that acts as the base for a professionalization of the care of patients with co-morbidity (see chapter 6). The recent trend on cooperation between agencies in different fields of the drugs user's life has continued, especially with regard to co-morbidity and with a special focus on the vulnerable situation of female drug users. Swedish legislation has also opened up to the possibility for county councils/municipalities to run needle exchange programs.

Needle and syringe programmes – overview of the situation

The National Board of Health and Welfare presented the new regulations concerning needle exchange in February 2007 (SOSFS 2007:2). The key points of the new regulation are:

- Procedures regarding the application state that the county council should make the application and that it should be motivated and have an organisation plan and name of a responsible manager and an address of the operation. The application should be developed in consultation with all the local governments within the county and there should be estimation of how many of the active drug users in the area that will use the NSP.
- There should be an account of the addiction care resources and to which amount they cover the needs of the drug users
- A report of how the need for detoxification, treatment and after care will be provided for, how collaboration between different types of care will be carried out and what kind of routines that will be used to satisfy the need for information transfer between public health care and the social services.
- The NSP should have a medical doctor as the responsible manager and should be carried out in collaboration with the medical infection- and addiction care of the County Council. The staff of a NSP should have psychosocial and addiction competence and consist of a sufficient amount of medical doctors with specialist competence in infectious diseases as well as nurses, midwife and social workers. There should also be available medical doctors with specialist competence in psychiatric care and with experience of addiction and other relevant specialist competence.

- The clients that it offered the NSP should be informed about risk and protection against infectious diseases and the risk of drug use. They should be offered a contact for talk therapy, detoxification, addiction treatment, after care and support. They should also be offered vaccinations for Hepatitis B and when needed other relevant vaccinations as well as advice and testing for Hepatitis B and C, HIV and other diseases.
- The operation should be quality assured with regard to how it upheld the law (2006:323, see the 2006 years report), that the clients that receive needles and syringes has a documented IV-use of drugs and that they are not in hospital care or in addiction treatment. There should also be a case record for the clients were activities by the NSP should be documented.
- The county council should every year deliver an annual report with an evaluation of the NSP to the National Board of Social welfare. The report should include statistics concerning the activities and the clients of the NSP as well as how well the resources have satisfied the needs and a estimate on how the activities has influenced the spread of infection. The collaboration with addiction care, social services and healthcare should be documented and evaluated.

At the end of 2008 the only applicants to operate NSP are the two programs that already were running (Lund and Malmö) at the introduction of the new legislation and regulation.

The more than 2 decennia long debate regarding the pros and cons of NSP is still animated at the political, clinical and scientific level and in combination with the rather extensive demands for running a NSP as evident in the legislation and regulation the introduction seems to get a slow start. However, in contrast to the previous phase when needle exchange programs were running on exemption the possibilities now exists for any county council to apply for the set up of a NSP (see above).

Psychiatric or physical co-morbidity – overview

During the last years the problem of co-morbidity has been highlighted in Sweden. In 2007, the NBHW published national guidelines for addiction treatment (see also Chapter 5, Introduction). Chapter 8 of the guidelines concerns psychiatric and somatic co-morbidity (Socialstyrelsen, 2007b). The purpose of the guidelines is to provide recommendations on methods that can or should be used for people with a drug abuse or dependency problem. The recommendations are based on an investigation carried out by an expert group that studied literature on available evidence based treatments. The guidelines are not legally binding and the NBHW can therefore not force municipalities and counties to follow them. They should be seen as methods that the regulators expect the agencies to use.

The guidelines conclude that psychiatric co-morbidity is common among alcohol and drug users. The risk among them to have had a lifetime psychiatric diagnosis is more than doubled compared to the average population. The two diagnoses (drugs and psychiatric) seem to have the effect that they amplify each other and that each problem thereby become larger than if they were alone. The group with co-morbidity is heterogeneous and whereas some persons have a severe psychiatric disease and

different levels of addiction others have a severe addiction problem and psychiatric problems to a varying degree.

Persons with co-morbidity also often have problems in other areas of life and are thereby under the attention of several agencies and authorities. Some of them also have a co-occurring behaviour disorder to a degree that they can be dangerous to other persons in society, for example during intoxication.

The guidelines stresses the importance of identification and assessment of co-morbidity and that a fundamental prerequisite to securely assess and diagnose a co-occurring psychiatric disease or personality disorder is that the client has not recently used alcohol or drugs (normally 1 to 4 weeks). If social services suspect that a person with alcohol or drug problems also has a psychiatric disorder or disease an assessment of this should always be carried out by health care. The social services should, depending on the severity of the reported psychiatric symptoms, get help from health care either through the primary health care (less severe cases) or the general psychiatric care (more severe or difficult cases).

There is also important that psychiatric and somatic care is more observant on alcohol and drug problems among their patients. The guidelines recommend the somatic and psychiatric health care system to build up systems and strategies to better detect alcohol and drug problems among their patients.

Early experience of treatment of people with severe psychiatric disorder show that the referral to treatment for addiction problems outside the premises did not work. Patients often dropped out of treatment and there were no model for the coordination of the care. This led to a series of studies, especially within psychiatry, that examined the possibility of integrating treatment and support within the same care provider. Still, there are no studies showing that a specific treatment with pharmacological treatment is to be used for patients with co-morbidity. The same also goes for psychosocial treatment and therefore treatments proven to work for people with only a drug abuse or dependency problem should be used. Central, however, is to coordinate the treatment for the psychiatric problem and for the drug problem.

The experts behind the guidelines makes the following statements based on the facts investigated:

- Health care and social services have a joint responsibility for clients and patients with drug abuse or dependency and a co-occurring psychiatric or somatic disease (co-morbidity).
- If there is a suspicion that a client with a drug abuse or dependency problem seeking help from social services also has a psychiatric disorder or a somatic illness, then contact should immediately be taken with health care for an assessment.
- For proper treatment of a client or a patient with drug abuse or dependency problems and a co-occurring psychiatric or somatic disease, it is important that the treatment of the two problems is executed simultaneously and that the efforts after the first acute intervention are coordinated.
- There is no specific evidence-based treatment for co-morbidity. Nothing speaks against using methods that have already proven effective in the

treatment of drug abuse or dependency problems as well as for psychiatric disorder and somatic illness.

The national guidelines are now being implemented in counties all over Sweden.

Pregnancies and children born to drug users – overview of the situation

There is no routine data collection in Sweden for this group. In 2005, the NBHW was given the task to investigate interventions directed to pregnant drug using women as well as the support to the family. The report from the NBSW tells that on the census day (April 1, 2005) estimated that 3 100 persons with custody of minor children and approximately 150 pregnant women or women with newborn children were in treatment (Socialstyrelsen, 2007a).

The Swedish national agency for compulsory care of substance users (SiS) reports in their DOK-report for 2007 that 9 percent of the female clients live together with a child, either alone (5 %) or with a partner (5 %). The numbers for men are: 1 % lives alone together with their child and 4 % with a child and a partner (SiS, 2008). To this can be said that 33 percent of the women has children under the age of 18 and among those women, 59 percent had lost custody or had at least one child taken away from them. Among the men, 20 % has a child under 18 and 47 % them had lost custody or had a child taken away from them.

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

No new information available

Prevention and treatment of drug-related infectious diseases

As was reported above, at the end of 2008 the only applicants to operate NSP are the two programs that already were running (Lund and Malmö) at the introduction of the new legislation and regulation.

Responses to other health correlates among drug users

See the section *Introduction* above.

Chapter 8: Social correlates and social reintegration

Introduction

Data on social exclusion is not collected and processed in a standardised way for official statistics. From research projects and special investigations information can be gathered, often for a limited cohort. Problem drug abuse and various forms of criminality, unemployment, homelessness, health problems etc. are all closely related and well known to the society.

The Ministry of Health and Social Affairs reports that around 8 400 people during a week year 2005, had been admitted to or registered at prisons, treatment units or supported housing in the social services, a county council, a private care provider, a care home or a treatment unit run by the National Board of Institutional Care without having any accommodation arranged before being discharged or moving out. The government makes the assumption that the discharge situation is critical for persons in treatment and that more efforts has to be made to secure the living situation at discharge from the National Board of Institutional Care (SiS), the governmental agency for compulsory addiction care. This is of course also true for other parts of the social situation, such as daily activities and social support.

When it comes to the daily activities: in the current attempts to fight the unemployment among young people, addiction is a neglected factor. An investigation for the government concerning actions for unemployed adolescents barely mentions addiction as a part of the unemployment problems. Of the in the report mentioned projects only one describes an attempt to address addiction among the adolescents in the project.

The Swedish National Board for Youth affairs has presented a report on how to break the exclusion of adolescents on the labour market. The report covers projects during the years 2003 to 2006. Of the 23 projects described, none mentioned adolescents with drug problem among the target groups and none targeted addiction in their methods. This exemplifies how unemployment and addiction keeps separated concerning adolescents and young people.

Social exclusion and drug use

Social exclusion among drug users & Drug use among socially excluded groups

Social exclusion, homelessness and drug abuse in Sweden

Research has shown that a substantial proportion of homeless people are problem drug users. Further, research has shown that drug misuse is a risk factor for homelessness and homelessness is a risk factor for drug misuse.

The situation in Sweden

In the last inventory of the homelessness situation in Sweden (2005) an estimated number of 17.800 persons were found. The distributions of the homeless were based on there living situations which were categorized in four situations:

1. This is the most vulnerable group of homeless people, consisting of approximately 3,600 persons. Approximately 900 of them were sleeping rough at the time of the

survey. Approximately 2,700 persons lived in shelters or other emergency accommodation, hotels, campsites or hostels.

2. Approximately 2,000 persons found themselves in situation 2. They were to be discharged, within the next three months, from correctional facilities, treatment institutions or supported accommodation. They were without having any housing arranged before their discharge, release or move.

3. This group of approximately 6,400 persons had insecure housing solutions with a risk for future homelessness. They were staying in treatment institutions or in some form of supported accommodation. Their discharge was not planned in the next three months, but no housing was arranged for future discharge or release.

4. Approximately 4,700 persons were in this situation. They were living with relatives or friends/acquaintances, or had subletting contracts shorter than three months. They had applied to the social services or another organisation for assistance in solving their housing situation.

Information from the mapping shows following about homeless persons: 75 percent were men, 25 percent were born outside of Sweden, 60 percent had addiction problems, and 30 percent were parents of children under 18 and 40 percent had problems with psychiatric disabilities.

Homelessness in Sweden is primarily an urban problem. 42% of the homeless are reported to be from the three largest metropolitan areas in Sweden, but the NBHW surveys also reveal that the problem, although small in scale, is widespread, existing in a large proportion of Swedish municipalities (Olsson and Nordfeldt, 2008).

Preventive interventions at the national/international level

Sweden is involved in different actions at European level aiming at preventing social exclusion.

The “Active inclusion” strategy is an integrated approach designed to tackle poverty and social exclusion in five European cities whereas Stockholm is one. A special project This EUROCITIES Network of Local Authority Observatories on Active Inclusion (NLAO) observes and analyses how this strategy is implemented at local level, in particular regarding access to social services and social and supported housing for people at risk of social exclusion. The municipalities are key actors the delivery of social services such as housing or social assistance services to especially vulnerable groups. Through their responsibilities as policy-makers and service providers and their engagement in this means that they are in the best position to evaluate what works and what does not and how to prevent social exclusion as homelessness and unemployment.

Sweden also participates as a partner in MPHASIS, an EU collaboration between approximately 20 countries, with the aim of finding methods to be able to monitor the development of homelessness in Europe and to compare the homelessness situations among the different countries. Further aims with the development of a monitor system is to collect the information needed to improving the provision of interventions and develop strategies for: preventing homelessness, lower the number of homeless people, take action against the causes behind homelessness, lower the harmful effects for homeless people and their families and make sure former homeless people can maintain stable housing.

In February 2007, the government presented for the first time a national strategy for counteracting homelessness and exclusion from the housing market (*Homelessness – multiple faces, multiple responsibilities*) (Socialdepartementet, 2007). The strategy comprises the period 2007–2009. Four objectives have been pointed out:

1. Everyone shall be guaranteed a roof over his/her head and be offered further co-ordinated action based on the needs of the individual.
2. There shall be a reduction in the number of women and men who are in prison or at a treatment unit, or have supported accommodation and who do not have any housing before being discharged or released.
3. Entry into the ordinary housing market shall be facilitated for women and men who are in temporary and transitional, supported accommodation, provided by the social services or others.
4. The number of evictions shall decrease and no children shall be evicted.

The National Board of Health and Welfare has been commissioned by the government to work together with the National Board of Housing, Building and Planning, the Swedish Enforcement Authority and the Swedish Prison and Probation Service to co-ordinate the implementing of the strategy. In order to assess the effects of measures taken a plan for a monitoring system on a continuous basis were presented. However, continuously surveying homelessness has no value in itself. NGOs in particular point out that there must be a clear recipient of the knowledge generated by the homelessness surveys. The aim of collecting the material must also be clearly described. In order to work effectively to combat homelessness and to design supportive measures for homeless people the society needs to have knowledge about the extent and character of homelessness. In order to be able to assess the effect of various measures, it is also needed to monitor the development of homelessness over time (Socialstyrelsen, 2009b).

Preventive interventions at the local level

There is a strong connection between eviction and homelessness and people who run a bigger risk for eviction are people with addiction problems and with psychiatric disabilities. During the last five years an estimated 3.500 tenants have been evicted each year.

Important conditions and measures in order to pursuit an eviction preventive work:

- Homelessness issues need to be focused and continuously discussed on the local, political agenda
- Co-operation between the Social Services, the local Enforcement Authority, housing companies, landlords as well as voluntary organisations is necessary.
- The Social Services as well as landlords need to act quickly when a person risks eviction.
- Relevant stakeholders need to have knowledge of the legislation associated with eviction – and of the possibility for stakeholders to act.
- The Social Services should be able to offer different kinds of support to persons threatened by eviction, such as:
 - Financial advice in different forms
 - The possibility for the Social Services to undertake the liability for the rent

- Housing support – primarily for persons with psychiatric disabilities and persons with addiction problems
- “PO” (*Personligt ombud*)

Drug use among socially excluded groups

Khat use among the Somali population

In the spring term of 2007 two students at the Public Health Programme at Sahlgrenska akademien, the unit of social medicine, conducted a study as part of their final exam for the programme (De Cal and Söderlind, 2007). The study focused on the population of Somali people in Gothenburg and their use of the drug Khat. Below is the abstract from their study:

“Khat is a drug and originates from the plant *Catha edulis*. It has been used for many hundred years. Khat resembles the chemical structure of amphetamine and contains the two main ingredients cathine and cathinone.

Khat use is an increasing problem in some countries in Africa, Asia Minor and among immigrants from these countries living in Europe. Khat use might affect both individuals and society in a negative way. This might show in aspects of mental and physical illness, isolation, economical problems, family problems and unemployment. It is estimated that about 50 % of the Somali men living in Sweden are chewing khat, but there are also indications that the use of khat has spread to women, youth and other groups of immigrants. The Somali population constitutes the largest group with East-African origin in Gothenburg and therefore we have chosen to investigate the use of Khat in this group.

The aim of the study was to survey the khat use among the Somali population in Gothenburg, with the purpose of highlighting the young Somali people.

Method: People with Somali origin were found by a method influenced of “Privileged Access Interview” (PAI) and Key Informant Interview (KII). The collection of data was made with a questionnaire. It was a convenient sample.

Results: The survey included 63 women, 53 men and 6 people where further information about sex was not received. All 122 participants were of Somali origin, in the ages of 17-55 and living in different parts of Gothenburg. The result showed that 33 % (40 people) had used khat at some occasion and 9 % (11 people) stated that they were using khat during the time the survey was conducted.

The aim of the study was not completely fulfilled due to the fact that 28 youth were reached and therefore constituted a limited group for making further conclusions.

Conclusion: 33 % of the participants in the survey had at some point tried chewing khat and 9 % were chewing khat during the period of the survey. The majority believed that khat could be a problem and 60 % approved to the fact that khat is considered an illegal drug. Results showed that the Somali group estimated their physical and mental well-being as good or very good. Amongst the 28 youth between 17 and 19 years old, 7 boys and 7 girls stated that they at some point had tried chewing khat. Results indicate a younger debut age in chewing khat than former studies. However, due to the limited sample further generalisations can not be made.” (De Cal and Söderlind, 2007)

In an article from 2009 in the journal for the Swedish medical doctors, *Läkartidningen*, the problem of “migrating local risk behaviours” is discussed, with focus on the use of Khat in Sweden. It is concluded that there are serious social and medical risks coming with the use of khat and its illegal syntheses, and that this problem has not been discussed in the Swedish drug context. Statistics from the customs show that the drug mainly originates from Eastern Africa. There are also easily accessible recipes of *metkatinon* available on the Internet, and this variant of the drug is mainly injected. The authors conclude that more information about the situation in Sweden is needed, and there is also a need to start discussing this openly. (Aquilonius et al., 2009)

Social reintegration

Housing

The primary measures to reintegrate already homeless people back to a more stable and normal living situation is through the use of different types of housing interventions (Blid, 2008). A common Swedish model to solve the homelessness problem is what has been labelled the staircase model (Sahlin, 2005).

The structure of available shelter and housing for the homeless resembles a staircase and the higher an individual climbs the more “normal” the individual's housing situation becomes. Growing evidence shows that this approach fails to reduce homelessness, rather the opposite and the flipside of this system is the negative impact of falling back down the staircase (Sahlin, 2005).

Recent research has assessed different special collective housing interventions for instance targeting homeless addicts (Blid and Gerdner, 2006). Findings show that category housing has a positive direct effect on housing stability of the residents, and their feeling regarding their quality of life, but not on their substance misuse (a. a.). Further, the increased housing stability seems to be more a direct effect of their staying on the programme, rather than a long term effect.

A different theoretical model is at present widely discussed in efforts to decrease homelessness and increasing stable housing, the Housing First approach. The idea behind the model is based on every one's right to housing and is the right opposite to the staircase model in that sense that it reverses the “ladder” and starts with a normal housing, usually in combination with some type of case management. The Housing First approach offers stable housing to chronically homeless, alcohol-dependent individuals without requirements of abstinence or treatment. It hasn't been assessed yet in Sweden but in a recent review (Socialstyrelsen, 2009b) of international effect studies of different housing programmes for homeless persons finding showed support for the Housing First model compared with the Treatment First model which is the more traditional model.

Chapter 9: Drug-related crime, prevention of drug related crime and, prison

Introduction

Since 2007 there exists a national plan to strengthen the collaboration between the police and the local municipalities. The plan includes that the police and the municipality signs a contract regulating the collaboration towards one or several target areas to promote security and to fight crime. From this contract the target area will be concretised so that measurable goals can be set up. Drug related crime is among the proposed target areas. The aim of the plan is to enhance local collaboration and communication between polis and the local government and to provide a better understanding for the different roles in crime prevention (Rikspolisstyrelsen, 2007).

When it comes to alternatives to prison and the prevention of relapsing into crime after release, the Swedish law (SFS 2006:431) changed on the first of January 2007. The purpose of thi change is to ease the transition into society and to offer a structured transition period for more inmates and for a longer time part of the sentence. Old means of transitional measures like family- or residential treatment and electronic surveillance were to be complemented with halfway houses.

The changes in the law are as follow:

- Electronic surveillance is changed into conditional discharged with the flexibility to remove the electronic surveillance (ES) at the end of the sentence. The goal group for ES is extended to include those having 6 and 18 months of sentence. The conditional discharge can start after half of the sentence (earliest after 3 months). Long term sentences can be allowed to have conditional discharge up to 1 year.
- Transition through Halfway houses is introduced for those that have long sentences but don't have the prerequisites for conditional discharge and no need for residential treatment.
- The earlier paragraph 34-placement is replaced with "residential care" and the requirements are lowered. The decision is also transferred from the probation committee to the Prison and Probation Services.

One of the purposes with the law change was that more inmates should end their sentence with care outside prison. During the first year (2007) the number of inmates that ended their sentence in family- or residential treatment went down (638 persons) instead of up (compare with 709 during 2006). The National Council for Crime Prevention (NCCP) believes that this has to do with a more strict practice from the Prison and Probation Services (PPS) compared with the old probation committee.

The view from NCCP is that the time directly after release from prisons it a critical time when it comes to risk for relapse into crime and drug use, especially for those with long sentences.

NCCP gives the following suggestions to the PPS for how to better live up to the intentions by the government:

- A less restrictive policy, inmates with a higher risk should be able to get conditional discharged.

- The time in conditional discharge for the old target group should be the same as before the change of the law.
- The target group of the halfway houses should be better defined.
- The number of inmates in family- or residential treatment should go up, not down.
- The application routines should be simplified to shorten the administrative time.
- There should be a uniform praxis in judgement and decisions.

Many drug users now have the opportunity to receive treatment in prison. The NCCP has conducted an effect study of treatment of drug users in prison that shows significant decrease in relapses in to crime between a treatment group (n=741) and a matched control group. At 12 months follow-up 58 percent in the control group had relapsed compared with 50 percent in the treatment group. The difference in relapse into crime as measured by new sentences was even larger, 11 percent less in the treatment group. For women, no significant differences between the treatment and the control group were found.

The best results were for:

- Men (9%) compared with women (3%, non significant)
- Those that completed treatment had less relapses than those that did not (10-12 percent to 3-10 percent compared with control)
- The differences were only significant for the group of inmates that were over 29 years old
- The twelve-step oriented programs had better result (11%) than the non-twelve-step programs (5%)
- Longer treatment (≥ 138 days) had better result (12%) than shorter ($76-137$ days = 5%), (≤ 75 7%)
- Those that could end their sentence with care outside the wall seemed to have better result (12%) than those that did not (5%, non significant)

A conclusion of the study is that the Prison and Probation Services are on the right track when it comes to interventions directed towards drug use, but there are still potential to improve the treatment in prison.

Drug-related Crime

According to the 2008 official criminal statistics of Sweden, about 78 200 offences against the drug punishment act were reported in 2008. An increase by 9% compared to 2007. The number of persons that were convicted with drug offence as the main crime increased with 11 percent (about 1 640 persons) compared with 2007. Of the 16 817 persons that had drug offence as main crime during 2008, 17 percent were women and 20 percent were adolescents between 15 and 20 years old. In 82 percent of the cases (13 860) the offence were considered minor, in 16 percent (2 617) not minor and in 2 percent as serious (340) as reported in the 2008 Swedish Official Criminal Statistics from Brå.

Year	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
n	7 291	8 055	8 005	8 992	10 106	10 808	11 862	13 932	15 179	16 817

Table 9.1. Number of individuals convicted with drug related offences as the main crime annually in Sweden 1999 to 2008.

For 2007 and 2008 there is not published statistics that further break down drug offences concerning convictions. Brå, on the other hand, has published tables of reported offences on their website that breaks down reported drug offences in the sub categories peddling etc., Drug possession, drug use, possession and use and production. The table below shows the trend in reported drug offences for those categories for the years 2000 to 2007.

Reported drug offences	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	Change between 2007 and 2008 %
Peddling, etc. (1-3a §)	5 256	4 012	3 719	3 781	3 766	4 031	3 915	5 539	5 645	6 390	13
Drug possession (1-3 §)	15 324	11 343	11 588	13 561	14 526	15 249	17 624	22 083	23 150	24 764	7
Drug use (1-3 §)	15 561	13 936	13 659	16 373	18 583	21 726	26 645	37 544	42 414	46 569	10
Possession and use (1-3 §)	.	2 984	3 305	4 155	3 766	3 876	3 418	1 421	2	.	-
Production (1-3 §)	382	148	134	135	219	211	205	270	335	465	39
Total	36 523	32 423	32 405	38 005	40 860	45 093	51 807	66 857	71 546	78 188	9

Table 9.2. Number of drug related offences annually in Sweden 1999-2008.

The table above shows that the total number of reported drug offences has gone up with 9 percent between 2007 and 2008. The highest raise is concerning drug production (39%) and peddling, etc. (13 %). Concerning drug possession and drug use there is a smaller change (7 % and 10 %). The category possession and use has been removed and that is the explanation for the sharp fall in the possession and drug use category (from 3 418 in 2005 to 1 412 in 2006 and to 2 in 2007). A change in praxis has occurred and this combined offence now is judged in a different way and thereby the cases are accounted for in each category instead. The total change between 2007 and 2008 for reported drug offences is similar to the drug offence as the main crime for conviction.

The following narcotic statistics that refers to type of offence and substance is a special narcotic statistics that from the year 2006 only will be published every third year. This means that the latest figures are from 2006 and the next figures will be published for the year 2009 in October 2010. Figures from other areas such as sanctions, age distribution and gender distribution are taken from the official statistic over persons found guilty of criminal offences from the year 2008.

Type of offence	Year									
	1997	1998	1999	2000 ¹	2001	2002 ²	2003	2004	2005	2006
Court sentence and fine issued by the prosecutor	9 448	10 144	10 771	11 326	12 320	13 891	14 491	14 774	15 877	17 619
Drug use	3 290	3 707	4 077	4 460	4 898	5 303	5 816	6 525	7 716	9 397
Drug possession	3 545	3 772	3 636	3 626	3 771	4 195	4 590	4 531	4 837	5 021
Possession, use	1 052	1 156	1 279	1 291	1 357	1 544	1 641	1 580	1 522	1 291
Peddling, peddling and possession	558	599	701	685	749	917	963	948	842	965
Possession, use and peddling	116	133	150	141	161	143	148	109	102	102
Production	20	9	29	15	10	7	6	18	25	17
Drug smuggling	590	560	639	770	968	1 495	982	657	556	509
Other offence and combinations	277	208	260	338	406	287	345	406	277	317
Waivers of prosecution	1 847	1 798	1 569	1 890	1 722	2 118	2 522	2 692	2 941	4 065
Total	11 295	11 942	12 340	13 216	14 042	16 009	17 013	17 466	18 818	21 684
minor offences	9 000	9 551	9 843	10 813	11 127	12 596	13 429	13 645	13 774	16 002
non-minor offences	2 219	2 127	2 210	2 075	2 548	2 974	3 131	3 336	4 490	5 248
serious offences	282	264	287	328	367	440	452	485	435	434
minor offences (%)	80	80	80	82	79	79	79	78	73	74

¹ 2000 corrected numbers.

² 2002 corrected numbers in waivers of prosecution.

Table 9.3. Number of individuals found guilty of drug offences annually in Sweden 1997-2006. By type of offence.

The number of persons convicted of drug offences has increased every year over the past 10 years. The annual increase has varied but averages at just fewer than 7%. This means that drug convictions have almost doubled (increased by more than 94%) over the last ten years. The following four paragraphs (*type of offence* → *sanctions*) are quoted from the Brå-report 2006 referred to above.

*Type of offence*⁸.

At 53% (9 397 persons) and 28% (5 021 persons) respectively, drug use and drug possession were the two most common offences committed by persons convicted of drug offences in 2006. Drug smuggling and distribution⁹ accounted for 5% and 3% of all drug convictions respectively. The proportion of convictions relating exclusively to personal use has increased with 4%, from 7 716 in 2005 to 9 397 in 2006. The proportion relating to possession offences has increased with 2%, from 4 837 persons in 2005 to 5 021 2006.

Persons convicted for crime against the Act on Prohibition of Certain Goods Dangerous to Health has increased more than six-fold between 2005 and 2006. 37 men, 3 women and 6 young persons were convicted 2006. An explanation to this marked increase is not at hand. One possibility could be that many persons were involved in the same crime.

Offence severity.

In 2006, minor offences accounted for approximately 74% of all convictions (just fewer than 16 000 persons). Non-minor offences accounted for 24% (5 250 persons) and serious offences for just over 2% (430 persons). The proportion of convictions for minor drug offences has decreased, primarily in 2005, whereas the proportion of convictions for non-minor drug offences has increased.

⁸ Refers to summary fines and court adjudications only, as the offence type cannot be discerned in the case of waivers of prosecution

⁹ Distribution and distribution in combination with possession.

Substances¹⁰.

Amphetamines and cannabis remain the two most common substances in the convictions statistics. In 2006 these accounted for 33% and 36% respectively of all substances mentioned in criminal convictions. Over the past 10 years there has been a shift in the proportions accounted for by cannabis and amphetamines respectively, with cannabis now being the most common substance in criminal convictions.

Sanctions¹¹.

The most common sanction awarded to persons convicted of drug offences is a fine, either in the form of a summary fine issued by the prosecutor or via a court sentence. Persons awarded fines accounted for 53% of all those convicted of drug offences in 2008. 29% of those convicted of drug offences in 2008 took the form of waivers of prosecution, whereas 10% involved prison sentences.

The increase in the total number of persons being convicted of drug offences is also mirrored as an increase in virtually all of the different sanctions. The number of fines has more than doubled over the period examined, from slightly less than 3 700 persons in 1999 to almost 8 900 in 2008. The number of persons sentenced to a prison term has increased from almost 1 400 in 1999 to more than 1 600 in 2008. The most common length of the prison term awarded in 2008 was between one and three months. About 79% of prison sentences fell within this range.

Regional distribution

Relative to the size of the population in the different counties of Sweden, counties in the country's metropolitan areas have a higher proportion of drug convictions than the remainder. The metropolitan counties, which are home to half of the national population, account for 59% of all drug convictions in Sweden in 2006. Since 1997 this proportion has remained stable at between 59 and 64% of all those convicted in the country as a whole.

Age distribution¹².

In 2008, young persons aged 21–24 had the highest level of drug convictions in relation to their numbers within the population at large, with 799 convictions per 100 000 of population. The groups aged 15–17 years and aged 50 years or over have the lowest number of convictions, with 196 and 35 convictions respectively per 100,000 of population. Over the period between 1999 and 2008, the largest increase in the number of drug convictions per 100 000 of population has been noted among those aged 50 years or over. Per capita convictions in this group have more than tripled over the period examined. Similarly for those aged 21–29 years the convictions per capita have more than doubled since 1999.

Gender distribution¹³.

Of the total number of persons convicted of drug offences in 2008, approximately 17% were women. This proportion has remained relatively stable over the past 10

¹⁰ Refers to convictions in which the drug offence was the principal offence.

¹¹ Figures are from the Official Statistics over Persons found guilty of offences from 2008.

¹² Calculations conducted per 100 000 of mean population is from the Official Statistics over Persons found guilty of offences from 2008.

¹³ Figures are from the Official Statistics over Persons found guilty of offences from 2008.

years. The number of women and the number of men convicted of drug offences has more than doubled over the past ten years. Between 2007 and 2008, the numbers of women and the number of men convicted increased by 9% and 11% respectively.

Other drug related crime

No new information available.

Prevention of drug-related crime

In 2008 the Swedish National Council for Crime Prevention (BRÅ) presented a systematic review, including a statistical meta-analysis, of the effects of drug treatment programs on crime (Holloway et al., 2008). The review was conducted by a number of highly qualified researchers from the United Kingdom and, as it is presented in the report, “The analysis combines the results from a large number of evaluations that are considered to satisfy a list of empirical criteria for measuring effects as reliably as possible. The analysis then uses the results from these previous evaluations to calculate and produce an overview of the effects that drug treatment programmes do and do not produce.” The summary from the study is presented below.

“The majority of European countries have a drug strategy that aims to reduce drug-related crime. One of the methods commonly used for achieving this is to provide treatment for drug users. In most countries, treatment for drug users is available through conventional medical referral processes. In some countries, treatment is also made available from within the criminal justice system. This can be part of a referral process whereby offenders are diverted at various stages into treatment or treatment can be provided from within the criminal justice system as part of a prison programme. In order for the strategy to be effective, it needs to be demonstrated that treatment for drug misuse can lead to a reduction in crime.

This report presents the results of a systematic review of the literature on the effects of different kinds of intervention for problematic drug use on criminal behaviour. The main selection criteria were that the evaluation should be based on voluntary treatment programmes that aimed to reduce drug use (e.g. methadone maintenance, detoxification, or self-help programs) or criminal justice programmes that aimed to reduce drug use and drug-related crime (e.g. drug courts and drug testing programmes).

The main finding of the narrative review was that the majority of treatment programmes (68%) were associated with positive outcomes (the treatment group performed better than the comparison group in terms of subsequent criminal behaviour). In seven of the nine treatment categories investigated, the majority of evaluations produced positive findings. The most successful were psycho-social approaches and therapeutic communities. It was only in relation to other treatment programmes and other criminal justice system programmes that the percentage of positive outcomes fell below 50 per cent.

The main finding of the meta analysis was that the majority of studies investigated (25 of 37) showed a favourable effect on criminal behaviour. The mean effect size for all studies combined showed that the treatment groups were associated with a 26 per cent

reduction in criminal behaviour compared with the comparison groups. Five of the seven programmes investigated generated effect sizes that showed a favourable impact of the programme on crime. The two most effective programmes measured by the meta analysis were therapeutic communities and supervision.

The report concludes that drug treatment programmes (especially psycho-social programmes and therapeutic communities) are effective in reducing criminal behaviour. However, the moderator analysis showed that there were statistically significant differences among programme types. It is difficult to explain the differences in effectiveness of programmes without a better understanding of the programme content and intensity.

The main research implications of the report are that evaluations need to be of a high quality and to present their findings in a way that can be used in future meta analyses. The main implication for policy is that drug treatment can be effective in reducing criminal behaviour and is a useful means of reducing crime.

However, more needs to be known about variations in effectiveness and the influence of programme type, intensity, and context on crime outcomes.” (Holloway et al., 2008)

Interventions in the criminal justice system

In 2002 the government instructed the Swedish Prison and Probation Service (SPPS) to further develop and improve the treatment of inmates with drug problems as part of a major effort in all of the society to improve the treatment and rehabilitation of drug addicts. A report on the SPPS experience of carrying through this particular effort for the period 2002-2007 was published in 2008 (Göransson, 2008). The report is summarised below.

Finding the addicts

The SPPS objective that all drug addicts in correctional treatment should be identified, “mapped” and motivated to treatment was in general fulfilled. It was guaranteed that all prisoners wanting help also were offered help. However, in some custody with high turn over the outreach activity might miss some detained persons that not voluntarily came forward since the outreach function is not manned 24 hours a day. In the period 02-07 more than 17 000 persons in custody have had in average three personal motivational interviews with the purpose to convince the detainee to participate in treatment. (Göransson, 2008)

Drug users in treatment.

A general demand was that the number of inmates participating in treatment should increase and that the treatment and rehabilitation efforts were adapted to the needs. To that end the SPPS identified and developed several strategic areas where improvements or implementations were needed. Among those were the identification and mapping of the inmates drug problems and treatment need, the introduction of the ASI as mapping method, increased number of prison units/departments earmarked for drug addicts, implementation of Motivational interviews (MI) and introduction of evidence based programmes, the testing of medically assisted treatment, improved methods to prevent smuggling of illegal drugs, developed cooperation between the social services and the correctional treatment and between custody, prison and

probation, a major investment in training and competence development of the staff. Custody and prisons were given priority at the start and from 2004 also the non-custodial treatment was included.

A large number of drug abusers are mapped according to the ASI-method as recommended in the guidelines from the Swedish National Board of Health and Welfare. The SPPS has the single largest ASI-databank comprising 11 500 cases at the turn of the year 07/08. From 2003 to 2007 the number of inmates with drug problem undergoing drug related treatment and rehabilitation programs increased from 900 to 4000 annually. The programmes are directed towards the abuse as well as the behaviour to decrease the risk for relapse. (Göransson, 2008)

Treatment programmes

Implementation and evaluation of the treatment programmes was part of the project. This task is ongoing and take years since the conditions for the implementation of a programme has to be quality secured before conclusions of the outcome could be drawn. Fifteen programmes at different stages of implementation and evaluation are listed in the report. The programme “Våga välja” (dare to choose) was recently evaluated and found to reduce the relapse into drug abuse with 13 percent. According to the evaluators no other factors could explain the outcome. An investment in MI was judged very important for the creation of a base and platform to build the particular effort on drug treatment on. (Göransson, 2008)

Supportive factors for the implementation

According to the report the strong political pressure, interest and demand was promoting for carrying thru the project. In times of cut backs and/or organisational problems the project was still given priority and carried out according to plan and the governmental financial support helped in putting the project into practice. Also the evident standpoint of management at all levels in the SPPS was of importance since it made the task visible for each and every one in the organisation.

As the project concerned the largest target group in correctional treatment the SPPS decided to include the whole organisation in the project instead of selecting special units for pilot projects. Even though the process was slower it was the right choice according to the report. Factors such as the inmate's possibility to be in contact with family, social services, employment offices etc in the home municipality were easier to cope with when all of the correctional treatment units were participating in the project. It was also judged better to create an engagement for the project among all staff and management instead of making elite units. In that way conflicts experienced to occur between regular operations and special units are avoided and the whole organisation becomes more willing to learn and change. (Göransson, 2008)

Limiting factors

The overriding problem in implementing the particular effort on drug treatment was the lack of space in the correctional treatment institutions since the SPPS has the task and duty to provide space for all detained serving their sentence in prison. As a consequence it was not always possible to differentiate the abusers. In the overcrowded departments it was also lack of occupation and work shops which further impaired the motivational climate for the inmates.

Difficulties in getting the municipalities to take financial responsibility for probation treatment or continued treatment after release were further obstacles in carrying through the project. The work laid down by staff and inmates during the prison period was jeopardised and in some cases municipalities said categorical no to all forms of treatment in spite of the fact that the SPPS financed the major part. Clinics offering medically assisted treatment also commonly refused to take on patients from the SPPS referring to the fact that they all ready had long lines of addicts outside the correctional treatment in acute need of treatment.

The SPPS's choice to include all correctional treatment in the project caused organisational problems. The need to find space and suitable care for an increasing number of convicts simultaneously as the project was running implied that trained staff sometimes found it difficult to work with the drug prevention programmes and that staff not yet educated in the new programmes could not be free for training and education. The implementation of new programmes was some times also hampered by the lack of experienced trainers and teachers.

A huge reorganisation of the SPPS also took part during the project period. From 36 autonomous agencies and one prison and probation board the organisation became one agency with a head office, several regions, institutions with different and differentiated levels of security etc. The implementation of an improved and extended treatment system for drug addicts simultaneously as a reorganisation of the prison and probation services often had the consequence that the treatment drive was impaired. (Göransson, 2008)

External evaluators

Parts of the treatment project have been followed and evaluated by the National Council for Crime Prevention (NCCP). In the 2008 NR it was reported how the staff perceived that the inmates had benefitted from the strategy (Brå, 2006) and how the inmates themselves judged the strategy (Bra, 2007). The 2008 NR also had a section on the NCCP studies on the efficacy of treatment in prisons regarding drug use and relapse into crime (Brå, 2008). In some instances the treatment was found to significantly decrease the relapse into drug use and crime in the treatment group compared to the control.

Summarized conclusions

According to the report it has not been possible to reach desirable results regarding reduced relapse into drug use and crime. To stop drug use, to give up a criminal life style and to form a life without drugs and crime is difficult and needs time. The SPPS handles very problematic drug users. To expect results in terms of directly measurable levels of relapse at the immediate start of the project is not realistic. It could however be expected that the SPPS initiates rehabilitation and motivation for continued treatment and according to the report this is achieved. To create a good environment for change in a "punishment" system takes a long time and involves many people working for the same goal.

The prerequisite to put in large efforts against drug dependence within the correctional treatment is that the drug treatment is voluntary and that it simultaneously is clear that the efforts take place within the frames of the punishment. The desire for a change exists among most inmates but there is also ambivalence. They don't believe

that they manage to change and they see no alternatives to drugs. The special investment in motivational interviews (MI) has thus been invaluable as a base and platform to build the particular effort on drug treatment on.

Drug treatment started within the frames of correctional treatment must not differ from drug treatment given at other treatment institutions in society since the drug treatment commonly is continued and finalized outside the correctional treatment system. Also, with drug treatment within the correctional treatment individuals could be reached that never or rarely asks for treatment. The detainee is as a consequence of the time in custody detoxified, perhaps for the first time in many years, and has the opportunity to consider and think thru the present life situation. If such a person is given the opportunity to meet with an engaged and experienced expert in drug treatment analysing the drug abusers needs and presenting possible ways for treatment and rehabilitation it could be an important first step in a process

Drug use and problem drug use in prisons

No new information available.

Responses to drug-related health issues in prisons

Since 2007, the Dependence Treatment Centre in Stockholm county and the Prison and Probation Service work together in an Integrated Team for Opiate-dependent Clients (ITOK). An evaluation study of the project from both a socio-economical and a co-operational perspective shows that all parties profit from working together. ITOK has developed a functional concept that has proved to be beneficial both for clients and for societys' economy.

The integrated team in ITOK contains staff from the probation service and from the dependence centre (medical doctor, nurse and psychologist). The task is to make assessments of clients in the prison and probation service, to start treatment and to coordinate services from all parties involved. The dependence centre is responsible for medically assisted treatment (buprenorphine- or methadone treatment in combination with psychiatric diagnosis and treatment), the prison and probation service contributes with cognitive programmes that focus on both criminal behaviour and misuse. The social services agencies are also involved in each single case.

An evaluation study was conducted, based on 43 individuals out of the 77 who started the treatment. More than half of them have been on parole or in prison (the rest were on probation or were subject to intensive supervision with electronic monitoring). On average, the clients had 16.1 sentences. 9 clients have successfully terminated their treatment in ITOK, and moved on to an ordinary outpatient clinic. After six months, three participants held some kind of jobs.

The evaluation showed that every sum of money invested in this treatment project gave 20 times its worth in return. In comparison with methadone treatment generally, ITOK has a target population that has more severe problems, but the project succeeds faster and to a larger extent in getting clients into jobs and other rehabilitating activities – and is cheaper per client. ITOK's structure and methodology are also said to be models for the setting up of future rehabilitating services.

ADHD among prisoners – occurrence/diagnosis/treatment/follow-up

In the last years the occurrence of individuals with the diagnoses of ADHD and related ones among the drug users have been highlighted. The background is that ADHD is thought to be more common among users of stimulants, and that this “self-medication” should be replaced with prescribed drugs in lower doses. This should then, according to the theories, help the drug users to stop using illicit drugs.

One ongoing study is conducted by Ylva Ginsberg, MD, and Nils Lindefors, MD, PhD, Karolinska Institutet, Department of Clinical Neuroscience, Division of Psychiatry, Huddinge, Sweden. Below is a summary of the project so far.

Objectives:

- To determine the prevalence of ADHD in a group of men, 18-65 years, at a Swedish semi security classed prison.
- To evaluate and describe the feasibility of assessment, diagnosing and treatment for ADHD in a subgroup of prisoners.
- Additional aim, not reported here: To evaluate the efficacy of PR OROS Methylphenidate and psychosocial interventions in the evaluated subgroup, diagnosed with ADHD (EudraCT-nr 2006-002553-80).

Design and methods:

- 316 participants were consecutively recruited and assessed for ADHD in childhood and adulthood.
- We used the self-reported questionnaires, Wender Utah Rating Scale (WURS) for retrospective symptoms in childhood and the Adult ADHD Self-report Scale (ASRS-Screener) for symptoms in adulthood.
- 34 prisoners screening positively for ADHD in childhood (WURS at least 36p) and adulthood (ASRS-Screener at least 4/6 criteria) were extensively evaluated for ADHD.
- The evaluation included neuropsychological assessment and semi-structured interviews for ADHD (CAADID), co-morbid axis-I disorders (SCID-I), and psychopathy (Hare PCL-R).
- As part of the study, but not reported here: 30 subjects with a confirmed diagnosis of ADHD were randomized to an initial 5 week double blind placebo controlled trial in prison, comparing PR OROS Methylphenidate and psychosocial interventions versus placebo.
- The initial phase is followed by an open label extension for 47 weeks in prison, evaluating the long-term efficacy of PR OROS Methylphenidate and psychosocial interventions.
- In a follow-up study 12 and 36 months post trial; ADHD symptoms, treatment, global functioning, quality of life, and relapse into abuse and criminality will be evaluated.

Results:

- Preliminary results from the survey show that 57% of the subjects were screening positively for ADHD in childhood and 52% for ADHD in adulthood, respectively.
- Combining ADHD in childhood and adulthood, the overall prevalence for ADHD was 45%.
- The response rate was 62%.

- In the clinically assessed group, 88% (30/34) were diagnosed with ADHD, indicating a high specificity.
- 30% of subjects with ADHD had previously been diagnosed with ADHD (9/30). Two subjects out of 9 were identified in childhood, while 7/9 were identified in adulthood prior to this study.
- Three subjects out of 30 (10%) had earlier received treatment for ADHD, but only one of them in childhood.
- The prevalence of ADHD in this prison population indicates to be 10 fold elevated (45%) compared to the normal population (4.4%).
- All subjects with confirmed ADHD (30) were eligibly randomized to the subsequent controlled trial, still ongoing, which will be reported later.

Conclusions:

- A high prevalence of Attention-Deficit/Hyperactivity Disorder (ADHD) among prisoners is indicated by the survey; 57% ADHD in childhood, 52% in adulthood and 45% in childhood and adulthood combined.
- In the evaluated subgroup, 88% were diagnosed with ADHD.
- 70% of subjects with ADHD were previously unidentified.
- 10% of subjects with ADHD had earlier received pharmacological treatment for ADHD, but only 3% in childhood.
- The prevalence of ADHD in this prison population indicates to be 10 fold elevated (45%), compared to the normal population (4.4%).

However, since the response rate was 62% there is some uncertainty in interpreting these results.

Update:

- The double blind phase was recently completed, while the open label extension phase is ongoing.
- The follow-up 12 months post trial has started

Infectious Diseases related to drug use

As was mentioned in Chapter 6, the National Board of Health and Welfare is setting up a sentinel surveillance system. This is developed in collaboration with the Swedish Prison and Probation service, the county councils and the Karolinska University. In August 2009, the system covered 2 out of 6 potential regions in Sweden. The intention is to roll-out a 3rd region by the end of the year.

Reintegration of drug users after release from prison

Education, training

The Prison and Probation Services invest heavily in studies and vocational training to make the prison sentence more meaningful for the inmates and to enhance reintegration. Studies and vocational training is an important complement to drug treatment in providing the inmates with skills that will help them to stay drug free after prison. The yearly report of the Prison and Probations Services put a high emphasis on those aspects of rehabilitation. In 2008 it was possible to get vocational training in 33 prisons, 4 of them women's prison, and in total 9 more than in 2006.

The studies organised in prison are under supervision of the National Agency for Education and 29 % (3 965 persons) of all inmates in 2007 were studying during their prison time, which is a slight increase from 2007 where approx. 27% of the inmates were studying. Women are still to a higher degree students than men, (35%).

During 2008 the number of certificates for completed studies have continued to increase. A total of 1 363 certificates were received by 869 inmates, this compared to 938 certificates received by 589 inmates during 2007.

The requirements for participation in education and training are more stringent. This has resulted in fewer study hours and better study results. There is a strong emphasis on raising the quality on education and to see that studies is not a way for inmates to get away from working.

Chapter 10: Drug Markets

Introduction:

Drugs origin: national production versus imported

Professional full scale illegal indoor cultivation of marijuana with concentration to the southern parts of the country is a new phenomenon in Sweden. More information about this can be found in the Selected Issue *Cannabis Markets and Production*.

Apart from this phenomenon, just small “kitchen labs” for production of synthetic drugs are found on rare occasions in Sweden, less than once per year. Most of the domestically abused illegal drugs are distributed via the three biggest cities, Stockholm, Gothenburg and Malmö. An increasing part of all kind of drugs, including not yet controlled substances, are distributed by letters/parcels after having been purchased via the Internet. In general Sweden is mainly a recipient country for most drugs of abuse.

Organized crime

A cooperation project between several crime-fighting authorities, on the threat of drug smuggling and related organized crime from a broad security perspective, describes the dynamic of the way drugs are smuggled to Sweden and the connection to organized crime. The project has through basic research constructed an open information database describing the drug problem in Eurasia and the analytic work resulting from the database has resulted in several reports. The project has shown that the drug trade has harmful effects on the societal development and has a close connection to armed conflicts and governmental corruption. The direct consequences for Sweden are that easily available sources of drugs are getting closer to the borders of Sweden and that organized criminal networks from the producing areas to a higher degree are active in Sweden. The report describes that the criminal networks are developing to a more flexible organizational structure that more easily can adapt to a changed situation. The report concludes that organized crime is on the rise in Sweden since Sweden is getting more integrated in the international drug trade and changes in other countries can directly affect the situation in Sweden.

Precursor chemicals used in the manufacture of illicit drugs

The manufacturing of illicit drugs (except the ones that are used in its natural form, such as khat or cannabis) requires so called precursor chemicals. The situation concerning these precursor chemicals is, as the problem with illicit drugs, an EU-problem rather than a problem for each member state separately. The illicit drugs and precursor chemicals are smuggled via the same areas in Europe. There are, however, some large differences between drugs and precursors.

Precursor chemicals are chemicals used both legally and illegally and are usually manufactured under rigorous security measures. The most important chemicals for producing illicit drugs, mainly PMK, BMK (the most important chemical in the production of amphetamine) and ephedra (ephedrine in its natural form), are actually manufactured in just a few places in the world. Because if this there is a possibility to stop smuggling by focusing on specific routes.

Despite of the above, the seizures of precursor chemicals have dropped almost to zero since 2005. Before that large seizures were made in the big harbours on the continental Europe, this mainly in the traffic coming from China. The seizures made today are mainly shipping's meant for the Latin American market, originating from China or India and only using Europe as transit.

The question that arises in the light of the above is then of course: all the precursor chemicals used in the manufacturing of amphetamine and ecstasy in Europe; where do they come from?

The European Commission have decided that under the second part of 2009 offer a course for all who works at the borders in Europe, this via computer-based study material sent to all customs etc. This will, hopefully, increase the possibilities of identifying and stopping the smuggling of precursor chemicals. In this offer it is also expected that those guarding the borders will provide the tools necessary to do this, such as protective clothing, possibility to analyse substances etc.

CAN's reporting system on drugs (CRD)

CAN's reporting system on drugs (CRD) is designed for early detection of new drugs and new ways of using existing drugs as well as to indicate where in the country and in which groups these changes happen.

The system is based on information from local reporters around the country. CAN sends out approximately 150 questionnaires to respondents in the 15 largest municipalities of Sweden. They are mainly to be found in social services, health services, police, open care/correctional systems and volunteer organizations. The response rate is usually about 80-85 percent.

Data are collected twice a year. The reporting period is currently on a semi-annual basis and the latest data collection covers July to December 2008. The selection of municipalities is not randomised and the survey is not claiming to be representative for the entire country. However, the strategic selection brings good possibilities to get information on new drugs and trends relatively quickly, which is the primary purpose of the survey.

The survey consists of two separate data collections; one includes respondents in the 15 largest municipalities and the other one representatives of each of the twenty-one county police departments of Sweden.

The data collection in the municipalities is implemented as a web-survey. The informants answer a questionnaire about changes in the drug situation and the availability of different drugs, for a six months period (January – June and July – December respectively). In addition, there are open ended questions about possible changes in the groups who use drugs, changes in drug patterns as well as one concerning any new drugs in the municipality. The respondents are requested only to submit information based on knowledge obtained from their work place or their region.

CAN is responsible for the data collection and processing. Thereafter, our local contact receives data on how the various respondents in the municipality have

responded. The local contact person then writes a brief summary. The local contact person also has the opportunity, when deemed appropriate, to contact some informants to follow up answers and to obtain additional information.

The survey that is done among the county police is a postal questionnaire, containing only questions about drug prices at street level and new drugs in the county. The reporting period is the same for both surveys.

Availability and supply

Availability of drugs

The perceived availability

The data in this section originates from the CRD data collection system (see the *Introduction* above) (Nyström, 2009)

Drug	Not occurring	Increase	No change	Decrease	Don't know
Cannabis resin	0	30	58	2	34
Herbal cannabis	0	18	57	0	49
Amphetamine	0	15	60	9	40
Heroin brown	1	8	40	9	66
Heroin white	3	4	42	5	70
Cocaine	0	27	47	1	49
Ecstasy	2	7	43	9	62

Table 10.1. Changes in the availability of drugs, local (national) reporter's view (CRD) (April 08– September 08).

The perceived changes in availability of drugs mirror the perceived changes in number of users. Cannabis resin and cocaine are the substances of the ones reported here that increase the most¹⁴. At the same time brown heroin, amphetamine and ecstasy are decreasing.

The response to the questions in the questionnaire should mirror the personal knowledge acquired by the respondent in the daily work at the local/regional level. Since the selection of municipalities is not randomised the investigation is not claiming to be representative for the country. The strategic selection brings however good possibilities to get some information on drugs and trends relatively quickly, which is the primary purpose of the inquiry.

Drugs origin: national production versus imported

No new information available (see the Selected Issue *Cannabis Markets and Production*)

Seizures

Quantities and numbers of seizures of all illicit drugs

Illegal drugs consumed in Sweden are mainly smuggled into the country. However, in 2008 20 well organised and sophisticated indoor marijuana cultivations were exposed

¹⁴ Benzodiazepines are the most increasing substance.

and dismantled. In addition some small-scale outdoor cannabis cultivation, some manufacturing of GHB and diversion of narcotic pharmaceuticals is observed but is judged to be of limited importance for the availability and supply. Table 10.2 shows the number of seizures by customs and police for some drugs since 2001.

Year	Medicine	<u>Cannabis[1]</u>	<u>Heroin[2]</u>	Amphetamine	Ecstasy	Cocaine	LSD
2001	3223	7156	1271	5713	621	328	28
2002	4476	8184	1052	6660	631	440	31
2003	4347	8243	1057	6657	489	545	18
2004	4715	8102	900	6773	411	524	17
2005	5247	8345	804	6499	381	546	32
2006	6032	9365	800	6842	309	772	50
2007	7443	10052	871	6477	268	725	65
2008	not available	10996	688	5304	231	815	51

15[1] Marijuana and hashish

16[2] White and brown heroin

Table 10.2. Number of seizures analyzed according to Police and Custom forensic laboratories 2001-2008, as reported in ST 13.

Seizures of medicines classified as narcotics are high and increasing, and although there are no statistics available yet for 2008 there is no reason to believe the trend is changing. The police give evidence that a steadily growing amount of legally prescribed medicine classified as narcotics become part of the illegal drug market. Flunitrazepam, diazepam and other benzodiazepines are dominating but also Sobril, Stillnoct and similar sedatives are seized. Subutex is also found among the diverted pharmaceuticals. About 80 % of the cannabis (hashish) seized in Sweden originates from Morocco.

The statistics for seizures made by police and customs gives the impression that cannabis becomes more common. The quantities have however decreased since last year. An increased use of cannabis among boys in the lower age groups is also shown in the annual Public Health Survey reported in Chapter 2 (2009 data). The continuous increase in seizures could thus possibly be explained by the increased efforts made by the police in the fight against drugs. This is also supported by the fact that the price development for cannabis has remained fairly constant over the last years.

During the 80s and 90s the seizures of heroine increased and reached a peak around the millennium shift with about 1300 annual seizures and 50 kg per year. Seizures as well as annual quantities are since then lower, with a decreasing number in 2008. Brown heroin has for many years constituted 80 – 90 percent of the heroine seizures.

Since 2002 the number of amphetamine seizures annually has been around 6500 and the seized amounts have a variation between 350 and 460 kg. As presented in this and previous NRs amphetamine is the most common i v drug in Sweden. For the two CNS stimulants ecstasy and cocaine the trends for seizures seems to mirror the perceived availability and use in the population as presented above.

A continuous increase in cocaine seizures is mirrored by a perceived increase in use and availability. In contrast, the perceived decrease or steady state level of ecstasy use and availability is also seen in terms of fewer seizures.

The seizures of LSD show no clear trend over the last 7 years. The increased number of seizures in 2006-2007 have now stopped and is back to the numbers in 2006

Quantities and numbers of seizures of precursors of illicit drugs

As many other countries Sweden is affected by the world wide illegal trade of ephedrine products for clandestine production of methamphetamine, mainly in Mexico. In 2007 approximately 1 ton of not finally refined ephedrine was seized in southern Sweden. The investigation could not prove the final destination but several observations in the case indicated that the parcel was aimed to be transhipped. No other smuggling attempts with precursors were revealed in 2007.

Number of illicit laboratories dismantled and type of illicit drugs manufactured

No manufacturing of illegal drugs are reported for the 2005 – 2007 period according to the latest report on the illegal drug situation in Sweden from the police and customs . Looking further back in time just a few small “kitchen labs” for production of synthetic drugs has been found. These smaller labs have mainly been set up and handled individually by not previously punished persons. The well established control system for the trade with chemicals and the national consultation group against illegal use of chemicals for the manufacturing of illegal drugs are explanatory factors contributing to the prevention of illegal manufacturing.

Quantities and numbers of seizures of precursor chemicals used in the manufacture of illicit drugs

As is also mentioned in the Introduction of the chapter, the seizures of precursor chemicals are almost down to zero since 2005. One of the last seizures in the EU was in Gothenburg, November 2005, when 2 000 kg ephedra (ephedrin in its natural form) was discovered in a shipping from China. This amount of ephedra would have been enough to manufacture approximately 200 kg methamphetamine. The investigation that followed revealed that the total amount smuggled at different points in time was around 5 000 kg ephedra and this had been sent on to Mexico via Poland, with USA as the final destination.

In Sweden we have a lot of traffic, going both via air and sea, directly to China and there is therefore a risk that Sweden can be used as one country for transit when shipping precursor chemicals to the continental Europe.

The precursors are categorised by the UN in three classes according to how important they are considered to be for the manufacturing of illicit drugs, those in category 1 being the most essential. In Sweden there is a large-scale traffic of the chemicals categorised in class 3, the least important for the manufacturing of illicit drugs (for example Sulfuric acid). The traffic of categories 1 and 2 is not substantial.

In table 10.3 we show the seizures made in Sweden during 2008.

Export 2008

Category I	Weight	Final destination
<i>No export</i>	-----	-----
Category II		
Anthranilic Acid	1kg	USA
Category III		
Hydrochloric acid	16 000 tons	NO, FI
Sulfuric acid	89 000 tons	AR, BR, CL, MA, NO, US
Toluene	29 tons	NO
Ethyl ether	2 tons	NO
Acetone	171 tons	AE, CA, NO
Methyl ethyl ketone	79 tons	FI, NO

Import 2008

Category I	Weight	County of origin
<i>No import</i>	-----	-----
Category II		
Acetic acid anhydride	2 200 tons	NO
Anthranilic Acid	1 000 kg	CN
Piperidine	129 kg	CN, JP, US
Potassium permanganate	350 kg	US
Category III		
Hydrochloric acid	7 750 tons	NO
Sulfuric acid	574 tons	JP, NO, TW, US
Toluene	166 kg	NO, US
Ethyl ether	3 000 kg	NO
Acetone	2 600 kg	CH, NO, US
Methyl ethyl ketone	54 kg	US, CH

Table 10.3. Number of seizures of various precursor chemicals in Sweden 2008.

Apart from the UN-defined list of precursor chemicals used for the manufacturing of illicit drugs mentioned above, there is a "voluntary" list within the EU. The most important substance for Sweden on this list is GBL. During 2008 a total of 500 litres was seized in the country and in connection to this a large network of criminals in Gothenburg was destroyed. GBL is categorised as a precursor chemical for manufacturing GHB. However, since several years the substance has been used as it is in Sweden, a problem that now also is occurring in other European countries.

Number of illicit laboratories and other production sites dismantled; and precise type of illicit drugs manufactured there

For information about this, please see the Selected Issue *Cannabis markets and production* in the end of this report.

Price/purity

Price of illicit drugs at retail level

No new information available

Price of drugs at street level

Street level prices are collected twice annually within the CRD reporting system (see the *Introduction* above). From the 2008 report it is evident that the price level has been rather stable over the last years (Nyström, 2009). In table 10.4 the price-trend 1996 – 2008 is presented.

Year	Hash	Marij	Amphet	Brown heroin	Cocaine	White heroin	Khat	Ecst	GHB	LSD
1996	94	89	305	1498	1109	1941				
1997	88	102	331	1380	1214	1766				
1998	99	111	332	1519	1050	2072				
1999	99	94	286	2008	1210	1926				
2000	87	74	272	1089	980	2451	300	163	38	87
2001	85	74	266	1063	1063	2127	266	159	32	106
2002	83	73	260	1041	833	1666	312	156	29	104
2003	82	71	255	1123	817	2042	306	128	31	92
2004	81	73	254	1017	814	2034	254	124	31	92
2005	81	81	253	1215	810	1367	253	101	30	61
2006	80	80	250	1000	800	1500	100	100	30	85
2007	80	80	225	1000	800	1500	100	100	30	100
2008	80	100	200	1000	800	2000	not available	100	not available	100

Table 10.4. The price (median) at street level 1996-2008 in SEK. 10 SEK is approximately 1 €. Prices are given per gram or bundle (khat), tablet (ecstasy), centilitre (GHB) and trip (LSD). (Figures from the CAN annual reports on drug prices).

As reported previously the monetary adjusted prices for amphetamine and brown heroine dropped by 60 % between 1988 and 2002, for hashish by 50 % and for cocaine by 35 %. For the period 2002 – 2008 the changes are small with a possible decreasing trend, except for herbal cannabis which is showing a slight increase in 2008. One possible explanation to this could be that new actors entered this market (please see *Selected Issue Cannabis markets and production*).

Purity/potency at street level and composition of drug/tablets

The purity of street level seizures and the composition of drug/tablets are not monitored systematically in Sweden and valid estimates could thus not be presented.

Chapter 11: Market and production of cannabis

Markets

Brief history of national production

Cannabis preparations (marijuana and hashish) are by far the most widely used illicit drugs in Sweden. Cannabis is also a "gateway drug" that leads young people into abuse of other illicit drugs. It has the function of an epidemiological base. Hashish is also a major source of income for organised criminal networks in Sweden and the suppression of importation and distribution of this drug is therefore of vital importance.

Approximately 90% of all hashish smuggled into Sweden is produced in Morocco. The Swedish National Laboratory of Forensic Science classifies and analyses hashish seized by the police and Swedish Customs.¹⁷ The National Laboratory of Forensic Science probably has one of Europe's largest collection of "stamps" on hashish slabs.

Cannabis use is occurring mainly among youth, disadvantaged groups, certain ethnic groups and older, more long-term drug users in Sweden. Problems with cannabis are complicated. Most users smoke cannabis in groups of young people up to 18 years old. Swedish and foreign studies indicate that Sweden is considerably below the European average for the number of young people who have tried illicit drugs.¹⁸

Sweden experimented in the 1960s with decriminalising the use of cannabis and providing legal prescriptions for other narcotics. During this time period the crime rate rose and problematic drug use increased so much in Sweden that all forms of legalisation were abandoned.¹⁹ Sweden now has a very restrictive drugs policy, based on the lessons learned and the knowledge gained during that period. In the late 1970s, it was quite difficult to obtain cannabis and other illicit drugs in Sweden. Including police seizures, trends regarding abuse of cannabis and other illicit drugs have remained relatively stable.

Problems with illicit drugs have increased in Sweden since the mid 1990s, partly due to greater mobility, access to information technology and more open borders in Europe.

Small indoor and outdoor cannabis plantations, mainly for private use, have existed since the 1960s. The number of small indoor and outdoor plantations has increased in the last 20 years, including a few plantations in greenhouses made of construction plastic or hobby greenhouses. Cannabis plantations in Sweden are exclusively seeded herbal cannabis.

The prevalence of indoor plantations increased in Europe in the mid 1990s. In 1994 the Danish police reported problems with plantations in apartments, garages and

¹⁷ The Swedish National Laboratory of Forensic Science

¹⁸ ESPAD (European School Survey Project on Alcohol and Other Drugs).

¹⁹ Bejerot, Nils (1968): *Narkotikafrågan och samhället [The Drugs Issue and Society]*. Stockholm: Aldus/Bonniers.

similar places. This trend did not reach Sweden until 2000, after which the police began seizing a few large large-scale plantations each year.²⁰

Combating cannabis is highly prioritised in Sweden. In 2004 the Government Coordinator for drug-related issues initiated a national cannabis project aimed at mapping and combating organised crime. The cannabis project was carried out by the Swedish National Criminal Police.

In this project the National Criminal Police assessed that large-scale plantations would increase. Intelligence indicated that marijuana had grown in popularity and that Sweden was to all intents and purposes self-supporting regarding cannabis, as confirmed by police and Customs seizure statistics. The annual statistics were relatively stable regarding cannabis seized by Customs, but police seizures were increasing sharply.

These warning signals resulted in a decision in 2008 by the National Police Board to allocate SEK 120 million to support more effective suppression of serious organised crime. The Operational Council, a joint committee whose members include the Police, the Prosecution Authority, the Tax Office, the Customs Service and the Economic Crimes Bureau along with the National Criminal Police, was instructed to determine how the allocated funds should be used. Chosen areas of priority were to combat importation of cannabis and establish a national task force at Skåne CID.

Cannabis market: marijuana and hashish

Based on intelligence and completed criminal drug cases, the National Criminal Police estimated the cannabis market at approximately 20 tonnes in Sweden. Denmark performed an unofficial assessment of its market, which was an estimated 30 tonnes. Statistics Sweden (SCB) assessed the cannabis market based on the gross domestic product with statistical information about known drug users. SCB assessed the cannabis market at 1,700 kg. These numbers are for obvious reasons not compatible.

Marijuana has been and is still a small part of the total quantity of seizures in this preparation group. The percentage is currently increasing, due to the fact that it is easy to produce marijuana in Sweden, including in private homes (there is probably a great deal of home cultivation). Seizure statistics for 2006 indicate that this theory may be correct. Seizures are on the rise and the number of police seizures represent the increase in quantity. According to reports from the Stockholm Police, marijuana use is increasing sharply among youth, cocaine abusers, and in restaurants. Stockholm is leading this trend.

The largest groups dealing and using marijuana of which we are currently aware, are youth, organised motorcycle gangs²¹ and people ethnically connected to the Balkan countries and West Africa. Accordingly, the cannabis market is a large market with large unreported statistics. A few sophisticated, large-scale cannabis plantations have been seized in Sweden and intelligence indicates that Swedes are quite capable of running large-scale plantations.

²⁰ BAR, seizures and analysis register, Swedish Police.

²¹ Organised motorcycle gangs

There is no general picture of organised multi-criminality. We have had a few cases involving international networks/organisations of criminals that have committed violent crimes, murders for the purpose of punishment or revenge, or armoured car robberies in order to obtain financial resources quickly. Reasons included that a large shipment of cannabis had disappeared and that criminals wanted a quick start to buying and dealing cannabis in organised forms. In these cases, cannabis was the main activity. A few national Swedish cases appeared to support the theory of multi-criminality. When this occurred it was a consequence of random circumstances and profit interests. Multi-criminality and generalists are often connected to mid-level organised gangs, local gangs, street gangs and prison gangs. Drug enforcement police believe this picture of crime is inaccurate with regard to wholesale drugs smuggling. The basis is always a main crime with a main preparation, which is not affected by police methods. Other crimes are committed, of course, often of an ad hoc type, but the main crime is always the same.

However, there are a few exceptions as one moves down the distribution chain. A study by the Swedish National Council for Crime Prevention indicated that the most common approach is that criminals traffic one illicit drug at a time.²² At an organisationally intermediate level, e.g. in an organised gang in a Swedish town of average size, it is starting to become possible to observe generalist criminal networks and organisations. They traffic several drugs in combination with other crimes such as violent crimes, financial crimes, robberies of money transports etc.

National distribution

The most central form of organised crime is drugs smuggling and distribution of drugs to other countries. According to a 1994 UN assessment of global organised crime, the total drugs traffic was an estimated USD 500 billion, compared to the estimated total profit of USD 750 billion from all types of criminal activities.²³ Others have estimated profits at USD 1 quintillion, which is approximately equal to the US federal budget.²⁴ Based on financial calculations regarding global crime, approximately 60% of international crime is related to drugs crime.

Cannabis trafficking includes both commercial production and drug trafficking amounting to turnover of USD 144 billion (SEK 1,152 billion).²⁵ Production and drug trafficking begin with poor farmers in the Rif mountains of Morocco and is channelled via drug barons and involves extensive logistics to smuggle cannabis resin to Europe. Warehouses where several tonnes of cannabis can be stored are found in Spain and France. Large-scale drug traffickers and trade coordinators are found in Spain and the Netherlands. To this we can add the “coffee shops” in the Netherlands where drugs are sold to the public.

Haulage companies or drug traffickers from south and central Europe transport cannabis to Sweden. Swedish networks sell, distribute and smuggle cannabis through

²² National Council for Crime Prevention, Report 2007:7. *Narkotikadistributörer. En studie av grossisterna* [Drugs distributors. A study of wholesalers].

²³ National Tax Agency Report 2000:9, *Rapport from Framtidsprojektet, etapp 2-3* [Report from the Future Project, Phases 2-3].

²⁴ Manuel Castells: *The Information Age: Economy, Society and Culture, Volume 3: End of Millennium*, 1999

²⁵ UNODC World Drug Report, 2006.

several links to individual drug abusers in Sweden. Marijuana and cannabis resin can be purchased all over Sweden.

Commonly, groups and networks that produce and sell cannabis are not as organised as they appear at first glance. However, the cannabis project mentioned above discovered that an inner circle of three to five individuals with fixed functions remains intact. This circle may remain unchanged for a relatively long time, as long as none of those involved begin to make mistakes or use drugs themselves.

An organisation and fixed functions in a network are necessary ingredients to smuggle and distribute cannabis. This is a large operation with extensive demands for logistics and secure handling of money. Robberies and kidnappings of drug distributors are common in several European countries. This requires the organisations to have their own security structures and intelligence, including risk analyses of police and Customs methods. The groups that are active in Sweden often have the same contacts abroad, mostly regarding smuggling networks. They maintain these contacts for many years and it is often difficult to discern the difference between organised crime and criminal networks. Both types often fit the EU criteria on organised crime.

The dynamics of the cannabis area

The total quantity of cannabis trafficking is relatively constant, this being based on intelligence material, drug habit studies and seizures of illicit drugs.²⁶ Approximately 75-80% of the market is cannabis resin and approximately 80-90% of this comes from Morocco. Approximately 20% - 25% of the cannabis market is Sinsemilla. Approximately 20-25% is smuggled to Sweden from other countries. The producing countries are in West Africa, the Balkan countries, the Netherlands and the United Kingdom. Note that the police seized 74.7% and Swedish Customs 25.3% of all cannabis seizures.²⁷ A change occurred in Sweden after 2005, when intelligence indicated an increase in large-scale plantations.

The largest groups that we are currently aware of that are dealing and abusing marijuana are youth, criminal motorcycle gangs and people with ethnic connections to the Balkan countries and West Africa. Swedish police have noted a trend of sophisticated illegal marijuana plantations in Sweden. Several sophisticated large-scale marijuana plantations have been seized and the criminals convicted. Intelligence also indicates that Swedes are very skilful at managing marijuana plantations. The country is nearly self-supporting regarding marijuana.

Outdoor cultivation (Morocco) yields larger crops of lower quality. For that reason, the crop is processed into cannabis resin, but can also be used as marijuana (kif). Indoor cultivation produces smaller quantities of higher quality and is thus used as marijuana.

Sweden is in a favourable position from the authorities point of view, because the size of the market does not make Sweden as profitable as some other European countries. Drug enforcement works well with respect to users and dealers, but unfortunately very few organisers are prosecuted and it is important to note this failure. We must

²⁶ BAR, seizures and analysis register, Swedish Police.

²⁷ Cannabis, marijuana.

improve drug enforcement methods in order to “vaccinate” Sweden against aggravated crime and organised crime. The fight against illicit drugs is also a strategic fight against other crime.

We are currently seeing criminal gangs from Denmark establishing operations in Sweden. These gangs are notorious for their violence and cannabis trafficking. Copenhagen is much more affected by drug problems and violence than Malmö in Sweden, even though the cities are only 10 km or 20 minutes apart. We can make a similar comparison with Oslo, Norway. The reason for this is that Sweden has learned from the liberalisation problems experienced in the 1960s. The market must be combated so that gangs and organised crime do not obtain any income.

The distribution of roles among individuals in networks or gangs often depends on their skills, knowledge and contacts combined with risks. We have established that business relations are prolonged over time. One difficulty for these networks is that conventional financial channels are largely closed to them. They must use money couriers when they rendering sales accounts and exchanging currency. Criminals are forced to exchange currency since Sweden is not using the Euro in connection with monitoring cash flows and attempting to trace money laundering or other criminal activities.

Typical sales outlets for retail dealers are apartments, houses or drug dealer agreements. Open drug scenes are uncommon in Sweden, but there are places notorious in connection with illicit drugs. Cannabis traffic is usually limited to cannabis, but amphetamines and benzodiazepines are sometimes sold by the same drug dealers.

“Grow shops”

There are no grow shops in Sweden. Equipment is imported from other countries, mostly equipment typical for production of cannabis. Legal growing equipment can be purchased from the specialised retail trade providing such equipment. Generally speaking, cannabis seeds or typical equipment for cannabis plantation are purchased in the Netherlands or over the Internet. There have been a few cases in which equipment was purchased from the United Kingdom (“cannacutter”).

One risk factor is that legal plantations of industrial hemp can spread cannabis plantations. The environmental control units of county administrative boards have a control function in Sweden. We asked one unit, which said it inspected 8 out of 28 plantations in their county. According to the National Swedish Laboratory of Forensic Science and the author of this report, there are shortcomings with these inspections when samples are taken. Another control function is that they are only permitted to grow cannabis hemp with specific, approved seeds from special producers. The control requires the grower to send the seed box labels from the seed used in the field to prove that a correct type of seed was used.

Distribution network

It is difficult to identify wholesalers, and there is a problem with the definition. All drug traffic is based on the existence of wholesalers. Every town has an important wholesaler with a network of a certain size, who may be the wholesaler for a particular group. This drug traffic should only be denominated within different levels

of drug dealing. Only individuals who are active as national import links for illicit drugs should be called wholesalers. Identified wholesalers are found in the larger cities in Sweden.

Identified wholesalers are sometimes completely new and unknown, but there are also individuals who have been involved previously and figure in old police investigations going back 5–20 years or more. When information is gathered or new drug cases are opened, it can be established that the networks from old cases are still intact. Often there is little change in smuggling methods and drug traffickers try to re-use successful concepts.

The core group of a distribution or smuggling network is normally made up of 3-10 individuals. When a large cannabis shipment is imported, 3-8 individuals are often involved. Active groups commonly aim to stay as small as possible in order to minimise risks and maximise the take for each when profits are divided.

Smuggling networks are based on established contacts in Denmark, Germany, the Netherlands or Spain. A distribution network may also be temporarily changed if a contact abroad is established. This usually happens in the Netherlands where there is an accessible cannabis market. This type of drug traffic is usually temporary, because it is difficult for Swedish drug dealers to successfully negotiate good prices that are attractive to Swedish buyers and to obtain the desired quantity and quality of cannabis resin.

A trend has developed in the last few years in which cannabis traffic has moved from Denmark to the south of Skåne, Sweden, mainly involving cannabis shipments of small to average quantities for small Swedish networks established locally in medium-sized towns.

One important discovery in the later years were a large number of sophisticated indoor cannabis plantations, mainly in the south of Sweden. There were indications of organised crime behind the detected indoor plantations. Several detainees were of Vietnamese origin, which indicates that foreign criminals are involved.

Identified groups

Gangs from the suburbs and prison gangs – networks

Ethnically linked gangs and networks

The police mainly identified Swedish, Danish, Moroccan, Arab, Yugoslavian, West African, Libyan, Albanian, Estonian and Polish nationals.

Wholesale prices per kg, hashish

Morocco: SEK 1,700-3,000

Spain: SEK 6,000-8,000

France: SEK 10,000-14,000

Netherlands: SEK 12,000-15,000

Germany: SEK 14,000-15,000

Sweden: SEK 20,000-30,000 (street price is SEK 60-100/g)

Norway: SEK 20,000-30,000

The price for cannabis resin is approximately SEK 80-100/g (among drug abusers). A normal price range is SEK 70-100/g. Wholesale prices (SEK/kg): Morocco, 2,500-3,000, Spain, 8,000. The price per kg in Sweden varies between SEK 20,000- 40,000.

Wholesale prices, marijuana

The price for marijuana is higher, mostly due to a higher level of THC. The wholesale price varies between SEK 50,000-80,000/kg depending on quality and quantity. The action group in Skåne reported a price of SEK 30-35,000 per kg. The price per gram is above SEK 100.

The action group in Skåne reported stable prices for cannabis products. The price neither increased nor decreased during the project period. The supply of cannabis products is good.

Seizures

Supply reduction, law enforcement, policing cannabis production, supply and distribution

The aim of the Swedish drug strategy is to reduce the drug market and the supply of illicit drugs. Uniformed police officers or drug enforcement officers are empowered to arrest drug users in order to take blood or urine samples. If a person is found under the influence of illicit drugs, the penalty is a fine or imprisonment for up to six months.

The second step is to direct enforcement activities at local drug kingpins and drug dealers with rapid and brief police initiatives by drug units that work in the streets.

The final step is for regional police, the National Criminal Police and Swedish Customs to limit supplies of illicit drugs by means of organised drug investigations.

The Swedish police increased efforts to combat serious crime related to cannabis by means of an action group in Skåne.²⁸ Efforts in Sweden have been aimed primarily at indoor plantations in private houses and secondarily against the market and distribution.

The work was performed in the traditional way by collecting information from various sources, carrying out drug investigations with surveillance and wiretapping, interviewing suspects and, finally, prosecution. The outcomes are good intelligence and knowledge including strategic information about organised cannabis traffic.

Indoor cannabis cultivation is an increasing crime. Much of Sweden is sparsely populated, which criminal gangs take advantage of. Criminals buy small, inexpensive houses in rural areas. The plantations found by the police were in southern and central Sweden.

Information came from our neighbouring countries regarding cultivation and smuggling of marijuana connected to Vietnamese individuals. It was quickly established that this type of cultivation was taking place indoors in purchased or rented houses.

²⁸ Swedish Penal law on Narcotics (NSL). Practice 2kg, serious crimes.

Vietnamese gangs purchased a number of relatively inexpensive houses in northeastern Skåne. The police quickly discovered 11 plantations in Kristianstad. Seizures and arrests were made. The arrested “gardeners” included undocumented immigrants and tourists with no connection to Sweden other than their work taking care of a plantation. Intelligence efforts continued and additional plantations were detected in the counties of Kronoberg, Kalmar, Halland, Närke and Blekinge in Sweden.

A total of approximately 350 kg of marijuana was seized. Nineteen plantations were discovered and 29 individuals were arrested. Nineteen individuals were prosecuted and convicted, receiving sentences of a total of 73 years imprisonment after the convictions were upheld in the court of appeal. Two houses were forfeited.

Other noteworthy information

Swedish distributors were part of a Danish smuggling organisation importing to Denmark. The Swedish distributor takes a percentage of the shipments that come to Denmark.

There is tangible information that individuals domiciled in Sweden/Skåne are cooperating with importers in Denmark that import tonnes to Denmark. Individuals domiciled in Skåne take a percentage of these shipments for further distribution in Sweden. It is evident that many large cannabis shipments are smuggled in trucks. For that reason, an initiative by Swedish Customs to carry out a project focused on heavy trucks is welcome.

German and Dutch truck drivers working for Dutch haulage companies loaded hashish with their legal cargo. Over the course of a year, tonnes of hashish are imported to all the Nordic countries by this means of distribution.

The method and point of departure is to collect information from completed cases that can provide a realistic market forecast. The forecast market size was based on large-scale drug trafficking, in order to minimise errors. The market was estimated based on identified organisations for which intelligence and investigations indicated capacity to import large quantities of cannabis each year and the necessary organisation or network. However, we know that there are several networks that are more or less dormant.

The National Laboratory of Forensic Science works with analysis and markings on seized hashish slabs. The purpose of the work was to link similar seizures from various parts of Sweden in order to determine, if possible, whether drugs came from a particular supplier.

The National Criminal Police employed a media strategy to inform the public by various media channels about assessed threat scenarios and how plantations are organised and connected to organised crime.

Large scale plantations

(Vietnamese individuals). Estimation and analysis by the action group in Skåne.

One house of 25 square metres converted and ready for SEK 600,000 can yield up to 10 kg per crop of marijuana. Five crops a year totalling 50 kg at SEK 30-35,000/kg = SEK 1,750,000. This produces a profit for each house of approximately SEK 1,800,000.

The weight of the cannabis plant without stem and leaves is approximately 25%. One plant yields 50-100 grams of marijuana with a THC content of 15-20%. One plantation of 400 plants can yield 20-40 kg of marijuana.

In one year, this adds up to production of 60-100 kg of marijuana for one house: 60 x 18 plantations = 1,080 kg.

Stolen electricity

Electricity theft or other crimes against energy companies were common at these plantations. In the discovered house properties connected to Vietnamese individuals, it appeared that the electricity company (EON) had not observed any signs of increased consumption of electricity. The cost of electricity should be approximately SEK 70-80,000 per year for one house (a low estimate). The growers had rerouted electric connections to bypass the electricity meter. The entire cannabis operation involved an obvious risk of fire.

Damages

Illicit drugs cause several problems: Profits from plantations are invested in legal activities. Unhealthy competition. Tax crimes. Criminal syndicates in Asia are provided with money which is invested in the tourism business. In the rest of Europe, for example in the Netherlands, the police are working with a cannabis project in order to stop serious organised crime. In 2007 they had 5,000 illegal plantations of marijuana, 80% of which was exported.

In the United Kingdom, there were more than 2,000 marijuana plantations found in 2007. Sixty percent of the cannabis abused in Britain is produced inside the borders of the United Kingdom, and 75% of these plantations are controlled by Vietnamese individuals.

Statistics

The statistics asked for (*Seizures of plantations, 2006-2008 Origin of cannabis products seized, Breakdown of cannabis seizures by product and by amount seized, 2008 Cannabis supply-related offences reported by the police, 2006-2008*) is not available, please see Statistical Bulletin for general statistics on seizures and drug-related offences.

Chapter 12: Problem amphetamine and methamphetamine use, related consequences and responses

Bengt Svensson
Professor of Social Work
Malmö University
Malmö

Epidemiology of amphetamine and methamphetamine use with emphasis on chronic/intensive use

History of (meth)amphetamine use

The introduction in Sweden of the amphetamine drugs, amphetamine (e.g. Benzedrine) and methamphetamine (e.g. Pervitine) around 1938 started a new era (Goldberg 1968). It was soon found that these drugs, besides a vasoconstrictor action systemically and locally, e.g., on the nasal mucosa, had an appetite suppressant effect and stimulant action on the CNS. This stimulant effect was thought to decrease the need for sleep and the feeling of fatigue, to improve muscular and intellectual work, and to enhance sexual potency.

By 1938-1940, amphetamine was recommended as a “pep pill” in newspapers, weekly journals and broadcasts for all sorts of people, from students to tired housewives. Within a few years, large sections of the Swedish population had tried these drugs: surveys of e.g. representative groups of students showed that 70-80% of informants had tried amphetamine at least once with varying effects.

As long as amphetamine was used for purely medicinal purposes and mostly for local application, it was sold over the counter in pharmacies. As a result of increasing medicinal and non-medicinal use as early as 1939, the drug was made prescription-only as one step towards controlling its use. This had some inhibiting effect on use, and sales remained stable for one year before increasing again.

A warning to physicians was issued by the National Medical Board in April 1943, leading to a decrease in sales by 40-60% and a change in the attitude of the press and other mass media, which began to point out the risks involved in the uncontrolled use of amphetamine rather than the “beneficial” effects. Aimed at reducing the risks of uncontrolled use, amphetamine was put on the National Narcotic Drugs List in 1944, i.e. treated as a *narcotic* under Swedish law.

In 1942-1943, there were an estimated 200,000 amphetamine users in Sweden, corresponding to 3% of the adult population. About two thirds, 140,000 people, were occasional users (one third who had used the drug only once and one third who used 2-4 times per year). Of the rest, about 60,000 used the drug anywhere from several times a year to twice a month, and about 4,000 people used about once per week, all taking 2-3 tablets on each occasion. Higher doses were taken by about 3,000 people, from several times per week to daily in doses up to 5-10 tablets per day. There was a small number, around 200, of excessive users who presented various physical and psychological symptoms of abuse, taking up to 10, 50, or even 100 tablets per day on a more or less continuous basis (Goldberg 1968).

This period, which lasted up to the early 1950s, was thus characterised by vast and widespread use of stimulant drugs, but relatively few cases of abuse at only one-tenth of 1% of the total number of users.

In the early 1950s amphetamine use began among a group of bohemians connected to the literary group *Metamorfos* in Stockholm, made up of poets, authors, actors and artists. Amphetamine use also spread among criminals in Stockholm, and soon afterwards in criminal subcultures in other large cities in Sweden. In 1960 there were about 1,000 intravenous amphetamine abusers in Sweden according to estimates by the National Medical Board. The spread of amphetamine continued in the 1960s, but even faster than before (Tunving 1982). Amphetamine has maintained its popularity since the 1950s in criminal subcultures, but has also been used by young people in connection with parties and to improve sexual performance.

With the arrival of heroin in the Stockholm area and south-western Sweden in 1974-75, amphetamine was no longer the drug of choice for youth experimenting with intravenous drug use in these regions. Elsewhere in Sweden, amphetamine was still the dominant substance on the drug scene.

There appears to have been a decrease in initiation to drug abuse in the 1980s and early 1990s, but this was followed by a period of increasing drug abuse. Central stimulant drugs like MDMA and amphetamine were widely used among youth involved in the club scene. Heroin spread rapidly in cities where there was no previous tradition of heroin use (Olsson, Adamsson Wahren, Byqvist 2001:25).

The rapid increase of drug abuse seems to have slowed in the 2000s with respect to both opiates and central stimulants like amphetamine and MDMA. Estimates from the Swedish National Board of Health and Welfare in 2004 conclude that the number of persons with a problem drug use was on the same level in 2004 as in 1998. An updated estimate is planned later this year (Svensson 2009).

Methamphetamine has been reported since the 1980s as one of many brands of amphetamines. It has not received special attention until recently, either among users of central stimulants or authorities such as the Police and Customs.

Recent statistics from the Swedish National Board of Forensic Medicine in Linköping show that methamphetamine is relatively common in the Swedish drug scene although mainly cut with amphetamine. The following table shows analyses of samples taken from persons detained by the police suspected of a “minor drug offence” (Ahlner 2009).

Year	Amphetamine	Amphetamine + methamphetamine	Methamphetamine	Total number of analyses
2005	7,776	1,369	125	21,106
2006	10,553	1,414	161	27,413
2007	10,478	1,225	249	30,483
2008	7,272	3,821	257	33,100
2009 (first six months)	2,645	2,191	199	17,030

Table 12.1 Analyses of samples taken from persons detained by the police suspected of a “minor drug offence” 2005-2009 (first 6 months).

Use of unadulterated methamphetamine is still rare among Swedish drug users, and the substance is instead cut with amphetamine, probably on the wholesale level.

Trends and patterns of (meth)amphetamine use

A typology of British amphetamine users is presented in the anthology *Amphetamine Misuse* (Klee 1997). Three major groups are distinguished: recreational users, criminal users and self-medicators. There has been little research in Sweden on recreational use and self medication. I will present one qualitative study on recreational use. There is more research available in respect of criminal users. This group can be divided into distinct subgroups:

- People with a criminal lifestyle who are otherwise trying to live a conventional life with flats, cars and ambitions to conceal their drug use. Amphetamine use may be seen as a means to achieving other goals: intoxication is not a goal in itself.
- Socially marginalised people who are extremely poor and often homeless. They take amphetamine when available but use other drugs as well, especially alcohol and benzodiazepines.
- People who are somewhere in between. For example, they have a flat and friends who are not drug users, but especially during binges of amphetamine abuse, intoxication becomes a goal in itself.

Drugged drivers

One way of getting information about all three major groups in Klee’s typology is by following up cases of drug driving. A research group connected to the University of Linköping and the National Board of Forensic Medicine is responsible for Swedish research on drugged drivers.

A common observation in Sweden is that cars and driving are part of the lifestyle of amphetamine users and that driving while under the influence is not unusual (Kalderstam 1979). Driving under the influence of drugs is illegal in Sweden, where a zero-tolerance law came into force on 1 July 1999. The number of cases of drug driving submitted by the police for toxicological analysis has increased more than tenfold since then. In response, a research group in Linköping started an in-depth investigation into the kinds of drugs used by offenders, whether licit or illicit, and the frequency of their occurrence (Holmgren et al 2007).

Methods: All blood samples from suspects of drug driving (DUID) sent by the police for toxicological analysis over a four-year period (2001–2004) were studied (N = 22,777 cases). Specimens of blood or urine were subjected to broad screening analysis using immunoassay methods aimed at detecting amphetamine, cannabis, opiates, cocaine metabolite and the major benzodiazepines. All positive results from the screening stage were verified by use of more specific analytical methods (e.g. GC-MS, LC-MS, GC-FID and GC-NPD).

Results: Between 80 and 85% of all the blood samples contained at least one banned substance and many contained two or more therapeutic and/or illicit drugs. About 15% of cases tested negative for drugs, although they frequently (30–50%) contained ethanol above the legal limit for driving in Sweden, which is 0.20 mg/g (0.02 g%).

Amphetamine was the most prevalent illicit drug, seen in 55–60% of cases, either alone or in combination with other drugs of abuse. Stimulants like cocaine and/or its metabolite were infrequently encountered (~1.2% of cases). The next most prevalent illicit drug was cannabis, with positive results for tetrahydrocannabinol (THC) in blood, either alone (~4%) or along with other psychoactive substances (~20%). Morphine, codeine, and/or 6-acetyl morphine were identified in ~2% of all DUID suspects, being indicative of heroin use. The major prescription drugs identified in blood were benzodiazepines (10%) as exemplified by diazepam, alprazolam, nitrazepam and flunitrazepam. Drugs for treating insomnia, zolpidem and zopiclone, were also identified in blood samples from DUID suspects over the study period. Other therapeutic agents were encountered in only 1–2% of all cases.

The researchers conclude that the dramatic increase in cases after the zero-tolerance law came into force probably reflects enhanced police activity and greater willingness to apprehend and charge individuals for the offence. Illicit drugs, particularly amphetamine and cannabis, and polydrug use were predominant, compared to use of scheduled prescription drugs. The typical offender using drugs while driving in Sweden abuses central stimulants, particularly amphetamine, and has probably done so for many years. The researchers conclude, “Options for treating offenders for their underlying substance abuse problem should be considered instead of the more conventional penalties for drug-impaired driving.”

The same research group has produced a separate amphetamine report for the years 2000-2004. Amphetamine was found in 15,898 of 26,556 cases of DUID (60%) either alone or combined with other licit or illicit drugs. In 6,094 cases, amphetamine was the only psychoactive substance in the blood at mean (median) and highest concentrations of 1.01 mg/L (0.80 mg/L) and 11.9 mg/L, respectively. Amphetamine users were mainly men (85% vs. 15% women; $p < .001$), and the men tended to be a few years older than the women. The mean (SD) age for men was 37 (9.2) years and for women 35 (8.1) years ($p < .001$).

Prisoners and probationers

There is a long tradition of amphetamine use among criminal subcultures in Sweden. For obvious reasons, they try to conceal their amphetamine use from authorities.

Information about these individuals becomes available when they end up in the criminal justice system.

According to the Swedish Prison and Probation Service's internal assessment, there are an estimated 9-10,000 clients in Swedish remand prisons, prisons, or on probation every day who have drug problems of varying severity.

About 6,350 drug users were processed into the prisons alone in 2006. This is somewhat fewer than in 2005, when 6,600 drug users were processed into Swedish prisons. The group of drug users assessed as severe addicts has increased in absolute numbers from about 3,000 people in 1997 to nearly 4,750 in 2006, an increase by 1,700 (Krantz, Elmby 2007).

Malmö researcher Anders Håkansson, who has reviewed ASI interviews performed by the Prison and Probation Service summarises the relationship between heroin and amphetamine users, the addiction groups who make up the majority of the severely drug dependent (Håkansson 2009).

“Amphetamine use was considerably more common in this criminal justice population than heroin and cocaine use, both when analysing recent drug use, history of drug use, and the primary drug reported by clients. Clients were 3.4 times more likely to report recent use of amphetamine than recent use of heroin, and the group of primary (and recent) amphetamine users was 3.6 times larger than the corresponding heroin group” (Håkansson 2009).

Håkansson concludes that amphetamine use is relatively more common than heroin use in the criminal justice system than in the drugs scene as a whole.

Another important finding in Håkansson's material was the high intensity of amphetamine use, with users reporting 23 consumption days in the past 30 days (almost similar to the frequency of heroin use by primary heroin users), and 61 percent of amphetamine users reported daily use during the past 30 days. The amounts of amphetamine consumed cannot be established in the interview used by Håkansson's team, but with 23 days of use in the past 30 days, and a large proportion using daily, there are few or no days of recovery between presumably intense periods of stimulant use. Besides very frequent use of amphetamine, amphetamine users also displayed very high rates of intravenous drug use in the material.

Thus, amphetamine use in Swedish drug users with a history of criminal behaviour may be particularly intense, with a high percentage of injectors and a pattern of injecting on a virtually daily basis, despite the consequences commonly associated with heavy amphetamine use, and despite the pattern of “binges” traditionally described (ibid).

“It has been described that polydrug use in stimulant addiction may be used to “come down” from intense stimulant arousal or to “smooth out” and treat withdrawal symptoms (Kreek, 1996; Leri et al., 2003), but substances possibly used for the management of amphetamine-related symptoms, such as concurrent opiate, tranquilliser or alcohol use, were relatively uncommon among the primary amphetamine users described here. It may be speculated that Swedish primary

amphetamine users use the substance in sufficiently small daily doses to sustain highly frequent use” (ibid).

Håkansson’s study reveals several important differences in characteristics in the abuse patterns and histories of drug users. Firstly, the group of primary amphetamine users was considerably larger than heroin users and cocaine users. Amphetamine users were, on average, almost six years older than heroin users, and more than seven years older than cocaine users. They were more likely than the other two groups to report hereditary alcohol problems and to report a personal history of binge drinking and delirium tremens, and the overlap of drug use with the other two primary drug user groups was limited. Amphetamine users had high rates of psychiatric symptoms, comparable to the other two groups, while they were markedly less likely than heroin users to have undergone inpatient detoxification. The amphetamine group also differed from heroin and cocaine users in demographic characteristics; not only were they older, they were also markedly less likely to be non-Nordic immigrants and appeared to be a more rural population than the other two groups (Håkansson 2009).

Håkansson’s figures show that amphetamine still is the most common intravenous drug of abuse in areas outside the biggest cities.

Street recruitment

A group of researchers and medical personnel did outreach among intravenous drug users in Stockholm in 2007-2008. Their report gives a picture of the drug use, health and living conditions of drug users who are visible in a public setting.

In a study in Stockholm in 2007-2008, 720 interviews were conducted with people actively engaged in intravenous drug abuse, in connection with an HIV and hepatitis screening programme (Britton, Hillgren et al 2008). The interviews were mainly performed in outdoor settings and in institutions frequented by drug users. The study provides a snapshot of a group of drug users who are visible in a public setting.

The average age of informants was 40 years and the overwhelming majority (73%) was men. Slightly more than half had permanent housing of their own. Only 8% were employed. More than two thirds had been in remand prison and/or prison, women to a significantly lower extent than men. Approximately 17% were born abroad.

Of the intravenous drug addicts, 47% reported that they had most frequently used amphetamine in the last 12 months, 22% reported heroin use and 22% alcohol, benzodiazepines, and cannabis. Although a primary drug can be discerned, many were polydrug abusers. Of the amphetamine users, 31% reported that they also used alcohol, 30% cannabis, and 18% benzodiazepines. The users whose primary drug was heroin also used benzodiazepines, 40%, amphetamine, 26%, and cannabis, 15%.

On average, the age of initiation to drug use was 15 for both men and women. The drug of first use was usually cannabis/hash/marijuana. Intravenous drug use began on average four years later; three fourths report amphetamine as the initial drug and one fourth report heroin.

One out of four informants had injected within 24 hours of the interview and about another one fourth had taken the last injection within the preceding week. There was

no significant difference between the sexes. Of those who had injected in the last month, 93% demonstrated high or very high risk behaviour, i.e., they shared syringes, needles, and paraphernalia relatively regularly among themselves and had unprotected sex. Women engage in significantly more high-risk behaviour than men in connection with injection. Significantly more women are found in the group with “very high risk behaviour.”

Of all informants, 7.1% were HIV positive and 82% were HCV positive. Prevalence of HCV among the general adult population in Sweden is approximately 0.2%.

The objective of the study by Britton and Hillgren is to reach as many active intravenous drug abusers as possible in the Stockholm area. The high average age (40) among the persons they have contacted indicates that intravenous drug users are an ageing population. However, the existence of a large, unreported population of younger, more socially integrated and more discreet drug users cannot be precluded.

Clients in low-threshold facilities

Since amphetamine is an expensive and illegal drug, it is hard for addicts to hold a job. After losing the job, the next step may be to lose the flat. Quite a few people with an amphetamine dependency end up homeless. Among the “stations of the lost,” there are various low-threshold institutions available to the homeless.

Convictus, an NGO dedicated to serving people who are homeless or HIV positive, runs an institution called *Bryggan* where people can come for a meal, a shower, a chat with the personnel or other clients during the day. The people who visit *Bryggan* are described in a report (Storbjörk, 2007). *Bryggan* has at least 80 clients every day, 15% of them women. The average age of clients is quite high, at 47. A large group is regular clients. Many clients have a stressful life and more than 50% are homeless. They live in low-threshold facilities, in cars, caravans, or public areas such as parks and stairwells.

The means of support of *Bryggan*’s clients indicates severe social marginalisation. Only a few have income from employment. Many receive economic assistance, sickness benefits, or pension benefits. But there is also a group, about one fifth of the informants, who report that they receive no income from these social institutions. They have supported themselves by panhandling or gifts of money from relatives.

It is commonly believed that all homeless people drink or use drugs. However, the interviews show that one fifth of the visitors have neither drunk to intoxication nor used drugs in the last month. However, roughly equal groups also report regular, high alcohol consumption or drug use. Amphetamine is the most commonly used drug, followed by heroin and cannabis. More in-depth interviews show that *Bryggan City* is a positive element in the lives of regular clients – the staff are compassionate, dedicated, and offer practical assistance (Storbjörk 2007).

Party-goers

Recreational amphetamine use increased worldwide in the 1990s, especially among youth active in the club scene. Sweden was no exception, although the rave movement was kept under intense surveillance by a special police force, “the Rave Commission” established in November 1996. The commission was a response to

mounting concerns among police authorities about the growth of the rave culture and its perceived links with drugs. Many clubbers express the opinion that the police have effectively ruined the prospects for the growth of a vibrant Swedish club scene.

In a qualitative study on drugs in the Swedish club culture, 17 clubbers age 19-33 years were interviewed (Sjö 2007). All had connections with the club culture and all but one had tried illicit drugs. The author also studied club-related websites and magazines and visited clubs.

The first rave in Sweden was held in Gothenburg in 1989; it had been preceded by some “acid house” inspired clubs in Sweden’s largest cities. Swedish club culture got off to a relatively slow and modest start, but by the mid-1990s the scene was attracting large numbers of youth and considerable attention in the Swedish mass media. Although the club culture has never been as popular among Swedish youth as in the UK, the development of the culture and the reaction of established society were quite similar in both countries.

The author concludes that ecstasy played an important role in the development of the club culture, although many informants seemed to think the drug has lost most of its influence on the culture. The type and number of different drugs used by clubbers vary widely in Swedish club culture. In city centre clubs, the most commonly used drugs were amphetamine, cocaine and marijuana, while the use of psychedelics like LSD and mushrooms was more common at underground parties. Many clubbers also used new substances, not yet classified as illegal. While far from all clubbers use illicit drugs, drugs certainly play an important role in the relationship between club culture and established society. Drug use may be a way to create distance from established society or protest the authorities.

Drug use may serve as a protest against the views espoused by the adult world, where alcohol is often the only substance used, or as a way of dissociating oneself from the state’s influence over what you as an individual are allowed to use. Some informants say that drugs help them reach a deeper level of thinking and gain insights into existential questions. Caesar explains that his use of LSD is a kind of protest against a society where it is “dangerous to think too much.” There is a strong presence of influences from eastern and ancient cultures and thinking in some club genres, where attitudes are sharply opposed to western, materialistic society in many areas.

Clubbers also feel there is a difference in terms of the importance of drugs to having a great night out. While the mainstream crowd has to numb themselves with alcohol to stand the bad music, bad dancing, and bad vibes, many clubbers have no need to be intoxicated by drugs to have fun when they are out dancing, according to informants. As illicit drug use has now become quite common even in mainstream nightlife, distance is also created through discourses on how the mainstream crowd loses control and cannot handle the risks when they take drugs or drink. In clubs, distance to the ordinary pub/disco crowd is created through the music, the attitude, the role of gender, the reason for going to the party, how to dance, and what kind of drugs to use and how to use them.

Prevalence estimates of problem (meth)amphetamine use

Sweden performed case finding studies in 1979, 1992, and 1998 to determine the prevalence of that referred to as “heavy drug abuse” in Sweden. The assessment was based on a definition, whereby heavy drug abuse was defined as “daily or virtually daily abuse of drugs and all intravenous drug use, regardless of frequency.” As defined, frequent use of cannabis was included as heavy drug abuse, but since most cannabis users are unknown to public agencies, they do not appear in case finding studies.

By this method, all public agencies that interact with drug users complete surveys that include information about these individuals. The forms are compiled, duplicates are culled, an estimate that adjusts for unreported cases is made, and an overall description of the group is drafted. The relevance of the description is based on the precision of the individual surveys. Over the years, it has become more unusual in the surveys for reporters to be able to specify primary drugs. For instance, 20% of the forms in the 1998 study of heavy drug abuse included no information about primary drugs. According to the research group, this is probably due to increased polydrug use and poorer understanding of addicts among the people who work with these issues at the reporting agencies. Another source of error is that many drug users are unknown to public agencies (Olsson B, Adamsson Wahren C, and Byqvist S (2001).

Considering that the 1979 study was probably better at picking up cannabis use than later studies, the increase of actual heavy drug abuse from 1979 to 1992 and from 1992 to 1998 would be even greater than usually reported in the figures.

1979 – point estimate 15,000 of which cannabis primary in 33%, CS in 47%, had used 77%

1992 – point estimate 19,000 of which cannabis primary in 17%, CS in 48%, had used 82%

1998 – point estimate 26,000 of which cannabis primary in 8%, CS in 32%, had used 73%

These figures indicate a small increase in heroin and amphetamine use during the 13 years between 1979 and 1992, but a sharp increase during the 6 years between 1992 and 1998. This becomes even more apparent if cannabis use is excluded, which yields the following total figures:

1979 – 10,050, of which primary CS abuse for 7,050 persons

1992 – 15,770, of which primary CS abuse for 7,570 persons

1998 – 23,920, of which primary CS abuse for 8,320 persons

If the 1998 figures are adjusted upwards based on the individuals for whom no primary drug was specified, the total becomes 9,984, i.e., almost 10,000 people.

No case finding studies have been performed since 1998. Instead, Daniel Svensson at the National Board of Health and Welfare has developed a model to estimate “problem drug use” based on hospital admissions. The point of departure is the diagnosis reports in connection with discharge, which Swedish hospitals are required to submit to Statistics Sweden and the National Board of Health and Welfare. According to Professor Börje Olsson, who headed up the three Swedish case finding

studies, the National Board of Health and Welfare's calculation method is acceptable (Olsson 2005).

The latest estimate was performed in 2004 and concluded that drug use, after an upturn over a few years, had once again subsided to the 1998 level. Daniel Svensson at the National Board of Health and Welfare reports that a new estimate will be presented in the autumn (Svensson 2009).

The median age for both men and women was 35 in the 1998 survey. It was 27 in 1979 and 32 in 1992. Women make up 23% of the group, almost exactly the same as at both other study occasions. The primary reason the median age is rising is that a large percentage of drug users continue using.

Amphetamine use in Sweden has traditionally been associated with injection. The route of administration is related to which substance or substances were used. Of CS users, 66% report having injected the preparation, 3% have smoked, 6% have inhaled, and 18% have eaten CS. By comparison, 60% of opiate users report having injected, 33% have smoked, 2% have inhaled, and 5% have eaten opiates (Byqvist 2007).

Based on the National Board of Health and Welfare's calculations, the number of problem amphetamine users can be estimated as at least ten thousand people. The median age is probably over 30. Based on an overall assessment of problem drug use in Sweden, I believe amphetamine is predominant among age groups above 30, but heroin is the most frequently used problem drug for people under age 30. This distribution is supported by research conducted using ASI interviews performed by the Prison and Probation Service.

Treatment demand for (meth)amphetamine use

Treatment demand for amphetamine users may emphasise drug-free treatment or be oriented towards harm reduction initiatives aimed at improving the health and general living conditions of users. Medically oriented treatment has begun in recent years, inspired by maintenance treatment for heroin addicts.

Drug-free treatment

Drug-free treatment for amphetamine users in the institutional setting has a long tradition in Sweden. This type of treatment has been financed by municipal social welfare committees. There has been a shift from inpatient to outpatient care, largely due to economic pressure on the public sector.

When Swedish addiction care was built up in the 1970s, it was based on cooperation between the health care system and social services. Social services were responsible for outreach activities in which social workers came into contact with people in need of addiction care. The next step was detoxification, for which the health care system was responsible. After detoxification, social services again assumed responsibility by paying for care in a treatment centre or family care for adults. Structured outpatient care programmes were unusual at that time (Tunving 1982).

Starting in the mid 1970s and continuing through the mid 1990s, treatment of amphetamine users in Sweden was based on group-oriented care, either institutional care oriented towards milieu therapy or institutional care based on the Minnesota

model. Amphetamine users were provided care in groups that included users of other drugs – heroin, cannabis, and alcohol (Käll 1997). Institutional care has traditionally been provided to clients with comprehensive social problems and a long history of substance abuse. People with less serious problems have been referred to counsellors in the outpatient care system (Blomqvist 2002). There were severe cutbacks in institutional care in connection with the economic crisis in the early 1990s, partly compensated for by expansions in outpatient care. This was most often based on the Minnesota model and, to a certain extent, cognitive models, such as the solution-focused method (Käll 1997).

There was a sharp increase in heroin use in the 1990s throughout the country. This triggered concerns that led to greater interest within the addiction care system in admitting heroin users for care, which in turn reduced the availability of beds for amphetamine users. This tendency was reinforced in the 2000s when maintenance treatment of heroin addicts was crowned as the only evidence-based treatment method for addiction care by SBU, the Swedish Council on Technology Assessment in Health Care. The same research overview concluded that there are no evidence-based treatment methods for amphetamine use, which probably further dampened interest in the health care system in offering care to amphetamine addicts. Providing care to amphetamine users has instead become the responsibility of social services.

A 2003 study of Swedish drug users' views on addiction care determined that a paradigm shift had occurred in the health care system, which stemmed from poorer municipal finances. Up until a few years into the 1990s, social services had actively sought out contact with addicts and offered care to all who wanted it. This changed in the 2000s and it is now up to the individual addict to convince the authorities that he or she needs care. Opportunities to gain access to care have deteriorated, particularly for users over the age of 30 (Svensson, Kristiansen 2004).

Targeted initiatives for youth

Most drug users start using drugs in their teens. Outpatient centres for young alcohol and drug users have been opened in the three largest cities in Sweden. The work and client backgrounds of six clinics during the period of 2005-2006 are described in a recent research report by Torkel Richert.

Maria Ungdom opened its doors in 1966 and was then the first programme in the country aimed specifically at youth with substance abuse problems. Since then, youth clinics based on the same model have been established in Gothenburg and Malmö. A survey of the client group at the six clinics was performed in 2005-2007. A total of 395 visitors to the clinics during the data collection period were included in the study (Richert 2007).

The six clinics provide counselling, support, and outpatient care that is easily accessible to the client. Cognitively oriented methods are the main approach in counselling sessions at most of the clinics. All clinics also take a systems theory approach, wherein resources in the young person's family and network are regarded as a natural and vital component of the process. The clinics can offer a structured, manual-based programme for cannabis users in the outpatient system to clients with serious cannabis dependencies. The clinics also offer basic medical services, such as

medical assessments, health advice, testing for hepatitis and HIV, liver status tests, drug analyses, and prescriptions.

Amphetamine was the second most common primary drug among clients. A total of 9% reported amphetamine as their primary drug, but 30% had used amphetamine at least once. Heroin or cocaine was the primary drug for fewer than 5%. Of those who reported amphetamine as the primary drug, the majority used at least 2-3 days a week.

There are significant differences between the sexes, particularly with respect to amphetamine, which was reported as the primary drug by 20% of the girls compared to 4% of the boys. Cannabis is more common as the primary drug for the boys, at 85% compared to 60% of the girls. Age distribution is relatively equal between the sexes and thus cannot explain the difference. It is possible that girls wait longer before seeking help for their problems and thus have had time to progress to using heavier drugs.

The initial drug was cannabis for 90% of all drug users. The initial drug was amphetamine or cocaine for a few. As shown in Table 8, the majority initiated drug use at the age of 13-15 years. One fifth of the clients had used for the first time between age 16 and 18. A few used for the first time before the age of 13 and a few used drugs for the first time after the age of 18. Somewhat more women than men initiated drug use when they were over 18.

Cannabis was also the most common primary drug (main drug of abuse) among the clients. Of those who had used drugs, 75% reported cannabis as their primary drug. A small percentage reported amphetamine, cocaine, or heroin as their primary drug. Differences between the sexes also emerged in this respect.

The men reported cannabis as their primary drug to a greater extent, while the women were more likely to report amphetamine, cocaine, or heroin as their primary drug. Beyond cannabis, a number of other narcotic preparations were relatively common. Of all clients, 30% had used amphetamine, 25% ecstasy, 20% benzodiazepines, and 20% cocaine. Compared to youth with drug experience in general, heroin, amphetamine, cocaine, and ecstasy were considerably more prevalent among youth who had visited the outpatient clinics. A small percentage of clients reported that they had used LSD (10%), heroin (7%), or GHB (5%).

A majority of clients were frequent drug users who had used at least 2-3 days a week during the last six months. Of those for whom cannabis was the primary drug, more than one fourth had used daily for the last six months (Richert 2007).

In a long term outcome study individuals who had consulted a substance abuse clinic as adolescents during 1968–1971 and 1980–1984 were followed until 2002 (Larman et al 2008). The prevalence of death, physical illnesses related to substance abuse, mental illness, substance abuse and criminality were very high in the population. The study indicates that young people who consult outpatient clinics like those described in Richert's report are at high risk of a troublesome future.

Follow up of Dianova

Institutional treatment for amphetamine abusers has a long tradition in Sweden. In the absence of RCT studies, a recent follow-up of patients who have been in treatment at Dianova is presented.

Dianova is an international organisation that provides treatment in 12 countries according to the therapeutic community model, where the patients live, work and spend their leisure time together. The treatment model is “producing individual changes through positive interactions between the participants and their environment, including the other people that they encounter” (Dianova 2009). Between 1 September 2002 and 31 June 2004, a total of 72 persons from Sweden had commenced treatment at Dianova (Fridell et al 2008). Five of the patients had died and 24 could not be traced, but 43 patients were interviewed using a standardised interview (ASI), administered psychological tests such as AUDIT, SCL-90, DIP-Q, GAF, KASAM, BCT, ISSI-SR, and answered a quality survey.

Upon admission, the informants were a severely addicted group. The substance abuse had been ongoing for more than 11 years on average. The median age was 31.2 years and on average, patients had a history of 1.7 treatment attempts prior to treatment at Dianova. Amphetamine was the most common drug, used by 17 people (40%), followed by heroin, 16 people (37%). The majority used more than one drug, with cannabis the most common (13) (30%), followed by various tranquillisers for 12 people (28%).

The majority (58%) was homeless upon admission to treatment; 70% were dependent on public economic assistance for their support and 21% supported themselves mainly through criminal activities. The highest level of education was compulsory school for the majority (61%). Following treatment at a Dianova treatment centre in Europe or the Americas, 63% of the group completed a post-residential programme. Discontinuation of treatment has been registered for 16 (37%). On average, the users had more than one year of treatment managed by Dianova. Of the 43 who were interviewed, 33 people (77%) were drug-free when the interview was conducted and 10 (23%) were actively using. Calculated according to intention-to-treat, i.e., on the entire group including those who discontinued treatment, 49% were drug-free. As a relatively short time had elapsed after completed treatment, 23 (53%) have been drug-free for more than 6 months; 21 people (49%) had been drug-free for more than one year, and 11 (26%) for two years or longer. Only four people were dependent on alcohol (10%).

The majority had no fixed source of income at follow-up and almost 60% were dependent on public economic assistance or sickness benefit as their main source of support.

There was some criminality in the group and 17% had been prosecuted during the six months prior to the study. Levels of psychiatric symptoms were low, but results for 47% of the studied group indicated personality disorders. The conclusion is that the group as a whole does not differ from other care groups populated by drug addicts.

The housing and employment situation had improved, while the group's social networks were still limited. With respect to treatment, the clients were most satisfied

with the social community and less satisfied with the aspects related to individual adaptation of treatment.

The conclusions are that the group as a whole does not differ from those studied in other studies of heavy drug abusers and that the rehabilitation figures are on par with those reported in other studies (Fridell et al 2008).

Involuntary treatment

Involuntary treatment of alcohol abusers has been practiced in Sweden since 1913. Involuntary treatment has had an “exception to the rule” nature and, as such, has only been applicable to a small number of drug users. An individual may be sentenced to involuntary treatment for a period of six months if he or she is engaged in life-threatening drug and alcohol abuse and will not agree to voluntary treatment.

Information concerning the backgrounds, recent life situations, and needs for assistance of clients in involuntary treatment in 2007 is presented in a report by the Swedish National Board of Institutional Care (SiS 2008:2). The clients were interviewed by means of a special documentation system (DOK). The report presents data on a total of 869 clients (34% women).

The median age among clients was 41 years (37 for women and 43 for men). The youngest client was 18 and the oldest 82. The group of people cared for at SiS institutions under the Swedish Care of Alcoholics and Drug Abusers Act (“LVM”) described in the report are among the most disadvantaged in society, perhaps even the most disadvantaged among addicts. They have severe problems in essentially all areas of life. Only half have homes. More than two thirds live alone, men more often than women (69% and 44%, respectively). Of those who live with someone else, (32% of informants) half live with another addict, which applies to women in particular. Twenty percent of the interviewed clients had a history of placements in foster homes. Every other client informant reported a history of substance abuse, psychiatric problems or both in his/her childhood environment. The level of education is generally low; 13% have not completed compulsory school and half have completed compulsory school at the highest. Slightly more than 10% of all documented clients, with a somewhat higher percentage of men than women, are dyslexic. Only 7% were supporting themselves by wages or unemployment benefits before admission to the institution and one out of ten was receiving sickness benefit. This means that only about one fifth have a connection to the labour market, or at least have had relatively recently. One third were receiving disability pension or sickness benefit and 31% were dependent on public economic assistance or relatives for their support. One third of the informants report income from criminal activities in the last 6 months and 74% report indebtedness. Bank and credit debt is most common, but debts to individuals and rent debt are also common.

The older clients were admitted mainly due to alcohol abuse, the younger primarily for drug abuse (opiates and/or central stimulants). About two fifths are polydrug users.

The overwhelming majority of drug users inject the drug. More than four out of five have received care for their addiction before the current institutional placement. Of the informants, 15% had previously received care under the Care of Young People

Act (“LVU”) and 35% under LVM. About one third of informants had been in contact with a non-governmental organisation in the six months prior to admission.

About 40% of the clients have a serious problem with their physical health. Every third informant is infected with either hepatitis B or hepatitis C, and 5% are infected with both. Of the informants, 45% report problems with their psychiatric health. Of these, 37% report that they have had these problems daily during the last month. Two out of five informants have had suicidal thoughts at least once and almost 30% have attempted suicide; 45% of the informants have received psychiatric care at some point. One fourth of the women informants and one fifth of the men report that they had received psychiatric care in the six months prior to admission.

Slightly more than half the women informants and one fourth of the men were victims of some kind of assault prior to their initiation to drug use. The corresponding figures after initiation to drug use were 69% and 40% respectively.

About 70% of clients have been convicted of a crime and 40% have been sentenced to prison or committed to involuntary psychiatric care. The most common offences are, in the order given, drug offences, theft, driving under the influence, and violent offences. Slightly more than half the men have been sentenced to prison or involuntary psychiatric care compared to 15% of the women.

Alcohol is the primary drug for 65% of the men and 50% of the women. For the men, opiates come next (13%), followed by amphetamine (12%). The situation is the reverse for women, with amphetamines at 26% and opiates at 16%.

Amphetamine is injected by 75% of those who prefer central stimulants (63% men, 86% women), taken orally by 15% (19% men, 11% women), and inhaled by 10% (18% men, 3% women). None of the 133 patients for whom central stimulants are the primary drug mentioned smoking as a route of administration. Methamphetamine, but not amphetamine, can be smoked, which indicates that traditional amphetamine is the drug of choice among people committed to involuntary treatment (SiS 2008:2).

Involuntary treatment outcomes

There is no systematic study of the outcomes of involuntary treatment available. A five-year follow-up of women treated at Lunden shows good results. Lunden is made up of two institutions, one for adults and one for adolescent women age 15-20. Both institutions are locked and work with women who have been committed to involuntary care.

A group of 132 women treated at the Lunden youth home and LVM treatment centres during the period of 1997-2000 were followed up five years later (Fridell et al 2009). The women’s backgrounds, physical and mental health status, and health care consumption have been described upon commitment to involuntary care. The follow-up was performed by means of interviews and the same tests and assessment scales used in connection with care, thus providing a basis for describing changes in drug use and life situation otherwise. The material is supplemented with registry data on appearances in the criminal justice system, health care and mortality. Four out of five in the group of adult women and almost nine out of ten in the adolescent group were

reached for the follow-up. The researchers were able to obtain test data for more than 90% of these women.

The results show that involuntary care was instituted at a point when health care consumption and criminality were at their peak in the group. People who successfully attain a drug-free lifestyle markedly reduce their criminality and health care consumption and achieve significantly better well-being than clients who do not become drug-free. One out of six follow-up subjects, or 15%, had remained entirely drug-free (with no relapses) since discharge five years previously. Almost half of the LVM clients and about two fifths of LVU clients otherwise had been drug free for one continuous year at follow-up, which must be considered a positive outcome in light of the severity of addiction in the client group.

Maintenance treatment for amphetamine users

There are some new initiatives concerning treatment of amphetamine use in Sweden. The most recent attempt at pharmacological intervention involves naltrexone, a non-selective opioid antagonist.

One study showed that pre-treatment with 50 mg naltrexone daily in healthy volunteers attenuated the subjective activation and arousal induced by amphetamine (Käll 2009). In a subsequent open clinical trial 20 amphetamine-dependent patients were treated with naltrexone and relapse prevention therapy for 12 weeks. Naltrexone was well tolerated and only three dropped out due to adverse events (headache, nausea, and abdominal pain). Five persons relapsed and were lost to follow up. Two patients achieved complete abstinence from amphetamine and in nine patients there was a significant reduction in level of consumption and frequency of use. A pronounced decrease in craving was noted during the course of treatment.

The hypothesis is that naltrexone reduces the subjective effect of amphetamine by attenuating the amphetamine-induced release of dopamine. Finally it was shown in a randomised, placebo-controlled trial that naltrexone reduced amphetamine use in amphetamine-dependent individuals. Eighty amphetamine-dependent patients were randomised to 12 weeks of double-blind naltrexone (50 mg) or placebo treatment. Overall 55 patients completed the trial and the naltrexone group had a significantly higher number of amphetamine-negative urine samples compared to the placebo group and the former also reported significantly less craving and consumption of amphetamine. The results are promising but need to be confirmed in clinical studies (Käll 2009).

Treatment for people with ADHD

A high frequency of ADHD was diagnosed in a Swedish sample of prisoners in which more than half the clients retrospectively met diagnostic criteria for ADHD (Dalteg et al 1998, quoted in Håkansson 2009).

Medical use of amphetamine or ATS in children with Attention Deficit and Hyperactivity Disorder (ADHD) and related disorders has long been accepted. Lately it has become evident that many of these children need to continue their medication into adulthood. It has also been noted that persons with untreated ADHD, particularly

if they also develop conduct disorder in school, are at high risk of substance abuse later in life.

Projects are currently ongoing in a number of Swedish dependency clinics aimed at diagnosing and treating drug-dependent adults with ADHD. One such study is presently in progress at the Clinic for Dependency Disorders in Linköping. As of March 2009, 50 patients were included, of whom 31 had amphetamine as their primary drug of abuse. Slow-release methylphenidate (Concerta) was used for most treated patients. Abstinence from drug use during treatment was controlled through urine and hair analysis. In a sense one could view this treatment as a treatment of the drug dependency as well as the ADHD, since the patients are usually very pleased with the treatment while also aware that treatment can only continue if they do not abuse drugs (Käll, 2009).

Initiatives related to mental and physical health

The use of illicit drugs is associated with health risks, especially when drugs are taken intravenously. Research shows that the risks of an early death are much higher than among people of the same age group who are not addicted to drugs.

It has long been known that morbidity and mortality are many times greater for drug addicts than for the normal population in corresponding age groups. The causes are multiple, but can be divided into three groups: complications consequent upon the pharmacological effects of the narcotic preparation, the route of administration, i.e., how the drug is taken, and the addict's general living conditions. Mental illness, polydrug abuse, difficult living conditions with risk of accidents and violence, etc. often play a greater role in morbidity than the preparation itself (CAN 2009).

Anders Håkansson (2009) reports health status among long-term IV drug users based on his extensive survey of drug users in the criminal justice system.

“Considering the high rates of intravenous drug use and history of binge drinking, and a high percentage of tobacco users, amphetamine users are likely to have health problems and treatment needs at least comparable to those of heroin users.” (ibid)

Håkansson note that psychiatric symptoms and cognitive problems, (represented in the ASI by the variable “troubles understanding, remembering or concentrating”), were common in all groups, but somewhat more prevalent in the amphetamine and cocaine groups than in the heroin group, even when controlled for age. These problems remained independently associated with being an amphetamine user rather than a heroin user (ibid).

Care for hepatitis C

Some observers have stated that the widespread incidence of hepatitis C among present and former intravenous drug users is a ticking time bomb waiting to explode in the health care system. Treatment is very expensive and the disease will cause a great deal of suffering to patients.

More than 40,000 cases of hepatitis C have been reported in Sweden since it became possible to diagnose the virus in late 1989 and reporting of the disease became mandatory under the Swedish Communicable Diseases Act. A large number of cases

were reported in the early years of the 1990s when many people in high-risk groups were tested, primarily intravenous drug users (Swedish Institute for Infectious Disease Control 2009). Since 1990, almost 28,000 people have been reported to the Institute for Infectious Disease Control as infected via intravenous drug use and this group makes up about two thirds of all reported cases of HCV (CAN 2009).

There were a total of 1,083 cases of hepatitis C (315 women, 768 men) among intravenous drug users in 2008. The median age is 28 for women (range 16-73) and 33 for men (range 15-73). More cases were also reported in 2008 than in the preceding year in the younger age groups among intravenous drug users. In the 15-19 age group, 62 cases were reported, compared to 33 in 2007, and 426 cases were reported in the 20-29 age group versus 386 in the preceding year (Swedish Institute for Infectious Disease Control 2009).

Assuming a population of 26,000 people with problem drug dependency and that 75% are intravenous users, that imply a population of 19,500 people. If 80% of this group is hepatitis C positive, that corresponds to about 15,600 active drug users (the majority of whose primary drug is amphetamine) with hepatitis C. In addition to these, there is a large group who has overcome addiction but is still infected.

Production sites and laboratories, origin of products and trafficking routes, precursors, seizures

Most of the drugs used in Sweden are smuggled into the country. According to Customs and the Police, there is no production of drugs in Sweden with the exception of small scale cannabis cultivation, some production of GHB and some leakage of legal drugs.

Methamphetamine shows up in the reporting system off and on and was reported the first time in autumn 2000. Methamphetamine was reported in the second half of 2008 by local reporters in Umeå and Västerås. This was published through the CAN reporting system on drugs (CRD 2008),

Amphetamine				
Unit	Responses	Range	Mean	Median
SEK/gram	40	125 – 400	234	225

Table 12.2. Average prices for various drug categories in Sweden according to the CAN reporting system on drugs (CRD), 2007. (also see chapter 10)

The lowest figures come from Skåne, the highest from regions outside the three largest cities in Sweden.

Amphetamine prices have fallen markedly over a period of twenty years (approximately 70% between 1988 and 2007), while seizures have trebled compared to the base year. In 2007, the reported price of one gram of amphetamine was approximately SEK 225.

The price reductions for hash, amphetamine and brown heroin seem to have taken place mainly in the 1990s and the prices of hash and brown heroin have been

relatively stable during the 2000s. However, amphetamine prices have continued to decline somewhat in the 2000s, although the rate of decline has been slower than in the 1990s.

According to the CAN reporting system, the number of seizures of amphetamine has remained stable at around 7,000 since 2002. Expressed in weight, total seizures are in the range of approximately 350–460 kg. The more or less successive upturns since the 1970s now seems, according to CAN, to have stabilised at a high level. Real prices have fallen by more than 60% since 1988, but a stabilising trend can be seen in recent years (CRD 2008).

Trafficking routes

According to information from Swedish Customs, the amphetamine sold in Sweden is smuggled into the country (Swedish National Criminal Police 2007). The smuggling originates in two production areas – the eastern area (Estonia, Lithuania and Poland) and the western area (Netherlands and Belgium). Smuggling from the eastern production area is carried out by criminal organisations domiciled in the producing countries. Ethnic Swedes have a more prominent role in the distribution of amphetamine in Sweden, as well as with regard to ordering, organising, and financing the activities. The drugs are commonly hidden in trucks and passenger cars and then transported via ferry connections or by road via Denmark.

With regard to the western production area, ethnically Swedish criminals are usually involved in all phases of smuggling, although laboratory production is performed by criminal organisations in the Netherlands and Belgium. The smuggling is organised by criminal organisations in which Swedes often cooperate with criminals from other countries, primarily the Netherlands, Germany and Denmark. The couriers are sometimes ethnic Swedes but are often other nationalities. The most common smuggling method is to conceal the drugs in trucks, passenger cars or trains to Sweden via Germany and Denmark.

Swedish Customs has been more effective at combating smuggling from eastern Europe than from western Europe. The reason given for this is that the agency has, among else by means of special project funding from MOB, established better police cooperation with Poland, Lithuania, and Latvia than with the Netherlands and Belgium. Cooperation with the eastern countries has enabled the agency to make larger seizures, but has also contributed to knocking out criminal organisations. Swedish Customs states: “Thus far, no particular national or international project with Swedish involvement has been established with initiatives targeting the western production area” (National Criminal Police 2007).

A secret internal report on methamphetamine (Customs 2008) dated 12 September 2008 confirms many of the conclusions in the Customs overview report from 2007. Citizens of Lithuania play a prominent role in both production and smuggling of methamphetamine. The final destination is Norway in some smuggling cases. There is a link between methamphetamine smuggling and organised crime.

Significant seizures of methamphetamine occurred for the first time in Sweden in 1998 (National Criminal Police 2007). Until 1 January 2008, there was no breakdown of seizure statistics between amphetamine and methamphetamine, but Swedish

Customs' weekly reports have been used to derive figures which show that seizures were relatively small (Customs 2008, Hansson 2009).

Year	Kg Methamphetamine	Kg Amphetamine
2004	12	179
2005	29	275
2006	18.3	231
2007	35.7	134
2008	55.0	143
2009 /first half	101	91

Table 12.3. Amount of Methamphetamine and Amphetamine seized in 2004-2009 (first 6 months)

The report also provides estimates of the abuse situation based on internal material and information provided by other agencies. The overall assessment of the report is that methamphetamine use is increasing and is today found in most of the country. For many users, methamphetamine seems interchangeable with amphetamine, but some view methamphetamine as stronger and better than other amphetamine. "No information has been received indicating that smoking of methamphetamine ("ice") is occurring among drug users in Sweden." Prices are the same as for amphetamine (SEK 150-500/gram). According to the report, the same groups are probably responsible for the smuggling of both amphetamine and methamphetamine (Customs 2008).

Overview of health and social correlates of chronic amphetamine and methamphetamine use

People who start using central stimulants often have a problematic background and the drug use only adds to the problems. Use of amphetamine and methamphetamine, especially when injected, causes infections, overdoses and accidents.

Infectious diseases, e.g. HIV and hepatitis

The first HIV positive patients in Sweden were diagnosed in 1985 but many had been infected years earlier. As of early 2009, a total of 8,455 cases of HIV have been reported in Sweden and about 5,000 of these patients are still alive. Since the outbreak of the epidemic, a little more than 1,000 intravenous drug users have been infected by HIV. Their average age is about 38.

A total of 1,286 people were found to be HIV positive between 1 January 2000 and 31 December 2008, of whom 227 were known intravenous drug users. Most (80%) were from the Stockholm area (Institute for Infectious Disease Control 2009).

There are only two needle exchange programmes in Sweden, both in the south (Malmö and Lund). Needles are not available in pharmacies for intravenous drug users.

Overdoses and other drug-related causes of death

According to Swedish regulations, all confirmed or suspected unnatural deaths, including cases involving confirmed or suspected substance abuse, unknown cause of death, unknown identity or suspected medical malpractice, must be reported to the police by the physician issuing the death certificate. In most cases, the police request a forensic autopsy. In the autopsy, femoral blood, urine and vitreous samples are collected, fluorinated, and submitted to the Department of Forensic Chemistry in Linköping, which constitutes a national laboratory where all samples routinely are screened for pharmaceutical drugs and ethanol.

Anna K. Jönsson and colleagues conducted a study based on autopsies performed at forensic pathology departments in Sweden during 2002–2003 (Jönsson et al 2007). A total of 10,273 autopsies were performed during the study period, of which 7% of the subjects were classified as drug addicts by the responsible forensic pathologists. Of these 86% were men. The median age was 38. Illicit drugs were detected in 70%.

In total, opioids (morphine, 6-acetylmorphine, codeine, methadone, oxycodone, ethyl morphine, propoxyphene, tramadol and/or fentanyl) were detected in 47% and psycho stimulants (amphetamine (227), methamphetamine (24), MDMA (17), cocaine and/or benzoyllecgonine 29) in 36% (263/736).

Morphine was frequently present in poisoning cases involving amphetamine and case histories indicated that many of these subjects were amphetamine users who had incidentally taken heroin (and the apparent primary cause of death was opioid toxicity). In most deceased drug addicts, multiple substances were detected; on average 3.8 substances were detected per case. Ethanol was commonly detected in combination with other drugs, e.g. morphine (104 cases), amphetamine (76 cases) and THC (75 cases). Other substances also frequently detected in combination were morphine and diazepam (73 cases).

In total, 50% died of poisoning and only 22% died of natural causes. Death was considered to have been directly or indirectly caused by drug abuse in 47%, whereas evidence of drug use was an incidental finding in 21% or based on case history alone in 33% (Jönsson et al 2007).

Drivers killed in road traffic accidents

One way to find out about hidden populations using drugs is through analyses of drivers killed in road traffic accidents. In a recent study (Jones et al 2009) statistics from the Swedish National Road Administration showed that a total of 1,403 drivers were killed in road traffic accidents in Sweden between 2003 and 2007. Forensic autopsies were performed in 97% of all deaths and specimens of blood and urine were sent for toxicological analysis. In 60% of cases (N = 835) the toxicology results were negative and 83% of these victims were men. The blood alcohol concentration (BAC) was above the legal limit for driving (>0.2 g/L) in 22% of cases (N = 315) at mean, median and highest concentrations of 1.7 g/L, 1.7 g/L and 4.9 g/L, respectively.

The proportions of male to female drivers with BAC > 0.2 g/L were 93% vs. 7% compared with 83% vs. 17% for those with drugs other than alcohol in the blood. Drivers with a punishable BAC were overrepresented in single vehicle accidents compared to multiple vehicle accidents (67% vs. 33%). The opposite was true for

drivers who had taken a prescription drug (39% vs. 61%) and drug-negative cases (31% vs. 69%).

Illicit drugs were present in 7.2% of all fatalities. The major illicit drugs identified in blood were amphetamine (N = 53) and cannabis (N = 35), along with a few instances of cocaine/benzoylecgonine (N = 5), MDMA (N = 2), and GHB (N = 3). Amphetamine concentrations in blood were high (see results section), which clearly indicates abuse of this central stimulant amine.

Despite an appreciable increase (12-fold) in the number of arrests made by the police for drug driving after the zero-tolerance law was introduced (July 1999), alcohol still remains the psychoactive substance most frequently identified in the blood of drivers killed in road traffic accidents.

The prevalence of alcohol and/or drugs in the blood of drivers killed in road traffic accidents in Sweden has remained fairly constant over the past eight years (Fig. 4), averaging 22%. Illicit drugs were identified in 7.2% of all driver fatalities, which reinforces the conclusion that alcohol abuse and alcohol-induced impairment is the major human factor responsible for road traffic accidents in Sweden (Jones et al 2009).

Social consequences among youth

Young people with grave psychosocial problems are provided care in special approved homes under LVU, the Care of Young Persons Act. The purpose of this treatment is to help the young person concerned achieve development and maturity and equip him or her for a life without violence, drugs and crime. The age group is 14-21 years.

A total of 1,103 adolescents were admitted to one of the special approved homes in 2007 (National Board of Institutional Care SiS 2008:1). Of these, 722 (65%) were interviewed using the Adolescent Drug Abuse Diagnosis interview. Of those interviewed, 36% were girls, 40% were 15 or younger, 44% 16-17, and 16% were 18 or older. About half the informants were of Swedish background, that is, both parents were born in Sweden. For the other half, one or both parents were born abroad.

Many of the adolescents committed to involuntary care in special approved homes will develop drug dependencies later in life. In the oldest age group, 18-20 years, quite a few already have a drug problem. A total of 58% have tried amphetamine at least once, 23% more than once a week during a typical month before admission to the home and about half of them injected the drug. Among adolescents age 18-20, cannabis has been used by 76%, ecstasy by 48%, cocaine by 45%, heroin by 23% and LSD by 32%. Experience with all drugs except LSD is slightly more prevalent among girls than boys.

I am quoting the study since it provides a picture of one of the subgroups of amphetamine abusers – those who during their teens have been recognised as so problematic that they have been put into involuntary care.

The childhood circumstances of these young people are characterised by a high percentage of divorce and separations. They have had serious problems at school –

school burnout (♀88%, ♂84%), truancy (♀80%, ♂68%), difficulties keeping up (♀56%, ♂48%), disruptive behaviour (♀53%, ♂63%) and victimisation (♀32%, ♂19%).

Of the youth in this study, 70% spend time with friends who commit crimes and 59% have close friends who have had run-ins with the police due to alcohol or drug abuse.

Among the girls, 23% report that their mothers have psychiatric problems and one third of the girls report that their fathers have problems with drugs and alcohol. The corresponding figures among boys were 15% and 21%, respectively. Half the girls report physical abuse and an equal number psychological abuse; 19% report sexual assault by a person upon whom they were dependent. Among the boys, 28% report physical abuse, about 25% report psychological abuse, and 2% report sexual assault.

Sleep disorders are the most common health problem reported by the adolescents (63% of the girls and 46% of the boys). About one third suffer back pain (46% of the girls and 31% of the boys) and 30% report frequent headaches (47% of the girls and 21% of the boys). Half of the informants reported problems with severe anxiety/tension or difficulties concentrating, and 46% have had at least one episode of serious depression. A larger percentage of girls than boys report having experienced these psychological symptoms. About two fifths have had episodes of violent behaviour, the incidence of which is about equal among the boys and the girls. Of all adolescents in the study, 37% had previously received outpatient care and 14% inpatient care for psychiatric problems. A significantly larger percentage of girls than boys have been provided one of the two forms of care.

The most common offence is shoplifting, in which about two thirds of the young people have been involved. The second most common offence is assault (70% of the boys and 42% of the girls). These are followed by theft and vandalism, offences committed by about half of the young people. The boys have committed more types of offences and are more criminally active than the girls. Boys generally commit first-time offences at a somewhat younger age than girls. In the three months immediately preceding admission, 43% of the young people, a larger percentage of boys than girls, had been detained or remanded for an offence.

Most of the informants had drunk alcohol at least once, 53% had used marijuana or hash, one third had used amphetamine and 21% had taken ecstasy. One fourth of the young people report that they have misused prescription drugs and 13% report use of heroin/opiates. As a rule, initiation of alcohol use occurred at age 12-13. Initiation to use of hash, amphetamine, ecstasy and prescription drugs occurred on average at age 14-15, and initiation to heroin at age 16. There is no appreciable difference between the girls and boys with regard to age of initiation to alcohol and drug use (SiS 2008:1).

Health, social and legal responses addressing (meth)amphetamine use or chronic use

Amphetamine use in itself is a crime in Sweden. Many amphetamine users also commit crimes to obtain money for drugs and many will be sentenced to prison as a result. The majority of Swedish prisoners have a drug problem. There are no statistics

available about the exact numbers of amphetamine and methamphetamine users who have received treatment.

Health and social responses

Most addiction care in Sweden is run within the social services and health care systems, but non-governmental organisations and other private health providers are also found, as well as special departments within the Prison and Probation Service. There has been a relatively large transition from institutional care to outpatient care compared to the 1990s (CAN 2009).

As of 1 November 2007, approximately 2,600 people were voluntarily admitted to an institution for some form of substance abuse, a decline from about 4,300 people as measured in 1989. That same year, some form of outpatient intervention due to addiction was provided in 11,500 cases, as well as 5,700 public assistance cases related to housing (National Board of Health and Welfare 2008).

However, the statistics for these interventions do not differentiate among alcohol, drugs, prescription drugs, or solvents and the groups cannot be totalled because there are overlaps among the subgroups. An inventory by the National Board of Health and Welfare (2004) as of 1 April 2003 found 23,500 people in addiction treatment of a more goal-oriented nature aimed at achieving a change in the addiction behaviour. Adjusted for non-response, the number was almost 30,000. For 55% of the clients, the treatment referred to (at least) drugs. This means that around 16,500 people were in goal-oriented treatment for drug dependency on a given day in 2003, based on the adjusted figure. A total of almost 3,400 intravenous drug users were reported as being in treatment (not adjusted for non-response). Compared to 1999, drug use had increased somewhat at the expense of alcohol (CAN 2009:).

Detoxification and care for psychiatric and other complications of drug dependency are performed by the health care system. The number of drug-related discharges from inpatient care doubled during the period of 1987–2001 (to 15,600). As shown, the increase also applies to the number of unique individuals (Table 83 and Figure 33). The situation has remained relatively stable since 2001, although a minor upturn can be seen. In 2007, 9,600 people were provided care on about 16,500 occasions. The number of care episodes per person and year has remained at 1.7 since 1987.

One measure of initiation to drug abuse is to follow the numbers of people provided care for the first time ever. The time series in the figure is misleadingly high in the beginning because it is impossible to link back further than 1987.

During the first half of the 1990s when this effect should be negligible, the number of new clients was about 3,100 annually. After new diagnosis classifications were introduced in 1997, the number rose to about 4,500 individuals and subsequently remained at about 4,300 through 2002. Thereafter and through the end of 2006, the number of first-time patients was at a somewhat lower level (approximately 4,000). In 2007, the number again rose to 4,300 individuals.

However, there are still unacceptable differences among municipalities and county councils in substance abuse and addiction care with respect to legal security/due process, quality, access, etc. Things including greater cooperation among small

municipalities are needed to ensure access to good care, regardless of where people live. Efforts to make transparent comparisons may over the long term improve avenues to more equitable substance abuse and addiction care.

Greater resources have been allocated to substance abuse and addiction care in recent years. According to the CAN report (2009), the economic crisis may entail risk that equally high prioritisation of substance abuse and addiction care will be impossible.

Legal responses

As a result of its zero tolerance policy, Sweden has tough drugs laws that prohibit all unlawful dealings with drugs. It is illegal to buy, use or generally possess drugs and to sell, exchange, lend or give drugs as a gift. It is also illegal to cultivate or produce drugs in any other way. Drugs may not be packaged, transported or stored, nor may one facilitate contact between buyers and sellers or help initiate payment between buyers and sellers.

Under the zero tolerance policy, it is also illegal to be under the influence of drugs. Since 1993 the police have had the legal right to take action against people they suspect of being under the influence of drugs. In such cases the suspect may have to provide a blood or urine sample for analysis. If the sample contains drugs, or traces of drugs, the person is found guilty of a minor drug offence, personal use.

The penalty for drug offences depends upon the seriousness of the offence. For minor drug offences the court may impose a fine or prison sentence of up to six months. More serious offences always carry a prison sentence, usually up to a maximum of three years. If the offence is considered particularly serious, the sentence will be anything from a minimum of two years to a maximum of ten years (Mumin 2007:7).

Persons convicted of drug offences

In 2006, almost 22,100 individuals were convicted of drug offences in Sweden, an increase of about 15% (2,900 individuals) compared to 2005. The number of people convicted of drug offences has increased yearly over the past 10 years. The annual increase has varied over the years but averages out at just under 7%. Accordingly, total drug convictions have almost doubled (increased by more than 94%) over the last ten years (National Council for Crime Prevention 2007).

At 53% and 28% respectively, drug use and drug possession were the two most common types of offences committed by people convicted of drug offences in 2006. Distribution and drug smuggling accounted for 5% and 3% respectively of all drug convictions.

Amphetamines and cannabis remain the two most common substances in the conviction statistics. In 2006 they represented 33% and 36% respectively of all substances mentioned in criminal convictions.

Of the total number of people convicted of drug offences in 2006, approximately 15% were women. This percentage has remained relatively stable over the past 10 years (ibid).

About 3,700 adolescents age 15-20 were convicted of drug offences in 2006. The average age of people convicted of drug offences in 2006 was 32.2 for women and 31.8 for men.

Age group	% cannabis	% amphetamine
18-20	54	12
21-24	41	16
25-29	25	20
30-39	16	31
40-49	17	39
50-59	18	42

Table 12.4. Number of people fined by the prosecutor or court or sentenced for drug offences in court in 2006. By age groups and substance involved.

Cannabis is the most prevalent drug among men (32%, women 17%) and amphetamine is most prevalent among women (39%, men 22%). Methamphetamine is not differentiated from amphetamine in the statistics. Cocaine and heroin represent only minor percentages of drug offences (National Council for Crime Prevention 2007).

Causes of death

One way to determine the health risks of amphetamine use is to analyse the cause of death in people who died while under the influence of the drug.

The study consists of a retrospective mapping of deaths in which the deceased had tested positive for at least one illicit drug (Thiblin et al 2006). The mapping is based on the catchment area for the forensic medicine departments in Stockholm and Uppsala during the period of 1994–2004 and referred to drugs including amphetamine. Basic demographic data, toxicological findings, causes of death and manner of death (illness, accident, suicide, homicide), morbidity registered in the inpatient care registry and finally a history of criminality found in the National Criminal Police criminal records registry will be described.

Of the material in its entirety (n = 276), 19% are women (n = 52) and 81% are men (n = 224). The average age for the entire group is 41.0 (men 41.7 and women 38.3). The youngest of the deceased was 18 and the oldest was 72. There is no distinct change in the number of cases per year, although frequency may have increased somewhat in later years. The average age has not increased either, but varied between 38.9 and 45.0 during the observed years.

Accident was the most common manner of death for the entire group (39%, n = 107), followed by illness (15%, n = 42) and undetermined manner of death (14%, n = 39). Comparison between the sexes shows no significant differences and the breakdown for manner of death is essentially the same for men and women, although no homicides occurred among the women.

Among the illnesses that led to death (n = 42), the most common were heart disease (n = 12), pneumonia (n = 10) and hyperglycaemia (n = 6). Other illnesses found in this group included organ failure, epileptic seizure, stroke and gastrointestinal bleeding.

Two large groups were found that accounted for more than half the deaths among those for whom accident was the manner of death (n = 107). Road traffic accidents in which the deceased was the driver were most common (28%, n = 30), closely followed by poisoning (26%, n = 28). In 30 accident cases, alcohol was also present in the blood.

A total of 38 deaths occurred due to suicide, of whom 7 women and 31 men. The most common method among the entire group was hanging (42%, n = 16), followed by poisoning (24%, n = 9). Hanging was the most common method among the men, while the frequency of hanging and poisoning was equal among women.

Twelve cases of homicide were found, all men. Seven were victims of homicide by shooting, four died of trauma inflicted with a sharp instrument and one died of blunt force trauma/assault. Alcohol was present in the blood of 42% (n = 5) of victims.

Substance abuse was known in 62% (n = 171) of the material. These individuals died more often of illness or "unspecified manner of death" but less often due to homicide compared to the group in which substance abuse was not known. The average age of known addicts abusers were also higher (43.4) compared to the others (37.5).

Alcohol was found in the blood and/or urine at time of death in 31% (n = 86). Suicide was more often the manner of death for these individuals than for others. Two or more types of amphetamine were found in the blood of 41 individuals.

Some degree of arteriosclerosis was found in 20%, only one of them under age 30. The average age for this group was higher, at 49.6, than for the others, whose average age was 39.1. If those with only minor arteriosclerosis are included, the frequency increases to 63.7%. Enlargement of the left ventricle of the heart was found in 17% (n = 48) and enlargement of the right ventricle in 1.8% (n = 5). Total cardiac enlargement was found in 6.9% (n = 19).

Stroke was the cause of death in 21 individuals (7.6%). In two cases, the stroke was probably caused by septic emboli (bacteria-infected blood clots) stemming from valvulitis. The others were spontaneous and the amphetamine intoxication may have been significant to onset.

Four people died in connection with police arrest. One died after about 24 hours in intensive care while the others died suddenly. Struggle and restraint were reported in all cases. The causes of death had been specified as "inspiration of vomited stomach contents," "complications of cardiac enlargement," "arteriosclerosis," and "acute amphetamine poisoning 2.0 µg amphetamine/g blood (26 hours after the arrest)".

Alcohol intoxication seems not to have had any critical effect in the cases of amphetamine-related death where such was recorded. This may be explained by the extremely potent effects of amphetamines on mental status and behaviour, i.e. that the effects of alcohol "drown" in the amphetamine effects (Thiblin et al 2006).

Quality assurance and best practices

The National Board of Health issued recommendations for best practices in addiction treatment in early 2007. This was done in order to ensure evidence-based treatment methods and techniques. The goal was more effective treatment from both the economic and patient/client perspectives. The recommendations were a disappointment in respect of treatment for amphetamine use. There is no evidence-based method for treatment of amphetamine users.

SBU, the Swedish Council on Technology Assessment in Health Care is responsible “for scientific assessment in health care that aims to identify interventions that offer the greatest benefits for patients while utilising resources in the most efficient way” (SBU 2009).

In 2001 SBU presented “Treatment of Alcohol and Drug Abuse,” a report based on systematic searches of relevant databases, literature lists from the studies identified and relevant monographs (SBU 2001). This report is the main source behind the recommendations issued by the National Board of Health and Welfare.

The SBU report compared three different types of interventions in amphetamine abuse: supportive methods, relearning therapies and methods based on behavioural therapy, and psychotherapeutic methods. SBU determined that only relearning therapies and methods based on behavioural therapy showed significant positive effects, especially during the first six months, upon comparison to a treated control group. However, only psychotherapy could show increased retention in treatment (National Board of Health and Welfare 2007).

There is no specific pharmaceutical treatment for detoxification with respect to amphetamines, cocaine, cannabis, or hallucinogens. Benzodiazepine therapy is generally recommended for symptomatic treatment of agitation and anxiety.

Detoxification that is not followed by further treatment is of no benefit to the patient’s situation over the longer term, according to the National Board of Health and Welfare. However, the patient’s situation can be improved by offering this treatment in a context, a “chain of care.” Cooperation between social services and the health care system is essential from the point the patient is admitted to hospital.

Measures related to the structure and design of the therapeutic environment, such as staff availability, how staff treats the clients, and a high level of activity in the therapeutic environment are probably significant to effective treatment. Informative dialogues with the patient prior to admission for detoxification seem to improve the outcomes.

There is weak support for the assumption that detoxification in an inpatient setting is preferable to outpatient care, other than with respect to treatment of opiate abuse.

There is insufficient evidence supporting any known pharmacological methods for detoxification beyond supplementary symptomatic therapy with benzodiazepines for agitation and anxiety. High-dose neuroleptics must be used with some caution in amphetamine-induced psychosis due to the risk of circulatory complications and

elevated body temperature (hyperthermia) (National Board of Health and Welfare 2007).

In an overview paper in *Interventions for Amphetamine Misuse* (Pates, Riley 2009) the Swedish researcher Kerstin Käll concludes as follows:

“The trend in the last decades has been to try out patient care to a larger extent, since this has proved more cost effective with alcohol dependent patients. The clinical experience is however that outpatient care is usually not as effective with hard drug users as with alcohol dependent patients, with the exception of maintenance treatment of opiate dependent patients. The trend today is to recommend at least six months of institutional care for severe amphetamine dependency, usually a twelve step programme followed up with Narcotic Anonymous (NA) contact for several years. For the less dependent patients who receive outpatient treatment cognitive behavioural therapy and motivational interviewing are the most prevalent new evidence-based methods recommended in clinics for dependency disorders”. (Käll 2009:209)

References:

- ANT-SEKRETARIATET, S. (2009) Fri från missbruk. Regeringens åtgärdsprogram för alkohol-, narkotika-, dopnings- och tobakspolitiken 2009.
- AQUILONIUS, S.-M., BERGQUIST, J. & DAHLLÖF, T. Å. (2009) Droger och desperation i skilda världar Missbruk av katinon och metkatinon hotar hälsa och social utveckling. *Läkartidningen*, 106.
- BLID, M. (2008) Ett folkhem för alla? Kommunala insatser mot hemlöshet. (A people's home for all? Municipal interventions against homelessness). Östersund, Mid Sweden University.
- BLID, M. & GERDNER, A. (2006) Socially excluding housing support to homeless substance misusers: two Swedish case studies of special category housing. *International Journal of Social Welfare*, 15, 162-171.
- BLOMQVIST, J. (2002). Att sluta med narkotika – med och utan behandling. Stockholm: R&D report 2002:2
- BRITTON, S, HILLGREN, K, MAROSI, K, SARKAR, K AND ELOFSSON, S. (2009). Baslinjestudie om blodburen smitta bland injektionsnarkomaner i Stockholms län 1 juli 2007 – 31 augusti 2008 Stockholm: Karolinska Institutet et al.
- BRA (2007) Den fortsatta narkotikasatsningen i kriminalvården Anstaltschefernas bild och de intagnas upplevelser. 2007:25.
- BRÅ (2006) Personalens erfarenheter av den fortsatta narkotikasatsningen i kriminalvården. *Webbrapport 2006:6*.
- BRÅ (2008) Behandling av narkotikamissbrukare i fängelse En effektstudie. 2008:18.
- BRÅ (2009) Statistics on drugrelated crime.
- BYQVIST, SIV, (2007), Missbruksmönster hos narkotikamissbrukare i Sverige
- CAN (2006) Drogutvecklingen i Sverige 2006. *CAN Rapport 98*.
- CAN 2008. Drogutvecklingen i Sverige (2008), Swedish Council for Information on Alcohol and Other Drugs. Report no. 113, Stockholm
- CAN & HIBELL, B. (2008) Kokain – ett uppmärksammat problem. *CAN rapport 109*.
- CRD (2008) Tendenser andra halvåret 2008) Early Warning System
- DE CAL, E. & SÖDERLIND, L. (2007) What one can't see, Doesn't exist – A survey of Khat use among the Somali population in Gothenburg. *Folkhälsovetenskapligt program.*, Sahlgrenska akademien.
- DIANOVA, 2009, Homepage. <http://www.dianova.org/en/content/services-addiction-residential.html>
- EMCDDA (2009) Statistical Bulletin.
- EPI-aktuellt, vol 8, no. 13 (26 March 2009), Nyheter från Smittskyddssverige, Swedish Institute for Infectious Disease Control
- FAHLKE, C. (2006) Drogvanor och psykisk hälsa hos ungdomar: Vad är det som gör att unga testar narkotika och vad gör att vissa fastnar., Mobilisering mot narkotika.
- FENDER, E. (2006) Kartläggning av narkotikapolitiska handlingsplaner i kommuner och stadsdelar. Centralförbundet för alkohol- och narkotikaupplysning (CAN);.
- FHI (2009) Nationella folkhälsoenkäten - Hälsa på lika villkor.
- FRIDELL, M, CRABO, J, GRADOWSKA, M, (2008), Uppföljning av personer behandlade vid Dianova, Sverige, Stockholm: MOB Report 24 2008

- FRIDELL, M, BILLSTEN, J, JANSSON, I & AMYLON, R. (2009),
Femårsuppföljning. Kvinnor vårdade på Lundens ungdomshem och LVM-hem. Stockholm: Swedish National Board of Institutional Care, SiS Research Report No. 1 2009
- GOLDBERG, L (1968) Drug abuse in Sweden. Bulletin on Narcotics 1.
- GRIPENBERG, J. (2008) Narkotika på Stockholms krogar En jämförelse mellan 2001 och 2007/08
- GRIPENBERG, J., WALLIN, E. & ANDRÉASSON, S. (2007) Effects of a community-based drug-use prevention program targeting licensed premises. *Substance Use and Misuse* 42 1883-98.
- GÖRANSSON, B. (2008) KRIMINALVÅRDENS SÄRSKILDA NARKOTIKASATSNING 2002-2007 S L U T R E D O V I S N I N G 2 0 0 8 - 0 3 - 1 5.
- HANSSON, L (2009) Interview with Lars Hansson, Customs officer, Malmö
- HENSING, G. (2008) Bruk av narkotika – är det maskulint? Könsskillnader och konstruktion av genus i narkotikabruk. IN ANDRÉASSON, S. (Ed.) *Narkotikan i Sverige: Metoder för förebyggande arbete: En kunskapsöversikt*. Östersund, Statens folkhälsoinstitut.
- HILLGREN, K. & BRITTON, S. (2009) Summary of Sweden's first baseline study on Blood borne Infections among Injecting Drug Users (Stockholm County July 2007 to September 2008).
- HOLLOWAY, K., BENNETT, T. & FARRINGTON, D. (2008) Effectiveness of Treatment in Reducing Drug-Related Crime.
- HOLMGREN, A, HOLMGREN, P, KUGELBERG, FC, JONES, AW., AHLNER, J. (2007), Predominance of Illicit Drugs and Polydrug Use Among Drug-Impaired Drivers in Sweden Traffic Injury Prevention, Volume 8, Issue 4 December 2007, pages 361 - 367
- HVITFELDT, T. & NYSTRÖM, S. (2009) Skolelevers drogvanor 2008. *CAN Rapport 114*.
- HÅKANSSON, A (2009) Overdoses, Suicidal Behaviour and Clinical Characteristics in Heavy Drug Users: Studies in The Criminal Justice System. Lund: Clinical Alcohol Research Lund University
- JONES, AW, KUGELBERG, FC, HOLMGREN, A & AHLNER, J. 2009, Five-year update on the occurrence of alcohol and other drugs in blood samples from drivers killed in road-traffic crashes in Sweden. *Forensic Science International* 186 (2009) 56–62
- JÖNSSON, AK, HOLMGREN, P, DRUID, H & AHLNER, J. (2007) Cause of death and drug use patterns in deceased drug addicts in Sweden, 2002–2003
- KALDERSTAM, J (1979) De laglösa. Lund: Studentlitteratur
- KLEE, H (1997) *Amphetamine Misuse*, Amsterdam: Harwood Academic Publishers
- KRANTZ, L. & ELMBY, J. (2007) Kriminalvårdens redovisning om drogsituationen. (The Swedish prison and probation system's accounting for drug situation). Norrköping: Prison Service, Headquarters.
- KÄLL, K (1997) Amphetamine Abuse in Sweden. In *Amphetamine Misuse*, Hilary Klee (ed). Amsterdam: Harwood Academic Publishers
- KÄLL, K (2009) Sweden's long experience of amphetamine problems. In Pates R, Riley D (eds), *Interventions for Amphetamine Misuse*. Oxford: Wiley-Blackwell

- LARMA, P, HODGINS, S, LARSSON, A, MOLERO SAMUELSON, Y & TENGSTRÖM, A, (2008) Long-term outcomes of adolescents treated for substance misuse, *Drug and Alcohol Dependence* 96 (2008) 79–89
- LUNDSTRÖM, S. & SÄRNDAL, C. E. (1999) Calibration as a standard method for treatment of nonresponse. *Journal of Official Statistics*, 15, 305-327.
- LUNDSTRÖM, S. & SÄRNDAL, C. E. (2001) Estimation in the Presence of Nonresponse and Frame Imperfections. . Statistics Sweden.
- NYSTRÖM, S. (2009) CANs rapporteringssystem om droger Tendenser andra halvåret 2008. *CAN rapport 116*.
- OLSSON, B., ADAMSSON WAHREN, C. & BYQVIST, S. (2001) Det tunga narkotikamissbrukets omfattning i Sverige 1998. MAX-projektet, delrapport 3. . *CAN nr 61*.
- OLSSON, B (2005) Personal communication
- OLSSON, L.-E. & NORDFELDT, M. (2008) Homelessness and the Tertiary Welfare System in Sweden – The Role of the Welfare State and Non-profit Sector. *European Journal of Homelessness*, 2.
- MUMIN (2007) MUMIN - motivating young drug abusers to treatment, The Swedish National Drug Policy Coordinator
- POLISEN (2008) Polisens årsredovisning 2008.
- REGERINGEN (2001) Regeringens proposition. Nationell narkotikahandlingsplan. 2001/02:91.
- RFHL & SVENONIUS, C. (2008) Your rights and options in treatment and care of drug addicts.
- RICHERT, T, (2007), Unga missbrukare i Stockholm, Göteborg och Malmö – En deskriptiv och jämförande studie av sex öppenvårdsmottagningar och deras besökare. Stockholm: MOB/Malmö University
- RIKSPOLISSTYRELSEN (2007) Samverkan Polis och kommun - för en lokalt förankrad polisverksamhet i hela landet.
- RKP (2007) Den illegala drogsituationen i Sverige 2007, Swedish National Criminal Police, CID Unit, Intelligence Section, NCP Report 2007:7
- SAHLIN, I. (2005) The Staircaser of transition. Survival through failure. *Innovation*, 18, 115-135.
- SBU – Swedish Council on Technology Assessment in Health Care (2009) <http://www.sbu.se/en/About-SBU/>
- SIS – Swedish National Board of Institutional Care (2008:1) Annual Report ADAD 07. *Ungdomar som skrivits in på särskilda ungdomshem under år 2007. Tabeller*, Public SiS Report 2008:8.
- SIS – Swedish National Board of Institutional Care (2008:2) Annual Report DOK 07. *Personer inskrivna vid LVM-institutioner under år 2007. Tabeller*, Public SiS Report 2008:7.
- SIS (2008) Årsrapport DOK 07. Personer inskrivna vid LVM-institutioner under år 2007.
- SMI (2009a) Statistik för hepatit B.
- SMI (2009b) Statistik för hepatit C.
- SMI (2009c) Statistik för hiv.
- SJÖ, F, (2005), Drugs in Swedish Club Culture – Creating Identity and Distance to Mainstream Society in Philip Lalander & Mikko Salasuo (eds), *Drugs and Youth Cultures — Global and Local Expressions*. Helsinki: NAD Report no. 46

- SOCIALDEPARTEMENTET (2005) Nationella alkohol- och narkotikahandlingsplaner. 2005:2005/06:30
- SOCIALDEPARTEMENTET (2006) En översyn av narkotikalagstiftningen. Kommittédirektiv. *Dir. 2006:97 uppl.; 2006.*
- SOCIALDEPARTEMENTET (2007) Homelessness – multiple faces, multiple responsibilities. .
- SOCIALDEPARTEMENTET (2008) Förebygga för framtiden. En presentation av regeringens politik på alkohol-, narkotika-, dopnings-, och tobaksområdet. Stockholm.
- SOCIALSTYRELSEN (2007a) Gravida kvinnor med missbruk och barn som lever i familjer med missbruksproblem.
- SOCIALSTYRELSEN (2007b) Nationella riktlinjer för missbruks- och beroendevård Vägledning för socialtjänstens och hälso- och sjukvårdens verksamhet för personer med missbruks- och beroendeproblem.
- SOCIALSTYRELSEN (2009a) Fördelning av medel till alkohol och narkotikaförebyggande åtgärder, år 2008. Uppföljning av länsstyrelsernas medelsfördelning.
- SOCIALSTYRELSEN (2009b) Plan for continuous monitoring of the extent and character of homelessness – a strategy for disseminating knowledge and information.
- STATENS FOLKHÄLSOINSTITUT (2009a) Det drogförebyggande arbetet i Sverige 2008. Rapport om det förebyggande arbetet mot alkohol-, narkotika-, tobaks- och dopningsproblem.
- STATENS FOLKHÄLSOINSTITUT (2009b) Länsrapport 2008. Östersund.
- STORBJÖRK, J (2007) Convictus Bryggan City: Gästerna, deras nätverk, problem, behov och resurser. In Beijer, U et al, Vad vet vi om narkotikaanvändarna i Sverige? MOB Report 14, 2006,
- SVENSSON B AND KRISTIANSEN A (2004). ”Byråkrati och narkomani går inte ihop...” Livsvillkor och värderfarenheter hos kvinnor och män som använder narkotika. Stockholm: Mobilisering mot narkotika. Report 1, 2004.
- SVENSSON, D (2009) Personal communication.
- SVENSSON, D. & ARVIDSSON, O. (2009) Skattning av problematiskt narkotikamissbruk 2007.
- SWEDISH COUNCIL FOR CRIME PREVENTION. (2007), Narcotic Drugs Statistics 2006. Official Statistics of Sweden. Stockholm: Report 2007:24
- SWEDISH CUSTOMS (2008) Report. Inventering av omfattning på information inom myndigheten. (Metamfetamin – Fas 1)
- SWEDISH INSTITUTE FOR INFECTIOUS DISEASE CONTROL (2009)
- SWEDISH NATIONAL BOARD OF HEALTH AND WELFARE (2007). Nationella riktlinjer för missbruks- och beroendevård. Vägledning för socialtjänstens och hälso- och sjukvårdens verksamhet för personer med missbruks- och beroendeproblem
- SWEDISH GOVERNMENT REPORT SOU 2000:126 (2000). Vägvalet – den narkotikapolitiska utmaningen. Final report from the Drug Commission. Stockholm: Fritzes.
- TENGSTRÖM, A. (2006) Ung och oberoende - en studie av Maria Ungdoms klienter: Vad vet vi om narkotikaanvändarna i Sverige? . Mobilisering mot narkotika.
- THIBLIN, I, STEINHOLTZ, L, NILSSON, A & FUGELSTAD, A. (2006) Narkotikarelaterad död – en rikstäckande studie av dödsorsak, dödsmechanismer, dödsätt, dödsplats, toxikologisk profil och riskfaktorer hos

rättsmedicinskt undersökta avlidna narkotikaanvändare. In Beijer, U et al,
Vad vet vi om narkotikaanvändarna i Sverige? MOB Report 14, 2006,
TUNVING, K (1982) Vård av narkomaner. Stockholm: Liber
UNGDOMSSTYRELSEN (2008) Insatser för unga i riskmiljöer, förebyggande och
främjande ungdomsverksamhet. *Ungdomsstyrelsens skrifter 2008:8*.
VÄGVERKET (2009) Nationell samverkan mot alkohol och droger i trafiken enligt
Skelleftemodellen.

Annex 1 List of tables appearing in the report

- 1.1 Previous estimations of drug-related public expenditure in Sweden
- 1.2 Distribution of funds to the ANDT-area allocated by the SNIPH in 2008.
- 2.1 Lifetime, last year and month prevalence of cannabis use in age groups 2004-2008.
- 4.1 Changes in the number of drug users, local (national) reporters view (CRD). April 2008-September 2008.
- 6.1 Participants in the Stockholm Baseline Study. IDU- and hiv-status.
- 6.2 Number of drug-related deaths 1999-2007 by opiats occurring or not. EMCDDA Selection B, version 3.0 and 3.1
- 6.3 Number of drug related deaths annually in Sweden 1997-2007. EMCDDA Selection B, version 3.0 and 3.1 and DIDP (Death with Illegal Drugs Present)
- 9.1 Number of individuals convicted with drug related offences as the main crime annually in Sweden 1999-2008.
- 9.2 Number of drug related offences annually in Sweden 1999-2008.
- 9.3 Number of individuals found guilty of drug related offences annually in Sweden 1997-2006. By type of offence.
- 10.1 Changes in the availability of drugs, local (national) reporters view (CRD). April 2008-September 2008.
- 10.2 Number of seiures analysed in Sweden 2001-2008.
- 10.3 Number of seizures of various precursor chemicals in Sweden 2008.
- 10.4 Prices of illicit drugs at street level in Sweden 1996-2008 (SEK, median)

Annex 2 List of figures appearing in the report

- 1.1 Illustration of the national coordination in the areas of alcohol, illicit drugs, tobacco and doping.
- 6.1 Number of individuals annually infected with hiv in Sweden 1999-2008. (IDUs shown separately)
- 6.2 Number of reported cases infected with HCV annually in Sweden 1999-2008 by transmission route.
- 6.3 Number of reported acute cases infected with HBV annually in Sweden 1999-2008 by transmission route.
- 6.4 Results of the hiv-tests taken and vaccination statistics for hepatitis B in the Stockholm Baseline Study.
- 6.5 Men and women treated in health care for drug related diagnoses in Sweden 1998-2007. Number per 100 000 inhabitants.
- 12.1 Analyses of samples taken from persons detained by the police suspected of a "minor drug offence" 2005-2009 (first 6 months).
- 12.2 Average prices for various drug categories in Sweden according to the CAN reporting system on drugs (CRD), 2007. (also see chapter 10)
- 12.3 Amount of Methamphetamine and Amphetamine seized in 2004-2009 (first 6 months)
- 12.4 Number of people fined by the prosecutor or court or sentenced for drug offences in court in 2006. By age groups and substance involved.

Annex 3 List of full references of laws in original language

(1968) Narkotikastrafflag. SFS 1968:64.

(1992) Lag om kontroll av narkotika. 1992:860.

(2006) Lag om ändring i brottsbalken. SFS 2006:431.

SFS (2006) Lag om utbyte av sprutor och kanyler. SFS 2006:323.