

# Drug Trends in Sweden 2006

## *Summary*

Today there are a wide variety of data which can be used to describe the use and abuse of alcohol, controlled substances and other drugs. In many respects, these data enable a fair assessment of the extent and development of drug problems. In other respects, however, they provide a less adequate picture, owing to insufficient data quality or simply a lack of certain kinds of information. Issues relating to data sources and their shortcomings, if any, are dealt with in the chapter on methodology.

## *Trends in alcohol use*

In the 2000s, alcohol consumption has reached a new and higher level while recorded sales have been relatively stable. Alcohol sales included in official statistics are those of the Swedish Alcohol Retailing Monopoly (Systembolaget) and restaurants plus sales by grocer's shops of 'medium-strength beer' (alcohol content 2.8–3.5 per cent by volume). For an estimate of total consumption, other categories ('unrecorded consumption') must be taken into account as well: privately imported, smuggled and home-made alcoholic beverages. These are determined by means of questionnaire surveys. Since the 1990s, there are fairly accurate estimates of the size of unrecorded consumption.

Total consumption in 2005 is estimated at 10.2 litres of pure alcohol per inhabitant aged 15 years or more. Much of the alcohol consumed nowadays comes from private imports, whose share was estimated at 22 per cent in 2005. In the same year, 2 per cent derived from legal home production, 11 per cent from smuggling and illicit home distilling (i.e. illegal sources), 15 per cent from restaurants and grocer's shops, and 48 per cent from the retailing monopoly.

Between 1990 and 2005 the share of unrecorded alcohol has doubled from 18 to 36 per cent of total consumption. While part of this increase is due to a rising share for illegal alcohol, the main reason is growing volumes of privately imported alcohol, mainly as a consequence of the fact that since 1 January 2004, when the phasing-out of previously strict import regulations was completed, large volumes of alcohol may be imported from other EU countries.

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Further reasons for the increase in sales and consumption since the mid-1990s may be the reduction in real terms of beer and wine prices, the introduction of new types of beverages and containers, the extension of opening hours at retailing-monopoly shops and the increase in the number of restaurants licensed to serve alcohol.

In the past four years, annual consumption has amounted to about 10 litres of pure alcohol, which is a historically very high level. Compared with the latter part of the 1990s, this represents an increase of around 2.5 litres or slightly more than 30 per cent, according to the estimates which include unrecorded alcohol.

Major changes have occurred in beverage preferences as well. Ever since the Second World War, wine has been growing in importance; it accounted for 44 per cent of all alcohol sales (measured in pure alcohol) in 2005. 'Strong beer' (alcohol content > 3.5 per cent by volume) has also long had a rising trend, and for several years it has been accounting for a clearly larger share of sales than spirits. In 2005, strong beer represented 29 per cent of sales. Medium-strength beer, however, has seen its share of sales halve in the past ten years to 11 per cent in 2005. The total share for beer was thus 40 per cent.

If unrecorded alcohol is taken into account, the shares for wine and beer fall to approximately 37 per cent each in 2004, while spirits increase their share from 17 to 26 per cent. In other words, beer and wine are more common than spirits even when unrecorded consumption is considered. It can thus be concluded that Sweden is nowadays a 'beer-and-wine country' and no longer a 'spirits country'.

For an assessment of trends in consumption based on sales statistics to be accurate, unrecorded consumption must be fairly stable over time. As has been seen, this is not the case here, since the share of unrecorded alcohol has been rising over the past 10–15 years.

An observation which partly contradicts overall consumption trends relates to young adolescents' alcohol habits as recorded in CAN's annual survey of ninth-year school pupils (aged 15–16). The share of respondents claiming not to drink alcohol increased from around 20 per cent in the 1990s to over 30 per cent in 2006. Pupils' consumption did increase strongly in the second half of the 1990s, but it has been falling in the 2000s.

The fall in consumption among ninth-year pupils may seem paradoxical, but it should be mentioned that their consumption level remains clearly higher than that obtaining in the first half of the 1990s. What is more, only boys' consumption has been falling since the turn of the millennium; girls' consumption has been rising steadily and has now doubled compared with 1989. Taken together, this has made the difference between boys' and girls' con-

sumption smaller than in a long time. Trends in intoxication habits (i.e. 'drinking to get drunk') follow more or less the same trends as total consumption among school pupils.

As an overall assessment of young people's alcohol habits, as shown by various questionnaire surveys, it can be said that their consumption increased during the 1990s. For ninth-year boys there has been a reduction in total consumption and intoxication drinking during the 2000s, even though it is hard to determine from the surveys available whether this is true of slightly older boys as well.

The shrinking gender gap observed for school pupils is not reflected among slightly older young people. According to the studies available, such as those carried out among second-year pupils at upper-secondary schools (aged 17–18) in 2006, there are clear differences between the sexes: young men drink a great deal more than young women. Consumption peaks in the early 20s, when men's consumption is more than twice that of women. From about 25 years of age, men's consumption then falls as they grow older, while the corresponding reduction for women is considerably less distinct and does not become clear until they reach the age of about 50.

The sexes differ in their beverage preferences. Among adult men, strong beer has had a dominant position for a number of years. According to interview results from 2002, it accounted for 41 per cent of total consumption (measured in pure alcohol). It was followed by wine, spirits, medium-strength beer and cider. Among women, wine is predominant; it accounted for 52 per cent of total consumption in the same year, when it was followed by strong beer, spirits, cider and medium-strength beer. Among ninth-year boys, spirits used to dominate consumption but strong beer is now the largest single category of beverage. While the share of spirits has shrunk slightly among girls in the past ten years, it still makes the largest single contribution in terms of pure alcohol. Nowadays, however, pre-mixed beverages (alcopops, wine coolers, etc.) are a very close second.

Younger women's drinking habits show a more even spread across beverage types. Among older young people, wine and strong beer in particular are increasing their shares while medium-strength beer is losing ground. It is worth noting the strong fall in the consumption of medium-strength beer found among ninth-year pupils in the past ten years: in 1995, 38 per cent of their alcohol consumption was made up of medium-strength beer, whereas its share had dwindled to 9 per cent in 2006.

Surveys of adults, though few in number, point to a clear trend towards increasing alcohol consumption ever since the Second World War, not least among women. Since the 1980s, however, the sexes have not converged much in this respect, at least not judging from various interview-based stud-

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ies. At that point, women's consumption had reached about 40 per cent of men's, and since the mid-1990s the corresponding figure has been about 45 per cent. The share of alcohol consumers in the total population has also increased during the post-war years. Nowadays, the proportion of adults who have not drunk alcohol in the past 12 months is about 10 per cent.

Several questionnaire surveys on alcohol-related matters indicate that the proportion of high consumers of alcohol has risen since the 1990s. This is true for both men and women, and for most age groups. The explanation is mainly an increase in the number of drinking occasions, rather than an increase in the amount consumed on each occasion. Moreover, survey findings also indicate that the number of 'intensive-consumption occasions' (i.e. drinking at least the approximate equivalent of a bottle of wine on a single occasion) has grown in the past ten years.

Comparison of alcohol-sales trends during the post-war period in Sweden and a number of other countries reveals important similarities. For instance, this period was characterised by rising consumption in many parts of the world. In many countries, as in Sweden, the increase in total alcohol consumption slowed down in the mid-1970s, then levelled off, and then there was even a fall in some countries. Such falls were seen, for instance, in a few European countries with historically high consumption levels, such as France, Italy and Spain, where large decreases were observed, especially for wine. In Sweden, on the contrary, it is wine consumption which shows a rise during this period.

It can thus be concluded that consumption trends move in different directions in the European countries in question (Norway and the 15 countries which until recently made up the EU), the result being in fact a convergence of consumption patterns: 'wine countries' reduce their wine consumption and see beer and spirits account for ever-larger shares of total alcohol consumption, while trends are the direct opposite in typical 'spirits countries'. This convergence across countries of consumption levels also brings about a convergence of alcohol-related mortality. This is true in particular of liver-cirrhosis mortality, which has been falling in the 'wine countries' of the EU and rising in the 'beer countries' while Norway, Finland and Sweden, taken together, manifest a fairly stable level.

When it comes to alcohol policy, it seems that the 15 'old' EU member states have converged to some extent. While alcohol policy has grown weaker in Finland and Sweden, several other countries – including Southern European ones – have reinforced their policies, for instance by lowering legal blood-alcohol levels for drivers and introducing stricter age limits for purchasing alcohol in both shops and restaurants.

It is well known that alcohol causes both social and medical harm. Some of this harm can be fairly well described using statistics. However, there is a lack of data conclusively showing the extent and development of alcohol-related harm. This is particularly true of the social harm, such as workplace absenteeism or the consequences for other members of alcoholics' households. Further, there are no certain data on trends in the number of alcohol abusers or addicts. Factors undermining attempts to measure the extent of alcohol-related harm in society include changes in legislation, practices, financial and human resources, diagnostic methods, knowledge and attitudes. The indicators used in this report thus do not provide a complete picture of the development and extent of alcohol-related harm.

As previously mentioned, alcohol sales grew during the post-war period and peaked in 1976. In the 1970s, arrests for public drunkenness increased until 1975. The number of admissions to inpatient psychiatric care with diagnoses of alcoholism and alcoholic psychosis also increased markedly. Moreover, there was a strong rise in alcohol-related mortality until 1979. For this period, in other words, there is a connection between trends in consumption and harm.

In 1976 sales began to fall, and a few years later the increase in alcohol-related mortality ceased as well. If estimates including unrecorded alcohol are taken into account, annual consumption can be said to have been largely stable for most of the 1980s and 1990s (at about 8 litres of pure alcohol per inhabitant aged 15 years or more). From this perspective, the major change is the increase in the early 2000s, which has led to annual consumption per inhabitant aged 15 years or more being slightly above 10 litres of pure alcohol for the past four years.

The number of arrests for public drunkenness fell sharply in the 1980s and 1990s, probably owing mainly to the attitudes and actions of society. However, it can be noted that this fall slowed down around the turn of the millennium and that the arrest level remained constant until 2004, even though it increased in 2005.

It can also be noted that the number of reported drunk-driving offences per inhabitant has almost doubled since 1998. A large part of the explanation for this increase, however, is probably provided by new laws and resource allocation by the police. Moreover, despite this rise, the number is still lower than the record levels seen in the early 1990s. The share of the population claiming in questionnaire surveys to have drunk alcohol in connection with driving during the past 12 months has fallen from 14 per cent in 1989 to 6 per cent in 2005.

Alcohol-related road-traffic accidents could possibly be a proxy for the prevalence of alcohol in road traffic which is less affected by outside factors.

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The number of persons involved in road-traffic accidents leading to personal injury who have been suspected of being under the influence of alcohol has been upwards of 40 per cent higher in recent years than it was in the second half of the 1990s. Still, even higher totals have been seen earlier, especially around the consumption peak in the latter part of the 1970s. As regards fatal accidents, though, the proportion of people suspected of being under the influence of alcohol is not lower now than it was in the 1970s. It was 9 per cent in both 2003 and 2004, which is twice as high as it was in the mid-1990s. However, in 2005 this proportion was lower again (5 per cent).

Another indicator which no longer shows a downward trend is alcohol-related inpatient care. Between 1987 and 1998, the number of alcohol-related treatment episodes fell, but then the trend turned upwards; in 2005, the increase on 1998 was 12 per cent. As regards the total number of people with alcohol problems of the kind reflected by inpatient care, an increase of 6 per cent between 1998 and 2004 has been estimated by means of special statistical treatment of inpatient-care data intended to capture 'hidden statistics' as well. One possible problem associated with using inpatient-care data as the sole indicator, however, is that the statistics are affected by changes in the range of services offered as well as the trend for inpatient care to be replaced by outpatient care.

Between 1979 and 2000, alcohol-related mortality in men – as measured according to the diagnostic categories chosen by the Swedish National Board of Health and Welfare – fell by 29 per cent. In the three years following that period, however, the fall has stopped and a rise of 9 per cent can be seen, even though the levels of the 1970s or 1980s have yet to be reached. Mortality in women also reached a peak in 1979, but a considerably less marked one. What is more, the alcohol mortality of women, unlike that of men, was of the same magnitude in 2003 as in 1979. Comparison of the first half of the 1990s with the 2000s shows that alcohol-related deaths in women have increased by 12 per cent.

The fact that men consume considerably more alcohol than women is clearly reflected in mortality statistics: in the 2000s, alcohol-related mortality in men is about four times higher than in women. At the same time, however, the gender gap has shrunk as a consequence of increased female consumption.

Women are increasing their share in several of the other above-mentioned indicators as well. For instance, the proportion of women among those arrested for public drunkenness has risen from 3 per cent in the early 1970s to 12 per cent in the 2000s. The proportion of women among suspects of drunk-driving offences has increased from 6 to 12 per cent between 1984 and 2005, and over the same period the proportion of female clients in institutional addiction treatment has doubled. Women have become more numerous in alcohol-

related inpatient care as well: in the 2000s, one-fourth of clients have been women.

It is no easy task to interpret the development of alcohol-related harm by means of a range of indicators. One conclusion which can be drawn, however, is that the positive trend exhibited by several of these indicators in the first half of the 1990s, as compared with the preceding decades, has now been broken. In several cases, alcohol-harm indicators seem to show that a negative development has taken place in the 2000s; signs of improvements are exceptional. A further complication is that the picture varies according to the year chosen as a starting point for comparisons. In some cases, the deterioration observed actually amounts to a return to previous levels.

For several indicators, however, it can be seen that measurable alcohol harm has not increased at the same rate as actual consumption. This may be due to delayed impact as well as to the fact that at least part of the increase in consumption involves groups which have previously been relatively moderate drinkers and have not traditionally been characterised by problem consumption; one example is older women. To understand and monitor harm trends more closely, it is thus important to have access to good information about the drinking patterns of various population groups as well as changes in these patterns.

## *Trends in illegal drug use*

Illegal-drug use may range from occasional consumption to more regular use as well as long-term and daily abuse. Different forms of use affect individuals and society in different ways. It is therefore important in any report and discussion of trends that different consumption patterns are dealt with separately.

As is the case for data on alcohol trends, studies and statistics on illegal drugs do not reflect the actual situation perfectly; findings are affected by factors such as changes in laws and their application and changes in orientation and resources within anti-drug efforts, addiction care, etc.

The availability of cannabis, amphetamines, heroin and cocaine has increased strongly since the late 1980s, as illustrated by a doubling of seizures of these drugs over this period, in terms of both numbers and amounts seized. During the same time, prices of these drugs have roughly halved in real terms. The impression of increased drug availability in the 1990s is also confirmed by young people in various questionnaire surveys.

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Data on occasional or less regular use of illegal drugs are obtained primarily from questionnaire surveys. Despite the methodological problems inherent in such studies, they are considered to reflect trends fairly well.

Since 1971, there are national data from surveys of school pupils and military conscripts. The share of ninth-year school pupils (aged 15–16) having tried illegal drugs was at its highest in the early 1970s, then fell to reach a low of 3–4 per cent in the second half of the 1980s. During the 1990s, this share more than doubled, and it was close to 10 per cent in 2001. From then on there has been a decrease; the share was 6 per cent in 2006.

Surveys of 18-year-old men undergoing physical and psychological examination in connection with compulsory military conscription describe a similar trend as school surveys: falling levels in the 1980s and rises in the 1990s. Between 1992 and 2002, the share of conscripts who had tried illegal drugs at least once increased threefold, from 6 to 18 per cent. Since then, as among the two-years-younger school pupils, trying drugs has become less frequent: in 2005, 14 per cent of conscripts said they had used illegal drugs. A new series of annual surveys of second-year pupils at upper-secondary school (aged 17–18) has been started; between 2004 and 2006 some 15 per cent claimed to have tried illegal drugs.

It is difficult to say anything about trends in the 2000s among young people older than 18 and among young adults, because there is a lack of comparable data. In 2003, 17 per cent of 16–24-year-olds in a telephone survey said that they had tried illegal drugs at least once. Average age at first use (among those who were 20 or older when participating) was 17.5 years, which reflects the need to monitor development among slightly older young people as well.

Surveys of young people tend to show that about 60 per cent of those who have tried illegal drugs have used cannabis only, while 5–10 per cent have used other drugs than cannabis only. Amphetamines used to be the second-most common drug type, but they now share second place with ecstasy. Illegal use of pharmaceuticals (most often benzodiazepine-type sedatives/ tranquillisers), however, is as common as use of ecstasy and amphetamines.

In school and conscription surveys, current use (30-day prevalence) has largely followed the same trends as lifetime prevalence. One exception is ninth-year pupils, where current use has not fallen in the 2000s but has been 3–4 per cent in the past two years. During the same period in the survey of upper-secondary pupils, 4 per cent claimed to have used illegal drugs in the past 30 days, with prevalence being higher for male pupils. These are relatively high levels. According to the survey of 16–24-year-olds, current use peaks at around the age of 21.

The most recent survey of adults – a postal survey of 16–84-year-olds carried out in 2006 – shows that about 10 per cent have tried cannabis at least once, corresponding to over 700 000 people in the age range in question. Among 18–29-year-olds, about one-fourth of men and one-fifth of women claimed to have tried cannabis. In this age group, last-year prevalence of cannabis was 8 per cent for men and 4 per cent for women, as compared with 2 per cent for men and 1 per cent for women among all respondents.

Among adults, men are about twice as likely as women to have experience of illegal drugs. It can be concluded that the differences between the sexes arise only at upper-secondary age and that they are clearer when more regular use alone is considered; however, there are almost no differences between boys and girls in the ninth year of school.

Almost all studies show clear regional differences. Illegal-drug experience is considerably more common in major urban areas while the lowest rates are found in small towns and sparsely populated regions. This is particularly true for current use.

Even though studies of groups of people with heavy drug abuse often reveal them to have had marked social problems from an early age, it is of course not the case that all those who have tried illegal drugs at least once come from such a background. At the same time, however, various studies have shown that young people who have tried illegal drugs usually distinguish themselves from their peers, for instance with regard to frequent truancy, a dislike for school and a lower educational level. Such differences become more pronounced in the case of current or regular consumption. This means that those who go on using illegal drugs often distinguish themselves with regard to the characteristics just mentioned – from those who have taken illegal drugs only on a few occasions and, in particular, from those who have never tried illegal drugs.

In the second half of the 1960s, more serious forms of drug abuse increased considerably. This period may be seen as the establishment phase of modern drug abuse. Available data indicate a certain stabilisation during the first years of the 1970s, but the second half of that decade was characterised by increasing trends for drug offences and drug seizures as well as for injection-related hepatitis infection and drug-related deaths. This period was when heroin was introduced in earnest in Sweden.

Based on a study made in Stockholm in 1967, the number of people with heavy drug abuse in Sweden in that year has been estimated at 6 000. Later and more careful surveys have shown that heavy drug abuse has increased since then. The number of people with heavy drug abuse was estimated at 15 000 in 1979, at 19 000 in 1992 and at 26 000 in 1998. ‘Heavy drug abuse’

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here refers to injection of illegal drugs in the past 12 months (regardless of frequency) or daily/near-daily use of illegal drugs in the past four weeks.

Another type of estimate, based on special processing of inpatient-care data, arrived at the same number of some 26 000 heavy abusers in 1998, but found them to be 28 000 in 2001. The numbers presented above translate into annual growth rates for the number of heavy drug abusers of 2 per cent in 1979–1992, 6 per cent in 1992–1998 and again 2 per cent in 1998–2001. Abusers' average age increased from 27 in 1979 to 32 in 1992 and 35 in 1998. At the same time, however, both the number and the proportion of people under 25 were clearly larger in 1998 than in 1992.

The calculation of the prevalence of abuse based on inpatient-care data has been updated, and in 2004 the number of people with heavy drug abuse was estimated at around 26 000 – that is, a return to the 1998 level. One problem associated with using inpatient-care data as the sole indicator may be that the statistics may be affected by changes in the range of services offered as well as the trend for inpatient care to be replaced by outpatient care.

The share of women has been fairly stable, at slightly less than one-fourth, in the three surveys to establish the prevalence of heavy drug abuse. This share is larger than for prosecutions for drug offences (14 per cent women) but smaller than for people treated at hospitals or reported as infected by HIV owing to intravenous drug abuse (about 30 per cent women).

The vast majority of those whose abuse was classified as 'heavy' in these surveys had injected illegal drugs in the past 12 months. In 1979, 82 per cent had done this, as compared with 93 per cent in 1992 and 89 per cent in 1998. CNS stimulants (mainly amphetamines), opiates (mainly heroin) and cannabis have always been the predominant drugs.

Amphetamines were the main drug for about 48 per cent of heavy abusers both in 1979 and in 1992, but had become less important in 1998, when only 32 per cent had amphetamines as their main drug. Last-year prevalence of amphetamine use was found to be 77, 82 and 73 per cent, respectively.

Heroin, on the other hand, has gained in importance since 1979. Last-year prevalence was 30, 34 and 47 per cent, respectively. Opiates were the main drug for 15 per cent of abusers in 1979, as compared with 26 per cent in 1992 and 28 per cent in 1998. The rise for heroin is also reflected, for instance, in seizures and prosecutions.

Last-year prevalence of cannabis use was 61, 66 and 54 per cent, respectively. In the most recent survey, 8 per cent were said to have cannabis as their main drug. The majority were said to be alcohol addicts as well.

Over the years, data reporters have become less likely to provide information about main drugs. Probable reasons are that polydrug abuse has become more common and that those who work with drug matters at reporting authorities know less about the abusers.

A clear pattern emerging from the surveys as well as from various drug-related indicators is that illegal-drug abuse, especially its heavier forms, are concentrated in the major urban areas. One tendency observed in the most recent survey from 1998 was a clear rise in Stockholm County excluding the city of Stockholm itself. While the prevalence of abuse in relation to total population was still greater in the city, the increase was more dramatic in its suburbs. Developments in Malmö also indicate a rise in the 1990s; this has been the highest-prevalence region since the 1970s. Gothenburg is characterised by an increase for heroin and by a convergence of abuse patterns with those observed in the other two major cities, even though the rate of increase appears to have been lower.

Comparison between available indicators – mainly data on seizures and criminal-justice, health-care and cause-of-death statistics – and survey findings shows that they provide a relatively similar picture of trends in heavy drug abuse, with rises especially in the 1990s. The indicators point to a continued increase after 1998 as well.

For the most recent years, however, some sources indicate a stabilisation or even a decrease. Inpatient-care figures have been falling for a few years, even though this may be a result of the shift towards outpatient care. Drug deaths have stopped increasing and have indeed fallen by 4 per cent between 2001 and 2003, which may be due to the introduction of Subutex in substitution treatment for opiate addicts. Drug prices have also remained relatively unchanged in the 2000s, and even though seizure statistics are no longer fully comparable, at least there does not seem to have been any major rise in the number of seizures in the most recent years. At the same time, however, no fall is discernible in criminal-justice statistics. While there may seem to have been a break of the trend, the picture is thus neither uniform nor obvious.

## *Trends in sniffing*

In the 1950s, ‘sniffing’ attracted attention as a youth phenomenon. Back then, sniffing meant inhaling fumes from solvents such as thinner and glue. Today a wider range of substances are sniffed, including butane gas and aerosols.

According to the surveys of ninth-year school pupils, a clear reduction of sniffing took place in the 1970s and the fall continued in the 1980s. Around

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1990, experience of sniffing was fairly uncommon: 5 per cent of pupils claimed to have tried it. Ten years later, this share had doubled, but in the 2000s it has fallen back somewhat again; in 2006, 7 per cent of boys and 6 per cent of girls claim to have sniffed.

To the extent that there are comparable data from the conscription survey, they show more or less the same trend as for school pupils. A similar rise-and-fall in sniffing experience was also observed in the United States in the 1990s.

Even though the situation was the opposite in 2005, ever since the early 1970s sniffing experience has normally been slightly more common among boys than among girls. About 2 per cent of pupils say that they are still sniffers at the time of the survey.

Regional differences are commonly found in the prevalence of individual drugs. For sniffing, however, the questionnaire surveys available do not seem to indicate any notable differences between major cities and less densely populated areas. Sniffing experience – at least nowadays – thus seems to be rather evenly spread across Sweden.

Those who have sniffed also claim to have rather extensive experience of other drugs and higher alcohol consumption than those who have never sniffed. Among school pupils, those who have tried sniffing are more likely to report playing truant and not liking school. Among older young people, those with sniffing experience have a lower educational level and are more likely to lack a job or other occupation than those without such experience.

Information about the prevalence of sniffing in adults is rather limited. Studies to investigate the extent of heavy drug abuse in 1992 and 1998 found that 1–2 per cent of drug abusers reported solvents among their secondary substances of abuse. Among adults undergoing compulsory institutional treatment, since the early 1990s one or a few per cent have reported sniffing at least as a component of their abuse.

## *Trends in doping*

In the 1990s it became apparent that the use of hormonal-doping substances was no longer restricted to organised sports but was spreading to other sectors of society, including body-builders and people who work out at gyms. Among the substances banned under the Swedish anti-doping law, one of the most prevalent types is anabolic-androgenic steroids (AAS).

Ever since questions on doping first begun to be asked in various nationwide representative surveys in the 1990s, about 1 per cent of young males have

claimed to have used AAS at least once. The exception to this trend is that in 2004–2005, 2 per cent of boys in the ninth year of compulsory school and in the second year of upper-secondary school claimed to have used AAS; in 2006, however, both proportions were back at 1 per cent. Among 18-year-old men undergoing conscription, no increase can be observed since 1994 – the level has been around 1 per cent. The prevalence of AAS in Sweden is similar to that in several other European countries but lower, for instance, than that in the United States, where there was, moreover, a ‘bulge’ in hormonal-doping experience between 1999 and 2003.

Experience of growth hormones is rarer, and it is also rare for women to report experience of hormonal-doping substances. Among young people, there has been found to be a link between hormonal-doping experience on the one hand and extensive alcohol consumption as well as experience of illegal and other drugs on the other.

Seizure and criminal-justice statistics point to an increase in doping-related crime. Since 1998, seizure data reported by customs and the police are mutually comparable, and from that year the number of seizures has almost tripled while amounts seized have also increased. The level of seizures made in the past three years is clearly higher than those of previous three-year periods. Criminal-justice statistics show that the number of people suspected of doping offences has almost quadrupled since 1999. Some 65 per cent of all suspects are in their 20s, and only a few per cent are women.

It seems clear that a market for doping substances has developed since the early 1990s, and it appears likely that the number of users has been growing progressively over the same period. However, it is harder to substantiate, based on the existing surveys, any claim that it has become more common for young people to try hormonal-doping substances. It can be concluded that experience of hormonal-doping substances is generally rather rare. Comparison of reported experience of AAS and illegal drugs shows, depending on the choice of survey, that among young men there are usually 5–20 times as many who have tried illegal drugs.

## *Trends in tobacco use*

At the beginning of the 20th century, ‘moist snuff’ and pipe tobacco were the dominant products on the Swedish tobacco market. Before the end of the Second World War, annual sales of cigarettes never exceeded 500 per inhabitant aged 15 years or more. After the war, however, cigarette sales increased, peaking in 1976 at about 1 800. Since then, sales have halved; in 2005, about 900 cigarettes were sold per inhabitant aged 15 years or more. The main reason for this fall is a reduction in smoking, but to a certain extent it is also due

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to an increase in smuggling and private imports. For 2004, it has been estimated that recorded cigarette sales accounted for 90 per cent of consumption in Sweden. Sales of other tobacco products intended for smoking have also fallen since the 1970s.

In line with shrinking cigarette sales, consumption has fallen. Half a century ago, smoking was more common in men than in women: in 1946, 50 per cent of men were regular smokers but only 9 per cent of women. In 1963, the sexes had come closer to each other (49 and 23 per cent, respectively); and in 1980, among 16–84-year olds, 36 per cent of men and 29 per cent of women were smokers. Since then there has been a reduction in smoking, particularly among men; in 2005, the share of daily smokers was 14 per cent among men but 18 per cent among women.

In other words, smoking has become more frequent in women than in men, which is a fairly unusual development from an international perspective. A reduction compared with 1980 has taken place in all age groups except among women aged 65 years or more; the largest fall has occurred among 25–44-year-olds.

Most smokers begin their habit at a rather young age, which is why the trends manifested in the survey of ninth-year pupils are interesting. This survey shows that smoking among ninth-year pupils was at its most prevalent in the early 1970s. In 2006, 19 per cent of boys and 26 per cent of girls say that they smoke, and 6 and 10 per cent, respectively, say that they do so daily or almost daily. These are the lowest levels of daily smoking found since records began in 1983. It may be added that over the past ten years, smoking has almost halved in the same age group in the United States. Among pupils in the second year of Swedish upper-secondary schools, 33 per cent of boys and 40 per cent of girls say that they smoke, and 9 and 17 per cent, respectively, say that they do so daily or almost daily.

In 1995, it was estimated that smoking claimed the lives of about 8 000 people in Sweden. The pattern for the development of smoking-related deaths is well in line with what can be expected from consumption and sales statistics. Mortality in men has fallen, but since the reduction in smoking among women has been smaller and occurred later, no mortality reduction is yet discernible for them. Another estimate shows an overall decrease in smoking-related deaths in the 1990s, but this study also fails to show any reduction for women.

A separate analysis of lung-cancer cases – approximately 85 per cent of which are caused by smoking in Sweden – shows a fall among men since 1985 but a continuous rise among women ever since the early 1980s.

Taking 'moist snuff' is still a distinctively male habit. Among ninth-year pupils in 2006, 20 per cent of boys and 7 per cent of girls claim to have this habit. For the boys' part, this means a return to the proportion of 'snuffers' seen in 1997 – after a temporary increase – while snuff-taking in girls has been increasing more or less constantly since that year. Among second-year pupils at upper-secondary schools, just under one-third of boys and 10 per cent of girls use snuff. Among 18-year-old men undergoing conscription, the proportion of snuffers was the same – 33 per cent – and upwards of three-fourths of them used snuff on a daily basis. Since 2000, snuff use has increased somewhat among these 18-year-old men.

Annual snuff sales rose steadily between 1970 and 2002 – from about 400 to 920 grams per inhabitant aged 15 years or more. Since then sales have fallen slightly, amounting to 880 grams in 2005. At the end of the 1980s, 17 per cent of adult men (16–84-year-olds) and 1 per cent of adult women used snuff. In 2005, the corresponding numbers were 23 per cent and 3 per cent, respectively. All available studies show snuff-taking to be the most prevalent among 25–44-year-old men.

Smoking has not decreased uniformly across all strata of society. While half a century ago the very highest rates of smoking prevalence were found in better-off groups, the present situation is the reverse. There is a clear social gradient in that daily smoking is more frequent among blue-collar workers, the financially vulnerable and people on low incomes. When it comes to snuff, however, socio-economic variables are less important. Among men, blue-collar workers are more likely than white-collar workers to use snuff, but no such difference can be seen for women.

Among young people, smoking is more frequent in those who dislike school and play truant more often. At upper-secondary school, where study programmes can be divided into academic and non-academic ones, daily smoking is twice as frequent among pupils in non-academic programmes.