Drug Trends in Sweden 2007

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 2006 is estimated at 9.7 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 19 per cent in 2006. In the same year, 1 per cent derived from legal home production, 12 per cent from smuggling and illicit home distilling (i.e. illegal sources), 17 per cent from restaurants and grocer's shops, and 53 per cent from the retailing monopoly.

Between 1990 and 2004, the share of unrecorded alcohol doubled from 18 to 38 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. In recent years (2004–2006), however, the share of unrecorded alcohol has fallen by 5 per cent as the retailing monopoly has regained market share.

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 five 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 steadily growing in importance; it accounted for 44 per cent of all alcohol sales (measured in pure alcohol) in 2006. '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 2006, 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 9 per cent in 2006. The total share for beer was thus 38 per cent.

If unrecorded alcohol is taken into account, the shares for wine and beer fall to approximately 37 per cent each in 2006, while spirits increase their share from 18 to 25 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 since the 1990s, Sweden has been a 'beer-and-wine country' instead of a 'spirits country'.

An observation which partly contradicts 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 the past two years. Pupils' consumption did increase strongly in the second half of the 1990s, but it has been falling in the 2000s.

Among ninth-year pupils, both girls' and boys' alcohol consumption has fallen rather strongly in the past two years. At present, the consumption levels of both sexes are the same as in the first half of the 1990s. Boys' consumption has fallen slightly more than girls' since the turn of the millennium; it should also be mentioned, however, that the increase in 1995–2000 was stronger among boys than among girls. The difference between boys' and girls' alcohol consumption is now smaller than it has been for 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.

By way of 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. Unlike among ninth-year pupils, consumption is increasing among pupils in the second year of upper-secondary school (aged 17–18). Data show that the increase since 2004 has occurred mainly among boys, with the increase among girls being less clear.

The shrinking gender gap observed for ninth-year pupils is not reflected among slightly older young people. The study of upper-secondary pupils shows 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 women's consumption rather stabilises at a lower level.

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 findings 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. Worth noting is the strong fall in the consumption of medium-strength beer which has been 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 10 per cent in 2007.

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 studies. 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 in-

creased during the post-war years. Nowadays, the proportion of adults who have not drunk alcohol in the past twelve months is about 10 per cent.

Several questionnaire surveys on alcohol-related topics 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 buying 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.

After 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 around 10 litres of pure alcohol for the past five 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 and then increased in 2005 and 2006.

It can also be noted that the number of reported drunk-driving offences per inhabitant has increased by 40 per cent 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 twelve months has fallen from 14 per cent in 1989 to 8 per cent in 2006.

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. 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 no 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 2006 this proportion was lower again (6 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 2006, the increase on 1998 was 18 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 22 per cent. In the three years following that period, however, the fall has stopped and a rise of 13 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 relatively high level in 1979, but a considerably lower one in absolute numbers. What is more, the alcohol mortality of women, unlike that of men, is 14 per cent higher in 2004 than it was in 1979. Comparison of the first half of the 1990s with the 2000s shows that alcohol-related deaths in women have increased by 24 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 has been 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 2006, 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 point to a negative development 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 does not seem to have 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 and not just lumped together under a single heading, whether it be ‘use’, ‘abuse’ or ‘misuse’ of illegal drugs.

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 increase in the availability of illegal drugs which was observed in the 1990s appears to have stagnated in the 2000s, to judge from the fact that the fall in the prices of illegal drugs has slowed down. At the same time, however, prices remain stable at a low level even though ever-larger volumes of illegal drugs are seized by law-enforcement agencies, which could be seen as an indication that the availability of illegal drugs is fairly good at present.

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 conscripts (18-year-old men undergoing physical and psychological examination in connection with compulsory military conscription). The share of young people having tried illegal drugs was at its highest in the early 1970s and then fell to reach a low level in the second half of the 1980s. During the 1990s, the share of ninth-year pupils and conscripts who had tried illegal drugs more than doubled. Since the beginning of the 2000s, however, this trend has been reversed and there has been a decrease. In 2007, 6 per cent of ninth-year pupils said that they had tried illegal drugs. The corresponding share in the relatively new survey of second-year upper-secondary pupils was 15 per cent.

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. Their average age at first use (among those who were 20 or older when participating) was almost 18 years, which reflects the need to monitor developments among slightly older young people as well.

Various surveys 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. Amphetamine used to be the second-most common drug but it now shares second place with ecstasy, at least among young people. Illegal use of pharmaceuticals (most often benzodiazepine-type sedatives or tranquillisers), however, is at least as common as use of ecstasy and amphetamine.

Among young people, current use (30-day prevalence) has largely followed the same trends as lifetime prevalence. A partial exception relates to ninth-year pupils, where current use did not fall in 2004–2006 but remained at a fairly high level of 3–4 per cent. Unfortunately, however, the relevant survey question was modified in 2007 and it is therefore not possible to tell whether consumption still remains at the same level. Findings from a survey of 16–24-year-olds indicate that current use peaks around the age of 21.

According to a 2006 postal survey of 16–84-year-olds, about 10 per cent have tried cannabis at least once. This corresponds to over 700,000 people in the age range concerned. 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.

In other words, adult men are more likely than adult women to have experience of illegal drugs. It can be concluded that the differences between the

sexes arise at upper-secondary age and that they are clearer when current use alone is considered.

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 not least true for current use.

Even though studies of groups of people suffering from 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 and young adults who have tried illegal drugs usually stand out 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 stand out 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 at all.

In the second half of the 1960s, more serious forms of illegal-drug abuse increased considerably in Sweden. 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 rising 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 heavy drug abusers in Sweden in that year was estimated at 6,000. Subsequent, more careful studies were made in 1979, 1992 and 1998; the number of heavy drug abusers was then estimated at 15,000, at 19,000 and at 26,000, respectively. ‘Heavy drug abuse’ here refers to injection of illegal drugs in the past twelve 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 drug abusers in 1998, but found them to be 28,000 in 2001. To judge from the numbers presented above, average annual growth rates were highest in 1992–1998. 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 years old were clearly larger in 1998 than in 1992.

The calculations of the extent of heavy drug abuse based on inpatient-care data have been updated, and in 2004 the number of heavy drug abusers 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 can 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 studies conducted to establish the extent of heavy drug abuse. This share is larger than for people prosecuted 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). On the basis of these studies, it can therefore be concluded that women are under-represented as regards (known) criminal behaviour but over-represented as regards consumption of health-care services.

The vast majority (about 88 per cent) of those whose abuse was classified as 'heavy' in these studies had injected illegal drugs in the past twelve months. CNS stimulants (mainly amphetamine), opiates (mainly heroin) and cannabis have always been the predominant drugs. Amphetamine was the main drug for about 48 per cent of heavy abusers in 1979 but had become less important in 1998, when 32 per cent claimed it to be their main drug.

Heroin, on the other hand, has gained in importance since 1979. In that year, opiates were the main drug of 15 per cent of abusers, as compared with 28 per cent in 1998. The rise for heroin is also reflected, for instance, in seizures and prosecutions. The share of abusers who claimed cannabis to be their main drug fell from 33 per cent in 1979 to 8 per cent in 1998. The majority of them were said to abuse alcohol as well. The studies indicate an increase in the prevalence of polydrug use, and the available indicators seem to show that this trend has continued.

A clear pattern emerging from the studies as well as from various drug-related indicators is that the abuse of illegal drugs, especially its heavier forms, is concentrated in the major urban areas.

Comparison between available indicators – mainly data on seizures and criminal-justice, health-care and cause-of-death statistics – and study findings shows that they provide a relatively similar picture of trends in heavy drug abuse, with rises especially in the 1990s. To judge from the indicators, the rise continued for a few years after 1998 as well.

Since 2001, however, inpatient-care data, statistics on drug-related deaths and other indicators point to certain instances of stabilisation and improvement as regards heavy drug abuse. Part of the reason why inpatient-care figures have been falling for a few years may be the shift towards an increased

focus on outpatient care, and the number of drug-related deaths may have been positively affected by the expansion of substitution treatment for opiate addicts – the group whose excess mortality is highest.

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 not entirely uniform. Part of the reason why criminal-justice statistics are still on the rise may be that the police are expanding their anti-drug efforts. Taken together, then, it is no easy task to make a statement about the development of heavy drug abuse in recent years, even though it is indeed a positive development in its own right that the health-related problems associated with the abuse of illegal drugs appear to be decreasing.

Trends in sniffing

In the 1950s, 'sniffing' attracted attention as a youth phenomenon. At that time, sniffing often 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 marked reduction of sniffing took place in the 1970s and the fall continued in the 1980s. Around 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 2007, 4 per cent of both boys and girls claim to have sniffed.

To the extent that there are comparable data from the survey of conscripts, 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.

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 substance 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. In 1992 a law prohibiting certain doping substances came into force; in 1999 its scope was extended to cover consumption, at the same time as the penalties were made more severe. The most commonly used type of illegal substance is anabolic-androgenic steroids (AAS).

Ever since questions on doping first begun to be asked in various nationwide representative surveys in the first half of the 1990s, about 1 per cent of young males have claimed to have used AAS at least once. The prevalence of AAS use 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 experience of doping 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 tripled while the volumes seized have also increased. Criminal-justice statistics show that the number of people suspected of doping offences has almost quadrupled since the same year. However, using criminal-justice statistics as the sole indicator of the extent and development of substance abuse may give an incorrect view. As regards illegal drugs, for instance, large increases in this indicator have been observed at the same time as other indicators have pointed to an improved situation.

Some 60 per cent of all suspects are in their 20s, and only a few per cent are women. These age and sex patterns are consistent with the characteristics of those who contact the Swedish anti-doping hotline because of their own doping abuse, and they probably give a rather good reflection of the true situation.

It seems clear that a market for doping substances has developed since the early 1990s, and it does not appear unlikely that the number of regular users has grown progressively during this 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. When it comes to developments among adults, there is unfortunately no recent information. Finally, 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, annual cigarette sales increased, peaking in 1976 at about 1 800. Since then, sales have halved; in 2006, 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 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 among men than among 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 2006, the share of daily smokers was 12 per cent of men and 17 per cent of women.

In other words, smoking has become more frequent among women than among 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 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 widespread in the early 1970s. In 2007, 20 per cent of boys and 30 per cent of girls say that they smoke, and 6 and 10 per cent, respectively, say that they do so on a daily or almost daily basis. These are the lowest levels of daily smoking found since records began in 1983. It may be noted that over the past ten years, smoking has almost halved in the same age group in the United States. Among second-year upper-secondary pupils in Sweden, 35 per cent of boys and 40 per cent of girls say that they smoke, and 10 and 14 per cent, respectively, say that they do so on a daily or almost daily basis.

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 – around 85 per cent of which are caused by smoking in Sweden – shows a fall in men since 1985 but a continuous rise in women ever since the early 1980s.

Taking ‘moist snuff’ is still a distinctively male habit. Among ninth-year pupils in 2007, 17 per cent of boys and 5 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 upper-secondary pupils, just under one-third of boys and 10 per cent of girls use snuff. Among conscripts, the proportion of snuffers is more or less the same – 30 per cent – and upwards of three-fourths of them use 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 stabilised; they amounted to 955 grams in 2006. At the end of the 1980s, 17 per cent of adult men (aged 16–84) 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 most common 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-taking, 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 among those who dislike school and play truant more often. It can be noted that at upper-secondary schools, where study programmes can be divided into academic and non-academic ones, daily smoking is twice as frequent among pupils in non-academic programmes.