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# Alcohol and cannabis use in Norway during the period 1995-2009

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### ABSTRACT

The description of alcohol and cannabis use in the period 1995-2009 is based on data from five sets of surveys. Sales figures for alcohol consumption are also included. Alcohol sales in Norway increased by 40 per cent during the period 1995-2009, from 4.8 to 6.7 litres of pure alcohol per inhabitant aged 15 years and over. This increase largely reflects a sharp increase in the sale of wine. Also when taking into account unregistered alcohol consumption, the consumption of alcohol increased considerably in Norway during the period in question. The increased alcohol consumption seems to be due to an increase in moderate alcohol consumers and/or an increase in situations involving moderate alcohol consumption. Population surveys indicate that there has been an increase in the proportion who drink alcohol and in the proportion of people who drink relatively often, but the increased drinking frequency is not accompanied by a corresponding increase in the proportion who often drink until they are intoxicated. On average, men drink more often and greater quantities than women, with the exception of wine. The proportion who drink alcohol at least twice a month or more has increased in all age groups, and the increase has been particularly marked among those above the age of 50. Despite a reduction in consumption among young people in recent years, consumption and drinking until intoxicated are still widespread. Young girls drink alcohol as often as boys and are equally often intoxicated. As for cannabis, there was an increase in the age group 15-20 years in the second half of the 1990s, followed by a decrease and stagnation since the turn of the millennium. There was little or no difference between boys and girls in the 15-20 age group in the use of cannabis, while among young adults, far more men than women reported that they had used cannabis.

### NORSK SAMMENDRAG

I denne oversiktsartikkelen gis det en beskrivelse av utviklingen i alkohol- og cannabisbruk i perioden 1995-2009 basert på resultater fra fem ulike sett med spørreundersøkelser. For utviklingen i alkoholbruk benyttes også omsetningstall. Alkoholomsetningen i Norge økte med 40% i perioden 1995-2009, fra 4,8 til 6,7 liter ren alkohol per innbygger 15 år og over. Økningen skyldes i hovedsak en kraftig vekst i omsetningen av vin. Også når man tar høyde for det uregistrerte alkoholkonsumet, har alkoholkonsumet økt betydelig i Norge i den aktuelle perioden. Det økte alkoholkonsumet ser ut til å skyldes en tilvekst av moderate alkoholkonsumenter og/eller en tilvekst av moderate drikkesituasjoner. Spørreundersøkelser i befolkningen tyder på at det både har vært en økning i andelen som drikker alkohol og i andelen som drikker relativt ofte, men økningen i drikkefrekvens er ikke fulgt av en tilsvarende økning i andelen som ofte drikker seg beruset. Menn drikker i gjennomsnitt oftere og mer enn kvinner, med unntak av vin. Andelen som drikker alkohol flere ganger i måneden eller oftere (2 ganger eller mer) har økt i alle aldersgrupper, og økningen har vært særlig sterk blant de over 50 år. Til tross for en reduksjon i konsumet blant ungdom de siste årene, er konsumet og beruselsesdrikkingen fortsatt betydelig. Unge jenter drikker alkohol like ofte, og er like ofte beruset, som gutter. For cannabis var det i aldersgruppen 15-20 år en økning i siste halvdel av 1990tallet, fulgt av en nedgang og utflating i årene etter tusenårsskiftet. Det var liten eller ingen forskjell mellom gutter og jenter i aldersgruppen 15-20 år når det gjaldt bruk av cannabis, mens det blant unge voksne var langt flere menn enn kvinner som oppga at de hadde brukt cannabis.

#### INTRODUCTION

This article describes the use of alcohol and cannabis in the Norwegian population, with the main emphasis on developments from 1995 until today. We will look at how much and how people drink, and how many have used cannabis and how often. In addition to describing the development in the general population, we will look at the development in the youth population in particular. Furthermore, we will look at different sub-groups divided by gender and age, and we will also look at developments in Norway compared with other European countries.

In order to describe developments in the use of alcohol in the period in question, we use both sales figures and figures from questionnaire surveys. Sales figures can be used to describe the development in the registered consumption over time and to compare the development in Norway with other European countries. However, information about registered consumption is not enough to describe how or how much people drink. First of all, this is due to the fact that a substantial amount of the alcohol drunk is not sold through channels where production and/or sales are registered. Among other things, this applies to alcohol from home production, smuggling, duty-free shopping and alcohol purchased abroad. Secondly, sales figures say nothing about how people drink and how consumption varies between different social groups. The most important source of information about such conditions is guestionnaire surveys, in which a presumed representative sample of the population is asked how they obtain the alcohol they drink and about their drinking habits.

We mainly base our description on data from five sets of surveys. Statistics Norway's (SSB) Norwegian Health Surveys covering the period 1995-2008 are used to describe the proportion of people who drink, how often they drink and the prevalence of highconsumption situations (Wilhelmsen, 2009). Regular surveys of the population's drinking habits conducted by the Norwegian Institute for Alcohol and Drug Research (SIRUS) in the period 1994-2009 are used to describe drinking patterns by type of alcoholic beverage (Horverak and Bye, 2007). The latter surveys also include a few questions about cannabis and other substances. These data sources are based on population samples from the age groups 16 years and above and 15 years and above, respectively, and, together, they provide a great deal of information about how the general population and different sub-groups drink. We also use data from two sets of surveys that focus on drinking patters among young people. One is SIRUS's annual nationwide surveys among young people in the 15-20 age group, which were conducted until 2008 (Vedøy and Skretting, 2009). The second set consists of surveys conducted every four years among tenthgrade pupils (15-16 years) as part of The European School Survey Project on Alcohol and Other Drugs (ESPAD) (Hibell et al., 2009). Here, we use data from the years 1995 to 2011. There are also four sets of questionnaire surveys from SIRUS on the use of alcohol and drugs among young adults (aged 21-30) from 1998, 2002, 2006 and 2010, from which we use the data on cannabis (Lund et al., 2007).

### SALES OF ALCOHOL

Registered sales of alcohol have increased in Norway since 1993, when it was at its lowest level for many years. We have to go all the way back to the late 1960s to find equally low sales figures. In the period we are examining here, i.e. from 1995 to 2009, sales have increased by 40 per cent, from 4.8 litres to 6.7 litres of pure alcohol per inhabitant aged 15 years and above (Edland-Gryt, 2010). As we can see from Figure 1, this

is due in particular to a marked increase in the sale of wine, a trend that started already in the 1980s. Sales of spirits fell in the 1980s, however, and remained at a relatively low level throughout the 1990s, before rising again just after the turn of the millennium. The sale of beer per inhabitant has remained stable since 1980 and has dominated alcohol sales during the whole period. While people bought more spirits than wine until the early 1990s, measured in pure alcohol, the sale of wine has exceeded the sale of spirits since the mid-1990s. The sale of alcoholic fruit drinks ('alcopops') has increased somewhat since their introduction to the Norwegian market in 1996, but it accounts for a very small proportion of the overall alcohol consumption. For a more detailed presentation of the changes in alcohol sales until 2009, reference is made to Edland-Gryt (2010).

As for the sale of wine, it has not only increased during the period; there has also been a shift from bottles of wine to so-called 'bag-in-box' wine. Cardboard wine boxes were launched in 1988 and accounted for 20 per cent of total wine sales already after two years. In the course of the next 20 years, bag-in-box wine continued to increase its share of sales, and in 2009, it accounted for 55 per cent of total sales of wine (Rossow, 2010). The popularity of the bag-in-box wine was also the main reason for the slight increase in the duty-free wine quota from June 1, 2006. Before the increase you could bring 2 litres of wine (with a strength of 2.5-22 per cent) in combination with 2 litres of beer (2.5-4.7 per cent). As a result of the increase you can now bring a bag-in-box wine/four bottles of wine (3 litres) in combination with the same amount of beer as before.

It is natural to see the considerable increase in the sale of alcohol in Norway during the period 1995-2009 in conjunction with the fact that alcohol has become relatively cheaper in relation to our purchasing power. At the same time, the increased availability of alcohol could also have influenced this development. It is first and foremost the sale of wine that has accounted for this increase, and there are several possible explana-

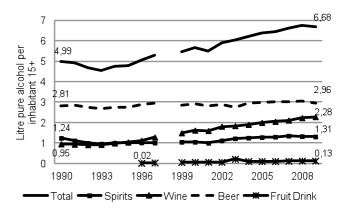
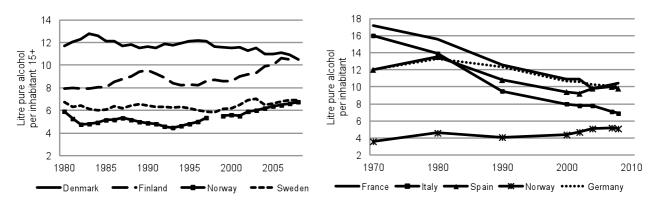


Figure 1. Annual sales of alcohol in litres of pure alcohol per inhabitant aged 15 and over, 1990-2009.

Source: Statistics Norway (figures from 1998 are not available).



**Figure 2.** Sales of alcohol in Norway and selected Nordic countries (per inhabitant aged 15 years and over), 1980-2008 (figure on the left) and in Norway and selected European countries (per inhabitant), 1970-2008 (figure on the right). Sources: Nomesco – Yearbook of Nordic Statistics and British Beer & Pub Association, Statistical Handbook.

tions for this. It is likely that bag-in-box wine creates more drinking opportunities and that people drink more each time they drink (Rossow, 2010). Wine journalism is obviously also important in relation to the demand for specific wines that are recommended (Horverak, 2009).

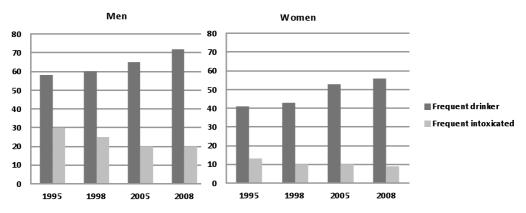
The amount of alcohol sold per inhabitant is lower in Norway than in the other Nordic countries. Norway also sells less alcohol per inhabitant than other European countries (Edland-Gryt, 2010). Several European countries have experienced quite dramatic changes in the level of alcohol sales in recent decades (cf. Figure 2). The big wine-producing countries, which have traditionally had high alcohol consumption, have seen a marked fall in the sale of alcohol since the 1970s. In the Nordic countries, on the other hand, which have traditionally had low alcohol consumption, sales have increased, resulting in smaller differences between the countries. In the Nordic region, Norway, Sweden, the Faeroe Islands and Iceland have traditionally had the lowest level of alcohol sales, and these countries have had markedly lower sales figures than Denmark and Greenland (Edland-Gryt, 2010). Finland stands out with a marked increase in alcohol consumption. From being one of the countries with the lowest sales of alcohol, it is now among the countries with the highest levels of sales (cf. Figure 2). It is reasonable to see the traditionally low alcohol consumption in Norway in light of our extensive use of restrictive alcohol policy instruments (Brand et al., 2007).

### **UNREGISTERED SALES**

To obtain a more realistic picture of the population's overall alcohol consumption, we must look at the unregistered consumption in addition to the sales figures. Calculations based on questionnaire surveys indicate that around half of all spirits drunk in this country come from unregistered sources, such as private importation, smuggling or illegal distilling (Horverak et al., 2001; Nordlund, 2003). By comparison, we can assume that the unregistered consumption of beer is insignificant, while private imports of wine were assumed to account for about 20 per cent of the overall wine consumption in 2002 (Nordlund, 2003). It is, of course, difficult to say anything specific about the size of the unregistered consumption, and thus also the overall consumption. If we use the above calculations as a starting point, however, the overall consumption seems to be just above eight litres of pure alcohol per inhabitant aged 15 years and over.

While the consumption of illegally distilled spirits, home-made wine and smuggled spirits seems to have fallen during the period 1994-2004, the consumption of alcohol from duty-free and cross-border shopping seems to have increased (Horverak and Bye, 2007). Calculations made by Nordlund (2003) also indicate that duty-free and cross-border (mainly with Sweden) trading increased from the mid-1990s until 2002. Norwegians are travelling abroad more than ever before, and calculations from SSB and SIRUS indicate that cross-border trading with Sweden has increased even more since the turn of the millennium. In 2009, alcohol accounted for more than 14 per cent of total crossborder trading, and it was at roughly the same level as cross-border trading of tobacco (15 per cent) (Lavik and Nordlund, 2009). Moreover, duty-free shopping has also become more convenient with the introduction of duty-free sale of alcohol and tobacco on arrival in Norway. Oslo Airport, Gardermoen was the first to have this arrangement from July 1, 2005, but other major airports have followed suit.

In other words, the consumption of alcohol increased significantly in Norway in the period 1995-2009, also when taking the unregistered consumption into account. In the following, data from different surveys are used to shed light on developments in alcohol consumption and drinking patters in different sub-groups divided by gender and age. First, we will look at the development in the general population, and then turn to the development in the youth population in particular.



**Figure 3.** Proportion of respondents who report that they drink alcohol often (i.e. at least twice a month) and drink so much that they feel clearly intoxicated, respectively, by gender. Source: Statistics Norway.

#### **DRINKING HABITS AMONG WOMEN AND MEN**

Figures from the Norwegian Health Surveys indicate that there has been an increase in both the proportion of people who drink alcohol (the proportion who have drunk alcohol during the past 12 months) and drinking frequency (how often people drink) since the mid-1990s. In general, men drink more often than women. It is a stable tendency throughout the period that more men than women report that they drink alcohol, but if we compare the situations in 1995 and 2008, the proportion of women who report that they drink alcohol has increased more (from 79 per cent to 86 per cent) than the proportion among men (from 88 per cent to 92 per cent). The proportion who drink alcohol several times a month or more (at least twice a month) increased equally among women (from 41 per cent to 56 per cent, cf. Figure 3) and men (from 58 per cent to 72 per cent, cf. Figure 3), while the proportion who drink several times a week or more increased slightly more among men (from 16 per cent to 27 per cent) than among women (from eight per cent to 16 per cent).

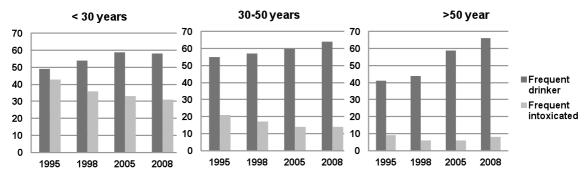
According to SIRUS's regular population surveys for the period 1994 to 2004, men drink beer and spirits more often than women, and they drink more each time of both types of alcohol (Horverak and Bye, 2007). As for wine, there were no gender differences in drinking frequency at the start of the period, but, towards the end of the period, there was a tendency for women to drink wine slightly more often than men. Men and women drink about equal amounts of wine each time they drink.

It is also more common to drink large amounts of alcohol each time among men than among women. The Norwegian Health Surveys contain two measures of high consumption: (1) 'had six drinks or more to drink in one night, which corresponds to four pints of beer or a bottle of wine' (i.e. six alcohol units), and (2) 'had so much to drink that that you have felt clearly intoxicated'. When, in the following, we report the proportion who drink a certain amount of alcohol or drink so much that they feel clearly intoxicated, we are referring to the proportion in the whole sample, not just those who report that they drink alcohol. In the surveys from 2005 and 2008, more than twice as many men (26 per cent) as women (11 per cent) reported that they drank six alcohol units several times a month. The proportion who reported that they drank until clearly intoxicated several times a month was also considerably higher among men (20 per cent) than among women (nine per cent).

Figure 3 shows the proportion of the respondents who reported that they drink alcohol and that they drink until intoxicated, respectively, several times a month. At the start of the period, 30 per cent of the men reported that they drank until clearly intoxicated several times a month, while the figure was 20 per cent in the last survey. Among the women, the proportion remained relatively stable and was nine per cent in the last survey. As mentioned, the proportion who reported that they drink several times a month (i.e. at least twice a month) increased for both women and men. In other words, there is a clear tendency for the increase in selfreported drinking frequency not to be accompanied by a corresponding increase in self-reported intoxication episodes. This means that the surveys may indicate that the period has been characterised by an increase in moderate alcohol consumers and/or an increase in moderate drinking situations. It must also be taken into account that the respondents' views on intoxication may have changed during the period. It may be expected that the threshold for what is perceived as clearly intoxicated is higher in periods of high consumption than in periods of less drinking. On the other hand, it is possible that people are less inclined to under-report such behaviour in periods of relatively high consumption.

## DRINKING HABITS IN DIFFERENT AGE GROUPS

Traditionally, we have seen that young adults and middle-aged people drink more often and in larger quantities than older people, but some of these differences seem to have evened out in recent years. Accor-



**Figure 4.** Proportion of respondents who report that they drink alcohol often (i.e. at least twice a month) and that they drink so much that they feel clearly intoxicated, respectively, by age.

ding to the Norwegian Health Surveys, the increase was greatest in both the proportion who drink and the proportion who drink relatively often in the above-50 age group. In this group, the proportion who reported that they drink alcohol at least twice a month or more increased from 41 per cent in 1995 to 66 per cent in 2008 and is now at the same level as the 30-50 age group (64 per cent) and slightly higher than for persons under the age of 30 (58 per cent) (cf. Figure 4). This is particularly interesting considering that persons above the age of 50 previously drank significantly less often than younger age groups. For example, the proportion who reported that they do not drink alcohol was more than twice as high among people above 50 than among younger age groups at the start of the period.

A drinking pattern characterised by intoxication and high consumption is nonetheless far more common in younger age groups. In 2008, 30 per cent of the respondents under 30 reported that they drank six alcohol units or more several times a month or more, which is almost twice as high as the percentage in the 30-50 age group (14 per cent) and almost four times as high as in the above-50 age group (eight per cent).

Figure 4 shows the development from 1995 to 2008 as regards the proportion who report that they drink often (i.e. at least twice a month) and that they often drink until clearly intoxicated (i.e. at least twice a month). As we have mentioned, there has been an increase in the drinking frequency in all age groups. This increase has not been accompanied by a corresponding increase in self-reported intoxication episodes. Throughout the period, the drinking pattern in the youngest age group (persons under 30) is characterised by the fact that it is more common to drink a lot when they drink, compared with middle-aged and older people.

According to SIRUS's population surveys, persons above the age of 50 drink less of all types of alcohol each time they drink than persons in younger age groups, and they also drink beer significantly less often. The consumption of wine increased sharply among persons above the age of 50 during the period 1994-2009. At the start of the period, persons in this age group drank wine less often than they drank beer, and they also drank wine less often than was common in the younger age groups. Now, persons above 50 drink wine more often than younger age groups, and wine has also replaced beer as the preferred type of alcoholic beverage. Corresponding tendencies are not as visible in the other age groups.

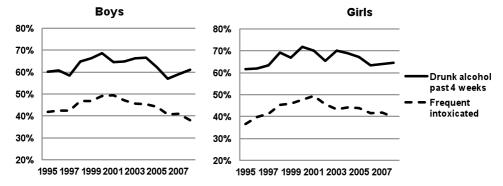
#### **DRINKING HABITS AMONG YOUNG PEOPLE**

Young people's drinking habits is a topic that has interested both researchers and politicians for a long time (see for example Berg and Bretteville-Jensen, 2005; Skretting and Bye, 2003; Vedøy and Skretting, 2009). As shown above, young people stand out as a group, with a drinking pattern that to a large extent is characterised by high consumption each time they drink and by frequent intoxication.

According to SIRUS's nationwide youth surveys, the great majority (about 80 per cent) in the 15-20 age group has drunk alcohol during the past year, and this proportion has not changed much during the period 1995-2008. The ESPAD surveys show that the proportion who have drunk alcohol is also high (60 per cent) among those aged 15-16, despite the fact that the age limit for buying alcohol in Norway is 18 years. The average age for first-time use has remained practically unchanged throughout the period and is just under 15 years. Beer is the alcoholic beverage most commonly drunk by young people, followed by spirits. It is slightly more common to drink alcohol among girls than boys in the youth group, but there are small gender differences as regards how often they drink. However, boys usually drink more each time they drink than girls (Vedøy and Skretting, 2009).

Figure 5 shows the development in the proportion who report that they have drunk alcohol during the past four weeks and the proportion who report that they have been clearly intoxicated more than four times during the past six months in the 15-20 age group. If we look at the period as a whole, the proportions have remained relatively stable, but there was a peak both in the drinking frequency and the intoxication frequency around the turn of the millennium. This applies to both

Source: Statistics Norway.



**Figure 5.** The proportion who report that they have drunk alcohol during the past four weeks, and the proportion who report that they have been intoxicated more than four times during the past six months in the 15-20 age group during the period 1995-2008, by gender. Source: Norwegian institute for alcohol and drug research.

boys and girls. The figures also show that the drinking frequency and the intoxication frequency mainly follow the same pattern: when the proportion who drink relatively often increases, the proportion who report that they are often intoxicated also increases. For a more detailed description of the drinking habits of young people in Norway, see Vedøy and Skretting (2009).

The ESPAD surveys are a good opportunity to compare drinking patterns among Norwegian youth with drinking patterns among youth in other European countries (see also Hibell et al., 2009). As we can see from Table 1, it is considerably more common, for example, to drink alcohol on a regular basis among those aged 15-16 in France and Italy than in Norway. The proportion who drink relatively often is also somewhat higher in Sweden and Finland than in Norway. This pattern is especially clear among boys, but a corresponding tendency can be seen among girls. At the same time, there is a clear tendency for the proportion who drink until intoxicated on a regular basis to be significantly lower in countries such as France and Italy than in the Nordic countries. There are also variations between countries as regards gender differences. In Norway, Sweden and Finland, girls drink alcohol as often or more often than boys, and it is almost as common or more common for girls than boys in these countries to drink until intoxicated on a regular basis. In France and Italy, boys drink more often than girls, and it is also less common for girls than for boys to drink until intoxicated. In other words, the strong connection between alcohol consumption and intoxication among young people seems to be a Norwegian or a Nordic phenomenon (see also Järvinen and Room, 2007).

# CANNABIS USE AMONG YOUTH AND YOUNG ADULTS

While we have data on alcohol sales, there are naturally no such data for illegal substances. To obtain information about recent or previous use of cannabis and other drugs in the general population, we must rely on questionnaire surveys. In the following, we will look at the prevalence of cannabis use in Norway based on results from SIRUS's surveys among youth and adults.

As regards the youngest age group, we have, as mentioned, data from five available survey years in the European school survey ESPAD. The surveys show that there was an increase from six per cent in 1995 to 12 per cent in 1999 in the proportion of those aged 15-16 who reported ever having used cannabis, while the proportion has since declined to five per cent in 2011 (Table 2). With the exception of 2003, a slightly higher proportion of boys than girls reported such use. For cannabis use during the past 30 days, the proportion has remained stable at about two-three per cent during the period.

**Table 1.** The proportion of boys and girls aged 15-16 who report that they have drunk alcohol or been clearly intoxicated during the past 30 days in selected European countries. Average figures based on the years 1995, 1999, 2003 and 2007.

	Alcohol use past 30 days		Intoxicated past 30 days		
	Boys	Girls	Boys	Girls	
Italy	69	55	19	13	
France	63	58	20	14	
Finland	53	57	40	43	
Sweden	51	52	33	34	
Norway	45	51	29	33	

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

**Table 2.** Percentage in the age group 15-16 who reported lifetime cannabis use, and use of cannabis the past 30 days.

	Cannabis use ever	Cannabis use past 30 days
1995	6	3
1999	12	4
2003	9	3
2007	6	2
2011	5	2

Source: Norwegian institute for alcohol and drug research.

Data from SIRUS's youth surveys (15-20 years) show that, in the early 1990s, eight to ten per cent reported ever having used hashish or marijuana (Figure 6). This was followed by an increase until the turn of the millennium to approximately 18 per cent, while there has been a steady decline in recent years. The last survey in 2008 showed a proportion of 10.9 per cent. It is important to underline that, when we look at the percentage who reported ever having used cannabis, this does not mean that they used cannabis on a regular basis. Some had only tried the substance once or twice, while others had more experience. For some of those who reported use, it may even have been in the past. We see from Figure 6 that, over the years, the proportion who reported use during the past six months is much lower than those who reported ever having used it.

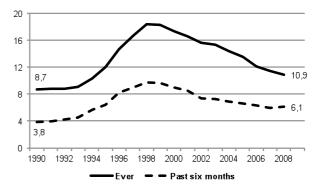
The fact that ever having used cannabis is not the same as regular use is illustrated by the fact that, during the period 2006-2008 as a whole, only three per cent of youth aged 15 to 20 reported having used cannabis more than five times during the past six months. In the 15-20 age group seen as a whole, there are little or no differences between boys and girls as regards experience of cannabis use.

From the surveys of young adults (21-30 years), the proportion who reported ever having used cannabis increased from 22 per cent in 1998 to 30 per cent in 2002 and to 34 per cent in 2006, followed by a decline to 26 per cent in 2010 (Table 3). The increase in the first half of the 2000s can to some extent be explained by the increase found among those aged 15-20 in the latter half of the 1990s, who were in the age group 21-30 in 2006. As for use during the past six months, there was an increase from seven per cent in 1998 to ten per cent in 2002 and 2006, while the corresponding proportion in 2010 was nine per cent.

While there were little or no differences between boys and girls in the age group 15-20 in relation to the use of cannabis, we see from Table 3 that markedly more men than women among young adults reported ever having used cannabis and having used it during the past six months.

# CANNABIS USE IN THE ADULT POPULATION (15-64)

Data from interview surveys in the adult population show that the proportion who have report ever having used cannabis increased from 8.5 per cent in 1985 to more than 16 per cent in 2004, before falling again to under 15 per cent in 2009 (Table 4). The fact that lifetime prevalence has fallen during the past five years is surprising given the cumulative nature of the variable; if you have used cannabis once, you will always thereafter 'have ever used it'. A better measure of the situation in question is the proportion who used cannabis during the past year. From Table 4, we can see that this proportion increased from 1985 to 1994, and that it re-



**Figure 6.** Percentage of young people aged 15-20 who reported ever having used cannabis and during the past six months, respectively (three-year sliding average).

Source: Norwegian institute for alcohol and drug research.

**Table 3.** Percentage in the age group 21-30 who reported ever having used cannabis, and during the past six months.

				Past six			
	Ever			months			
	Total	Men	Women	Total	Men	Women	
1998	22	26	18	7	10	4	
2002	30	35	25	10	14	6	
2006	34	39	28	10	14	6	
2010	26	30	22	9	11	5	

Source: Norwegian institute for alcohol and drug research

**Table 4.** Percentage of respondents in the age group 15-64 who have used hashish/marijuana: ever, during the past year and during the past 30 days, respectively.

1985	1991	1994	1999	2004	2009
8.5	9.6	13.1	15.4	16.2	14.6
2.2	3.0	4.4	4.5	4.6	3.8
_*	-	1.9	2.5	2.2	1.6
	8.5 2.2	8.5 9.6 2.2 3.0	8.5 9.6 13.1   2.2 3.0 4.4	8.5 9.6 13.1 15.4   2.2 3.0 4.4 4.5	8.5 9.6 13.1 15.4 16.2   2.2 3.0 4.4 4.5 4.6

Source: Norwegian institute for alcohol and drug research. \* = missing data.

mained stable at about 4.5 per cent until 2004, but that it dropped somewhat in 2009. Since 1994, data have also been available for the proportion who report that they have used cannabis during the past 30 days. This proportion seems to have been at its highest around the turn of the millennium and to have decreased in 2009.

Both in 2004 and 2009, lifetime prevalence was greatest in the 25-34 age group, while the proportion who had used cannabis during the past year and the past 30 days was highest in the 15-24 age group. The decline in the proportion who have used cannabis during the past 30 days was greatest among those under 35. In 2004, the proportion for this group was 4.5 per cent, while it had been reduced to 2.1 per cent in 2009. The prevalence of use during the past year has also declined among those under 35, from 9.6 per cent in

2004 to seven per cent in 2009. There seems to have been an increase among those above 35, however. The decline in the youngest age group could also be a sign of a change in the longer term and it may be a contributory factor to the presumed decline in lifetime prevalence at population level. The difference between women and men appears to have decreased during the past five years. For the whole 15-64 years sample, the lifetime prevalence for the use of cannabis among women was 13 per cent in both 2004 and 2009, while it had declined for men from almost 20 per cent to 16 per cent.

Cannabis is without a doubt the most commonly used illegal drug in Norway, and yet only 10-14 per cent of the general population (above 16 years) have ever tried the substance. In the 18-30 age group (presumably the group with the highest level of cannabis use), 14 per cent have used cannabis more than a few times and six per cent have used the drug more than 50 times in their lives so far. If we look at recent use in this age group, nine per cent report having used cannabis once or several times during the past six months. In other words, 90 per cent of the 18-30 age group do not use cannabis actively.

# USE OF CANNABIS IN A EUROPEAN PERSPECTIVE

If we examine the use of cannabis as it is described in different surveys, the proportion who have used this drug in Norway is mostly lower than in other European countries. If, for example, we compare data from population surveys (15-64), we find that Norway is at a relatively low level when it comes to cannabis use, measured by both lifetime prevalence and use during the past year. According to the 2010 annual report from the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA), the average prevalence in the age group 15-64 for ever having used cannabis is reported to be 23 per cent (EMCDDA, 2010). The highest proportions are found in Denmark, the Czech Republic, Italy and the UK, with 31-39 per cent, while the corresponding percentage in Norway is around 15. For more recent use, i.e. use during the past year, the European average is seven per cent, while the Czech Republic, Italy, Spain and France have the highest proportions, with 9-15 per cent. The same four countries also have the highest proportions for use during the past 30 days, at five to nine per cent, while the European average is four per cent. The corresponding proportions for Norway are approximately three per cent for use of cannabis during the past year, and just under two per cent during the past month.

If limited to the 15-34 age group, the same four countries (the Czech Republic, Italy, Spain and France) have the highest proportions for use of cannabis during the past year and the past 30 days, with 17-28 per cent and 10-17 per cent, respectively. The European average here is 13 per cent and nine per cent. In Norway, the

corresponding proportions are much lower, seven per cent for lifetime prevalence and just over two per cent for use during the past month (Hordvin, 2010).

From the comprehensive ESPAD survey among those aged 15-16, figures from the 2007 survey show that the highest proportion reporting ever having used cannabis comes from the Czech Republic, with 45 per cent. It was followed by Estonia, France, the Netherlands, Slovakia and the UK, with 26-32 per cent, while, by comparison, the proportion among Norwegians aged 15-16 years was six per cent (Hibell et al., 2009).

#### SUMMARY

The results show that the use of cannabis appears to have stabilised since the turn of the millennium. Among the adult population, approximately 15 per cent have ever used cannabis, while approx. two per cent report that they have used cannabis during the past 30 days. About six per cent of those aged 15-20 and nine per cent in the 21-30 age group report that they have used cannabis during the past six months. While there are no gender differences as regards the use of cannabis in the 15-20 age group, there were far more men than women among young adults who reported that they had used cannabis. This applies to both those who reported ever having used cannabis and those who reported having used it during the past six months. The proportion of cannabis users in Norway is also lower than in most other European countries, both among youth and young adults and among the general population. These results are based on questionnaire surveys and will first and foremost help to provide a picture of what must be called experimental and recreational use of cannabis. As for more intensive use /abuse of cannabis, many of the users in question are socially and economically marginalised and cannot therefore be reached through traditional questionnaire surveys.

Alcohol sales in Norway increased significantly during the period 1995-2009, from 4.8 to 6.7 litres of pure alcohol per inhabitant in the 15 and above age group. The increase largely reflects a sharp increase in sales of wine. Also when taking the unregistered consumption into account, the main conclusion is that alcohol consumption has increased significantly. Despite the increase we have seen in alcohol consumption in Norway in the past 15 years, alcohol consumption is still low in Norway compared with other Nordic and European countries. Questionnaire surveys among the population appear to indicate that there has been an increase in both the proportion who drink alcohol and the proportion who drink relatively often. However, the increase in drinking frequency does not seem to have been accompanied by a corresponding increase in the proportion who often drink until they are intoxicated. This must probably be seen in conjunction with the fact that a large part of the increase in alcohol consumption is due to an increase in wine consumption and to the

fact that an increasing proportion of the population drink alcohol. Previous calculations show that, in situations where wine is the main alcoholic beverage, it is far less common to drink until intoxicated than in situations where beer or spirits is the main beverage (Horverak and Bye, 2007). However, this must not be interpreted to mean that people drink less often until intoxicated in situations where wine is the main beverage because they are drinking wine. It may well be that, no matter what they drink, those who prefer wine will drink less often until intoxicated than those who prefer beer or spirits. It is also conceivable that wine is more often drunk in situations in which it is less acceptable to drink until intoxicated. Moreover, it is possible that the interpretation of the term 'clearly intoxicated' has changed over time. As mentioned, it may be that the threshold for what is perceived as clearly intoxicated can be expected to be higher in periods of high consumption than in periods of less consumption.

The population surveys also indicate that the increase in alcohol consumption has been particularly strong among people above the age of 50, and in this group, drinking until intoxicated is less common. This group is now roughly at the same level as the other age groups. It is particularly wine consumption that seems to have increased among the oldest age group. There are several possible explanations for the increase in drinking frequency among those over 50: those who are older (over 50) now may always have drunk alcohol more often (cohort effect) and it could be that drinking frequency increases with age and with changing life phases (age or life phase effect). These are both probable explanations (see also Horverak and Bye, 2007: 104-118). The proportion who state that they often drink until intoxicated has been relatively stable throughout the entire period. This applied to all age groups. Furthermore, the surveys indicate that the proportion who drink alcohol has increased slightly more among women than among men, but the main conclusion is still that men drink far more frequently and drink larger amounts each time they drink than women.

SIRUS's nationwide youth surveys indicate that the drinking frequency among young people increased until the turn of the millennium and then decreased somewhat. This corresponds with the development observed among Norwegian adolescents in the ESPAD surveys (Hibell et al., 2009). Despite the tendency for a decline in alcohol consumption among youth in recent years, consumption among teenagers is still substantial. As shown, there is also a close connection between drinking alcohol and intoxication among the youngest groups, and it is well documented that episodes of acute intoxication and high consumption have major social and health-related consequences for the individual in question, his/her close surroundings and socie-

ty at large (see also Storvoll et al., 2010; Rossow et al., 2010).

As mentioned in the introduction, we depend on questionnaire surveys to describe how much or how people drink alcohol, and such surveys have been an important source for identifying trends and levels of alcohol use (and the use of other substances). In this article, we have not specifically discussed the exact amount of alcohol consumed during one year or one drinking situation, nor how the amount of alcohol varies in different sub-groups. The reason is that there has been increasing concern in recent years about whether the estimates of alcohol consumption based on recent years' population surveys can be said to be valid. This is due, among other things, to the fact that the trends in the survey estimates conflict with registered sales (see also Østhus and Amundsen, 2011, for a more detailed discussion of this).

All in all, the drinking habits of Norwegian men and women can be said to have been surprisingly stable from the 1980s up until the present, with the exception of three changes. Firstly, more and more people in Norway drink alcohol, especially women. Secondly, there has been a change in the type of alcohol we drink, in that we now drink wine in more situations where we would previously have drunk spirits. Norway shares this development with the other Nordic countries, which have traditionally had low wine consumption. One of the reasons for the increase in wine consumption is increased demand for alcoholic beverages among women. Wine has traditionally been the most common alcoholic beverage among women in Norway. The third most important change is that we drink alcohol more frequently than before. However, weekend drinking has continued, regardless of the increased alcohol consumption on the other days of the week. As with the sale of alcohol, alcohol consumption in Norway is unevenly distributed between the different days of the week, and the major drinking situations are often at weekends. Figures from 2004 showed that weekends, i.e. Friday, Saturday and Sunday, accounted for 70 per cent of the total number of drinking incidents and 80 per cent of all intoxication situations during the past week (Horverak and Bye, 2007). Although the increase in drinking frequency is not significant for most people, it has undoubtedly become somewhat more common to drink on weekdays than it was in the 1970s and 1980s. However, in 2004 only one per cent of the Norwegian population reported that they normally drank wine with dinner on weekdays, compared with 36 per cent in Italy. If by 'continental drinking pattern' we mean a drinking habit characterised by drinking wine with the main meal of the day, such as in Italy, Norwegian drinking habits are still far removed from the continental pattern.

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