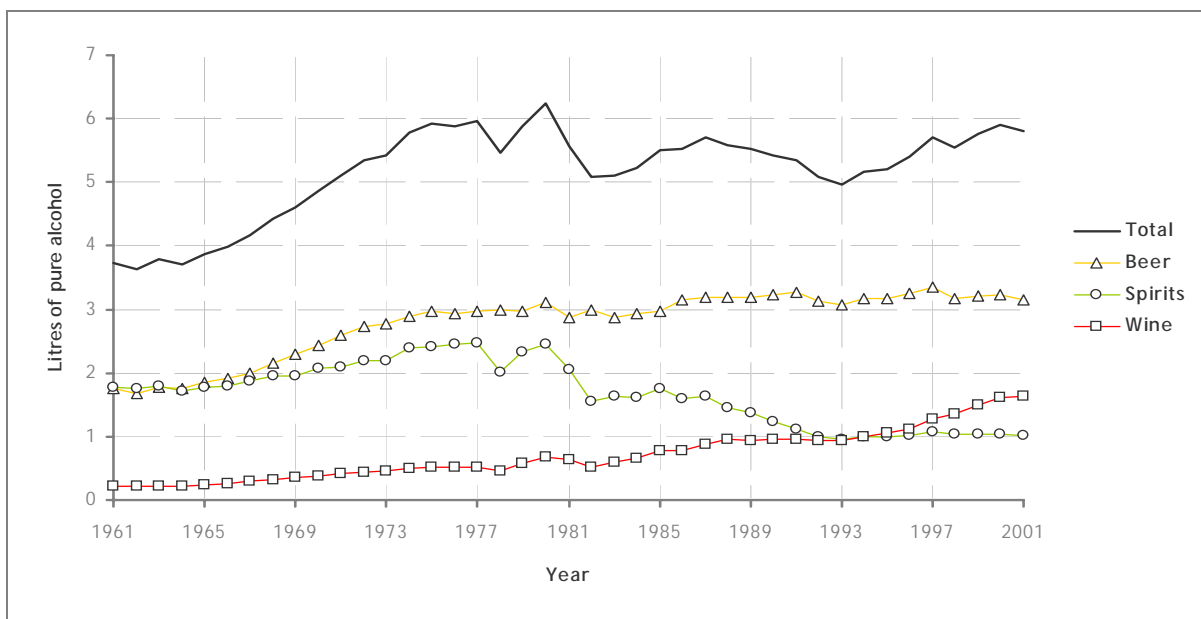


NORWAY

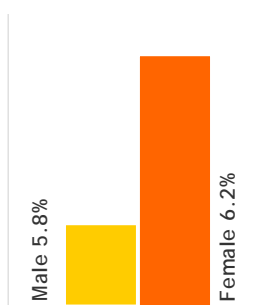
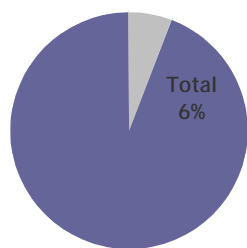
Recorded adult per capita consumption (age 15+)



Sources: FAO (Food and Agriculture Organization of the United Nations), World Drink Trends 2003

A study looking at trend in alcohol consumption by socioeconomic status in Norway over the 1993–2000 period found that alcohol consumption increased in all socioeconomic groups over this period. Men consumed more than women; consumption increased with level of education and level of income. Income and level of education predicted alcohol consumption about equally well.¹

Last year abstainers



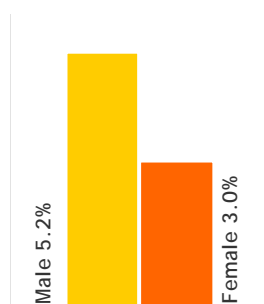
Data from the WHO GENACIS study. National survey conducted in 1999 (age group 20 to 64 years). Total sample size $n = 1666$; males $n = 799$ and females $n = 867$.²

A 1999 national survey from SIRUS (Norwegian Institute for Drug and Alcohol Research) found the rate of last year abstainers to be 11.2% (total), 9% (males) and 13.2% (females).³

A 1996 national survey with total sample size $n = 1750$ aged 19 to 71 years old found the rate of last year abstainers to be 8% among men and 17% among women.⁴

Estimates from key alcohol experts show that the proportion of adult males and females who had been abstaining (last year before the survey) was 9% (males) and 13% (females). Data is for after year 1995.⁵

Heavy and hazardous drinkers (among drinkers)



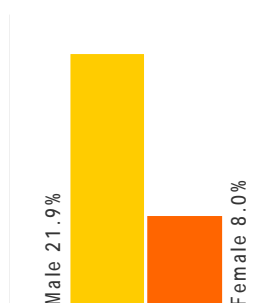
Data from the WHO GENACIS study. National survey conducted in 1999 (age group 20 to 64 years). Total sample size $n = 1666$; males $n = 799$ and females $n = 867$. Definition used: average consumption of 40 g or more of pure alcohol a day for males and 20 g or more of pure alcohol a day for females.²

A 1998 national survey of subjects 16 years and above (males $n = 3308$ and females $n = 3696$) found the rate of heavy drinkers to be 6.4% (total), 9.7% (males) and 3.5% (females). Definition used: under the influence of drink (consume enough alcohol to feel intoxicated) once a week or more.⁶

Statistics Norway's health survey data from 1995 (total sample size $n = 4777$; males $n = 2497$ and females $n = 2280$) gave the following results: 2% of the total sample, 3% of males and 1% of females drank to intoxication seven times a month or more and 6% of the total sample, 9% of males and 2% of females drank to intoxication 4–6 times per month.⁷

A study conducted among Norwegian doctors in 1985, 1993 and 2000 found that 33% of the doctors drank alcohol more often than once weekly in 2000, compared to 22% in 1985. The proportion of doctors with a modified AUDIT score of 6 or more increased from 12% to 15% from 1993 to 2000, and the proportion with a modified AUDIT score of 13 or more increased from 0.6% to 1.35. The change in drinking habits among Norwegian doctors is similar to the change in the population at large. More frequent moderate consumption of alcohol has not been accompanied by less frequent consumption of larger amounts of alcohol.⁸

Heavy episodic drinkers (among drinkers)

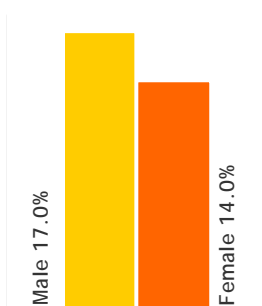
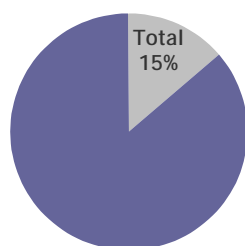


Data from the WHO GENACIS study. National survey conducted in 1999 (age group 20 to 64 years). Total sample size $n = 1666$; males $n = 799$ and females $n = 867$. Definition used: consumption of 2 litres beer or 0.75 litres wine or 0.33 litres spirits in one sitting (among drinkers only).²

Heavy episodic drinking (annual frequency)

In a 1996 survey of a representative sample of subjects 19 to 71 years old (total sample size $n = 1750$), the annual frequency of drinking six or more drinks in one drinking occasion (among all respondents) was 8.8 among males and 2.9 among females.⁴

Youth drinking (alcohol consumers)

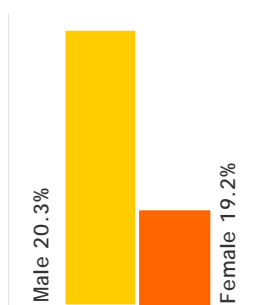
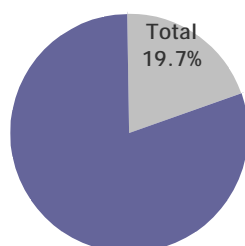


Data from the 2003 ESPAD survey (total sample size $n = 3822$, males $n = 1945$ and females $n = 1888$; age group 15 to 16 years). Alcohol consumer was defined as lifetime use of 40 times or more.⁹

Data from the 1999 ESPAD survey (total sample size $n = 3918$; males $n = 1980$ and females $n = 1811$; age group 15 to 16 years) found the rate of alcohol consumers to be 16% (total), 18% (males) and 13% (females). Alcohol consumer was defined as lifetime use of 40 times or more.¹⁰

A 2003 national survey conducted among subjects aged 15 to 20 years old found the rate of lifetime prevalence use (have at some time drunk alcohol) to be 85% (total), 84% (males) and 85% (females).¹¹

Youth drinking (drink at least weekly)

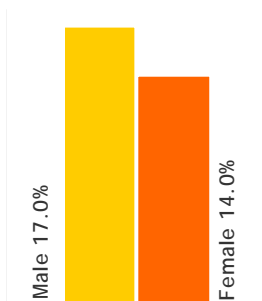
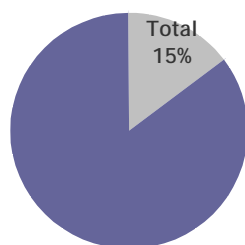


HBSC survey 2001/2002. Data shows proportion of 15-year-olds who report drinking beer, wine or spirits at least weekly. Total sample size $n = 1624$.¹²

According to the 1997/1998 HBSC survey (total sample size $n = 1670$), 16% of 15-year-old boys and 12% of 15-year-old girls reported drinking beer, wine or spirits at least weekly.¹³

A 1999 survey conducted among 1002 high school students in a small Norwegian town found that 26% drank alcohol weekly.¹⁴

Youth drinking (binge drinkers)



Data from the 2003 ESPAD survey (total sample size $n = 3822$, males $n = 1945$ and females $n = 1888$; age group 15 to 16 years). Binge drinking was defined as consuming five or more drinks in a row three times or more in the last 30 days.⁹

Data from the 1999 ESPAD survey (total sample size $n = 3918$, males $n = 1980$ and females $n = 1811$; age group 15 to 16 years) found the rate of binge drinking to be 24% (total), 26% (males) and 23% (females). Binge drinking was defined as consuming five or more drinks in a row three times or more in the last 30 days.¹⁰

Youth drinking (drunkenness)

According to the 2001/2002 HBSC survey (total sample size $n = 1624$), the proportion of 15-year-olds who reported ever having been drunk two or more times was 38.5% for boys and 40.7% for girls.¹²

In the 1999 ESPAD study of subjects 15 to 16 years old (total sample size $n = 3918$; males $n = 1980$ and females $n = 1811$) the proportion of subjects who reported being drunk three times or more in the last 30 days was 14% (total), 14% (males) and 13% (females).¹⁰

Traditional alcoholic beverages

Aquavit, a spirit distilled from potatoes and flavoured with caraway, is a traditional Norwegian drink.

Studies have shown that adolescents in Nordland county consume more alcohol than the national average, and that homemade liquor is an important element in the local alcohol traditions. A survey of 435 high school students in the municipality of Alstahaug found that homemade liquor was frequently consumed by students of all ages. Nearly all interviewees who drank beer, wine or brandy, also had a high consumption of homemade liquor.¹⁵

Unrecorded alcohol consumption

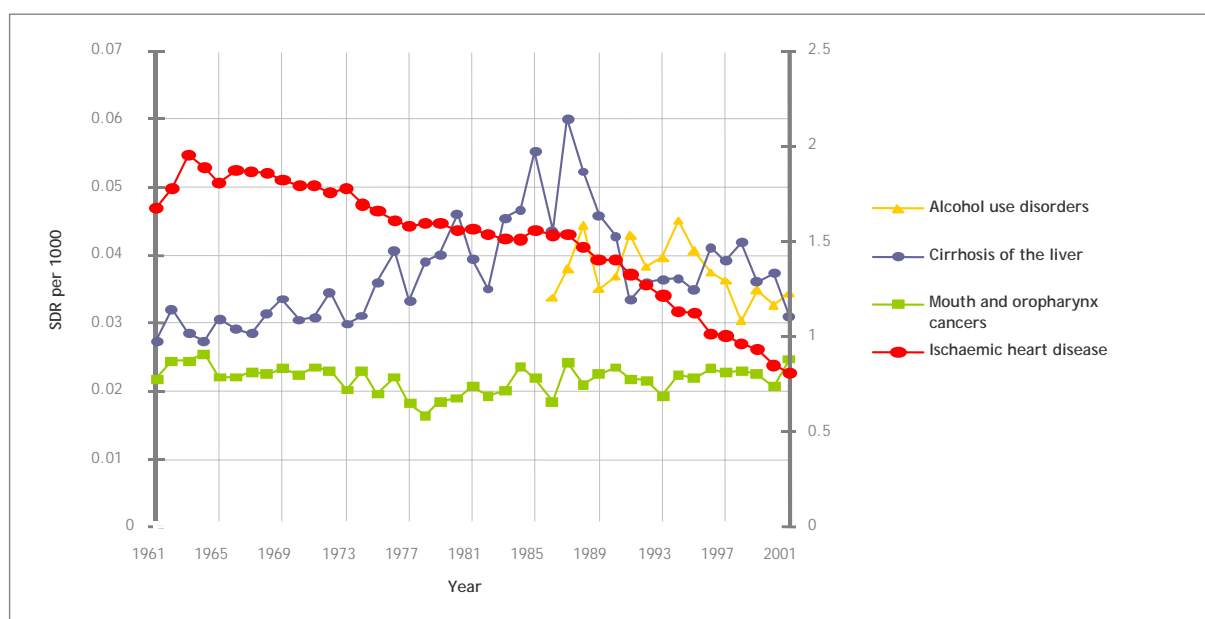
The unrecorded alcohol consumption in Norway is estimated to be 2.0 litres pure alcohol per capita for population older than 15 for the years after 1995 (estimated by a group of key alcohol experts).⁵

According to the Norwegian Institute for Alcohol and Drug Research (SIRUS) a notable amount of unrecorded alcohol is consumed in Norway, mostly originating from legal (wine) or illegal home production, smuggling and travel imports. The proportion of the unrecorded alcohol is estimated at 25–30% of the total consumption. In 2002, there were 9867 cases of sanctions involving misdemeanours (mainly illicit distilling and smuggling of alcohol).¹¹

Mortality rates from selected death causes where alcohol is one of the underlying risk factors

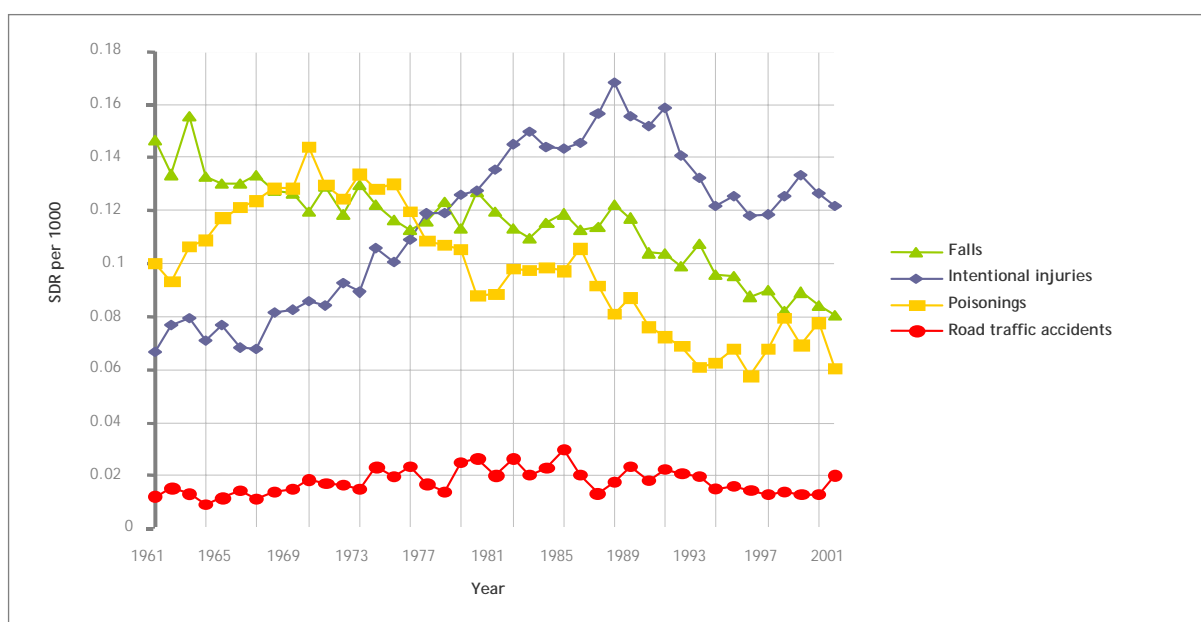
The data represent all the deaths occurring in a country irrespective of whether alcohol was a direct or indirect contributor.

Chronic mortality



Note: Chronic mortality time-series measured on two axes, ischaemic heart disease on right axis and the other causes on the left.

Acute mortality



Source: WHO Mortality Database

Morbidity, health and social problems from alcohol use

In a study that looked at autopsy protocols from 167 car drivers involved in traffic accidents in south-east Norway from 1994–1999 it was found that blood alcohol levels were above the statutory limit in 20% of drivers in both explained and unexplained accidents.¹⁶

Blood samples from 159 fatally injured drivers from 1989 and 1990 were analysed for alcohol. Alcohol was found in 28.3% of the drivers, 27% above the legal limit of 0.05%. Among 79 drivers fatally injured in single-vehicle accidents, 41.8% were positive for alcohol.¹⁷

A retrospective study based on 230 forensic reports of drivers involved in fatal car accidents found that 21% of the drivers had raised blood alcohol levels. Hepatic steatosis (fatty liver) was observed in 16% of all drivers, most of whom were not under the influence of alcohol. The study showed that drunkenness and alcoholic liver disease represented major risk factors in fatal road accidents.¹⁸

Data from Statistics Norway (Crime Statistics) show that in 2002, there were 4162 sanctions issued for driving under the influence of alcohol and/or drugs in Norway. This number represented 2.7% of all traffic misdemeanours for that year. Data from the Norwegian Institute of Public Health show that in 2002, there were 5486 cases of drivers suspected of driving under the influence of alcohol.¹⁰

The results of a study show that between 10 and 30% of drivers convicted for driving under the influence of alcohol are rearrested two or more times for the same violation during a subsequent three-year period. The recurrence rate is dependent on blood alcohol concentration at the selection time.¹⁹

A study that aimed to identify mortality rates and cause of death among drunken drivers during the years after apprehension found that the mortality rate of male drunken drivers was higher than in an age-matched Norwegian population.²⁰

In 2001, there were 378 deaths from alcohol (mainly due to alcohol dependence and liver cirrhosis).¹⁰

In a study that investigated the prevalence and concentration of alcohol in 1539 medico-legal autopsies in two counties in northern Norway during the period 1973 to 1992, blood alcohol concentration (BAC) ≥ 0.5 per thousand (50 mg/100 ml) was found in 47.6% of violent deaths tested, and in 93% of these the BAC was ≥ 1.0 per thousand. In 17.4% of tested natural deaths the BAC was ≥ 0.5 per thousand.²¹

The SDR per 100 000 population for chronic liver disease and cirrhosis was 5.04 in 2000 and 4.23 in 2001.²²

In a study looking at patients with acute pancreatitis in Bergen, alcohol consumption was found to be an etiological factor in 19% of cases. The risk of recurrent pancreatitis was 47% in alcohol-induced pancreatitis.²³

In a study looking at domestic violence during pregnancy, it was found that alcohol use among partners was strongly correlated with physical and sexual abuse.²⁴

In a representative longitudinal study of young people in Norway looking at intimate partner violence, it was found that for men and women alike, victimization correlated with alcohol use.²⁵

In a study of 1803 assault victims treated at the Bergen Accident and Emergency Department during a two-year period (1994–1996), it was found that most of the victims were under the influence of alcohol during the assault.²⁶

In a study of homicides by sharp force committed in Oslo and Copenhagen (Denmark) during a ten-year period from 1985 to 1994, it was found that 65% of the male and 37% of the female victims had alcohol in their blood.²⁷

A study found that future suicide attempts among a representative sample of high school students was predicted by alcohol intoxication as a major risk factor.²⁸

A recent study conducted found that children of alcohol abusing fathers had more adjustment problems assessed by the Child Behaviour Checklist (CBCL) compared to a general population sample.²⁹

In a study looking at alcohol disorders and re-employment among the long-term unemployed, it was found that at the 5-year follow up, 23% of those still unemployed and 12% of those re-employed scored higher than the AUDIT cut-point of 10. None of the 7% who had a DSM-III diagnosis of an alcohol disorder had a job five years later, however, suggesting that alcohol-related selection to unemployment does occur.³⁰

A cross-sectional study comprising a national sample of 12 000 Norwegian adolescents aged 12–20 years found that violent behaviours were more often reported among boys, in the younger age groups, with increasing frequency of alcohol intoxication, among users of other drugs, among those engaged in criminal activities and among those in wet environments (friends drinking regularly and parents often being intoxicated). There was a significant positive correlation between intoxication frequency and the sum-score for violent behaviour.³¹

Economic and social costs

In 2002, the percentage of household consumption of consumer expenditure on alcohol (spirits, wine and beer) was 3.6, a slight increase from 3.5 in 2001.¹⁰

Country background information

Total population 2003	4 533 000	Life expectancy at birth (2002)	Male	76.4
Adult (15+)	3 626 400		Female	81.7
% under 15	20	Probability of dying under age 5 per 1000 (2002)	Male	5
Population distribution 2001 (%)			Female	4
Urban	75	Gross National Income per capita 2002	US\$	37 850
Rural	25			

Sources: Population and Statistics Division of the United Nations Secretariat, World Bank World Development Indicators database, The World Health Report 2004

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