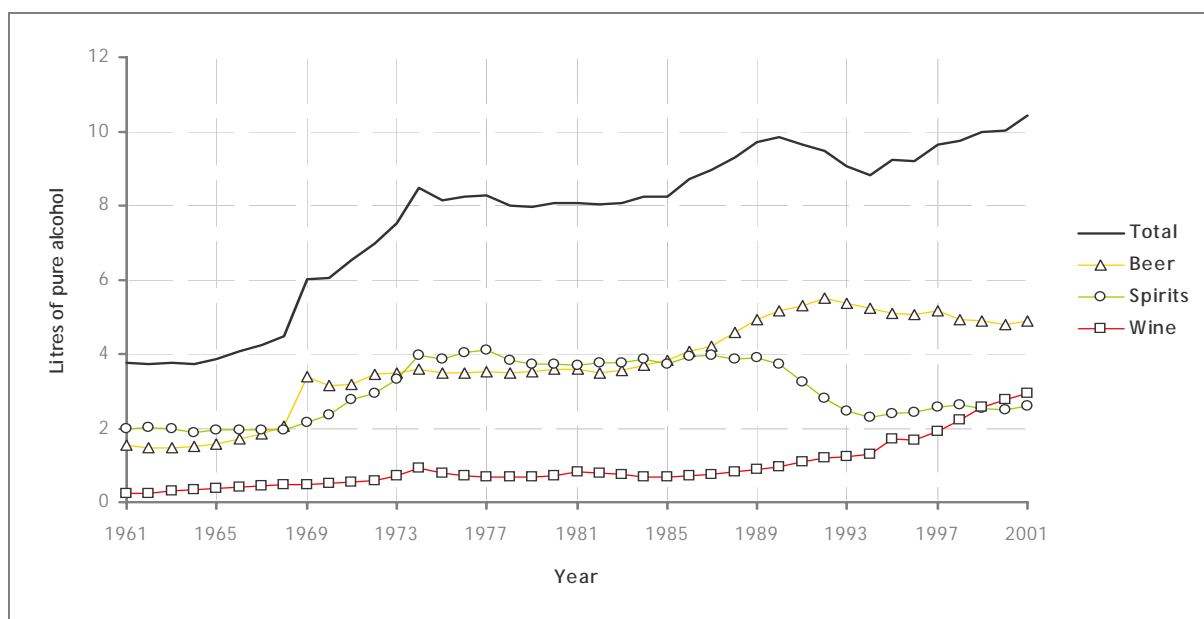


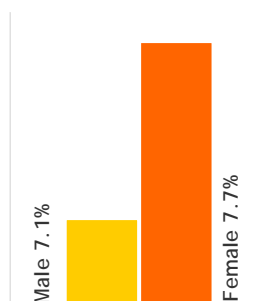
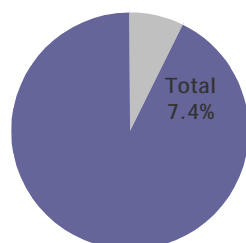
FINLAND

Recorded adult per capita consumption (age 15+)



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

Last year abstainers



Data from the WHO GENACIS study. National survey conducted in 2000 (age group 20 to 64 years). Total sample size $n = 1661$; males $n = 832$ and females $n = 829$.¹

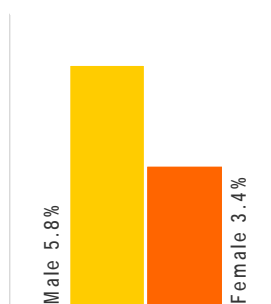
Data from the 2000 Drinking Pattern Survey (total sample size $n = 1932$; males $n = 945$ and females $n = 987$) show that the rate of last year abstainers was 9% (total), 8% (males) and 9% (females).²

A 2000 national survey of about 1000 respondents aged 18 to 64 years conducted by the European Comparative Alcohol Study (ECAS) project found the rate of abstainers to be 6% among males and 8% among females (based on the most frequently consumed beverage for each respondent).³

A 1996 survey (total sample size $n = 1509$; aged 19 to 71 years) found the rate of abstainers to be 7% (males) and 14% (females).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 10% (males) and 18% (females). Data is for after year 1995.⁵

Heavy and hazardous drinkers (among drinkers)



Data from the WHO GENACIS study. National survey conducted in 2000 (age group 20 to 64 years). Total sample size $n = 1661$; males $n = 832$ and females $n = 829$. 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.¹

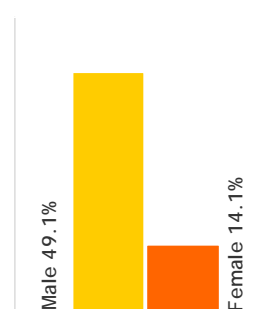
A 1998 survey of 3198 adults (49% male) aged 20 years and above found that 30% of the total population sampled (29% of males and 29% of females) were frequent consumers of strong alcohol (spirits). Frequent consumption was defined for men as once a week or more and for women as 2–3 times a month or more.⁶

Data from a series of cross-sectional surveys from 1991 to 1998 were pooled (total sample size $n = 22\,745$; males $n = 10\,687$ and females $n = 12\,058$; aged 20–64 years old) and the results found that the rate of heavy drinking was 42.1% among males and 26.4% among females. Heavy drinking was for males defined as more than eight units/week and for females more than five units/week.⁷

Data from the 1992 Finnish Drinking Habits Study (total sample size $n = 3369$; aged 15 years and above) found that 22% of men and 5% of women can be classified as risky drinkers (cut-off point of 11 on the AUDIT). Risky or hazardous drinking is most common among young people, those living alone, unmarried people and city dwellers.⁸

In a 1993 study of 1861 primary health care clinic and 2942 occupational health care clinic outpatients and 544 randomly selected adults in the general population (aged 20–60 years), among men the prevalences of heavy drinking in the primary health care clinic, occupational health care clinic and general population were 20%, 17% and 16% respectively. Among women, the corresponding figures were 9%, 6% and 13%. A male patient was defined as a heavy drinker if his self-reported alcohol consumption was at least 280 g of absolute ethanol (24 standard drinks) per week and/or if he had at least three affirmative answers in CAGE (self-reported questionnaire on alcohol-related problems). For women, the limits were 190 g (16 standard drinks) and/or two affirmative CAGE answers.⁹

Heavy episodic drinkers (among drinkers)



Data from the WHO GENACIS study. National survey conducted in 2001 (age group 20 to 64 years). Total sample size $n = 4223$; males $n = 2085$ and females $n = 2138$. Definition used: consumption of six or more drinks in one sitting at least once a month (among drinkers only).¹

A national survey conducted in 2000 of a sample representative of the adult population aged 18–64 years found that the percentage of binge drinking occasions of all drinking occasions in the last 12 months was 29% among male drinkers and 17% among female drinkers. Binge drinking was defined as an occasion when the respondent had consumed at least one bottle of wine, 25 centilitres of spirits or four cans of beer.³

In a 1996 survey of a representative sample of subjects 19–71 years old (total sample size $n = 1509$), the annual frequency of drinking six or more drinks in one drinking occasion (among all respondents) was 10.9 among males and 2.3 among females.⁴

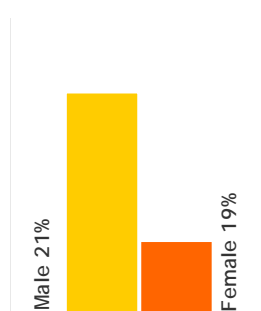
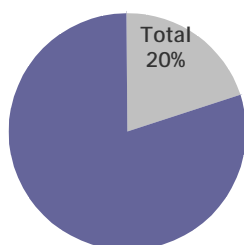
In a 2000 national survey of subjects aged 18–64 years, the annual frequency of binge drinking in the past year was 21.3 among males and 7.1 among females. Binge drinking was defined as consuming at least a bottle of wine, 25 centilitres of spirits or four cans of beer.¹⁰

According to a national survey conducted in 2003 (total sample size $n = 1018$; aged 15 years and over), the average number of times that respondents had consumed the equivalent of one bottle of wine, five pints/bottles of beer or five measures of spirits on one drinking occasion was 2.53.¹¹

Data from the 2000 Drinking Pattern Survey (total sample size $n = 1932$; males $n = 945$ and females $n = 987$) show that the average number of days of drinking six or more drinks at one sitting per year was 11 (total), 16 (males) and 5 (females).¹²

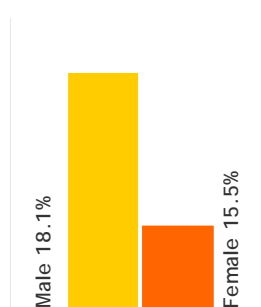
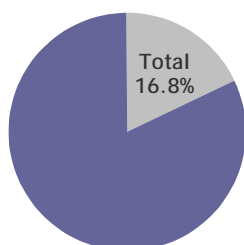
Data from the 1992 Finnish Drinking Habits Study (subsample size $n = 2869$, males $n = 1494$ and females $n = 1375$; aged 15 years and above) found that among male drinkers, 3%, 11% and 7% were irregular binge drinkers, infrequent binge drinkers and frequent drinkers respectively. The corresponding figures for female drinkers were 1%, 2% and 1% respectively. Irregular binge drinking was defined as consuming seven or more units of alcohol once a month or less, infrequent binge drinking was defined as consuming seven or more units of alcohol 2–4 times a month and frequent binge drinking was defined as consuming seven or more units of alcohol twice a week or more.⁸

Youth drinking (alcohol consumers)



Data from the 1999 ESPAD survey. Total sample size $n = 3286$; males $n = 1646$ and females $n = 1640$; age group 15 to 16 years. Alcohol consumer was defined as lifetime use of 40 times or more.¹³

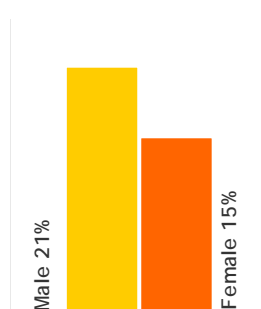
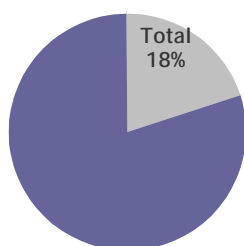
Youth drinking (drink at least weekly)



HBSC survey 2001/2002. Data shows proportion of 15-year-olds who report drinking beer, wine or spirits at least weekly. Total sample size $n = 1745$.¹⁴

According to the 1997/1998 HBSC survey (total sample size $n = 1545$), 11% of 15-year-old boys and 8% of 15-year-old girls reported drinking beer, wine or spirits at least weekly.¹⁵

Youth drinking (binge drinkers)



Data from the 1999 ESPAD survey. Total sample size $n = 3286$; males $n = 1646$ and females $n = 1640$; 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.¹³

Data from the 1992 Finnish Drinking Habits Study (subsample size males $n = 144$ and females $n = 143$; aged 15 to 19 years) found that among male drinkers, 8%, 25% and 9% were irregular binge drinkers, infrequent binge drinkers and frequent drinkers respectively. The corresponding figures for female drinkers are 4%, 7% and 1% respectively. Irregular binge drinking was defined as consuming seven or more units of alcohol once a month or less, infrequent binge drinking was defined as consuming seven or more units of alcohol 2–4 times a month and frequent binge drinking was defined as consuming seven or more units of alcohol twice a week or more.⁸

Youth drinking (drunkenness)

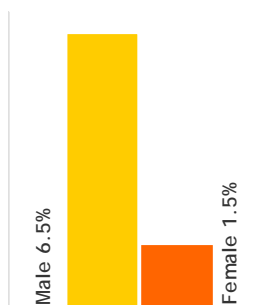
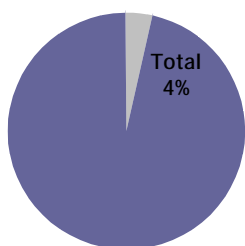
According to the 2001/2002 HBSC survey (total sample size $n = 1745$), the proportion of 15-year-olds who reported ever having been drunk two or more times was 53.3% for boys and 55.7% for girls.¹⁴

In the 1999 ESPAD study of subjects 15 to 16 years old (total sample size $n = 3286$; males $n = 1646$ and females $n = 1640$) the proportion of subjects who reported being drunk three times or more in the last 30 days was 18% (total), 19% (males) and 17% (females).¹³

Data from the 1992 Finnish Drinking Habits Study (subsample size males $n = 144$ and females $n = 143$; aged 15 to 19 years) found that 12% of females and 42% of males in the age group of 15- to 19-year-olds usually drink at least seven units on one occasion. 9% of boys get intoxicated (drink at least seven units on one occasion) at least twice a week. Every fourth boy gets drunk two to four times a month. Getting drunk when drinking is less common among women than among men, and is more typical for young women than for older women.⁸

A study looking at trends in adolescent drinking habits in Finland from 1977 to 1999 (among representative samples of 12-, 14-, 16- and 18-year-olds; number of respondents varying from 2832 to 8390) found that age-adjusted monthly drunkenness among 14-, 16- and 18-year-olds rose from 13% (1981) to 27% (1999) among boys and 6% to 22% among girls. Throughout the study period, the drinking style among boys became more drunkenness-orientated with age. Earlier onset predicted higher prevalence of problem use at the age of 18.¹⁶

Alcohol dependence



National survey conducted in 2000 (total sample size $n = 6005$; aged 30 years and above) using the CIDI interview and DSM-IV classification.¹⁷

Drunkenness

A 1992 survey of a representative sample of the Finnish population between 15 and 69 years of age (total sample size $n = 3446$) found that 20.2% of the total sample (30.3% of males and 9.3% of females) reported being drunk approximately once a month or more.¹⁸

Traditional alcoholic beverages

Homemade alcohol in Finland includes moonshine, homemade wine, *kilju* (a sugar-fermented strong home brew), and homemade beer, including *sahiti*, the traditional Finnish home-brewed ale. It is estimated that 1.7 million litres of *sahiti* were produced in 1999.¹⁹

Unrecorded alcohol consumption

The unrecorded alcohol consumption in Finland 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

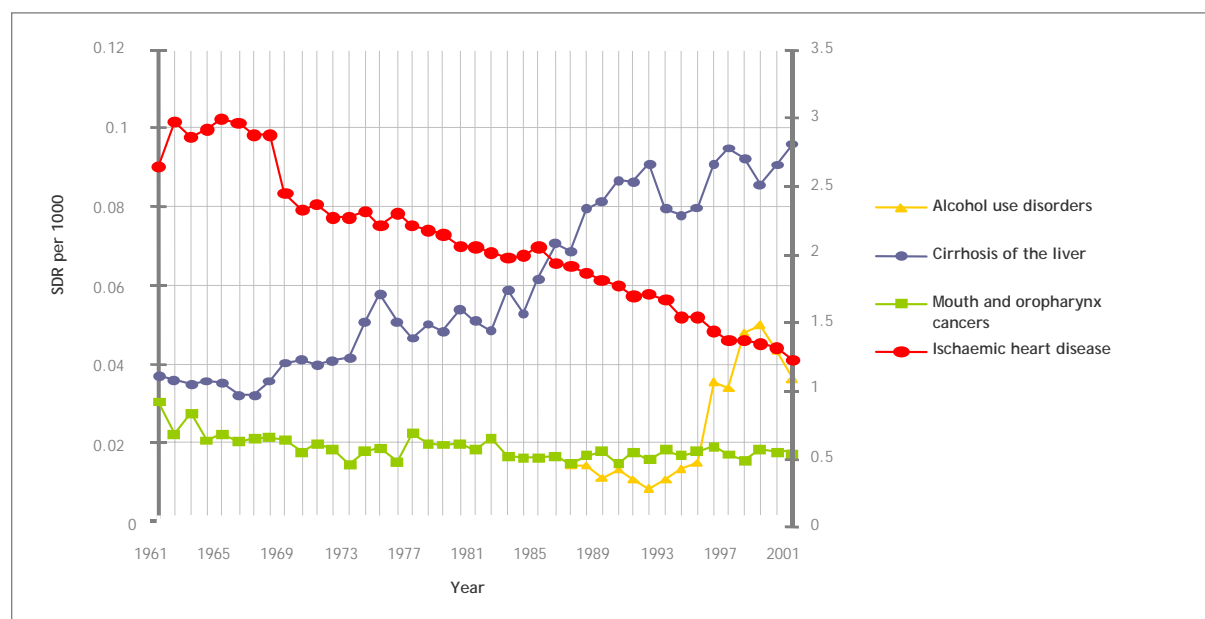
According to the National Research and Development Centre for Welfare and Health (STAKES), in 2001, there were 8.5 million litres of unrecorded alcohol: 0.9 million litres of home distilled alcohol, 4.6 million litres of tourist alcohol, 1.7 million litres of alcohol consumed abroad and 1.3 million litres of illegal distilled and smuggled alcohol. In per capita terms, the figure was 1.7 litres.²⁰

A study that looked at unrecorded alcohol consumption in Finland found that at the end of the 1990s about one fifth of all alcohol consumed was unrecorded alcohol. More than half of the unrecorded alcohol consisted of travelers' alcohol imports. The next important categories were consumption outside Finland, homemade alcohol and smuggled alcohol.¹⁸

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

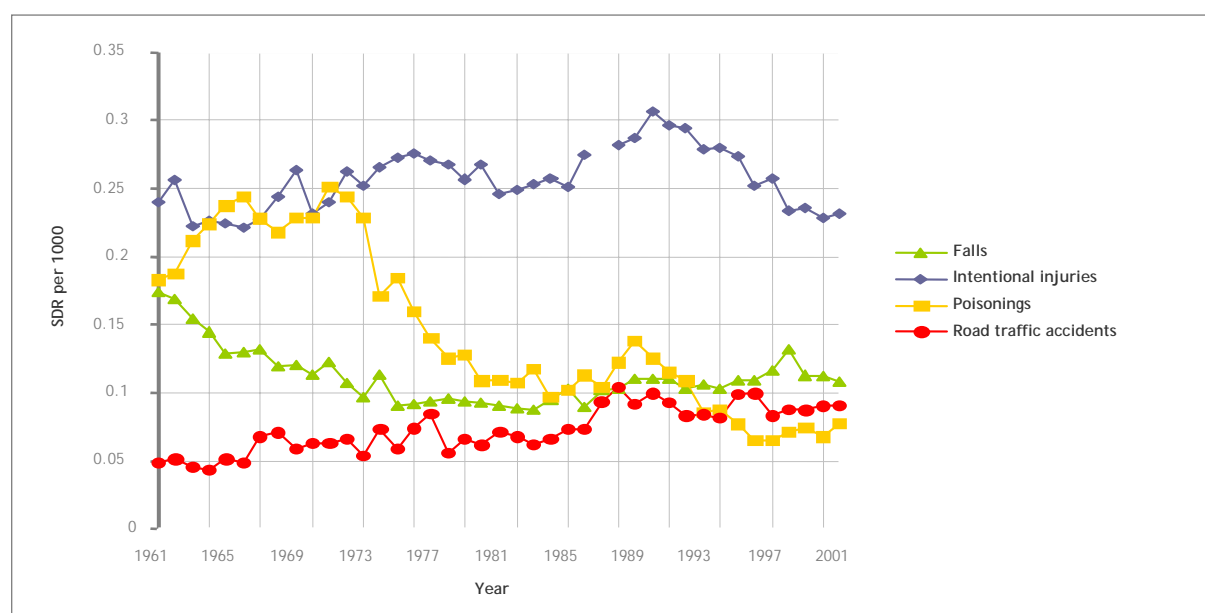
The data represent all the deaths occurring in a country irrespective of whether alcohol was a direct or indirect contributor.

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 2002 there were 23 496 recorded cases of drunken driving (23 219 in 2001). In 2002, there were 8844 persons killed or injured in road accidents in Finland – 14.6% of these were drink-related.²⁰

The number of alcohol-related road accidents in 2000 was 13.7%.²¹

From 1987 to 1996, 10 360 (23.3%) of the 45 544 violent deaths that occurred in Finland were alcohol-related. Among those aged 15–64 years, 28.6% of accidents, 30.5% of suicides and 55.3% of homicides were associated with alcohol.²²

During the period 1987–1995, 63% of the fatal water traffic accidents (WTA) in Finland were associated with alcohol intoxication. In WTA-related drownings among those 15 years old and above, 66% were associated with alcohol intoxication. Fatal WTA associated with alcohol intoxication accounted for 12.5% of all accidental deaths associated with alcohol intoxication.²³

A time series analysis study conducted for the period 1950–1995 found that total alcohol sales was positively and statistically significantly associated with the homicide rate in Finland.²⁴

Data from 2002 show that in total there were 1465 deaths from alcohol-related diseases or poisoning and 913 deaths due to alcohol-related accidents or violence.²⁵

In 2001, there were 33 156 cases of hospitalization related to alcohol: 10 645 were for alcoholism, 2391 for illnesses of the pancreas, 2950 for morbid hepatitis, 462 for alcohol poisoning, 9795 for intoxication and 6913 for other alcohol-related illnesses. In 2000, there were 34 954 cases of hospitalization related to alcohol: 11 960 were for alcoholism, 2385 for illnesses of the pancreas, 2872 for morbid hepatitis, 470 for alcohol poisoning, 10 094 for intoxication and 7173 for other alcohol-related illnesses.²⁰

The SDR per 100 000 population for chronic liver disease and cirrhosis was 11.53 in 1998 and 10.94 in 1999.²⁶

The number of alcohol-related road traffic accidents per 100 000 population was 18.76 in 2000 and 18.16 in 2001.²⁶

A cohort study conducted among 5092 men aged from 25 to 64 years who had consumed alcohol during the 12 months before the baseline examination found that consuming six or more drinks at a time is related to increased mortality among working age male drinkers. There was an increased risk of death from all causes, ischaemic heart disease, external causes, and alcohol-related causes among drinkers with heavy drinking patterns, compared with drinkers without heavy drinking occasions.²⁷

A study showed that fatal alcohol poisonings were found to peak during weekends and in the May Day, Midsummer Day and Christmas celebrations. Regression analysis showed that a 1% increase in the sales of spirits increases the number of fatal alcohol poisonings by 0.4%. At a population level, increases in the sales of spirits and periods of heavy drinking seem to increase deaths from alcohol poisoning.²⁸

In a total 1-year (1987–1988) population of suicides in the National Suicide Prevention Project in Finland, it was found that on the basis of informant interviews, 35% of included victims were classified as alcohol misusers (reported by the informant to have been in an obvious state of drunkenness at least once or twice a week during the last year). The misusers were more often younger, male, divorced or separated and had more often worked, but were recently unemployed. They had experienced more often recent adverse life events possibly dependent on their own behaviour, were far more likely to be alcohol-intoxicated at the time of suicide, and tended to die from drug overdose.²⁹

A study of 106 adolescent suicides out of a total nationwide population of 1397 suicides (from 1987–1988) found that 42% of these 13–22-year-old victims were classified as having suffered either a DSM-III-R alcohol use disorder or diagnostically subthreshold alcohol misuse according to retrospective evaluation using the Michigan Alcoholism Screening Test (MAST). These victims had a greater tendency to be alcohol-intoxicated at the time of the suicidal act, which tended to occur during weekends, suggesting that drinking in itself, and its weekly pattern, each contributed to the completion of their suicides.³⁰

A study of 36 689 adult (age range 25–64 years) men and women who participated in the population surveys between 1972 and 1992 found that 12.6% of men and 2.7% of women were heavy users of alcohol (120 g or more of pure alcohol a week, or 10 drinks per week). The study also found that the adjusted relative risk of suicide increased linearly with increasing level of joint heavy use of alcohol, cigarettes and coffee.³¹

A population-based study of 1515 suicide victims found that 15.2% of cancer patients who committed suicide and 45.3% of non-cancer patients who committed suicide were under the influence of alcohol.³²

In a study of 269 patients with DSM-IV major depressive disorder, a nominal regression model predicting suicidal ideation found that alcohol dependence or abuse was a significant independent risk factor.³³

A 1992 survey of a representative sample of the Finnish population between 15 and 69 years of age (total sample size $n = 3446$) found that among the subsample group of drinkers ($n = 2856$), 33.5% reported having been loud-voiced or boisterous after drinking, 25.4% reported having said or done something that they regretted after drinking, 17.7% reported being in a quarrel or argument after drinking, 3.3% reported that they had driven a car under the influence of alcohol, 2.9% had been involved in an accident or injury after drinking, 2.9% reported health problem conditions related to prolonged drinking and 20.3% had been criticized by their family for drinking.¹⁷

In a study of 15-year-old Finnish school pupils, it was found that heavy drinking was associated with smoking, trial of drugs, poor social skills in class, and poor school achievement in both girls and boys. In girls, heavy drinking was associated with psychosomatic symptoms and negative social self-image. Girls who drank heavily also had more difficulty with concentration and externalizing problems and more problems with teachers than those who were abstinent or consumed alcohol moderately. The self-image of boys who drank heavily were more negative than those of alcohol-abstinent boys.³⁴

Country background information

Total population 2003	5 207 000	Life expectancy at birth (2002)	Male	74.8
Adult (15+)	4 269 740		Female	81.5
% under 15	18	Probability of dying under age 5 per 1000 (2002)	Male	4
Population distribution 2001 (%)			Female	3
Urban	59	GNI per capita 2002	US\$	23 510
Rural	41			

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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