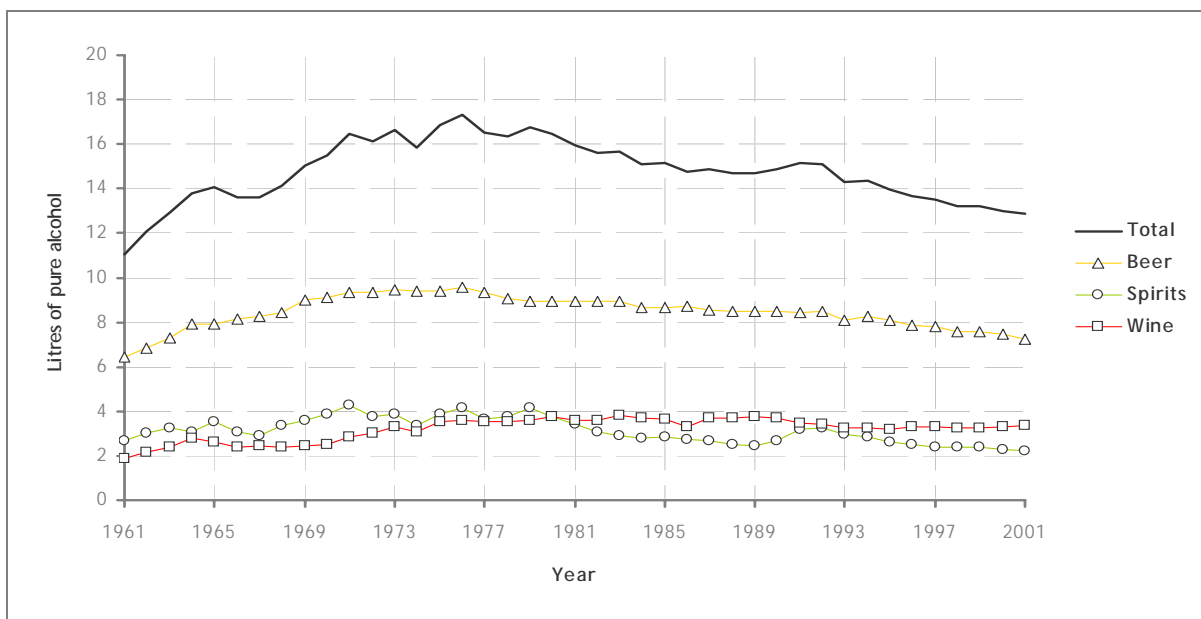


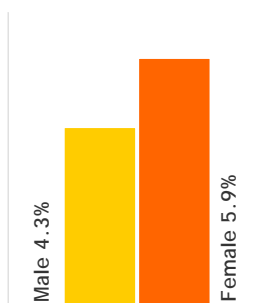
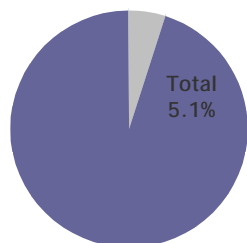
# GERMANY

## Recorded adult per capita consumption (age 15+)



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

## Last year abstainers

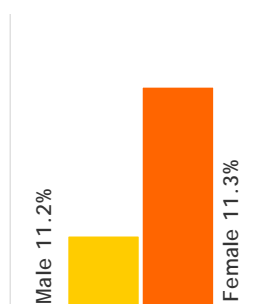


Data from the WHO GENACIS study. National survey conducted in 2000 (age group 20 to 64 years). Total sample size  $n = 7907$ ; males  $n = 3580$  and females  $n = 4327$ .<sup>1</sup>

Estimates from key alcohol experts show that the proportion of adult males and females who had been abstaining (last year before the survey) was 8% (males) and 12% (females). Data is for after year 1995.<sup>2</sup>

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 12% among males and 18% among females (based on the most frequently consumed beverage for each respondent).<sup>3</sup>

## Heavy and hazardous drinkers (among drinkers)



Data from the WHO GENACIS study. National survey conducted in 2000 (age group 20 to 60 years). Total sample size  $n = 7907$ ; males  $n = 3580$  and females  $n = 4327$ . 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.<sup>1</sup>

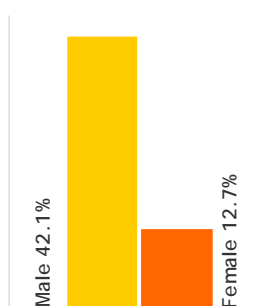
Data from a 1997 national survey show a German-wide prevalence of 11.8% for hazardous alcohol consumption (more than 20 g of pure alcohol for women and 40 g of pure alcohol for men daily).<sup>4</sup>

Survey of subjects aged between 25 and 69 years old (males  $n = 7677$  and females  $n = 7732$ ) found the rate of heavy drinking to be 3.6% (total), 6.4% (males) and 0.9% (females). Heavy drinking was defined as consuming more than 80 g of alcohol per day.<sup>5</sup>

A 1996/1997 regional survey (total sample size  $n = 4075$ ; males  $n = 2045$  and females  $n = 2030$ ) was conducted among subjects aged between 18 and 64 years old and living in the northern German city of Lübeck. For hazardous consumption a prevalence rate of 4.3% (5.5% in males and 3.2% in females) during the last 12 months and 6.8% lifetime (9.3% in males and 4.2% in females) was found. For harmful consumption the rates were 1.7% (2.8% in males and 0.7% in females) during the last 12 months and 6.5% lifetime (10% in males and 2.9% in females). Hazardous consumption was defined as average daily consumption of 20 to 40 g absolute alcohol in the case of women and 40 to 60 g in the case of men. Harmful consumption was defined as average daily consumption of more than 40 g absolute alcohol in the case of women and 60 g in the case of men.<sup>6</sup>

A study which looked at three samples of 18- to 64-year-olds (including 510 consecutively admitted currently smoking in-patients of a general hospital, 271 patients of a randomized sample of general practices, and 1567 current smokers from a regional population of Germany) found the rates of current daily cigarette smokers with harmful or hazardous alcohol consumption (HRD) to be 13.3% in the general hospital and 2.2% in the general practice sample compared with 6.2% in the general population. Hazardous consumption was drinking at the amount of 20 to 40 g pure alcohol per day in females, 30 to 60 g in males; more than 40 g in females and more than 60 g in males was harmful use. The study also found that the rate of HRD and AUD (alcohol abuse or dependence according to DSM) taken together was 47.1%, 32.1% and 18.4% for the three groups respectively.<sup>7</sup>

## Heavy episodic drinkers (among drinkers)

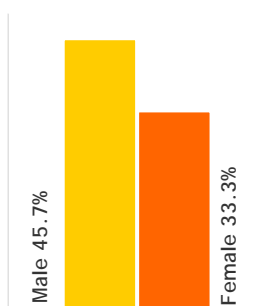
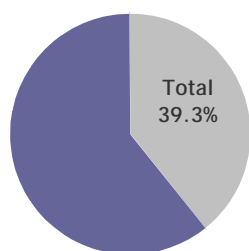


Data from the WHO GENACIS study. National survey conducted in 2000 (age group 20 to 60 years). Total sample size  $n = 7907$ ; males  $n = 3580$  and females  $n = 4327$ . Definition used: consumption of 75 g or more of pure alcohol in one sitting at least once a month in the last year (among drinkers only).<sup>1</sup>

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 14% among male drinkers and 7% 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.<sup>3</sup>

In a 2000 nationally representative sample of subjects aged 18–64 years, the annual frequency of binge drinking in the past year was 14.3 among males and 4.0 among females. Binge drinking was defined as consuming at least a bottle of wine, 25 centilitres of spirits or four cans of beer.<sup>8</sup>

## Youth drinking (drink at least weekly)



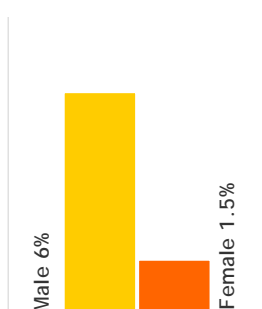
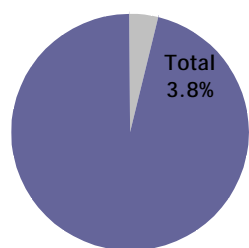
HBSC survey 2001/2002. Data shows proportion of 15-year-olds who report drinking beer, wine or spirits at least weekly. Total sample size  $n = 1749$ .<sup>9</sup>

According to the 1997/1998 HBSC survey (total sample size  $n = 1599$ ), 29% of 15-year-old boys and 22% of 15-year-old girls reported drinking beer, wine or spirits at least weekly. Note that this was not a nationally representative sample but a regional sample of Germany (North Rhine-Westphalia region).<sup>10</sup>

## (Youth drinking) drunkenness

According to the 2001/2002 HBSC survey (total sample size  $n = 1749$ ), the proportion of 15-year-olds who reported ever having been drunk two or more times was 44.3% for boys and 34.4% for girls.<sup>9</sup>

## Alcohol dependence (lifetime prevalence)



1996/1997 regional survey with total sample size  $n = 4075$ ; males  $n = 2045$  and females  $n = 2030$ . Subjects were aged between 18 and 64 years old and living in the northern German city of Lübeck. DSM-IV diagnoses of alcohol dependence was used.<sup>6</sup>

Data from a national 1997 survey containing items adapted from the alcohol use disorder section of the Munich Composite International Interview (M-CIDI) to assess DSM-IV alcohol abuse and dependence show a German-wide prevalence of 5% abuse and 3% dependence in the last 12 months. The study also found the rates of lifetime alcohol abuse and alcohol dependence to be 8.3% and 4.3% respectively.<sup>4</sup>

Data from a 1995 regional survey of a sample of 14–24 year old residents (total sample size  $n = 3021$ ) in Munich, Germany found the rate of lifetime prevalence of DSM-IV alcohol dependence among the total population to be 10% (men) and 2.5% (women). Similarly, the rate of 12-month prevalence of DSM-IV alcohol dependence among the total population was 7.3% (men) and 2.2% (women). Among alcohol users, the rates of alcohol dependence were considerably higher (for lifetime prevalence: 14.3% in men and 4.1% in women; for 12-month prevalence: 10.5% in men and 3.7% in women). The same study also found the rate of lifetime prevalence of DSM-IV alcohol abuse among the total population to be 15.1% (men) and 4.5% (women), and among alcohol users to be 21.6% (men) and 7.5% (women). The corresponding rates for 12-month prevalence of DSM-IV alcohol abuse was 8.4% (men) and 2.7% (women) among the total population and 12.1% (men) and 4.5% (women) among alcohol users.<sup>11</sup>

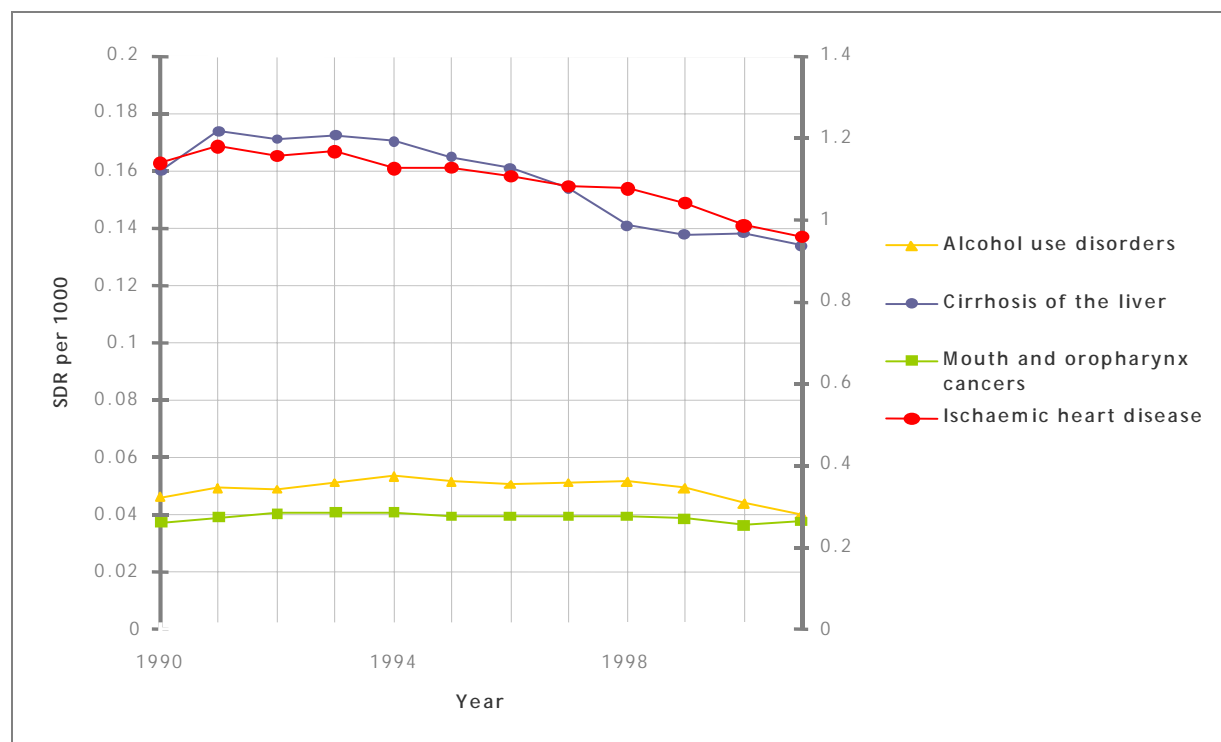
## Unrecorded alcohol consumption

The unrecorded alcohol consumption in Germany is estimated to be 1.0 litre pure alcohol per capita for population older than 15 for the years after 1995 (estimated by a group of key alcohol experts).<sup>2</sup>

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

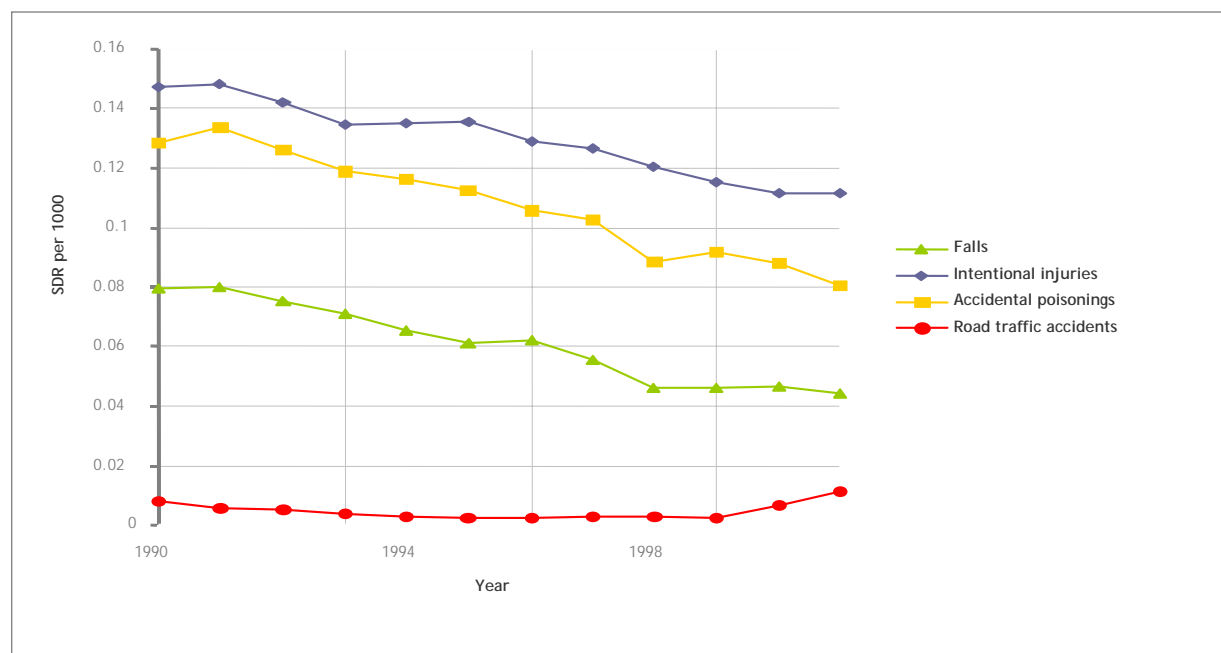
The data represent all the deaths occurring in a country irrespective of whether alcohol was a direct or indirect contributor.

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

The police registered 64 400 accidents involving alcohol in Germany in 2001. In 25 700 accidents involving personal injury and the use of alcohol, 33 500 persons were injured and 909 were killed. This means that 13% of all persons killed in traffic accidents in 2001 died from the consequences of an accident where at least one party was under the influence of alcohol.<sup>12</sup>

In a study of 99 bicycle and motorcycle accidents that had taken place from 1980 to 1984 in and around Frankfurt on the Main, it was found that 30% of all the participants involved had a relevant blood alcohol concentration.<sup>13</sup>

In a study assessing the influence of alcohol-induced disorders on criminal recidivism among a sample of 185 delinquents, it was found that 27.3% of the delinquents with alcohol abuse and 47.2% with a family history of alcohol abuse recidivated with a crime.<sup>14</sup>

In 1997, 7.98% (14 579) of all 182 634 death cases at age below 65 years are due to alcohol alone. In males, 9.02% (11 147) of all 123 536 death cases and in females, 5.81% (3432) of all 59 098 death cases at age below 65 years are due to alcohol alone. In 1997, the number of years of potential life lost before the age of 65 that were attributed to alcohol was 224 634.<sup>15</sup>

In 2002, alcoholic liver disease was the tenth leading cause of death among males. There were 7877 recorded cases representing 2% of the total number of deaths among males.<sup>16</sup>

A study looking at alcohol-attributable mortality estimated that in West Germany, there were 1.3% more male deaths than would have occurred in a non-drinking population and 0.3% more female deaths. In East Germany, there is a bigger difference between the sexes, with 3.9% excess male deaths and 0.3% fewer female deaths. In East Germany, around 30% of deaths among males aged 25–34 and 35–44 years were due to drinking. Up to 20% of female deaths among those aged 35–44 years may be due to their alcohol consumption.<sup>17</sup>

The rate of alcoholic psychosis incidence per 100 000 population was 259.34 in 1999 and 339.04 in 2000.<sup>18</sup>

The number of alcohol-related road traffic accidents per 100 000 population was 33.31 in 2000 and 31.20 in 2001.<sup>18</sup>

A study based on cross-sectional data of the German adult population found that among women, alcohol consumption was associated with age, socioeconomic status, household size, smoking status, physical activity, use of soft drugs, body mass index, pregnancy and general health perception. The highest alcohol consumption was observed for women of middle age with high socioeconomic status. Among men, age, socioeconomic status, smoking status, physical activity, use of soft drugs, vegetarian diet, contentment with family or neighbours/friends, social functioning and physical functioning were associated with alcohol consumption, with age and smoking being the most important predictors.<sup>19</sup>

A recent multicentre study drew the conclusion that the tendency of an earlier alcohol consumption is related to an earlier beginning of habit-forming drinking. Therefore, young people develop a problematic drinking style at an earlier age and this could lead to an increased number of severe alcoholics later.<sup>20</sup>

## Economic and social costs

A report of a working group convened by the Federal Ministry of Health concluded that each year approximately 42 000 Germans die from alcohol-related causes. 238 000 criminal acts are committed under the influence of alcohol and the cost of alcohol-related diseases is around €20 billion.<sup>21</sup>

## Country background information

<b>Total population 2003</b>	82 476 000	<b>Life expectancy at birth (2002)</b>	Male	75.6
Adult (15+)	70 104 600		Female	81.6
% under 15	15	<b>Probability of dying under age 5 per 1000 (2002)</b>	Male	5
<b>Population distribution 2001 (%)</b>			Female	4
Urban	88	<b>Gross National Income per capita 2002</b>	US\$	22 670
Rural	12			

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

## References

1. Preliminary results from the *Gender, Alcohol and Culture: An International Study (GENACIS Project)*. International Research Group on Gender and Alcohol (for more information please see <http://www.med.und.nodak.edu/depts/irgga/GENACISProject.html>).
2. Alcohol per capita consumption, patterns of drinking and abstinence worldwide after 1995. Appendix 2. *European Addiction Research*, 2001, 7(3):155–157.
3. Hemström Ö, Leifman H, Ramstedt M. The ECAS survey on drinking patterns and alcohol-related problems. In: Norström T, ed. *Alcohol in postwar Europe: consumption, drinking patterns, consequences and policy responses in 15 European countries*. Stockholm, Almqvist & Wiksell International, 2002.
4. Kraus L, Bauernfeind R. Repräsentativerhebung zum Konsum psychoaktiver Substanzen bei Erwachsenen in Deutschland 1997. *Sucht* 44/Sonderheft, 1998, 1:7–82. In: Meyer C et al. Prevalence of alcohol consumption, abuse and dependence in a country with high per capita consumption: findings from the German TACOS study. *Social Psychiatry and Psychiatric Epidemiology*, 2000, 35(12):539–547.
5. Hoffmeister H et al. The relationship between alcohol consumption, health indicators and mortality in the German population. *International Journal of Epidemiology*, 1999, 28(6):1066–1072.
6. Meyer C et al. Prevalence of alcohol consumption, abuse and dependence in a country with high per capita consumption: findings from the German TACOS study. *Social Psychiatry and Psychiatric Epidemiology*, 2000, 35(12):539–547.
7. John U et al. Alcohol high risk drinking, abuse and dependence among tobacco smoking medical care patients and the general population. *Drug and Alcohol Dependence*, 2003, 69(2):189–195.
8. Gmel G, Rehm J, Kuntsche, E. Binge drinking in Europe: definitions, epidemiology, and consequences. *Sucht [German Journal of Addiction Research and Practice]*, 2003, 49(2):105–116.
9. Currie C et al., eds. *Young people's health in context. Health Behaviour in School-aged Children (HBSC) study: international report from the 2001/2002 survey*. Copenhagen, WHO Health Policy for Children and Adolescents (HEPCA), 2004.
10. *Health Behaviour in School-aged Children: a WHO Cross-National Study (HBSC) International Report*. Copenhagen, World Health Organization, 2000.
11. Nelson CB, Wittchen H. DSM-IV alcohol disorders in a general population sample of adolescents and young adults. *Addiction*, 1998, 93(7):1065–1077.
12. *5% less road traffic accidents involving alcohol in 2001*. Federal Statistical Office. Press Release, 10 September 2002 (<http://www.destatis.de/presse/englisch/pm2002/p3180191.htm>, accessed 22 October 2003).
13. Lutz FU, St Kreidel H. Fatal bicycle accidents – causes and legal responsibility. *Zeitschrift für Rechtsmed [Journal of Legal Medicine]*, 1988, 101(1):1–8.
14. Stadland C, Nedopil N. Alcohol and drugs and their relation to criminal recidivism. *Fortschritte der Neurologie-Psychiatrie*, 2003, 71(12):654–660.
15. John U, Hanke M. Tobacco- and alcohol-attributable mortality and years of potential life lost in Germany. *European Journal of Public Health*, 2003, 13(3):275–277.
16. *Federal Statistical Office Germany*. Wiesbaden, 2004.
17. Britton A et al. A comparison of the alcohol-attributable mortality in four European countries. *European Journal of Epidemiology*, 2003, 18(7):643–651.
18. European health for all database. World Health Organization, Regional Office for Europe (<http://hfadb.who.dk/hfa>, accessed 26 February 2004).
19. Burger M et al. Characteristics associated with alcohol consumption in Germany. *Journal of Studies on Alcohol*, 2003, 64(2):262–269.
20. Seifert J. The development of alcohol dependence in Germany – results from a multicentre study. *Psychiatrische Praxis*, 2004, 31(2):83–89.
21. Buhringer G et al., eds. *Alcohol consumption and alcohol-related problems in Germany*. Göttingen, Hogrefe & Huber, 2002.