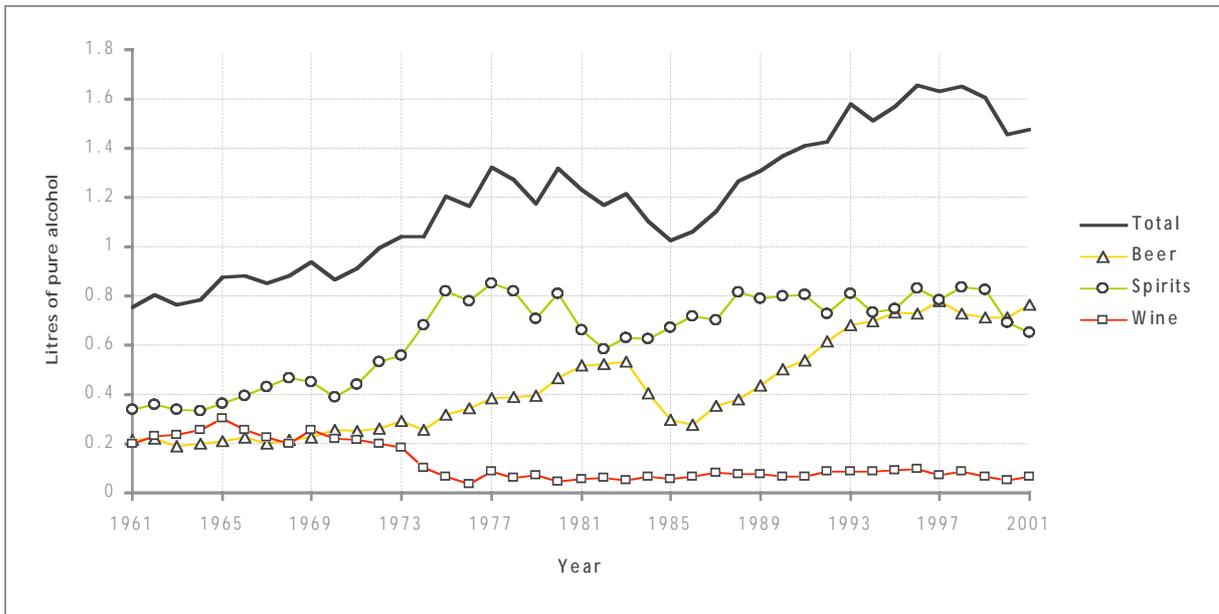


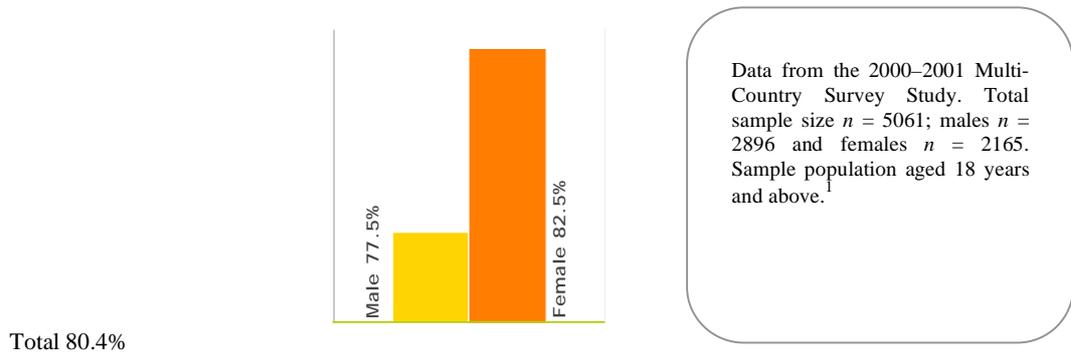
TURKEY

Recorded adult per capita consumption (age 15+)



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

Last year abstainers



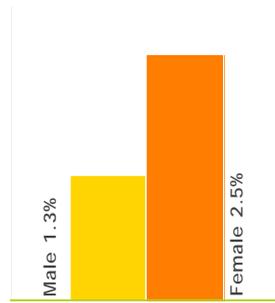
According to the 2003 World Health Survey (total sample size $n = 11\,152$, males $n = 4782$ and females $n = 6370$; sample population aged 18 years and over), the rate of lifetime abstainers was 81.1% (total), 65.9% (males) and 92.4% (females).²

According to a 1997–1998 national survey of subjects 20 years and above (males $n = 11\,080$ and females $n = 13\,708$), 91.6% of the total population sampled were non-current users of alcohol. 81.9% of men and 99.5% of women were currently not using alcohol.³

An urban survey of 1550 residents (743 women and 807 men) living in Istanbul aged 12 to 65 years found that the rate of current alcohol users was 25.6%, including 15.9% of the women and 34.5% of the men. 67% reported never having used alcohol.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 35% (males) and 55% (females). Data is for after year 1995.⁵

High risk drinkers



Total 1.7%

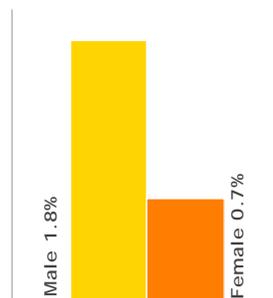
Data from the 2000–2001 Multi-Country Survey Study. Total sample size $n = 5061$; males $n = 2896$ and females $n = 2165$. Sample population aged 18 years and above. Definition used: consumption of five or more standard drinks for males and three or more standard drinks for females on a typical drinking day.¹

According to the 2003 World Health Survey (total sample size $n = 11\,152$; males $n = 4782$ and females $n = 6370$, sample population aged 18 years and over), the rate of heavy and hazardous drinking among the total population was 1.1% (total), 1.9% (males) and 0.5% (females). Heavy and hazardous drinking was defined as average consumption of 40 g or more of pure alcohol a day for men and 20 g or more of pure alcohol a day for women.²

According to the 2003 World Health Survey (total sample size $n = 1372$; males $n = 1093$ and females $n = 279$), the mean value (in grams) of pure alcohol consumed per day among drinkers was 9.3 (total), 10.5 (males) and 5.2 (females).²

An urban survey of 1550 residents (743 women and 807 men) living in Istanbul aged 12 to 65 years found that the rate of problem drinkers was 31.5% among men and 15.2% among women. Prevalence of risky drinking was 6.8%.⁴

Heavy episodic drinkers

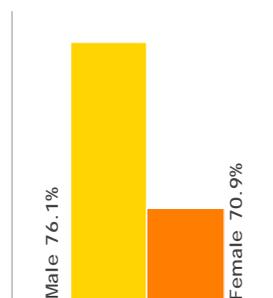


Total 1.3%

Data from the 2000–2001 Multi-Country Survey Study. Total sample size $n = 5061$; males $n = 2896$ and females $n = 2165$. Sample population aged 18 years and above. Definition used: at least once a week consumption of six or more standard drinks in one sitting.¹

According to the 2003 World Health Survey (total sample size $n = 11\,152$, males $n = 4782$ and females $n = 6370$; sample population aged 18 years and over), the rate of heavy episodic drinking among the total population was 0.9% (total), 2.1% (males) and 0.1% (females). Heavy episodic drinking was defined as at least once a week consumption of five or more standard drinks in one sitting.²

Youth drinking (last year abstainers)



Total 74.2%

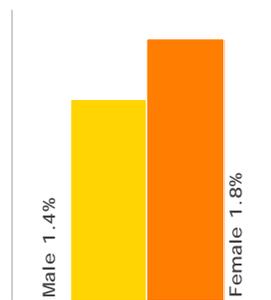
Data from the 2000–2001 Multi-Country Survey Study. Total sample size $n = 1531$; males $n = 966$ and females $n = 565$. Population aged 18 to 24 years. For the age group 15 to 19 years (subsample $n = 467$), the rate of last year abstainers was 80.1% (total), 82.6% (males) and 76.3% (females).¹

According to the 2003 World Health Survey (total sample size $n = 1532$, males $n = 573$ and females $n = 959$; sample population aged 18 to 24 years), the rate of lifetime abstainers was 83.5% (total), 70.4% (males) and 91.1% (females).²

A cross-sectional study involving the completion of a modified version of the 'Health Behavior in School-aged Children (HBSC 1997/1998) questionnaire by 4153 grade 9-11 students from 26 randomly selected high schools in Istanbul found that overall, 61% of students were experimental drinkers, and 46% of students were current drinkers. Regular drinking was reported by 6% of students. Male students were more likely than female students to report regular drinking at each grade. 19% of the students reported that they had been really drunk at least once during their lifetime.⁶

A study of 447 medical students from three medical schools in Turkey found that 53.9% of students were non-drinkers and 7.4% reported risky alcohol use.⁷

Youth drinking (heavy episodic drinkers)

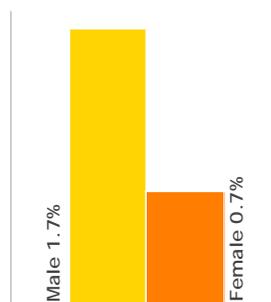


Total 1.6%

Data from the 2000–2001 Multi-Country Survey Study. Total sample size $n = 1531$; males $n = 966$ and females $n = 565$. Population aged 18 to 24 years old. For the age group 15 to 19 years (subsample $n = 467$), the rate of heavy episodic drinkers was 1.1% (total), 1.4% (males) and 0.5% (females). Definition used: at least once a week consumption of six or more standard drinks in one sitting.¹

According to the 2003 World Health Survey (total sample size $n = 1532$, males $n = 573$ and females $n = 959$; sample population aged 18 to 24 years), the rate of heavy episodic drinking among the total population was 0.8% (total), 2.1% (males) and 0.0% (females). Heavy episodic drinking was defined as at least once a week consumption of five or more standard drinks in one sitting.²

Alcohol dependence (last year)



Total 1.3%

Data from the 2000–2001 Multi-Country Survey Study. Total sample size $n = 5132$. Population aged 15 years and above. Alcohol dependence was measured using ICD-10 criteria.¹

Note: These are preliminary, early-release, unpublished data from WHO's Multi-Country Survey Study and World Health Survey made available exclusively for this report. Some estimates may change in the final analyses of these data.

A recent study carried out among 645 subjects (193 males and 452 females; aged 15 years and above) in the Edirne provincial centre found the rate of alcoholism to be 8.2% (total), 23.3% (males) and 1.8% (females). Alcoholism was measured using the Michigan Alcoholism Scanning Test (MAST). Accordingly, the prevalence of alcoholism was 12.4 times higher in men than women, 3.2 times higher in gypsies than others, 1.9 times higher in people earning income in the preceding week than the unemployed, and 3.7 times higher in individuals who had smoked more than 100 cigarettes during their life or had smoked at least one cigarette for three months or for a longer period than those who hadn't smoked cigarettes.⁸

According to a 1992 national survey of those aged 20 or older ($n = 27,408$ across 6672 households), 3% of adults (males 6.5%; females 0.2%) drank alcohol (excluding social drinkers). Drinkers were more

likely to be between 40-44 years of age, live in urban areas, live in the western Black Sea or eastern Anatolia regions, and have a higher level of education.¹⁷

According to a study carried out among 12,781 high school students in 1995 by the Ministry of Health, 27 % of students were experimental drinkers (males 64.1%; females 32.5%).

Traditional alcoholic beverages

Raki is a very popular traditional alcoholic drink in Turkey, made of raisin or grape spirit, redistilled with aniseed. It is colourless. The word *raki* is believed to derive from *razaki*, the variety of grape originally used to make *raki*. The alcohol content of *raki* is between 45% and 50%. After the liquor has been diluted, it is left to mature for one to three months in oak casks, before being filtered and bottled. *Raki* is served cold in narrow cylindrical glasses. It may be mixed with water or may be accompanied by soda water.⁹ *Raki* was produced by the government monopoly (TEKEL) until 2003, when it was partially privatised; 6 TEKEL *raki* factories remain.¹⁸

Boza is a Turkish traditional beverage made by yeast and lactic acid fermentation of cooked maize, wheat and rice flours.¹⁰

Unrecorded alcohol consumption

The unrecorded alcohol consumption in Turkey is estimated to be 2.7 litres pure alcohol per capita for population older than 15 for the years after 1995 (estimated by a group of key alcohol experts).⁵

Morbidity, health and social problems from alcohol use

In a review of 7249 autopsies in the Morgue Department of Istanbul, in 1994–1996, alcohol was detected in 21.9% of all traffic accident cases, and 56.2% of these cases were drivers.¹¹

Of the 30 485 calls reported to the Drug and Poison Information Center in Izmir, Turkey between 1993 and 2002, 996 (3.3%) cases were that of alcohol poisoning.¹²

In a study of 331 fatal poisoning cases between 1996 and 2000, alcohol was the third most common cause of fatal poisoning cases (20%). Among fatal alcohol poisoning cases, ethanol was the cause of death in 34% of cases.¹³

A study found that alcohol abuse was a factor contributing to the fatal outcome of homeless people in Istanbul between 1991 and 1995.¹⁴

The rate of alcoholic psychosis incidence per 100 000 population was 0.04 in both 1997 and 1998.¹⁵

The number of alcohol-related road traffic accidents per 100 000 population was 4.35 in 2000 and 3.59 in 2001.¹⁵

In 2002 10,048 patients were discharged from hospitals due to alcohol-related causes, accounting for 1,192,161 patient days. There were also 50 deaths.¹⁶

Country background information

Total population 2003	71 325 000	Life expectancy at birth (2002)	Male	67.9
Adult (15+)	49 927 500		Female	72.2
% under 15	30	Infant mortality rate (2003)	Male	39
Population distribution 2003 (%)			Female	36
Urban	67	Gross National Income per capita 2002	US\$	2500
Rural	33	In Turkey, approximately 99% of the population are Muslim.		

Sources: Population and Statistics Division of the United Nations Secretariat, World Bank World Development Indicators database, The World Factbook 2003, The World Health Report 2004, Ministry of Health and Hacettepe University Institute of Population Studies

References

1. Ustun TB et al. WHO Multi-Country Survey Study on Health and Health System Responsiveness 2000–2001. In: Murray CJL, Evans DB, eds. *Health Systems Performance Assessment: Debates, Methods and Empiricism*. Geneva, World Health Organization, 2003.

2. Ustun TB et al. The World Health Surveys. In: Murray CJL, Evans DB, eds. *Health Systems Performance Assessment: Debates, Methods and Empiricism*. Geneva, World Health Organization, 2003.
3. Satman I et al. Population-based study of diabetes and risk characteristics in Turkey: results of the Turkish Diabetes Epidemiology Study (TURDEP). *Diabetes Care*, 2002, 25(9):1551–1556.
4. Akvardar Y et al. Prevalence of alcohol use in Istanbul. *Psychological Reports*, 2003, 92(3 Part 2):1081–1088.
5. Alcohol per capita consumption, patterns of drinking and abstention worldwide after 1995. Appendix 2. *European Addiction Research*, 2001, 7(3):155–157.
6. Alikasifoglu M et al. Alcohol drinking behaviors among Turkish high school students. *Turkish Journal of Pediatrics*, 2004, 46(1):44–53.
7. Akvardar Y et al. Substance use in a sample of Turkish medical students. *Drug and Alcohol Dependence*, 2003, 72(2):117–121.
8. Ekuklu G et al. Alcoholism prevalence and some relate factors in Edirne, Turkey. *Yonsei Medical Journal*, 2004, 45(2):207–214.
9. [Anonymous]. *Turkish food and drink* (<http://www.aboutmarmaris.com/marmaris-food-drink/drinks.htm>, accessed 13 April 2004).
10. Hancioglu O, Karapinar M. Microflora of Boza, a traditional fermented Turkish beverage. *International Journal of Food Microbiology*, 1997, 35(3):271–274.
11. Sozen S., Tuzun B., Fincanci SK. Correlation of traffic accident and alcohol concentration. *Journal of Traffic Medicine*, 2000, 27(3–4):91–96.
12. Kalkan S et al. Acute methanol poisonings reported to the Drug and Poison Information Center in Izmir, Turkey. *Veterinary and Human Toxicology*, 2003, 45(6):334–337.
13. Elif D et al. Fatal poisonings in the Aegean region of Turkey. *Veterinary and Human Toxicology*, 2003, 45(2):106–108.
14. Altun G, Yilmaz A, Azmak D. Deaths among homeless people in Istanbul. *Forensic Science International*, 1999, 99(2):143–147.
15. European health for all database. World Health Organization, Regional Office for Europe (<http://hfabd.who.dk/hfa>, accessed 26 February 2004).
16. Health Statistics 2003, Research Planning and Coordination Council, Publication No: 617
17. Health Services Utilization Survey. Ministry of Health, Turkey, 1992
18. State Planning Organization, Sectors Profiles of Turkish Industry, February 2004