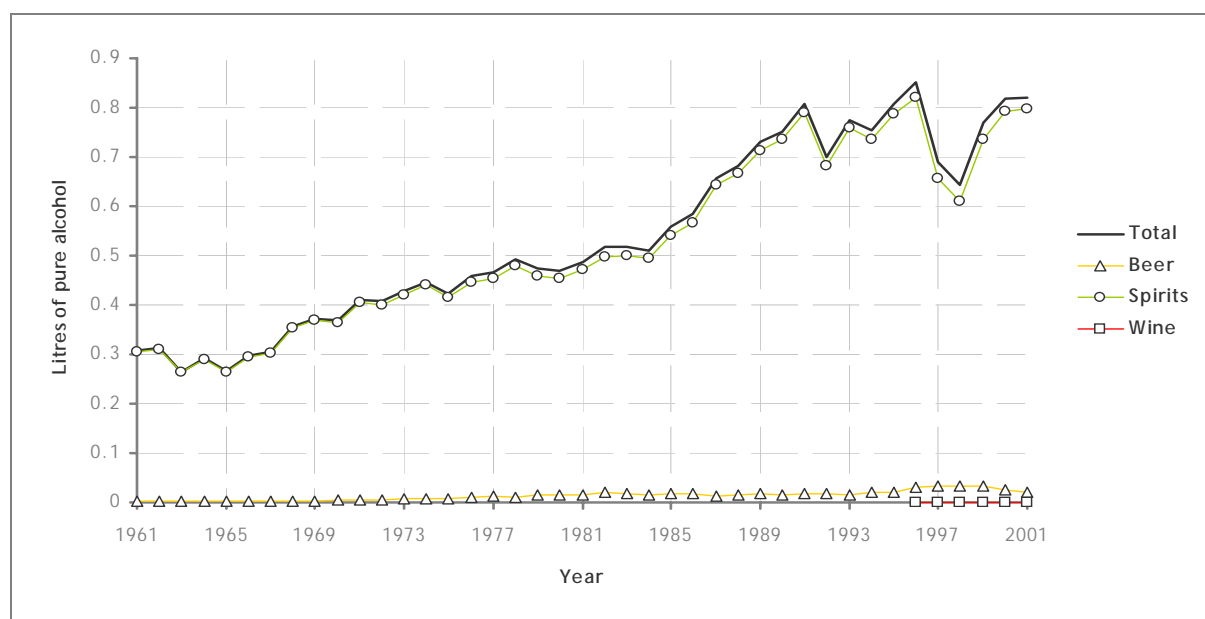


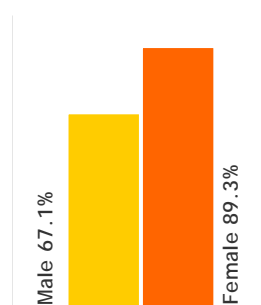
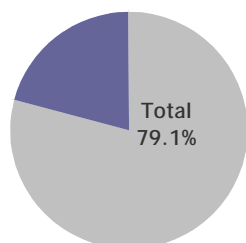
INDIA

Recorded adult per capita consumption (age 15+)



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

Last year abstainers in Andhra Pradesh



Data from the 2000–2001 Multi-Country Survey Study. Total sample size $n = 5119$; males $n = 2387$ and females $n = 2732$. Sample population aged 18 years and above.¹

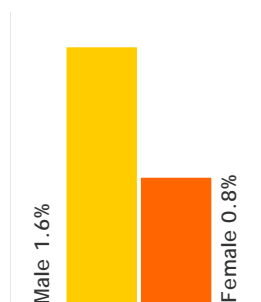
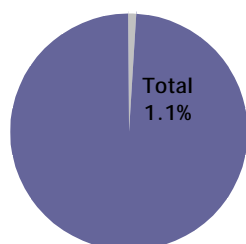
According to the 2003 World Health Survey (total sample size $n = 9540$, males $n = 4605$ and females $n = 4935$; sample population aged 18 years and above), the rate of lifetime abstainers was 89.6% (total), 80.2% (males) and 98.4% (females).²

Estimates from key alcohol experts show that the proportion of adult males and females who had been abstaining (last year before the survey) was 75% (males) and 96% (females). Data is for after year 1995.³

The 2003 National Household Survey of Alcohol and Drug Abuse of 40 697 males aged between 12 to 60 years old found that the rate of lifetime abstainers among the sampled population was 74.1%. Of the total sampled population, 21.4% were reported to be current users of alcohol (used in last 30 days).⁴

A sample of 1831 people (aged 10 years and above) interviewed in 1997–1998 in Meghalaya and upper Assam region found that the prevalence rate of alcohol use was 12.5%. Female alcohol use was low (3.2%) compared with male use (20.2%). Distribution by age documents that prevalence was approximately 23% among adults and the older age group (30 years and above) and 4.2% among adolescents and young adults (10 to 29 years).⁵

High risk drinkers in Andhra Pradesh



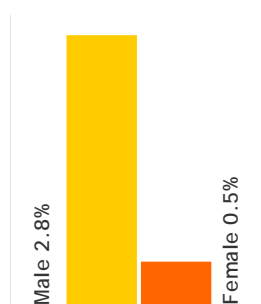
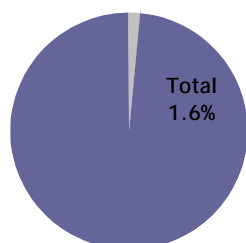
Data from the 2000–2001 Multi-Country Survey Study. Total sample size $n = 5119$; males $n = 2387$ and females $n = 2732$. Sample population aged 18 years and above. Definition used: consumption of five or more standard drinks for males and three or more standard drinks for females on a typical drinking day.¹

According to the 2003 World Health Survey (total sample size $n = 9540$, males $n = 4605$ and females $n = 4935$; sample population aged 18 years and above), the rate of heavy and hazardous drinking among the total population was 1.4% (total), 2.4% (males) and 0.4% (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

Data from regional surveys (male subjects 15 years and above) conducted in 1997 show that for the Lucknow, Mandsaur and Thoubal regions, the rate of heavy drinking among male current drinkers was 79.7%, 87.9% and 89% respectively. Heavy drinking was defined as monthly consumption of 75 ml or more of pure alcohol.⁶

According to the 2003 World Health Survey (total sample size $n = 722$; males $n = 658$ and females $n = 64$), the mean value (in grams) of pure alcohol consumed per day among drinkers was 35.9 (total), 38.3 (males) and 12.9 (females).²

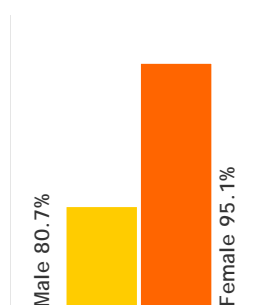
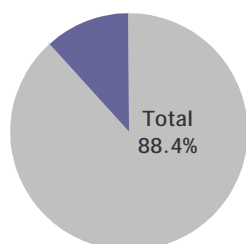
Heavy episodic drinkers in Andhra Pradesh



Data from the 2000–2001 Multi-Country Survey Study. Total sample size $n = 5119$; males $n = 2387$ and females $n = 2732$. 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 $n = 9540$, males $n = 4605$ and females $n = 4935$; sample population aged 18 years and above), the rate of heavy episodic drinking among the total population was 1.4% (total), 2.9% (males) and 0.1% (females). Heavy episodic drinking was defined as at least once a week consumption of five standard drinks in one sitting.²

Youth drinking in Andhra Pradesh (last year abstainers)

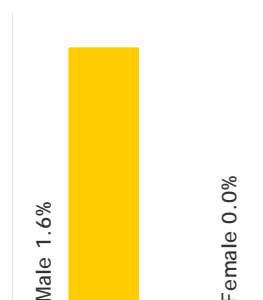
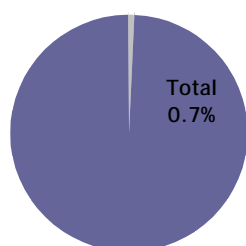


Data from the 2000–2001 Multi-Country Survey Study. Total sample size $n = 682$; males $n = 308$ and females $n = 374$. Sample population aged 18 to 24 years. For the age group 15 to 19 years (subsample $n = 210$), the rate of last year abstainers was 93.8% (total), 90.7% (males) and 96.0% (females).¹

According to the 2003 World Health Survey (total sample size $n = 1767$, males $n = 870$ and females $n = 897$, sample population aged 18 to 24 years), the rate of lifetime abstainers was 95.9% (total), 92% (males) and 99.6% (females).²

A National Family Health Survey conducted in 1998–1999 (sample size males $n = 26\,297$ and females $n = 24\,602$; age group 15 to 19 years old) found the rate of youth drinking to be 1.5% (total), 2.4% (males) and 0.6% (females).⁷

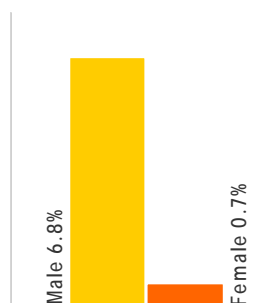
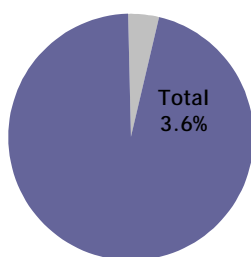
Youth drinking in Andhra Pradesh (heavy episodic drinkers)



Data from the 2000–2001 Multi-Country Survey Study. Total sample size $n = 682$; males $n = 308$ and females $n = 374$. Sample population aged 18 to 24 years old. For the age group 15 to 19 years (subsample $n = 210$), the rate of heavy episodic drinkers was 0.5% (total), 1.2% (males) and 0.0% (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 $n = 1767$, males $n = 870$ and females $n = 897$, sample population aged 18 to 24 years), the rate of heavy episodic drinkers among the total population was 0.3% (total), 0.7% (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 in Andhra Pradesh (last year)



Data from the 2000–2001 Multi-Country Survey Study. Total sample size $n = 5167$. Population aged 15 years and above. Alcohol dependence was measured using ICD-10 criteria.¹

According to The Hindustan Times, it is estimated that around 1% of the population can be classified as being alcohol-dependent. This translates into about five million people dependent on alcohol.⁸

Note: The Multi-Country Survey Study was not nationally representative and was carried out only in Andhra Pradesh. The World Health Survey was carried out in six states in India spread across the country (Assam, West Bengal, Maharashtra, Karnataka, Rajasthan and Uttar Pradesh) based on specified stratification criteria and is fairly representative of the country. 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.

Traditional alcoholic beverages

Country liquor is a distilled alcoholic beverage made from locally available cheap raw material such as sugarcane, rice, palm, coconut and cheap grains, with an alcohol content between 25% and 45%. Common varieties of country liquor are *arrack* (from paddy or wheat), *desi sharab* and *tari*. Illicit liquor is mostly produced clandestinely in small production units with raw materials similar to that used for country liquor. With no legal quality control checks on them, alcohol concentration of illicit liquor varies (up to 56%). Adulteration is quite frequent, industrial methylated spirit being a common adulterant, which occasionally causes incidents like mass poisoning with consumers losing their lives or suffering irreversible damage to the eyes. Cheaper than licensed

country liquor, illicit liquor is popular among the poorer sections of the population. In many parts of India, illicit production of liquor and its marketing is a cottage industry with each village having one or two units operating illegally.⁶

Toddy is an alcoholic drink made by fermenting the sap of a coconut palm. It is white and sweet with a characteristic flavour. It has between 4% and 6% alcohol and has a shelf life of about 24 hours.⁹ *Toddy* is popular among the lower socioeconomic groups in south India.¹⁰

Besides these, home production for self-consumption is also common in some parts of India. Home fermentation and distillation is also common in several tribal areas in the country, especially the north-eastern region of the country.¹¹

The use of alcohol is widespread in the villages of India. *Toddy* is brewed all along the coast as are rice beers like *handia* and *chhung* in the hills and the tribal belts. The area of Arunachal Pradesh boasts a rice wine called *apong*. Distillates, however, are also common - from *arrack* to *desi* to the *mahua* used in the tribal belts. Contrary to *toddy* and the rice brews which are not considered very damaging to the health – being natural brews and lightly fermented – the distillates are strong alcoholic drinks.¹¹

Jack-fruit wine is an alcoholic beverage made by ethnic groups in the eastern hilly areas of India. As its name suggests, it is produced from the pulp of jack-fruit (*Artocarpus heterophyllus*). Ripe fruit is peeled and the skin discarded. The seeds are removed and the pulp soaked in water. Using bamboo baskets, the pulp is ground to extract the juice, which is collected in earthenware pots. A little water is added to the pots along with fermented wine inoculum from a previous fermentation. The pots are covered with banana leaves and allowed to ferment at 18 to 30°C for about one week. The liquid is then decanted and drunk. During fermentation, the pH of the wine reaches a value of 3.5 to 3.8, suggesting that an acidic fermentation takes place at the same time as the alcoholic fermentation. Final alcohol content is about 7% to 8% within a fortnight.¹²

In Bangalore, the following types of alcoholic beverages are consumed most often: **Arrack**, a traditional drink produced (both legally and illegally) by distilling fermented molasses, raw brown sugar, palm wine, rice, or palm sugar; it has an alcohol content ranging from 20% to 40%. **Palm wine**, another traditional alcoholic beverage produced from either the coconut tree or other palm trees, is also consumed.¹³

Daru, a drink distilled from the flowers of the mahwa tree and which ranges in alcohol content from 20% to 40% is consumed among the Rajputs of north-western India.¹³

Zu and **Rohi** are locally brewed alcoholic beverages found in Nagaland (10 to 20% ethanol content).¹⁴

Unrecorded alcohol consumption

The unrecorded alcohol consumption in India is estimated to be 1.7 litres pure alcohol per capita for population older than 15 for the years after 1995 (estimated by a group of key alcohol experts).³

Morbidity, health and social problems from alcohol use

Industry association sources estimate that 15% to 20% of absenteeism and 40% of accidents at work are due to alcohol.¹⁵ Alcohol use among industrial workers is increasing and this has led to an increase in alcohol-related sickness and absenteeism. The annual loss due to alcohol-related problems in work places is between Rs 70 000 to 80 000 million.¹⁴

A study looking at the prevalence and associations of hazardous drinking in a male industrial worker population in India found that hazardous drinking was significantly associated with severe health problems, such as head injuries and hospitalizations.¹⁶

The country's road research institute estimates that 25% of road accidents were alcohol-related, one third of the drivers on the highway were under the influence of alcohol and 20% of accident-related head injury victims seen in emergency rooms of hospitals have consumed alcohol prior to the accident.¹⁷

Alcohol involvement is known to be present among 15% to 20% of traumatic brain injuries at the time of injury.¹⁸

Alcohol-related problems made up 17.6% of the case load of psychiatric emergencies in an Indian General Hospital.¹⁹

In a study looking at risk factors for suicide, it was found that the prevalence of alcohol use disorders among people who committed suicide in the city of Madras was 34%.²⁰

The percentage of alcohol-related court cases in a police station in Kohima, Nagaland increased from 78% in 1995 to 88.8% in 1997.¹⁴

In India household expenditure on alcohol varies between 3% to 45% of income. Alcohol abuse is one of the main killers of young men in India today. However, its real impact is on the social and family dynamics that underlie its communities. Domestic violence and an exacerbation of poverty have made alcohol abuse the single most important problem for women in India.²¹ With one in three people in India falling below the poverty line, the economic consequences of expenditures on alcohol attain special significance. Besides money spent on alcohol, a heavy drinker also suffers other adverse economic effects. These include reduced wages (because of missed work and lowered efficiency on the job), increased medical expenses for illness and accidents, legal cost of drink-related offences, and decreased eligibility of loans.²²

In a 1997 study comparing two groups of families within the same community in Delhi, India (Group A having at least one adult consuming alcoholic drinks at least three times per week in the last month and group B having no adult consuming more than one drink in the last month), it was found that Group A, on an average, spent almost 14 times more on alcohol per month compared with group B. A larger proportion of families in group A had significant debt compared with group B. The implications of this are towards fewer financial resources for food and education of children and fewer resources for purchasing daily living consumables. The more heavily drinking group A was more likely to report major illnesses or injuries during the past one year and was more likely to require medical treatment.²³

In a study of 180 women seeking prenatal care in rural South India, it was found that 20% of the women reported domestic violence and 94.5% of these women identified their husbands as the aggressors. Husband's alcohol use was a significant risk factor for domestic violence.²⁴ The role of alcohol in domestic violence is also cited in another Indian study which found that 33% of spouse-abusing husbands were using alcohol. Of these 15% were occasional, 45% frequent and about 40% were daily users of alcohol. More than half of the spousal abuse took place during the period of intoxication.¹⁴

Country background information

Total population 2003	1 065 462 000	Life expectancy at birth (2002)	Male	60.1
Adult (15+)	713 859 540		Female	62.0
% under 15	33	Probability of dying under age 5 per 1000 (2002)	Male	87
Population distribution 2001 (%)			Female	95
Urban	28	Gross National Income per capita 2002	US\$	480
Rural	72			

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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