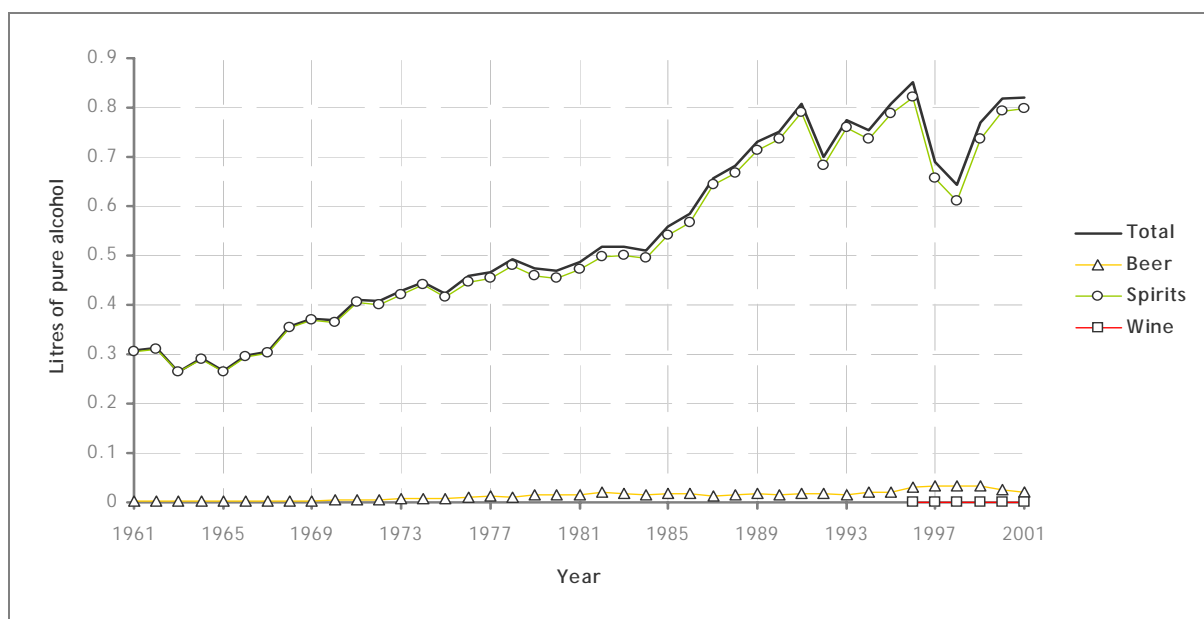


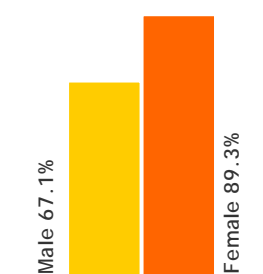
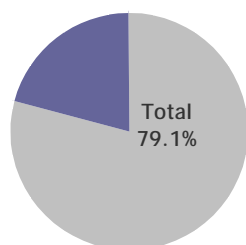
# INDIA

## 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.<sup>1</sup>

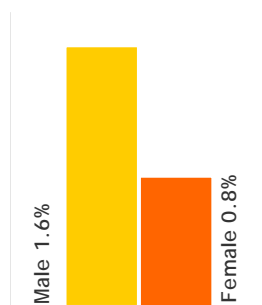
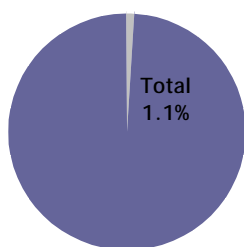
According to the 2003 World Health Survey (total sample size  $n = 9540$ , males  $n = 4605$  and females  $n = 4935$ ; sample population aged 18 years and above), the rate of lifetime abstainers was 89.6% (total), 80.2% (males) and 98.4% (females).<sup>2</sup>

Estimates from key alcohol experts show that the proportion of adult males and females who had been abstaining (last year before the survey) was 75% (males) and 96% (females). Data is for after year 1995.<sup>3</sup>

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).<sup>4</sup>

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).<sup>5</sup>

## High risk drinkers in Andhra Pradesh



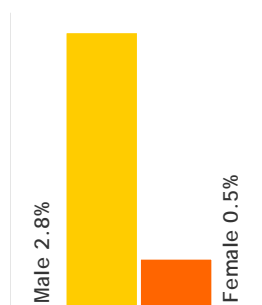
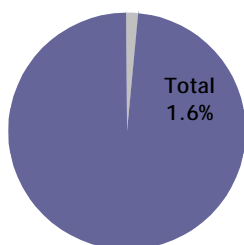
Data from the 2000–2001 Multi-Country Survey Study. Total sample size  $n = 5119$ ; males  $n = 2387$  and females  $n = 2732$ . Sample population aged 18 years and above. Definition used: consumption of five or more standard drinks for males and three or more standard drinks for females on a typical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

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.<sup>2</sup>

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.<sup>6</sup>

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).<sup>2</sup>

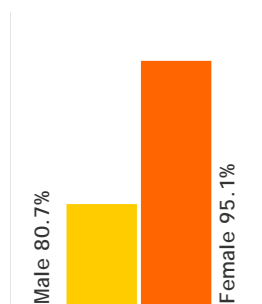
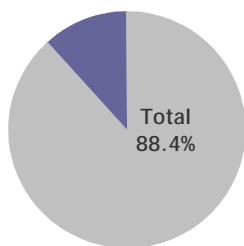
## Heavy episodic drinkers in Andhra Pradesh



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.<sup>1</sup>

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.<sup>2</sup>

## Youth drinking in Andhra Pradesh (last year abstainers)

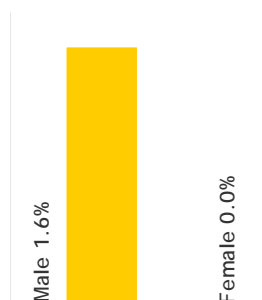
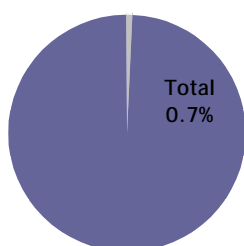


Data from the 2000–2001 Multi-Country Survey Study. Total sample size  $n = 682$ ; males  $n = 308$  and females  $n = 374$ . Sample population aged 18 to 24 years. For the age group 15 to 19 years (subsample  $n = 210$ ), the rate of last year abstainers was 93.8% (total), 90.7% (males) and 96.0% (females).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

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).<sup>2</sup>

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).<sup>7</sup>

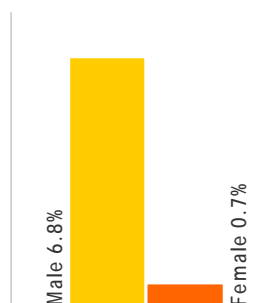
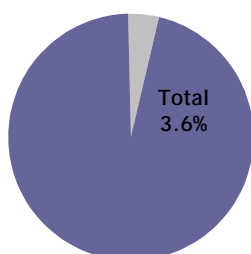
### Youth drinking in Andhra Pradesh (heavy episodic drinkers)



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.<sup>1</sup>

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.<sup>2</sup>

### 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.<sup>1</sup>

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.<sup>8</sup>

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.<sup>6</sup>

**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.<sup>9</sup> *Toddy* is popular among the lower socioeconomic groups in south India.<sup>10</sup>

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.<sup>11</sup>

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.<sup>11</sup>

**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.<sup>12</sup>

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.<sup>13</sup>

**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.<sup>13</sup>

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

## 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).<sup>3</sup>

## 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.<sup>15</sup> 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.<sup>14</sup>

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.<sup>16</sup>

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.<sup>17</sup>

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

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

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%.<sup>20</sup>

The percentage of alcohol-related court cases in a police station in Kohima, Nagaland increased from 78% in 1995 to 88.8% in 1997.<sup>14</sup>

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.<sup>21</sup> 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.<sup>22</sup>

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.<sup>23</sup>

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.<sup>24</sup> 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.<sup>14</sup>

### Country background information

<b>Total population 2003</b>	1 065 462 000	<b>Life expectancy at birth (2002)</b>	Male	60.1
Adult (15+)	713 859 540		Female	62.0
% under 15	33	<b>Probability of dying under age 5 per 1000 (2002)</b>	Male	87
<b>Population distribution 2001 (%)</b>			Female	95
Urban	28	<b>Gross National Income per capita 2002</b>	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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## INDIA

<b>1</b>	<b>Definition of an alcoholic beverage (minimum volume %)</b>	<b>4</b>
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<b>2</b>	<b>Price of alcoholic beverages</b>	
	<i>quantity (ml)</i>	<i>(Rupees)</i>
	Average locally produced or most consumed beer	650 50
	Average and most consumed table wine	750 300–1800
	Average locally produced or most consumed spirits (Indian Made Foreign Liquor-IMFL)	750 200–600
	If it exists, other special or different local alcoholic beverage, (Indian Made Country Liquor-IMC 29–36% alc. vol)	750 80
	Average Non-alcoholic soft drink	300 10
2 a	Change in price during the last five years	Increased by 5%

<b>3</b>	<b>Taxation of alcoholic beverages</b>	
3 a	General sales tax or VAT (Value Added Tax)	Sales tax
3 b	Percentage of the tax	20% and above
3 c	Duty-paid, excise or tax stamps or labels	Yes
3 d	Level of alcohol tax (percentage of the retail or selling price)	
	<i>Beer</i> (approx. 4.5% alcohol by volume)	150%
	<i>Wine</i> (approx. 12% alcohol by volume)	50%
	<i>Spirits</i> (approx. 40% alcohol by volume)	250% and above

<b>4</b>	<b>Drink-driving legislation</b>	
4 a	Maximum legal blood alcohol concentration (BAC) when driving a car	30 mg%
4 b	Frequency of Random Roadside Breath Testing (RBT) of drivers	Occasional
4 c	Geographical distribution of RBT use	Highways/ Expressways

5 Restrictions on consumption and availability		
5 a	Legal age limits for buying alcohol	
	<i>On-premise (years)</i>	<i>Off-licence (years)</i>
Beer	25	25
Wine	25	25
Spirits	25	25

5 b	Restrictions on alcohol consumption in different public domains	
Health care establishments	Legally forbidden	
Educational buildings	Legally forbidden	
Government offices	Legally forbidden	
Public transport	Legally forbidden	
Parks, streets etc.	Legally forbidden	
Sporting events	Legally forbidden	
Leisure events (concerts etc.)	Permitted with licence	
Workplaces	Legally forbidden	

5 c	Level of state control on production and sale of beer, wine and spirits		
State monopoly (full state control)			
	<i>Beer</i>	<i>Wine</i>	<i>Spirits</i>
Production	No	No	No
Retail sale	No	No	No
Licence is required (partial state control)			
	<i>Beer</i>	<i>Wine</i>	<i>Spirits</i>
Production	Yes	Yes	Yes
Retail sale	Yes	Yes	Yes

5 d	Existing restrictions for the off-licence sale of beer, wine and spirits		
	<i>Beer</i>	<i>Wine</i>	<i>Spirits</i>
Hours of sale are restricted	Yes	Yes	Yes
Days of sale are restricted	Dry days are Notified	Dry days are Notified	Dry days are Notified
Places of sale are restricted	Yes	Yes	Yes
Density of outlets is restricted	Permission is given on demand	Permission is given on demand	Permission is given on demand

5 e	Level of enforcement of existing sales restrictions	Fully enforced
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<b>6 Alcohol advertising and health warnings</b>			
6 a	Alcohol advertising allowed and exists in some form	No	
6 b	Health warnings legally required on the advertisement	NA	
6 c	Health warnings of any kind legally required on the <i>containers/bottles</i> of alcoholic beverages	Yes	
6 d	Regulation of alcohol advertising in different media		
	<i>Type of Media</i>	<i>Beer</i>	<i>Wine</i>
	National TV	Legally forbidden	Legally forbidden
	Cable TV	Legally forbidden	Legally forbidden
	National radio	Legally forbidden	Legally forbidden
	Local radio	Legally forbidden	Legally forbidden
	Newspapers/magazines	Legally forbidden	Legally forbidden
	Billboards	Legally forbidden	Legally forbidden
	Points of sale	Legally forbidden	Legally forbidden
	Cinema	Legally forbidden	Legally forbidden

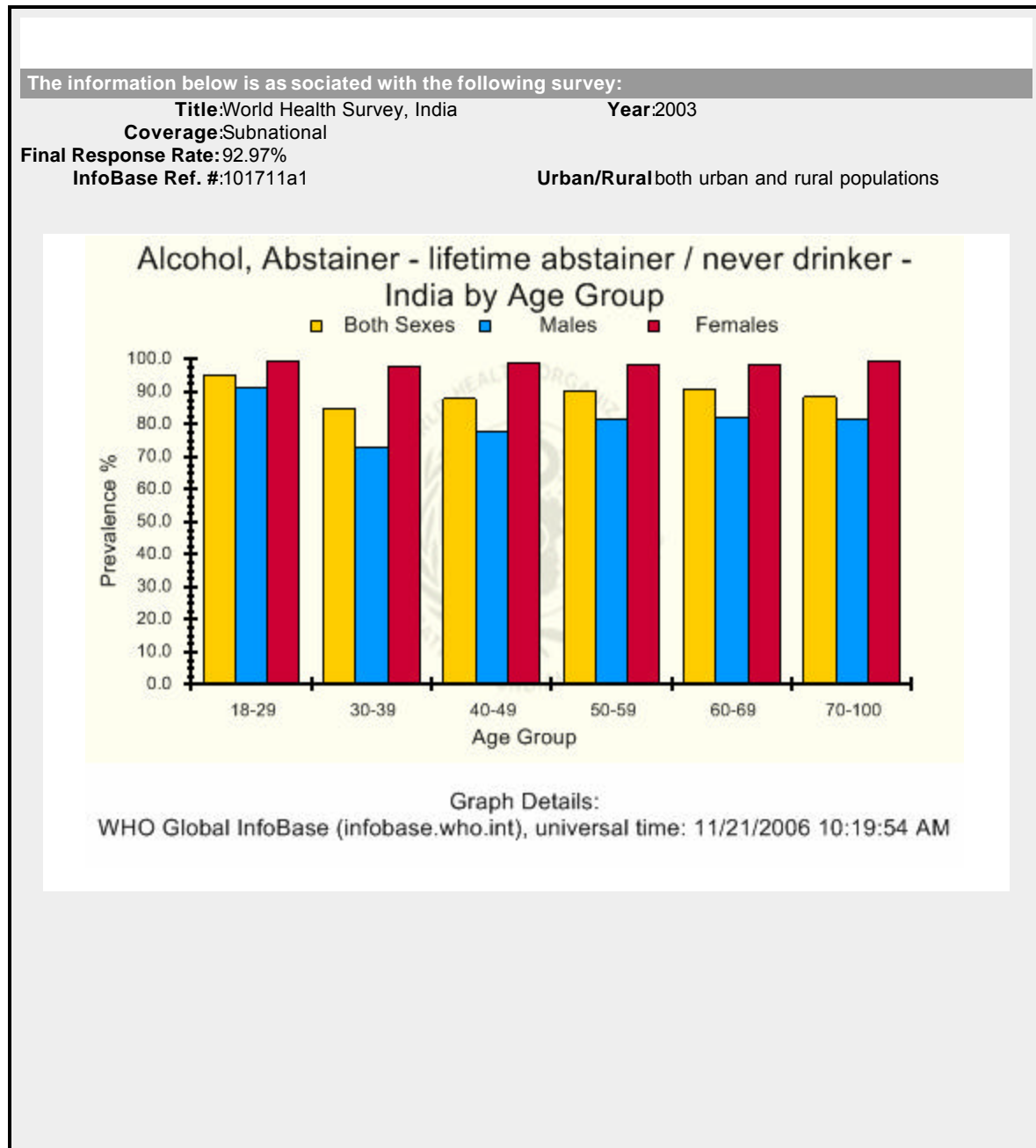
<b>7 Alcohol sponsorship and promotion</b>			
		<i>Beer</i>	<i>Wine</i>
	Alcohol industry sponsorship of sporting events	Legally forbidden	Legally forbidden
	Alcohol industry sponsorship of youth events	Legally forbidden	Legally forbidden
	Sales promotion in the form of serving <i>free alcohol</i> (complying with existing age and other sales restrictions)	Legally forbidden	Legally forbidden
	Sales promotion in the form of <i>sales below cost</i> e.g. two for one, happy hour (complying with existing age and other sales restrictions)	Yes	Yes

<b>8 Level of enforcement of existing advertising and sponsorship restrictions indicated in the two previous questions</b>	
Advertising	Fully enforced
Sponsorship	Fully enforced

## WHO Global InfoBase: Data from the World Health Survey

### India

#### Alcohol, Abstainer:



## India

### Alcohol Abstainer Definitions

**Definition:** lifetime abstainer / never drinker

**Alcohol Type:** alcohol (general)

Males			
Age Group <sup>?</sup>	Sample Size (n) <sup>?</sup>	Prevalence %	95 % CI <sup>?</sup>
18-29	1,382	91.4	88-94
30-39	1,115	73.2	69-77
40-49	898	77.6	73-82
50-59	550	81.4	76-87
60-69	406	82.3	76-88
70+	249	81.4	75-88
<b>18+</b>	<b>4,600</b>	<b>83.2</b>	<b>81-85</b>

Females			
Age Group <sup>?</sup>	Sample Size (n) <sup>?</sup>	Prevalence %	95 % CI <sup>?</sup>
18-29	1,614	99.5	99-100
30-39	1,300	98.0	97-99
40-49	799	98.8	98-100
50-59	594	98.6	98-100
60-69	421	98.5	97-100
70+	204	99.2	98-100
<b>18+</b>	<b>4,932</b>	<b>98.9</b>	<b>98-99</b>

Both Sexes			
Age Group <sup>?</sup>	Sample Size (n) <sup>?</sup>	Prevalence %	95 % CI <sup>?</sup>
18-29	2,996	95.0	93-97
30-39	2,415	85.1	83-87
40-49	1,697	88.0	85-91
50-59	1,144	90.2	87-93
60-69	827	90.7	87-94
70+	453	88.4	84-92
<b>18+</b>	<b>9,532</b>	<b>90.6</b>	<b>89-92</b>

#### Notes:

1. Lines in **bold** indicate the value represents a "Total Age Group"
2. The "+" indicates the age range goes to the upper boundary
3. Total age group values do not appear on graphs as they are not directly comparable to age specific values.
4. If you find information that does not appear correct, please direct your feedback to us using the form below.

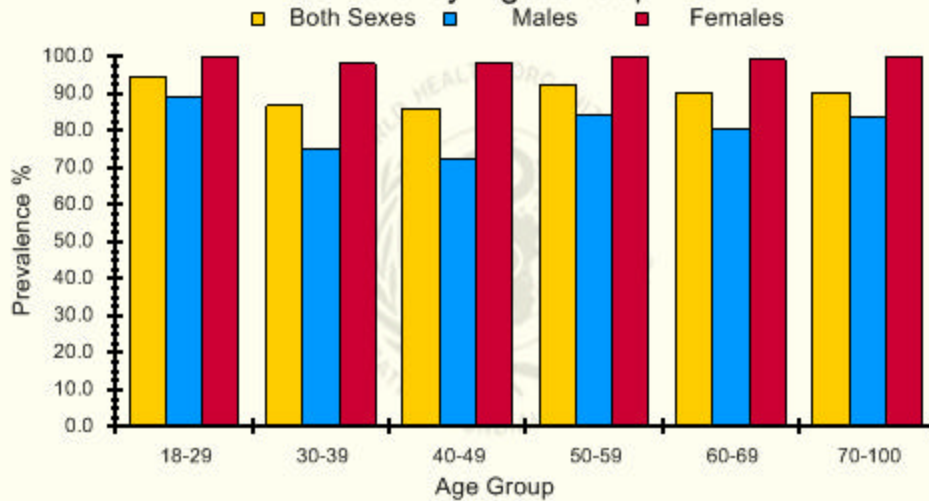
The information below is associated with the following survey:

**Title:**World Health Survey, India  
**Coverage:**subnational  
**Final Response Rate:**90.77%  
**InfoBase Ref. #:**101711c1

**Year:**2003

**Urban/Rural:**urban

### Alcohol, Abstainer - lifetime abstainer / never drinker - India by Age Group



Graph Details:

WHO Global InfoBase (infobase.who.int), universal time: 11/21/2006 10:19:56 AM

[\[+\] click to enlarge graph](#)

## India

### Alcohol Abstainer Definitions

**Definition:** lifetime abstainer / never drinker

**Alcohol Type:** alcohol (general)

Males			
Age Group ?	Sample Size (n) ?	Prevalence %	95 % CI ?
18-29	374	89.3	86-93
30-39	300	75.2	69-81
40-49	249	72.6	64-81
50-59	140	84.1	77-91
60-69	111	80.3	71-89
70+	72	83.8	73-94
<b>18+</b>	<b>1,246</b>	<b>81.6</b>	<b>78-85</b>

<b>Females</b>			
Age Group ?	Sample Size (n) ?	Prevalence %	95 % CI ?
18-29	428	100.0	100-100
30-39	401	98.2	97-100
40-49	259	98.6	97-100
50-59	142	100.0	100-100
60-69	126	99.3	98-101
70+	60	100.0	100-100
<b>18+</b>	<b>1,416</b>	<b>99.3</b>	<b>99-100</b>

<b>Both Sexes</b>			
Age Group ?	Sample Size (n) ?	Prevalence %	95 % CI ?
18-29	802	94.4	93-96
30-39	701	86.9	84-90
40-49	508	86.1	82-90
50-59	282	92.7	89-96
60-69	237	90.3	86-95
70+	132	90.5	84-97
<b>18+</b>	<b>2,662</b>	<b>90.4</b>	<b>89-92</b>

**Notes:**

1. Lines in **bold** indicate the value represents a "Total Age Group"
2. The "+" indicates the age range goes to the upper boundary
3. Total age group values do not appear on graphs as they are not directly comparable to age specific values.
4. If you find information that does not appear correct, please direct your feedback to us using the form below.

The information below is associated with the following survey:

Title: World Health Survey, India

Year: 2003

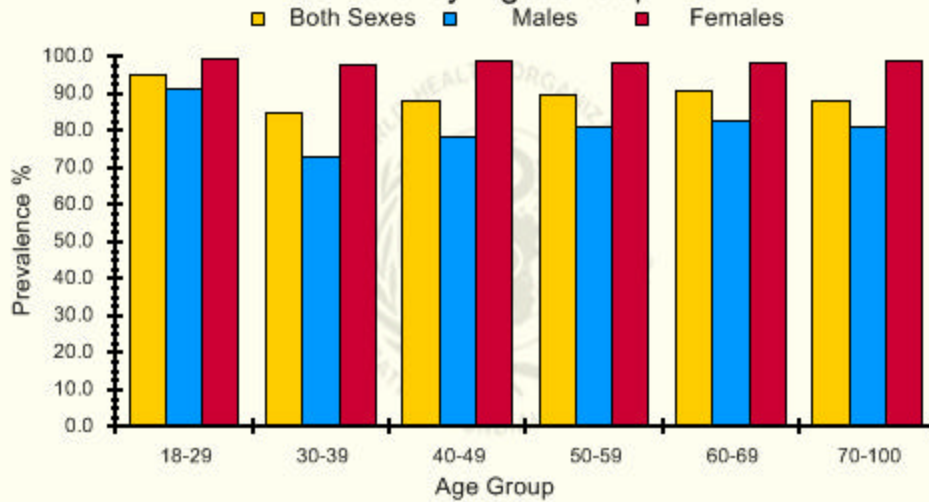
Coverage: subnational

Final Response Rate: 93.82%

InfoBase Ref. #: 101711c2

Urban/Rural: rural

### Alcohol, Abstainer - lifetime abstainer / never drinker - India by Age Group



Graph Details:

WHO Global InfoBase (infobase.who.int), universal time: 11/21/2006 10:19:57 AM

## India

### Alcohol Abstainer Definitions

Definition: lifetime abstainer / never drinker

Alcohol Type: alcohol (general)

Males			
Age Group <sup>?</sup>	Sample Size (n) <sup>?</sup>	Prevalence %	95 % CI <sup>?</sup>
18-29	1,008	91.6	88-95
30-39	815	73.0	69-77
40-49	649	78.2	73-83
50-59	410	81.1	75-87
60-69	295	82.6	76-89
70+	177	81.1	74-88
<b>18+</b>	<b>3,354</b>	<b>83.3</b>	<b>81-86</b>

<b>Females</b>			
Age Group ?	Sample Size (n) ?	Prevalence %	95 % CI ?
18-29	1,186	99.5	99-100
30-39	899	98.0	97-99
40-49	540	98.8	98-100
50-59	452	98.5	97-100
60-69	295	98.4	97-100
70+	144	99.1	98-100
<b>18+</b>	<b>3,516</b>	<b>98.8</b>	<b>98-99</b>

<b>Both Sexes</b>			
Age Group ?	Sample Size (n) ?	Prevalence %	95 % CI ?
18-29	2,194	95.1	93-97
30-39	1,714	84.8	82-87
40-49	1,189	88.2	85-91
50-59	862	89.9	87-93
60-69	590	90.7	87-94
70+	321	88.2	84-93
<b>18+</b>	<b>6,870</b>	<b>90.6</b>	<b>89-92</b>

**Notes:**

1. Lines in **bold** indicate the value represents a "Total Age Group"
2. The "+" indicates the age range goes to the upper boundary
3. Total age group values do not appear on graphs as they are not directly comparable to age specific values.
4. If you find information that does not appear correct, please direct your feedback to us using the form below.

## Alcohol, Consumer:

The information below is associated with the following survey:

**Title:** National Family Health Survey (NFHS-2), 1998-99:

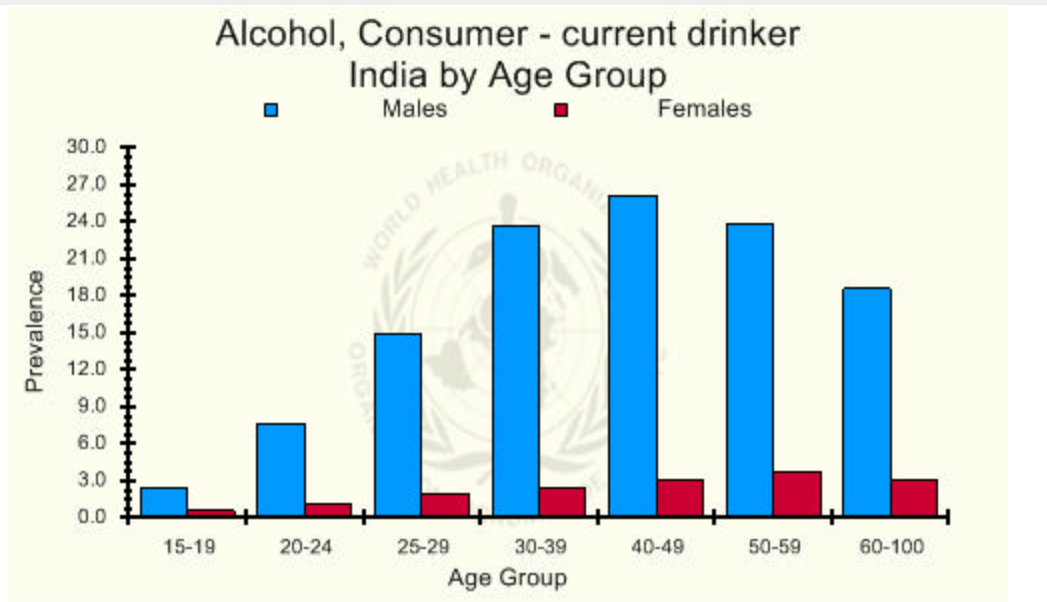
**Year:** 1999

India

**Coverage:** National

**InfoBase Ref. #:** 101033a1

**Urban/Rural:** both urban and rural populations



Graph Details:

WHO Global InfoBase (infobase.who.int), universal time: 11/21/2006 10:20:26 AM

## India

### Alcohol Consumer Definition

**Definition:** current drinker

**Alcohol Type:** alcohol (general)

Males			
Age Group	Sample Size (n)	Prevalence (%)	95 % CI
15-19	26,297	2.4	-
20-24	21,461	7.7	-
25-29	19,641	14.9	-
30-39	33,554	23.6	-
40-49	24,151	26.1	-
50-59	15,195	23.9	-
60+	20,571	18.6	-
<b>15+</b>	<b>160,871</b>	<b>16.7</b>	<b>16.5-16.9</b>

<b>Females</b>			
<b>Age Group</b>	<b>Sample Size (n)</b>	<b>Prevalence (%)</b>	<b>95 % CI</b>
15-19	24,602	0.6	-
20-24	22,288	1.1	-
25-29	20,761	2.0	-
30-39	32,127	2.5	-
40-49	21,253	3.1	-
50-59	15,108	3.8	-
60+	18,588	3.1	-
<b>15+</b>	<b>154,726</b>	<b>2.2</b>	<b>2.1-2.3</b>

**Notes:**

1. Lines in **bold** indicate the value represents a "Total Age Group"
2. The "+" indicates the age range goes to the upper boundary
3. Total age group values do not appear on graphs as they are not directly comparable to age specific values.
4. If you find information that does not appear correct, please direct your feedback to us using the form below.

The information below is associated with the following survey:

Title: National Household Survey of Drug and Alcohol Abuse 2003 (NHSDAA)

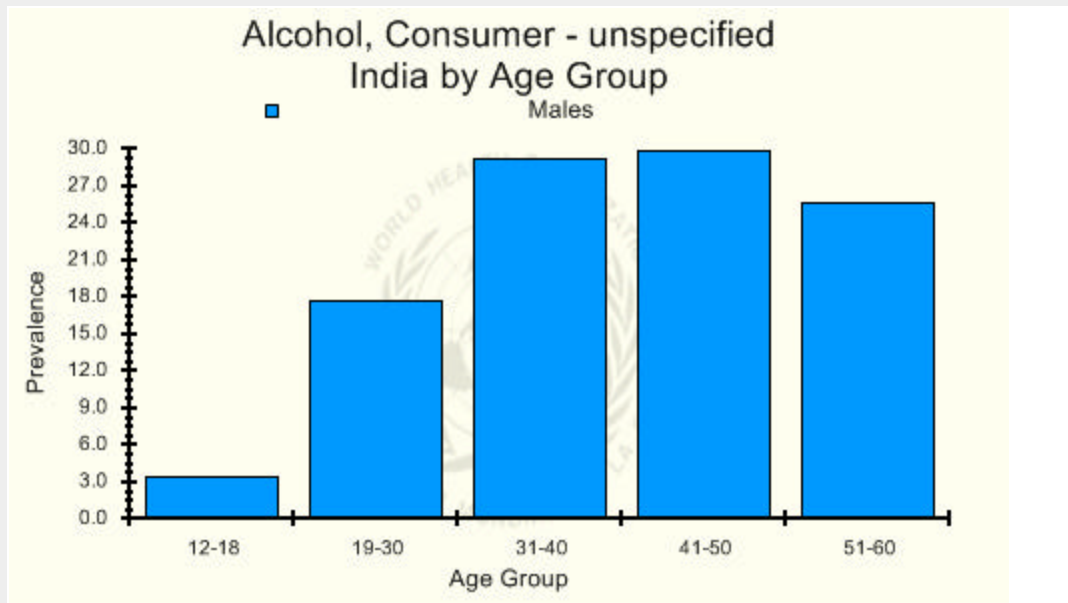
Year: 2003

Coverage: National

Final Response Rate: 82.9%

InfoBase Ref. #: 101566a1

Urban/Rural: both urban and rural populations



Graph Details:

WHO Global InfoBase (infobase.who.int), universal time: 11/21/2006 10:20:27 AM

## India

### Alcohol Consumer Definition

Definition: Unspecified

Alcohol Type: alcohol (general)

Age Group	Sample Size (n)	Prevalence (%)
12-18	8,587	3.4
19-30	13,216	17.7
31-40	7,805	29.2
41-50	5,920	29.9
51-60	5,168	25.6

### Notes:

1. Lines in **bold** indicate the value represents a "Total Age Group"
2. The "+" indicates the age range goes to the upper boundary
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## India: Published Studies

A collective review shows that nearly 30% of adult men and less than 5% of women consume alcohol giving a male to female ratio of 6:1. Alcohol use is higher in poorer communities. The average age of initiation has reduced from 28 years during the 80s to 20 years in recent years. The amount of drinking increases with age and duration. The commonest place of drinking is pubs / bars and retail outlets (60 – 70%) in urban areas, while in rural areas it is the local outlets selling alcohol. Based on the available data, alcohol accounts for 15-20% of premature mortality in adult men. Nearly one third of nighttime road traffic injuries and deaths can be attributed to alcohol. 25% of those hospitalized with stroke had long term alcohol use. In the Indian region, a significant relationship has been established between alcohol and risky sexual behaviour leading to HIV/AIDS and other STDs. There are many barriers to address the harms from alcohol. (Gururaj G., Rao GN, Bengal V, Murthy P. **Alcohol use and public health: the Indian Perspective**. National Institute of Mental Health and Neurosciences Bangalore, India, for World Health Organization, 2006.)

An ethnographic study of the communities in Sundarban Delta, West Bengal, found that drinking is an integral feature of the cultural landscape. Locally brewed alcohol and so-called Indian-made foreign liquor (IMFL) are consumed in these villages. Reported effects of problem drinking included social disturbances, family discord, and domestic violence. Increasing problem alcohol use was attributed by villagers to social changes resulting from development, such as improved transportation and communications. The findings illustrate the limitations of western clinical models of dependence and the importance of clarifying sociocultural conditions that define locally acceptable and problem use. (Chowdhury AN, Ramakrishna J, Chakraborty AK, Weiss MG. **Cultural context and impact of alcohol use in the Sundarban Delta, West Bengal, India**. Social Science and Medicine. 2006 Aug;63(3):722-31)

In a survey of 28,507 individuals stratified by rural, town, slum and urban areas in Bangalore showed that alcohol consumption is a predominantly a male phenomenon and 23.7% of the total study population reported to have consumed alcohol in the last one year against 1.5% of females. In the 16-60 year age group it was 32.6% among males. Within the same age group of males, 29.1% of those in rural areas and 38.7% of those in towns consumed alcohol. 2.3% of females in towns and 1.8% in rural areas were users. Nearly a third of users were regular users. Whisky and arrack were the first choices for consumption for 89%. Alcohol users were found to be at approximately three times the risk (OR 2.8) of suffering from a health problem compared non-users. A disproportionately greater (7.8% vs. 1.6%) of alcohol users suffered from intentional or unintentional injuries during preceding 12 months. They also had problems at home and work. This study estimated that Rs. 244 billion was spent yearly in India to manage consequences of alcohol use. **Burden and socio-economic impact of alcohol: Bangalore Study.** World Health Organization Regional Office for South-East Asia 2006

In an epidemiological study on a sample of 2,264 individuals (male, 1,033; female, 1,231) aged 15 years and older in 2002-2003 in a tea garden population of Assam, the total age-adjusted prevalence of alcohol consumption was 59.2% (male, 69.3%; female, 54%). More than half of the respondents (54.7%) were multiple users of alcohol and tobacco. Prevalence of alcohol consumption in the 15-24 year age group was 32.2% Socio-demographic correlates such as education, occupation, and marital status were important predictors of substance uses irrespective of sex. Users of alcohol and tobacco were mostly illiterate, manual workers, and widows/widowers. (Medhi GK, Hazarika NC, Mahanta J **Correlates of alcohol consumption and tobacco use among tea industry workers of Assam.** Journal of Substance Use and Misuse. 2006;41(5):691-706.)

Prevalence of current alcohol use range from 7% in Gujarat (officially under prohibition) to 75% in Arunachal Pradesh. Prevalence of in women has been estimated at less than 5% but higher in north-eastern states. Beer accounts for less than 5% of consumption. The Constituent Assembly of independent India included prohibition as a one of the directive principles of state policy. Alcohol use for the majority is stigmatized. No prescribed patterns of behaviour exist to regulate drinking

behaviours. The signature pattern is one of heavy drinking. Alcohol related problems account for over a fifth of hospital admissions. There has been a significant drop in lowering of age at initiation of drinking. The largest expansion of sales is seen in southern India, visibly focused on the non-traditional segment of urban women and young people. The current official responses focus exclusively in supply reduction (prohibition-centric) and tertiary prevention. (Bengal V. **India: alcohol and public health**.. Addiction. 2005 Aug;100(8):1051-6.)

A study using a multilevel cross-sectional analysis of alcohol consumption from the data of the 1998-1999 Indian National Family Health Survey of 301,984 adult individuals in 92,447 households in 3215 villages in 440 districts in 26 states, found that the total prevalence of alcohol use was 19.8% for men and 2.8% for women. Men with no education were more likely to consume alcohol. Men and women living in households at the lowest standard-of-living quintile were more likely to consume alcohol (OR, 1.92; 95% CI, 1.81-2.03, and OR, 2.72, 95% CI, 2.18-3.39), respectively, than those classified as living in the top quintile. Members of scheduled tribes and castes and other backward classes were more likely to consume alcohol than members of other caste groups. There was no difference in alcohol consumption between men from states that were not under prohibition (OR, 1.36; 95% CI 0.69-2.03) and those that were. States not under prohibition has higher alcohol use by women (OR, 3.04, 95% CI, 1.59-4.48) than those under partial or complete prohibition. Therefore caste, education and standard of living independently influence alcohol use in India. Prohibition policies appear to have little effect on alcohol use by men, but may reduce the proportion of women who consume alcohol. (Subramanian SV, Nandy S, Irving M, Gordon G, Smith GD. **Role of Socioeconomic markers and state prohibition policy in predicting alcohol consumption among men and women in India: A multilevel statistical analysis**. Bulletin of the World Health Organization, Vol 83:11:829-836 November 2005)

Prevalence of alcohol use among women was 5.8% and 33.2% for males in Karnataka. Two divergent patterns of consumption in women are seen. The traditional pattern is frequent heavy use of cheaper alcohol usually alone, by less educated women in rural settings and poorer segments of the urban society. The more affluent, educated urban women who are comparatively younger, more

educated and earn more, drink less on typical drinking occasions, drink less frequently and have shorter durations of drinking. They are more likely to be unmarried and without children. Emancipation as a result of education, economic independence and urbanization along with the effects of globalization that affect women in urban India appear to increase the chance of initiating consumption. (Bengal V, Nayak M, Murthy P, Chandra P, Gururaj G. **Women and alcohol in India**. In Alcohol, gender and drinking problems – Perspectives from low and middle income countries. World Health Organization, 2005)

In a case-control study of 234 subjects randomly selected from a population of male workers in Goa who had participated in a survey of drinking behaviour found hazardous drinkers having significantly poorer physical and mental health and show trends for adverse social outcomes such as violence. Casual drinkers were no different from abstainers on any of the key outcomes. As compared to casual drinkers, hazardous drinkers tend to drink alone, in bars, and prefer non-commercial alcoholic beverages which are cheaper and have high alcohol concentration. (Gaunekar G, Patel V, Rane A., **The impact and patterns of hazardous drinking amongst male industrial workers in Goa, India**.. Social Psychiatry and Psychiatric Epidemiology. 2005 Apr;40(4):267-75)

A study providing national estimates of regular tobacco and alcohol use in India and their associations in a representative survey of 471,143 people over the age of 10 years in 1995-96 (the National Sample Survey) found that the national prevalence of regular use of was alcohol 4.5%. Men were 9.7 times more likely to regularly use alcohol. Respondents belonging to scheduled castes and tribes recognized as disadvantaged groups were significantly more likely to report regular use of alcohol. People from rural areas had higher rates compared to urban dwellers, as did those with no formal education. Individuals with incomes below the poverty line had higher relative odds of use of alcohol compared to those above the poverty line. The regular use of both tobacco and alcohol also increased significantly with each diminishing income quintile. (Neufeld KJ, Peters DH, Rani M, Bonu S, Brooner RK., **Regular use of alcohol and tobacco in India and its association with age, gender, and poverty**. Drug and Alcohol Dependence. 2005 Mar 7;77(3):283-91)

A study analyzing the data from the fifty-second round of the National Sample Survey, a representative survey of 120,942 households across India, found a higher risk of borrowing/distress selling during hospitalization for individuals from households that use both tobacco and alcohol (OR 1.51,  $p < 0.05$ ), even after controlling for socio-economic and demographic factors. The same groups also met a higher percentage of hospitalization expenditures through borrowing/distress selling of assets. The adjusted population-attributable risk proportion of borrowing/distress selling to meet hospital expenditures for tobacco and alcohol use was 16%. (Bonu S, Rani M, Peters DH, Jha P, Nguyen SN. **Does use of tobacco or alcohol contribute to impoverishment from hospitalization costs in India?** Health Policy Planning. 2005 Jan;20(1):41-9)

In a National Household Survey carried out of non-institutionalized males in 24 states between the ages of 12-60 years ( $n=40,697$ ) covering both urban and rural populations 21.4% were current users of alcohol. It estimated that there were approximately 62.46 million alcohol users in this age group. The highest proportion of users were in the 41-50 year age group (32.2%). The North-East States had the highest prevalence of current use. The mean age of commencement was 21.3 years. (United Nations Office for Drugs and Crimes and Ministry of Social Justice and Empowerment, Government of India **The Extent, pattern and trends of drug abuse in India, National Survey**, 2004)

A study using data from the National Family Health Survey-II, a nationally representative survey from India of 92,486 households found that children from households that use tobacco or alcohol were less likely to be immunized, more likely to have acute respiratory tract infection, more likely to be malnourished, and more likely to die before first birthday even after controlling for other socio-economic and demographic characteristics. (Bonu S, Rani M, Jha P, Peters DH, Nguyen SN. **Household tobacco and alcohol use, and child health: an exploratory study from India.** Health Policy. 2004 Oct;70(1):67-83)

In the Global Youth Tobacco Survey (GYTS) carried out in standards 8, 9 and 10 in 6350 schools in 8 states in which 16,932 students participated, those who smoked

and used alcohol ranged from 6.9% (Meghalaya) to 13.1% (Sikkim). Among boys the range was from 8.5% (Meghalaya) to 19.6% (Manipur) and among girls, 2.9% (Manipur) to 7.7% (Mizoram). (Sinha DN, Gupta PC, Pednekar MS., **Prevalence of smoking and drinking among students in north-eastern India**. National Medical Journal of India. 2003 Jan-Feb;16(1):49-50)

In a study of 50,220 men aged 45 years and over from the lower and lower-middle section of the general population of Mumbai showed that 18.8% were currently consuming alcoholic beverages, of which 32.8% drank on at least 6 days per week. The most popular beverage was locally distilled products of fruits and grain (country liquor). Seventy-five per cent of the consumers of country liquor would consume over 53 g of ethanol on a day when they drank, with 46.6% of these doing so on at least 6 days per week. (Gupta PC, Saxena S, Pednekar MS, Maulik PK. **Alcohol consumption among middle-aged and elderly men: a community study from western India**. Alcohol and Alcoholism. 2003 Jul-Aug;38(4):327-31)

A study of subjects admitted for treatment of alcohol dependence with (n=30) and without (n=30) found that sensation seeking as a personality variable was significantly associated with sexual risk taking behaviour among heavy alcohol users. (Chandra PS, Krishna VAS, Benegal V and Ramakrishna J., **High-risk sexual behaviour & sensation seeking among heavy alcohol users** Indian Journal Medical Research 117, February 2003, pp 88-92)

In a study of 658 admissions with injuries to an Emergency Unit of a General Hospital in Bangalore India, 30% of males and 4% of females had taken alcohol prior to the injury. Injuries in 80% of men and 18% of women were probably linked use of alcohol by self or others. Violent and deliberate injuries are significantly related to alcohol use and form the largest segment of alcohol related injuries. (Benegal V, Gururaj G, Murthy P. **Project Report on a WHO Multi-Centre Collaborative Project on establishing and monitoring alcohols involvement in casualties**. ([http://www.nimhans.kar.nic.in/Deaddiction/lit/Alcohol%20and%20%20Injuries\\_WHO%20Collab.pdf](http://www.nimhans.kar.nic.in/Deaddiction/lit/Alcohol%20and%20%20Injuries_WHO%20Collab.pdf)) Accessed 27 November 2006)

In a study aimed at identifying alcohol related road traffic injuries in 12 major hospitals in Bangalore city it was found that nearly 28% of traffic injuries were directly attributable to alcohol. The roadside survey showed that drivers under the influence of alcohol varied from 11% as detected by police testing drivers on suspicion to 40% by random checking. Among those tested positive 35% were above the legally permissible limit to 30mg/100ml. (Gururaj G, Bengal V, National **Driving under the influence of alcohol and road traffic injuries in Bangalore.** Institute of Mental Health and Neurosciences Bangalore, India. 2002)

In a study of matched data on 10312 individuals from 2937 households above the age of 10 years in Delhi found that among males, the prevalence of use of only alcohol and concurrent smoking and drinking was 3.3 and 9.6 per cent respectively. Concurrent use was higher in the 31-40 year age group and dependence higher in the 41-50 year age group. Both at surveys I and II current smokers had higher percentage of alcohol drinkers compared to tobacco abstainers; dependent smokers had higher percentage of dependent drinkers. The use of alcohol at survey II was higher among tobacco smokers compared to tobacco abstainers identified at survey I (Mohan D. Chopra A. and Sethi H. **The co-occurrence of tobacco and alcohol in general population of Metropolis Delhi** Drug Dependence Treatment Centre, All India Institute of Medical Sciences, New Delhi, India Indian Journal of Medical Research 116, October 2002, pp 150-154 D.)

A study on alcohol use in three states in India showed that 97% of females abstained while the current use ranged from 20.8% to 37.5% in males. Among current drinkers, high monthly quantities of alcohol ranged from 66.7% to 92.9%. The prevalence of alcohol related problems in the three investigated areas were relatively high. (World Health Organization **Alcohol Consumption in India: A cross sectional study, in Surveys** of drinking patterns and problems in seven developing countries, 2001)

A rapid assessment study of 72 colonies in five types of housing clusters in Delhi showed that the prevalence of tobacco, alcohol, cannabis and opioids use among

males was 27.6, 12.6, 0.3 and 0.4 per cent respectively. The rates were highest in resettlement clusters followed by urban villages, unauthorized, regularized and in "other" clusters. The use rates remained unchanged during the re-survey. Dependent use (any drug) increased in the resettlement clusters only during the re-survey. (Mohan D, Chopra A, and Sethi H., **A rapid assessment study on prevalence of substance abuse disorders in metropolis Delhi** Indian Journal of Medical Research 114, September 2001, pp 107-114)

Strict rules and guidelines covered who could drink and under what circumstances. Ancient Indian society had the knowledge of how to prepare beverage alcohol, but did not support routine alcohol use and regarded abstinence as a virtue for most people. During the colonial period distilled beverages of a much higher alcohol content gradually replaced traditional fermented beverages. Drinking changed from ritualistic and occasional to become a part of everyday social intercourse and entertainment. Currently hundreds of kinds of alcoholic beverages are made and consumed. Illicit liquor production occurs in many parts. Home production for personal consumption is also present in some parts of the country. The India-made Foreign Liquor and beer sector are the most visible part of the alcohol industry. Joint ventures with international companies have taken place. Nearly all the major transnational companies have a presence in India. Since direct advertising is not permitted indirect advertising is used by the industry. The Country Liquor segment is more decentralized and most brand names have only a local presence. They do not indulge in advertising. (Saxena S. **Country profile of alcohol in India**. In Alcohol and public health in 8 developing countries, World Health Organization, Geneva 1999)