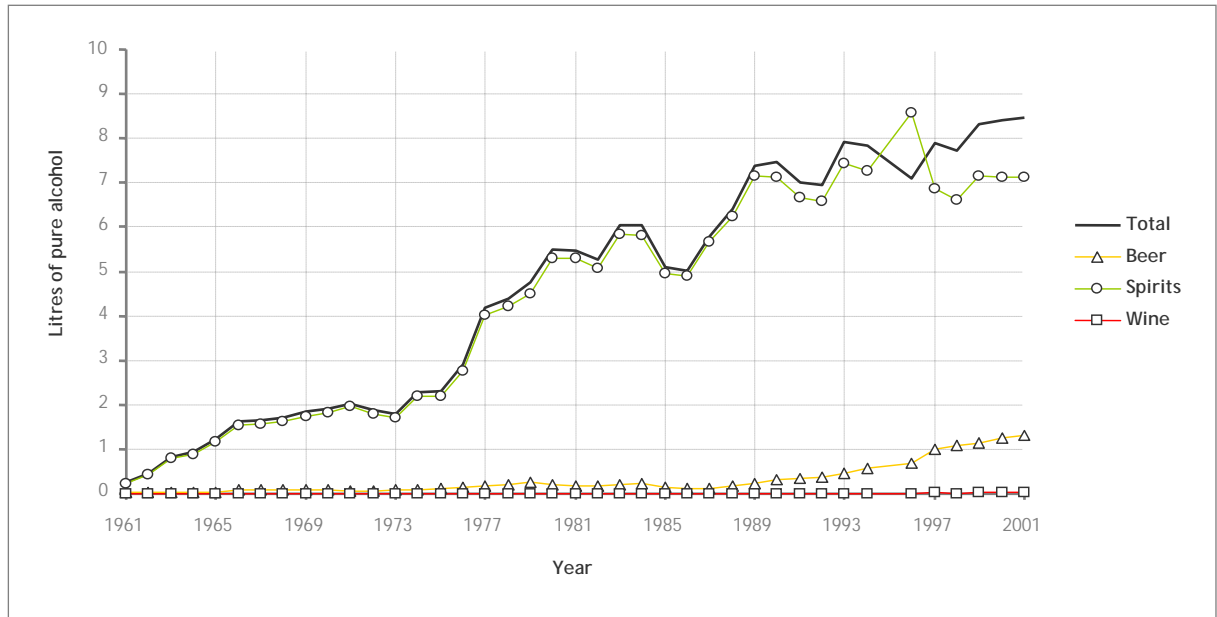


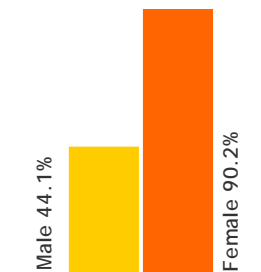
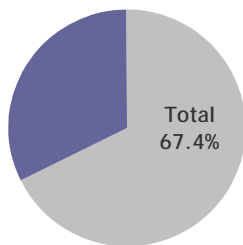
# THAILAND

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



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

## Abstainers (non-drinkers)

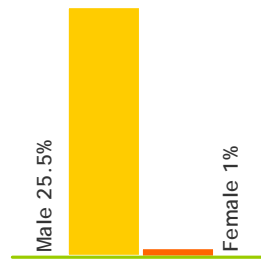
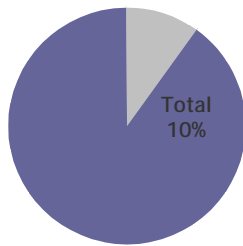


National survey conducted in 2001 (males  $n = 23\ 281$  and females  $n = 23\ 699$ ; aged 15 years and above).<sup>1</sup>

In a case-control study of the relationships between alcohol dehydrogenase-2 (ADH2), aldehyde dehydrogenase-2 (ALDH2) and male alcohol use disorders (AUD), the research sample included 153 paired cases (probable AUD) and controls (non-probable AUD), sampled from Khon Kaen villagers from north-east Thailand. 86.9% of the controls were current drinkers.<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 31% (males) and 72% (females). Data is for after year 1995.<sup>3</sup>

## Harmful and hazardous drinkers in southern Thailand

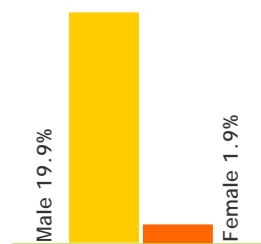
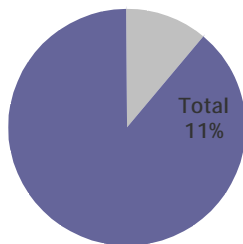


Survey in a southern Thai community. Total sample size  $n = 898$ ; males  $n = 325$  and females  $n = 573$ ; aged 35 years and older. Respondents who scored 8 or more on the AUDIT were classified as having hazardous or harmful alcohol consumption or possibly dependence.<sup>4</sup>

In a study of 91 alcohol-dependent subjects, 77 hazardous or harmful drinkers, and 144 abstainers or light drinkers (all subjects were Buddhist males aged 18 years or over), it was found that the median alcohol intake was 75 and 49 g/drinking day in the alcohol-dependent and harmful or hazardous groups respectively. The former group drank on average 25 days/month, whereas the harmful or hazardous drinkers drank 10 days/month. Drinking alone was more common in the alcohol-dependent group (67%) whereas harmful or hazardous drinkers typically drank with friends (58%) and infrequent drinkers drank only at social functions (61%). Only 28% of alcohol-dependent subjects perceived themselves as dependent on alcohol.<sup>5</sup>

In a 1997 study of 220 dentists working in 14 provinces in southern Thailand (age range 22 to 54 years), it was found that 19.1% consumed alcohol on a weekly basis.<sup>6</sup>

## Youth drinking (consumes alcohol)



National survey conducted in 2001 (males  $n = 2862$  and females  $n = 2778$ ; aged 15 to 19 years old).<sup>1</sup>

In a 1999 survey of 1725 students aged 15 to 21 years (893 males and 832 females) attending one of three vocational schools in Chiang Rai Province, alcohol consumption during the previous three months was reported by 826 males (92.5%) and 670 females (80.5%).<sup>7</sup>

## Alcoholism in Karen villages in northern Thailand

In a study conducted in 1999–2000 in 31 Karen tribal villages in northern Thailand (size of each village ranges from 52 to 435 persons), alcoholism was reported in most villages. 25% of the villages reported having between one and four alcoholic persons and 41% reported having more than four alcoholic persons.<sup>8</sup>

## Traditional alcoholic beverages

Thailand has several traditional alcoholic beverages: *Satoh*, *Ou* and *Krauche*. *Satoh* production is carried out by using three kinds of rice: white sticky rice, red sticky rice and non-polished rice, yielding 29% ethanol within nine days at room temperature.<sup>9</sup>

*Lao khao* is a potent alcoholic beverage made from rice that is widely distilled and sold in villages.<sup>10</sup>

*Lao-lao* (homemade rice whiskey) and *lao-hai* (alcoholic drink made of sticky rice) are also consumed.

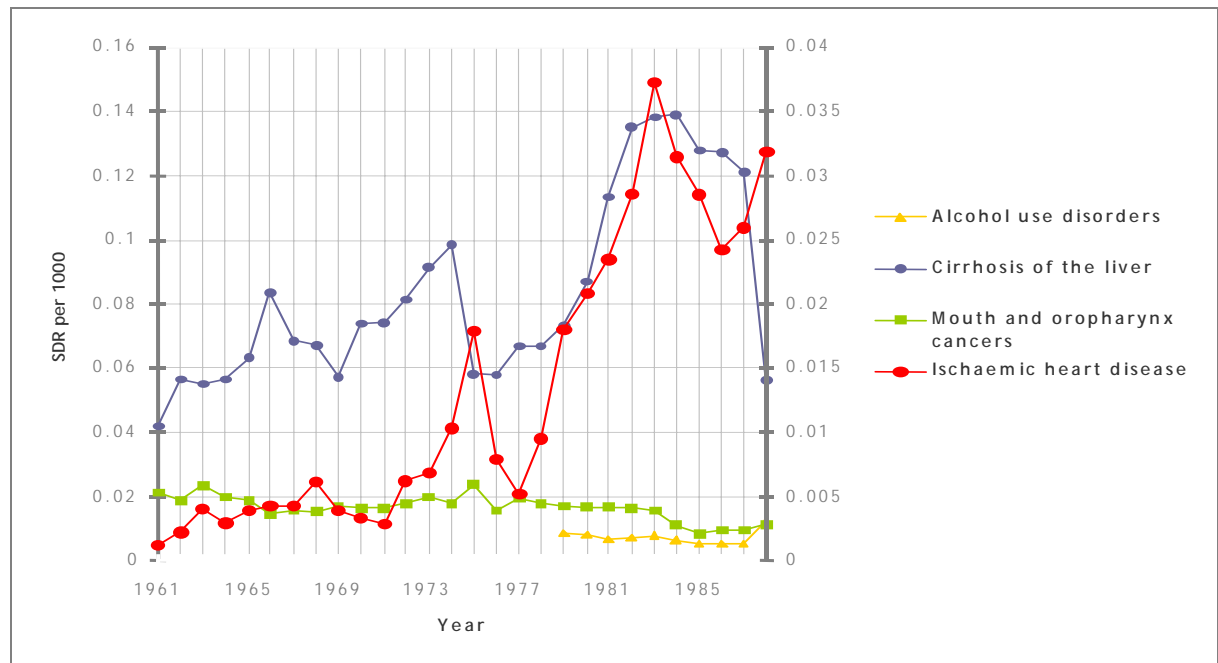
## Unrecorded alcohol consumption

The unrecorded alcohol consumption in Thailand is estimated to be 2.0 litres pure alcohol per capita for population older than 15 for the years after 1995 (estimated by a group of key alcohol experts).<sup>3</sup>

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

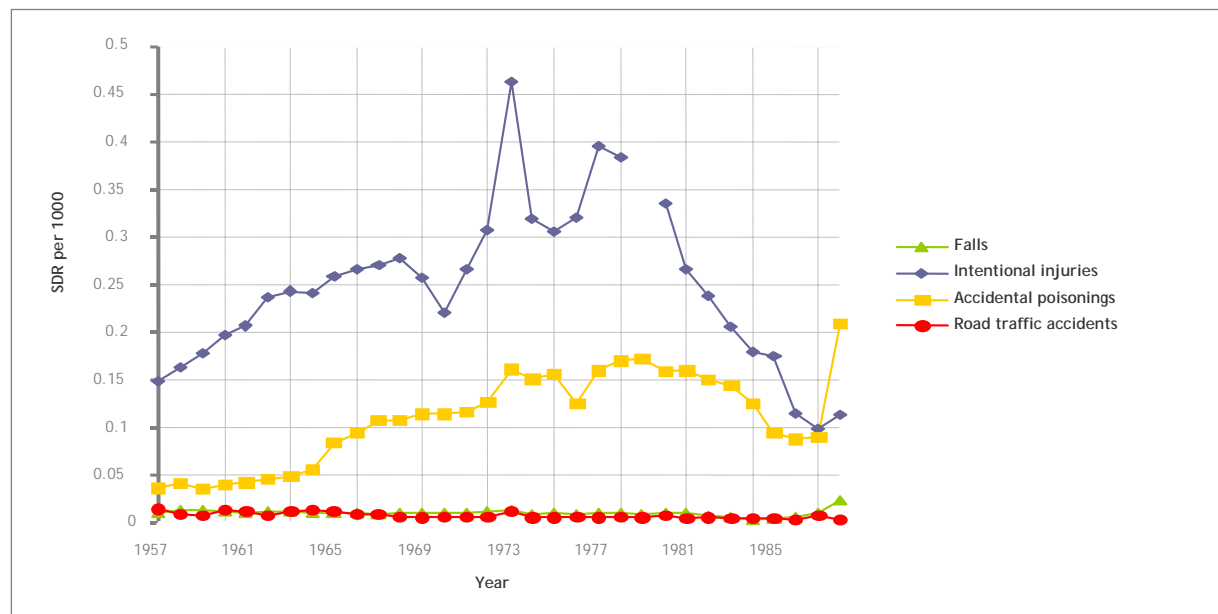
The data represent all the deaths occurring in a country irrespective of whether alcohol was a direct or indirect contributor.

### 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

Note: Caution should be exercised when interpreting the results as death registration level is incomplete.

## Morbidity, health and social problems from alcohol use

A survey found that 62% of traffic accident victims had a positive blood alcohol concentration.<sup>11</sup> An estimated 45% of deaths from traffic accidents in Thailand are due to alcohol consumption.<sup>12</sup>

A substantial proportion (44%) of traffic injury cases seeking emergency services in public hospitals had a blood alcohol concentration of 0.1% or more.<sup>13</sup> A recent study revealed that one third of road traffic accident patients were under the influence of alcohol, and consumption of alcohol one hour before driving was associated with a threefold increased risk of being involved in a traffic accident.<sup>14</sup>

In a study looking at consecutive emergency room admissions aged 14 years and older, admitted from 18:00 to 02:00 in three regional hospitals in Thailand (total sample size  $n = 992$ ), it was found that among the 404 males and 127 females admitted for trauma, 43% and 13% respectively had positive AUDIT scores, compared with 35% of male non-trauma and 6% of female non-trauma patients. The study also revealed that 39% of all males presenting to the emergency room for treatment between 18:00 and 02:00 misuse alcohol. The rate was significantly lower (8%) among females.<sup>15</sup>

A retrospective analysis was done of 3225 injured motorcyclists treated at Phra Chom Klao Hospital between 1999 and 2000. Approximately 21% of the riders involved in accidents had been drinking alcohol.<sup>16</sup>

A study conducted in 1995 in eight provinces in Thailand tested 4675 male drivers. The crude prevalence of high blood alcohol concentration (BAC) – over 50 mg/dl – was 12.6%. During 22:00 to 24:00 the prevalence rose to 19.2%, 16% and 11.9% among the motorcyclists, the 4-wheel vehicle drivers and the 6-or-more-wheel vehicle drivers, respectively.<sup>17</sup>

## Economic and social costs

The economic cost of hospitalized alcohol-related illness per person per admission was estimated to be over 20 000 Baht (US\$ 800) in 1992 which included medical treatment costs and indirect costs from lost earnings, decreased productivity of the patient and family, transportation costs, and other non-medical equipment and food.<sup>18</sup>

## Country background information

<b>Total population 2003</b>	62 833 000	<b>Life expectancy at birth (2002)</b>	Male	66.0
Adult (15+)	47 124 750		Female	72.7
% under 15	25	<b>Probability of dying under age 5 per 1000 (2002)</b>	Male	32
<b>Population distribution 2001 (%)</b>			Female	26
Urban	20	<b>Gross National Income per capita 2002</b>	US\$	1980
Rural	80			

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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## THAILAND

<b>1</b>	<b>Definition of an alcoholic beverage (minimum volume %)</b>	<b>&gt; 0.5</b>
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<b>2 Price of alcoholic beverages</b>		
<i>Off-licence</i>	<i>Usual quantity (ml)</i>	<i>Price (Baht)</i>
Average locally produced or most consumed beer	250	30–60
Average and most consumed table wine	330	45–70
Average locally produced or most consumed spirits	320	30–60
If it exists, other special or different local alcoholic beverage: Satho (7–15 % alc. vol).	640	30–60
Average Non-alcoholic soft drink	250	13–15

2 a	Change in price during the last five years	Increased
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<b>3 Taxation of alcoholic beverages</b>		
3 a	General sales tax or VAT (Value Added Tax)	Yes
3 b	Percentage of the tax	7% (7–20%)
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)	60%
	<i>Wine</i> (approx. 12% alcohol by volume)	60%
	<i>Spirits</i> (approx. 40% alcohol by volume)	50%

<b>4 Drink-driving legislation</b>		
4 a	Maximum legal blood alcohol concentration (BAC) when driving a car	50 mg%
4 b	Frequency of Random Roadside Breath Testing (RBT) of drivers	Sometimes
4 c	Geographical distribution of RBT use	Mostly performed in urban, highly populated areas

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	20	18
Wine	20	18
Spirits	20	18

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	No restrictions	
Parks, streets etc.	No restrictions	
Sporting events	No restrictions	
Leisure events (concerts etc.)	No restrictions	
Workplaces	Partially restricted	

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	No	No	No
Places of sale are restricted	No	No	No
Density of outlets is restricted	No	No	No

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		Yes
6 b	Health warnings legally required on the advertisement		Yes
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	Partial restriction	Partial restriction
	Cable TV	Partial restriction	Partial restriction
	National radio	Partial restriction	Partial restriction
	Local radio	Partial restriction	Partial restriction
	Newspapers/magazines	Partial restriction	Partial restriction
	Billboards	No restrictions	No restrictions
	Points of sale	No restrictions	No restrictions
	Cinema	No restrictions	No restrictions

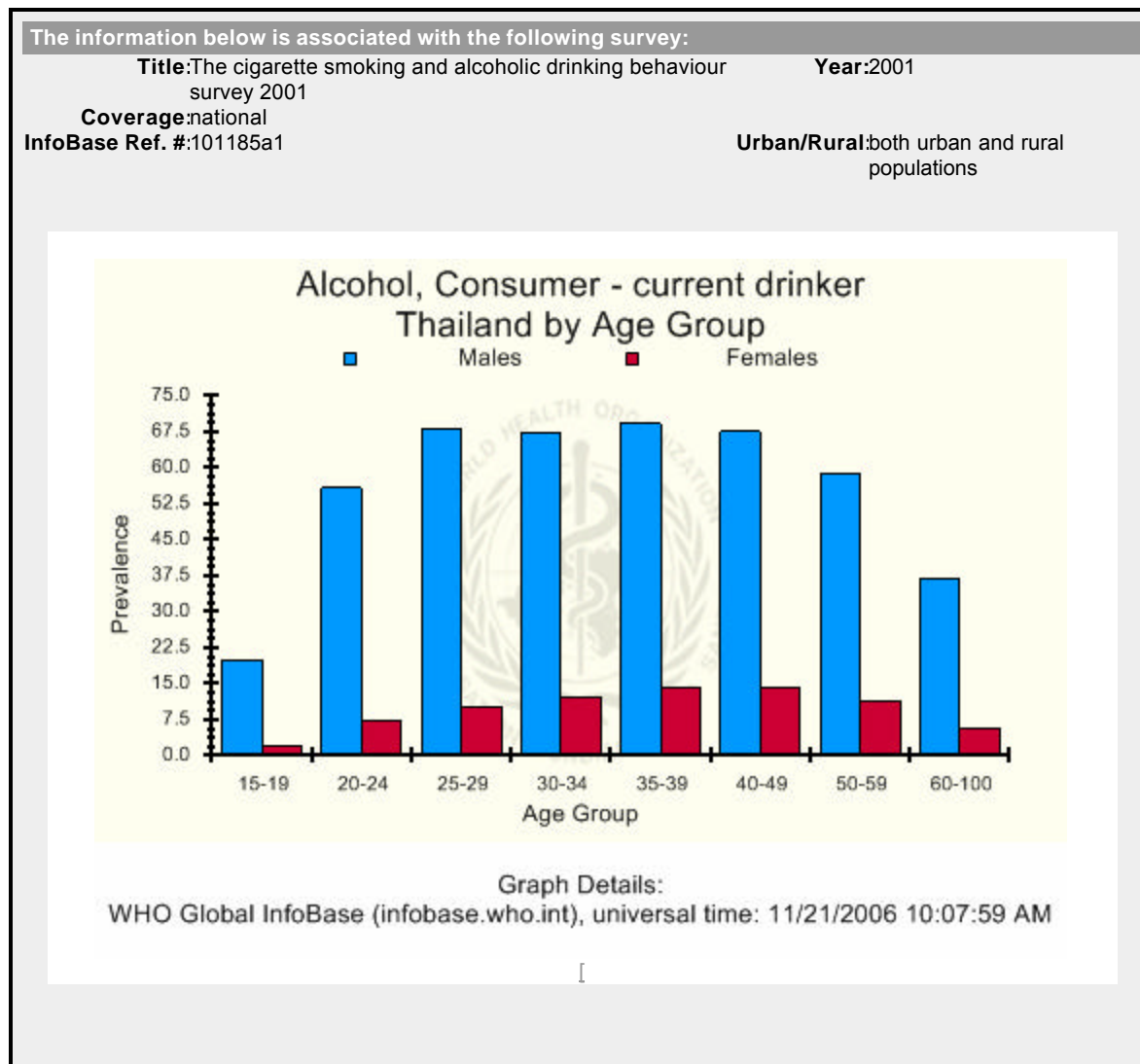
<b>7 Alcohol sponsorship and promotion</b>			
	<i>Beer</i>	<i>Wine</i>	<i>Spirits</i>
Alcohol industry sponsorship of sporting events	No restrictions	No restrictions	No restrictions
Alcohol industry sponsorship of youth events	No restrictions	No restrictions	No restrictions
Sales promotion in the form of serving <i>free alcohol</i> (complying with existing age and other sales restrictions)	No restrictions	No restrictions	No restrictions
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)	No restrictions	No restrictions	No restrictions

<b>8 Level of enforcement of existing advertising and sponsorship restrictions indicated in the two previous questions</b>	
Advertising	Partially enforced
Sponsorship	Not enforced

## WHO Global InfoBase : Data from Cigarette smoking and alcohol drinking behaviour survey

### Thailand

#### Alcohol, Consumer:



## Thailand

### Alcohol Consumer Definition

**Definition:** current drinker

**Alcohol Type:** alcohol (general)

Males			
Age Group <sup>?</sup>	Sample Size (n) <sup>?</sup>	Prevalence (%)	95 % CI <sup>?</sup>
15-19		19.9	-
20-24		55.8	-
25-29		68.1	-
30-34		67.1	-
35-39		69.2	-
40-49		67.5	-
50-59		58.7	-
60+		37.0	-
<b>15+</b>		<b>55.9</b>	<b>55.3-56.5</b>

Females			
Age Group <sup>?</sup>	Sample Size (n) <sup>?</sup>	Prevalence (%)	95 % CI <sup>?</sup>
15-19		1.9	-
20-24		7.2	-
25-29		10.2	-
30-34		12.3	-
35-39		14.2	-
40-49		14.2	-
50-59		11.5	-
60+		5.7	-
<b>15+</b>		<b>9.8</b>	<b>9.4-10.2</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.

## Thailand: Published Studies

Currently, spirits is the dominant form of alcohol used, although beer consumption has shown an eightfold increase between 1982 and 2001. According to the National Statistics Office, 56% of males and 10% of females consumed alcohol in 2004. The alcohol market is dominated by a few companies. Imported beverages have only a small foot-hold. Alcohol is estimated to be the third most important health risk factor in the country. Road Traffic is the second biggest cause of death with alcohol being a major contributor. The prevalence of alcohol dependence was 19.4% and 4.1% among the male and female adults in 2001. A recent study showed that families with drinking members have a higher risk of family violence. The Thai Health Promotion Foundation receives 2% surcharge from tobacco and alcohol taxes, and has an Alcohol Consumption Control programme. (Thamarangsi T. **Thailand: alcohol today**. *Addiction*. 2006 Jun;101(6):783-7)

Surveys of high-school years 7, 9 and 11 and vocational school year 2 students in four provinces in Southern Thailand found that the rates of alcohol consumption in the past 30 days were 19.3%, 17.3% and 15.2% ( $p>0.05$ ) in 2002, 2003 and 2004. (Assanangkornchai S, Pattanasattayawong U, Samangsri N, Mukthong A. **Substance use among high-school students in southern Thailand: Trends over 3 years (2002-2004)**. *Drug and Alcohol Dependence*. 2006 Jul 10;)

In a cross-sectional community population survey of two urban and five rural areas in Southern Thailand, the age-adjusted prevalence of hazardous-harmful drinking was 10% (27% in males and 1% in females) for the 1,005 subjects aged 35 years or more, using the Alcohol Use Identification Test (AUDIT). Median intensity of drinking was 43 g and 25 g per drinking day in the hazardous-harmful and non-problem drinkers respectively. Of all the subjects, 48%, 25% and 15% of the hazardous-harmful, non-problem and non-

drinkers had abnormal GGT. (Assanangkornchai S, Pinkaew P, Apakupakul N. **Prevalence of hazardous-harmful drinking in a southern Thai community** Drug and Alcohol Review. 2003 Sep;22(3):287-93)

In a study of three groups, comprising 144 non/infrequent/light drinkers, 77 hazardous/ harmful drinkers and 91 alcohol dependents no protective association was shown between early religious life and later alcohol use disorders. Hazardous/harmful drinkers were less likely to report being moderately to strongly religious, than were non/infrequent/light drinkers. (Assanangkornchai S, Conigrave KM, Saunders JB., **Religious beliefs and practice, and alcohol use in Thai men.** Alcohol and Alcoholism. 2002 Mar-Apr;37(2):193-7)

In the same sample, median alcohol intake was 75 and 49 g/drinking day in the alcohol-dependent and harmful or hazardous groups respectively. The former group drank on average 25 days/month, whereas the harmful or hazardous drinkers drank 10 days/month. Drinking alone was more common in the alcohol-dependent group (67%), whereas harmful or hazardous drinkers typically drank with friends (58%), and infrequent drinkers drank mainly at social functions (61%). Only 28% of alcohol-dependent subjects perceived themselves as dependent on alcohol. It concluded that alcohol dependence was characterized by continual drinking, whereas hazardous or harmful consumption was associated with an intermittent pattern. (Assanangkornchai S, Saunders JB, Conigrave KM. **Patterns of drinking in Thai men.** Alcohol and Alcoholism. 2000 May-Jun;35(3):263-9)

Of 1,138 corpses that were sent for autopsy at Chiang Mai University from January to December 2003, 78.4% had suffered unnatural death. Of these 153 were used as a sample. In the sample, 74 (48.4%) were from traffic injuries. Blood alcohol was detected in 82 (53.6%) of them, and 99% were male. The Blood Alcohol Concentrations in the accident deaths were very high, with 67 (81.7%) having blood alcohol concentrations of more than 50 mg, and only 15 (18.3%) with less than 50 mg%. The authors concluded that Alcohol was one of the most common associations with unnatural death in Thailand. (Narongchai S, Narongchai P. **The prevalence of detectable blood alcohol concentration among unnatural deaths in**

**northern Thailand.** Journal of the Med Association of Thailand. 2006 Jun;89(6):809-13.)

In a large prospective study in which on scene, in-depth investigation and reconstruction of 969 collisions involving 1082 motorcycle riders, alcohol proved to be the most outstanding causative factor. Alcohol accidents were more frequent on weekends and particularly at night. Drunk drivers were more likely to be in a single vehicle accident, violate traffic control signals, and to be in non-intersection collisions. They were more likely to be inattentive to the driving task just before they crashed, and to be the primary or sole cause of the accident. One-fourth of all riders did not go to the hospital, and another 42% needed only treatment in the emergency room. Drinking riders were more likely to be hospitalized and far more likely to be killed. (Kasantikul V, Ouellet JV, SmithT, Sirathranont J, Panichabhongse V. **The role of alcohol in Thailand motorcycle crashes.** Accid Anal Prev. 2005 Mar;37(2):357-66. )

