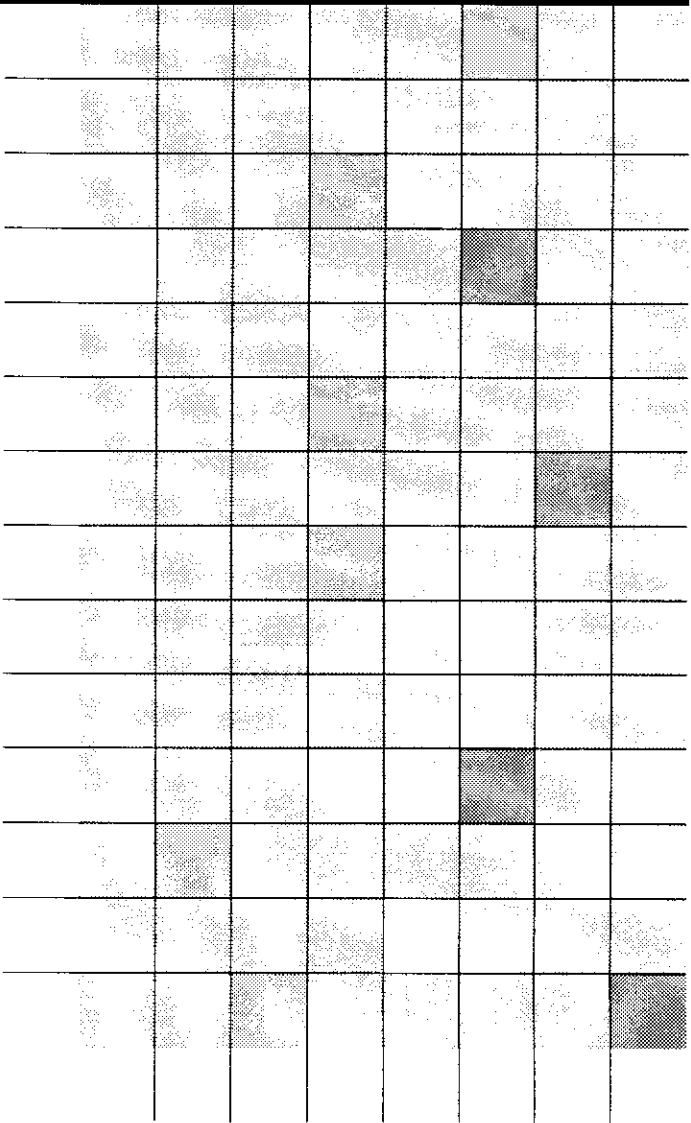




# ALCOHOL AND OTHER DRUG USE IN QUEENSLAND



*Information Circular No. 31*



**ALCOHOL AND DRUG BRANCH  
EPIDEMIOLOGY AND HEALTH INFORMATION BRANCH**

February 1995

## COST OF DRUG USE TO THE COMMUNITY

The economic, social and personal costs of alcohol and other drug use to the Queensland community are substantial and unacceptable.

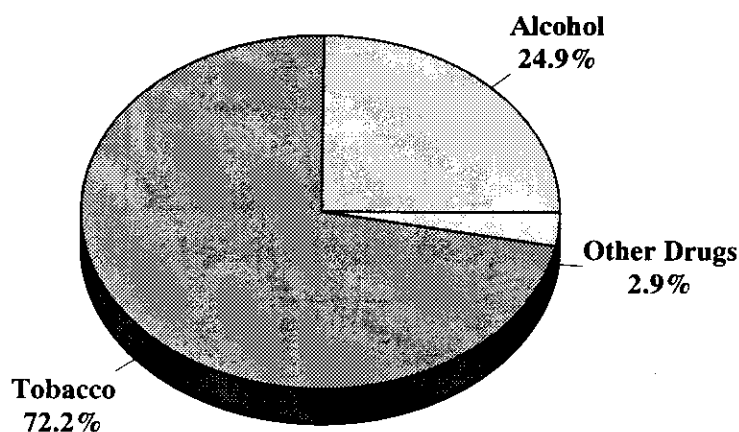
- It has been estimated that in 1988 the financial burden imposed on the Australian community by drug use exceeded \$14 Billion or 4.6% of gross domestic product (Collins & Lapsley,1991).
- Of this total \$6,800 Million (47.5%) was attributed to tobacco, \$6,000 Million (42%) to alcohol and \$1,500 Million (10.5%) to illicit drug use.
- Queensland's share of the national drug bill on a population basis was of the order of \$2 Billion.

## MORTALITY AND MORBIDITY CAUSED BY DRUG USE

### Mortality

It is estimated that of the 20,496 deaths recorded in Queensland during 1992, 4,283 or slightly more than 20% were caused by drug use.\*

When this mortality data is categorised by drug type, tobacco emerges as the leading cause of drug related death (72%), followed by alcohol (25%) with other drugs accounting for only 3% of total drug mortality (see figure 1).

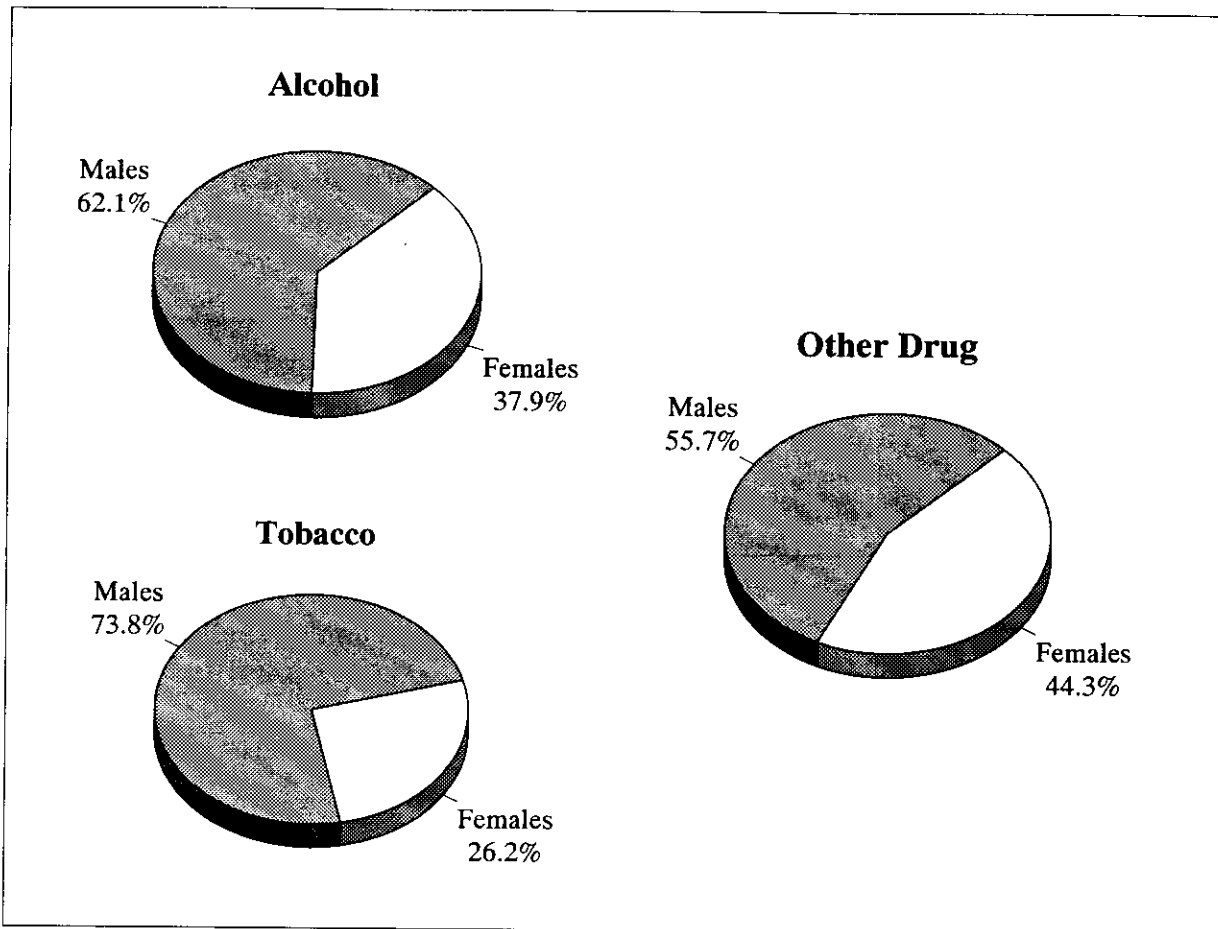


**Figure 1 : Alcohol, tobacco and other drug caused mortality Queensland, 1992**

\* To determine the number of drug caused deaths from the total number of deaths from all causes, aetiological fractions have been applied to ABS mortality figures for conditions known to be related to drug use. An aetiological fraction is an estimate of the contribution of drug use to death or illness from a specified condition and can range from zero indicating no association to one indicating that drug use is a sole cause of a particular condition (Holman and Armstrong,1989). For example, alcoholic dependence and ethanol toxicity have an aetiological fraction of 1; whereas chronic pancreatitis has a fraction of 0.7.

Analysis of mortality data (see figure 2) reveals that there are significant gender differences in the rates of drug caused mortality with males experiencing higher rates for tobacco, alcohol and other drug caused deaths.

The differences are particularly large for tobacco (males, 74%; females, 26%) and alcohol (males, 62%; females, 38%).

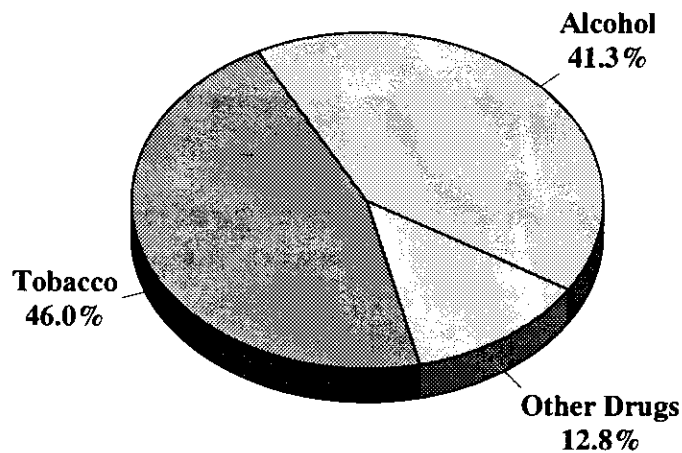


**Figure 2: Alcohol, tobacco and other drug caused mortality by sex in Queensland, 1992**

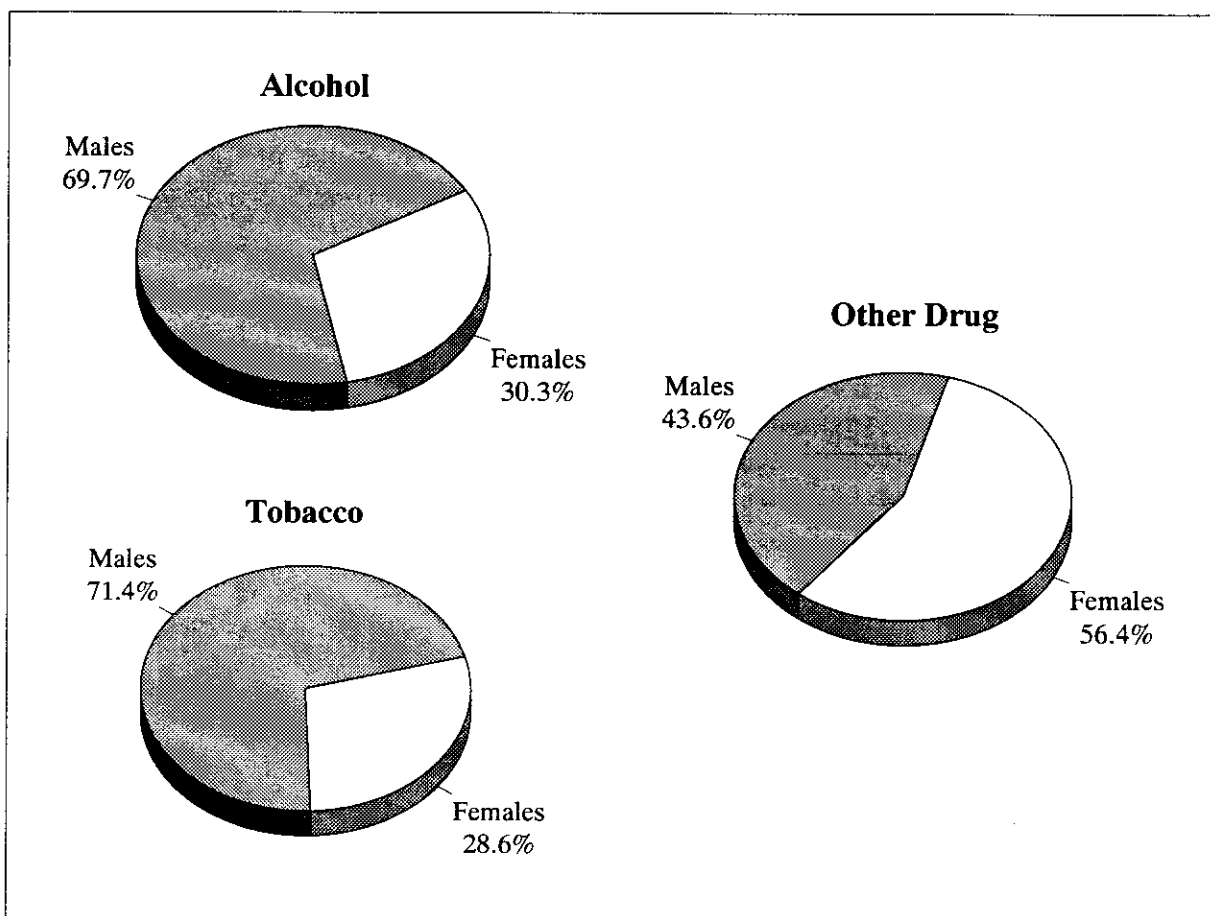
## **Morbidity**

Aetiological fractions have also been applied to Queensland hospital morbidity data to estimate the proportion of hospital separations attributable to drug use.

Figure 3 indicates that tobacco use is responsible for the largest proportion (46%) of all drug caused morbidity followed closely by alcohol (41%). Other drug abuse accounts for 13% of total drug morbidity.



**Figure 3 : Alcohol, tobacco and other drug caused morbidity Queensland - 1991**



**Figure 4: Alcohol, tobacco and other drug caused morbidity by sex in Queensland, 1991**

Alcohol and tobacco morbidity is substantially higher for males than for females. Conversely other drug caused morbidity is higher for females than for males (see figure 4).

## ALCOHOL

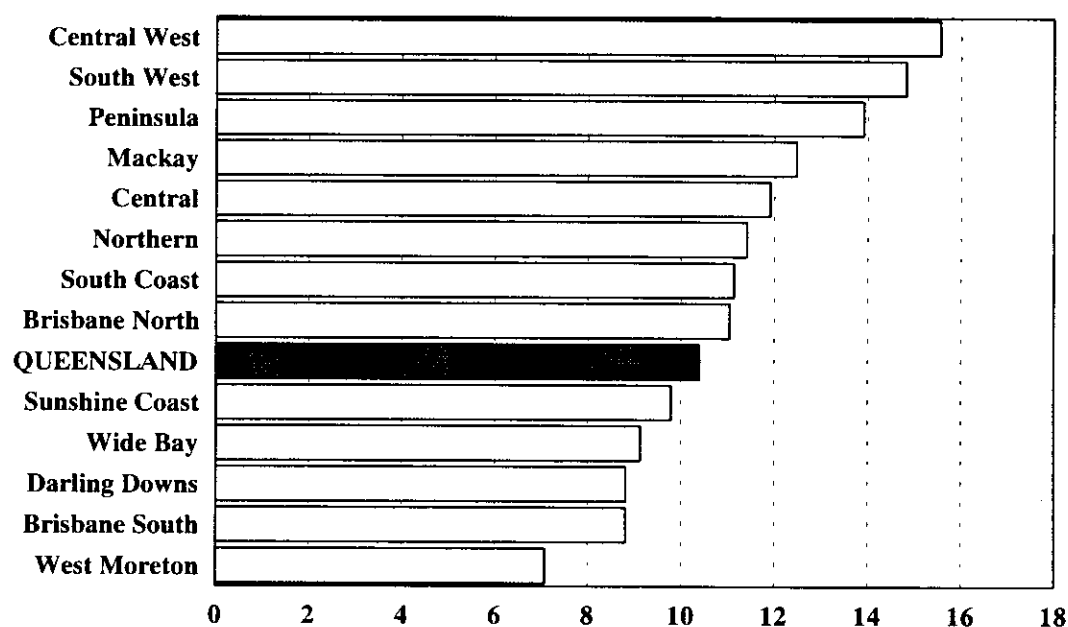
The excessive use of alcohol is associated with a range of individual harms and social costs. These include accidents on the road and at work, lost productivity through illness and absenteeism, alcohol related crime, family disruption, personal distress, serious illness and death.

### Per Capita Consumption of Alcohol

Liquor sales figures collected by the Department of Tourism Sport and Racing have been analysed to estimate per capita consumption of alcohol by adults (15 years and over) for Queensland and the 13 Health Regions (see figure 5).

These figures indicate that the per capita (15 years and over) consumption of absolute alcohol in the 1991/1992 financial year was 10.4 litres.

Adult per-capita consumption of ethanol in the Health Regions of Central West (16 litres), South West (15 litres) and the Peninsula and Torres Strait (14 litres) was considerably higher than the Queensland average of 10 litres.



**Figure 5 : Per capita consumption of absolute alcohol  
Queensland (1991/92) - Persons 15 years and over by Region**

## **Patterns of Consumption**

The Queensland Regional Health Survey (1993) included a number of questions relating to alcohol consumption including a self report screening instrument (AUDIT) to identify persons at risk of experiencing alcohol related problems.

This survey revealed:

- An estimated 16% of persons in Queensland are at moderate or high risk of experiencing alcohol problems.
- Males (26%) are much more likely than females (6%) to be at risk.
- Eighteen percent (18%) of drinkers report consuming six or more drinks on a weekly or a more frequent basis.

## **Crime and Alcohol**

Research has revealed a significant association between alcohol and crime. A police survey (Arro, Crook & Fenlon, 1992) conducted in South East Queensland over a two week period indicated that one third of incidents in inner city areas were assessed to be alcohol related.

In particular, the study showed alcohol was associated with:

- 82% of serious assaults
- 64% of attempted suicides
- 63% of street disturbances
- 46% of assaults.

## **Traffic Accidents and Alcohol**

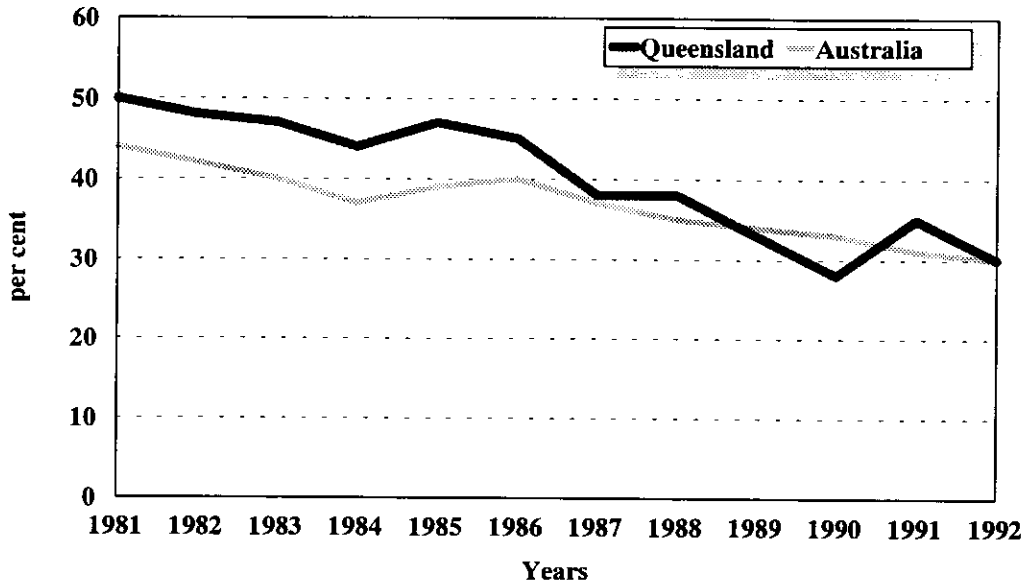
During 1993, post mortem blood alcohol tests were conducted on 79% of the 233 fatalities which occurred amongst drivers and motorcycle riders (Queensland Transport, 1993).

Of those tested:

- Four percent (4%) registered a positive blood alcohol content (BAC) below the legal limit.
- Eight percent (8%) had a BAC between 0.05 - 0.14%.

- Twenty-one percent (21%) had a BAC of 0.15% or more (three times the legal limit for most open licence holders).

The proportion of 17 to 24 year olds drivers with illegal BACs has declined by 25% since 1990 (see figure 6).



**Figure 6 : Percentage of drivers and riders killed with a BAC over the legal limit, Queensland - Australia, 1981 to 1992**

### School Students and Alcohol

A survey of secondary school students in Queensland (Cancer Prevention Research Unit, 1993) revealed that:

- Eighty-nine per cent (89%) of year 12 students report having consumed alcohol in the past year compared with 42% of Year 7 students.
- The drinking experience for students in Year 7 and 8 is mostly limited to having a few sips. In this cohort 37% of males and 29% of females report ever having had more than ten alcoholic drinks. By Year 12 these percentages increase to 77% for male students and 59% for female students.
- There was an increase across all year levels between 1990 and 1993 in the average number of alcoholic drinks consumed per week for males (6 drinks in 1990 compared to 8 in 1993), while the average consumption for females remained the same (5 drinks in 1990 and 1993).
- Across all year levels a greater proportion of males than females drank alcohol.

- Beer and spirits were the most commonly consumed alcoholic beverages.
- The majority of students obtained their alcohol from parents or friends.

### **Aboriginal and Torres Strait Islander People and Alcohol**

The proportion of Aboriginal and Torres Strait Islander people who abstain from alcohol (19%) is greater than that found in the general population (9%). However, the proportion of hazardous and harmful drinkers amongst some Aboriginal and Torres Strait Islander communities is substantially higher than for the general Queensland population.

A survey of non-urban Aboriginal and Torres Strait Islander communities throughout Queensland revealed a high proportion of drinkers, especially males, consuming alcohol at levels considered hazardous\* and harmful\*\* by the National Health & Medical Research Council Guidelines (NH&MRC, 1992):

#### **ABORIGINAL & TORRES STRAIT ISLANDER PEOPLE**

<b>Consumption</b>	<b>Males</b>	<b>Females</b>
Hazardous	23%	7%
Harmful	45%	13%
<b>Total:</b>	<b>68%</b>	<b>20%</b>

Comparable prevalence rates of hazardous and harmful drinking levels in the general adult population (18 years and over) in Queensland (Castles, 1990) are:

#### **GENERAL QUEENSLAND POPULATION**

<b>Consumption</b>	<b>Males</b>	<b>Females</b>
Hazardous	12%	11%
Harmful	11%	3%
<b>Total:</b>	<b>23%</b>	<b>14%</b>

\* Hazardous: Males (4-6 standard drinks/day) - Females (2-4 standard drinks/day)

\*\* Harmful: Males (more than 6 standard drinks/day) - Females (more than 4 standard drinks/day)



## SMOKING

Tobacco is the single major cause of preventable drug related mortality. Cancer and ischaemic heart disease account for approximately 60% of all tobacco related deaths.

From 1940 to 1990 there has been a dramatic decrease in smoking prevalence for Australian males. Prevalence rates have declined from approximately 70% to 30%.

For females there has been an increase in smoking during that period with levels peaking in the early 1980's.

The National Health Survey (Castles, 1990) revealed that for each age group males tend to be heavier smokers than females. This is true nationally and for Queensland.

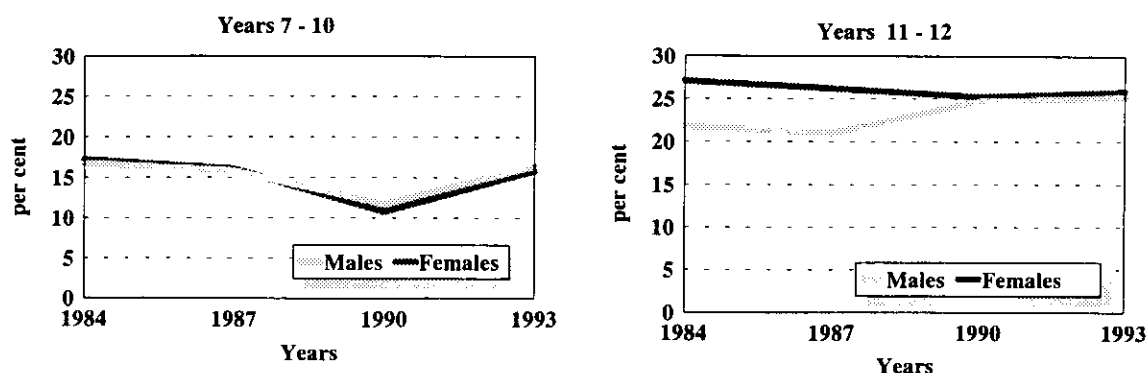
The prevalence of smoking among males and females in Queensland is similar to that for Australia as a whole.

Responses to the Queensland Regional Health Survey (1993) indicated that almost one-quarter of the adult population (24.3%) identify themselves as current smokers with males (28.2%) more likely to smoke than females (20.4%). As age increases the proportion of smokers decreases.

### School Students and Smoking

A survey of secondary school children (Cancer Prevention Research Centre, 1993) revealed that:

- About one quarter of students in Year 12 report having smoked within the last seven days, compared to less than 10% in Year 7.
- Smoking prevalence rates in Years 7 to 10 remained steady from 1984 to 1987, with a decrease in 1990, and an increase in 1993 back to the previous levels.
- Smoking prevalence rates for females in Years 11 and 12 have dropped slightly between 1984 and 1993. The rate for males in Years 11 and 12 has increased from 1987 to 1990, and has remained stable to 1993.
- In 1984 and 1987 the smoking prevalence rate for females in Years 11 and 12 was substantially higher than for males. However this difference is not evident in 1990 and 1993 (see figure 7).



**Figure 7: Percentage of students reporting having smoked in the last week for male and female students in years 7-10 and 10-12**

## OTHER DRUGS

### Injecting Drug Use/Needle and Syringe Exchanges

Injecting drug use is associated with the transmission of HIV/AIDS, hepatitis B & C, and other communicable diseases. The provision of disposable clean injecting equipment is an important public health measure aimed at reducing the spread of disease amongst injecting drug users.

- Last year 488,000 needles and syringes were distributed through the 50 needle exchange programs currently operating in Queensland.
- These programs operate through a range of venues including: Alcohol and Drug Services, Youth Services, STD Clinics, Universities, Community Based Groups, Community Health Centres, and Hospital Based programs.
- The number of needles and syringes distributed by the Brisbane North Community Alcohol and Drug Service ('Biala') has doubled every 6 months since it opened in 1989. Last year the "Biala" needle exchange distributed 288,000 needles and syringes.
- Seventy percent (70%) of clients accessing needle exchanges are male.
- Preliminary results of a survey of pharmacies in Queensland in 1993 reveals that 82% sell needles and syringes.

The HIV statistical report (1994) indicated that the percentage of notified HIV infections associated with injecting drug use in Queensland was 4.3% as at June 30, 1994.

A 1989 study (ANAIDUS, 1991) of 685 injecting drug users in Brisbane revealed that 4.4% of users who had undergone an AIDS test reported having received a positive result.

## **Methadone**

Methadone is a synthetic opioid which can be prescribed by approved medical practitioners as a treatment for heroin and other opiate dependence.

Methadone programs aim to:

- Contain the spread of opiate dependence and associated criminal activities;
- Improve the physical health, social functioning, prospects of rehabilitation and the overall quality of life of people dependent on opiates.

As of the 1st of July 1994, there were 1,952 clients registered on the methadone program in Queensland.

- Sixty percent (60%) of clients were male (average age of 35 years) and 40% were female (average age of 33 years).
- Forty-eight percent (48%) of the total number of methadone program clients were aged 35 or over.
- Seventy-five percent (75%) of methadone program clients were registered with public clinics - the remainder are patients of 23 authorised private prescribers (75% of these are psychiatrists).

## **Cannabis**

Cannabis is the most widely used illicit drug in Queensland

- Approximately 33% of Queenslanders (14 years and over) report ever having smoked cannabis and approximately 29% of those have tried cannabis in the last 12 months.
- Of those Queenslanders who have ever tried cannabis 6% smoke once a week or more and 10% have used cannabis in the last month.

## **Pharmaceuticals**

The unnecessary, inappropriate or excessive use of prescribed and over-the-counter medication has implications in terms of health, social and economic costs to both the individual and Australian society.

A survey of psychotropic medications in the Australian community (Hancock & Sanson-Fisher, 1992) revealed that:

- Older age groups use prescribed and non-prescribed drugs more than younger age groups;
- Females are more likely to use prescription medication than males.

The prolonged use of some psychotropic medications (especially benzodiazepines) is of concern because of the risk of dependency and associated decline of quality of life.

The 1989-90 Australian National Health Survey indicates that:

- Ten percent of the population were currently using tranquillisers or sleeping medication;
- An estimated 330,000 Australians were using benzodiazepines daily for six months or more. Women and the elderly were the major user groups.

## **POLICY DIRECTIONS**

The Alcohol & Drug Branch has coordinated the development of the "Queensland Drug Strategy: Major Policy Directions 1993-1997". This document outlines the mission, key policy goals and priority areas to achieve reductions in drug related harm in Queensland.

### **Key Policy Goals**

- To minimise the level of illness, disease, injury and premature death associated with the use of alcohol, tobacco, pharmaceutical and illicit drugs
- To minimise the level and impact of criminal drug offences and other drug related crime, violence and anti-social behaviour within the community
- To minimise the level of personal and social disruption, loss of quality of life, loss of productivity and other economic costs associated with the use of alcohol and other drugs

## **Priorities for 1993-97**

- Alcohol Use and Aboriginal & Torres Strait Islander People
- Alcohol & Intoxication - Public Safety and Health
- Young People
- Mainstreaming and Training - Integration into General Services
- Infectious Diseases Associated with Injecting Drug Use & Intoxication
- Women - Acceptable, Accessible Services

A second discussion paper "The Queensland Drug Strategy: Examples of strategies for Implementation" outlines objectives, strategies and actions to achieve reductions in drug related harm in Queensland. Copies of these documents can be obtained from the Alcohol & Drug Branch.

## REFERENCES

- Arro, P., Crook, G. M. & Fenlon, T. (1992). The nature and extent of alcohol related incidents requiring police attention in South East Queensland: Results of an Alcohol Incident Management Study (AIMS). Queensland Police Service, Queensland.
- Cancer Prevention Research Centre. (1993). Smoking, alcohol consumption and skin protection among year 7-12 students in Queensland, 1993. University of Queensland.
- Castles, I. (1991). 1989-90 National Health Survey: Summary of results Australia. Australian Bureau of Statistics, catalogue no.4364.0.
- Collins, D. J. & Lapsley, H. M. (1991). Estimating the economic costs of drug abuse in Australia. Commonwealth Department of Community Services and Health, Canberra.
- Gascoyne, M. (1989). Survey on alcohol, tobacco and analgesic use and related problems within Aboriginal and Torres Strait Islander communities: a preliminary report. Unpublished report - Alcohol & Drug Dependence Service, Queensland Health.
- Hancock, L. & Sanson-Fisher, R. W. (1992). Psychotropic medications in the Australian Community: Prevalence, sociodemographic variables associated with use and conditions surrounding supply. University of Newcastle.
- HIV/AIDS Statistical Report Period Ending 30 June, 1994. AIDS Medical Unit.
- Holman, C. D. & Armstrong, B. K. (1989). The quantification of drug caused mortality in Australia. Commonwealth Department of Community services and Health.
- Information Circular No. 18. Smoking in Queensland and Australia. Epidemiology and Health Information Branch, Queensland Health.
- National Health & Medical Research Council. (1992). Is there a safe level of daily consumption of alcohol for men and women? Recommendations regarding responsible drinking behaviour. Australian Government Publishing Service, Canberra.
- NCADA Social Issues Survey. (1991). Department of Health, Housing and Community Services, Canberra.
- Queensland Regional Health Survey. (1993). Survey summary conducted for Queensland. Epidemiology and Health Information Branch, Queensland Health.
- Queensland Transport. (1993). Road traffic crashes in Queensland: A report on the road toll, 1993. Road Transport and Safety Division.