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Preventing harmful drug use in Australia

**Submission to the Inquiry by the
Director of Liquor Licensing
into proposed restrictions on
the sale of packaged liquor in
Port Hedland and South Hedland**

Formerly National Centre for Research into the Prevention of Drug Abuse

FUNDED BY THE NATIONAL DRUG STRATEGY



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June 2002

Introduction

This report has been prepared, on behalf of the Executive Director Public Health, Department of Health, for presentation at an Inquiry to be held, under Section 64 of the *Liquor Licensing Act* (1988), at South Hedland Court on the 18th and 19th June 2002. The purpose of the inquiry is to:

... hear evidence and submissions in relation to the proposed restrictions on the twelve licensees authorised to sell packaged liquor in Port Hedland and South Hedland (Director of Liquor Licensing 21st May 2002a).

The proposed restrictions, which are to apply from Sunday to Friday, for a 12 month trial period, are as follows.

1. The sale of up to one block of packaged low strength beer (eg: 30 cans) (3.5% alcohol by volume of less) per customer may be sold between the hours of 10.00am and 10.00pm.
2. The sale of full strength packaged liquor shall not commence before 12 noon and cease no later than 10.00pm. During these trading hours, the sale of liquor will be subject to the following limits on the volume of liquor that may be sold per customer.
 - 4.5 litres of full strength beer or UDLs (eg: 12 cans); or
 - 2 litres of wine; or
 - 700ml of spirits.
3. Normal trading conditions will apply on all Saturdays during the trial period.

The Director of Liquor Licensing has invited evidence from interested parties regarding:

- (i) the extent of alcohol-related harm in the two towns;
- (ii) potential adverse effects of proposed restrictions;
- (iii) key issues;
- (iv) complementary measures;
- (v) suggestions for alternative proposals (Director of Liquor Licensing 2002b).

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The extent of alcohol-related harm in the two towns

Background

Concerns about excessive consumption of alcohol, and related harm, in the Pilbara are not new. The Pilbara, generally, and Port Hedland, in particular, have been the focus of a number of studies into substance misuse and its consequences (Smith & Skowron 1988; Unwin & Serafino 1995; Philp, Cutler & Zilko 1996; CCD Australia 1999). These have demonstrated relatively high levels of alcohol consumption, and a range of health and social harms related to misuse, particularly, but not exclusively, among Aboriginal people.

One such study was the Hedland Community Alcohol Intervention Project conducted by Philp, Cutler & Zilko (1996) for the Pilbara Public Health Unit. The report presented a range of data on alcohol consumption and alcohol harm indicators for Port Hedland as a precursor to development of a Community Alcohol Intervention Project. The authors linked the dominance of young, heavy drinking males; high disposable income and lack of alternative entertainment; and high unemployment among Aboriginal males; and environmental factors such as climate and the cultural context of North-West life, to high alcohol consumption and related harms in the region (Philp, Cutler & Zilko 1996:9).

Describing the social environment as ‘wet’—in which excessive drinking is normalised—the authors identified a significant proportion of Pilbara males and females drinking at high-risk levels. This included Aboriginal people, and although there is little detailed information available on the drinking pattern of Aboriginal people in the Pilbara, what evidence there is suggested a pattern similar to that demonstrated elsewhere in Australia. While the proportion of Aboriginal people who drink is less than that among non-Aboriginal people, Aboriginal drinkers are more likely to be drinking at harmful levels. Aboriginal women are more likely to be abstainers or to drink less than Aboriginal men. (Philp, Cutler & Zilko 1996; Smith & Skowron 1988; Commonwealth Department of Human Services and Health 1996; Siggers & Gray 1998).

Alcohol consumption

The most accurate assessment of alcohol consumption comes from liquor sales data. The Department of Racing Gaming and Liquor provides the National Drug Research Institute (NDRI) with data on wholesale sales of alcohol in Western Australia. These data are recorded as litres of beverages for the categories: high (alcohol) beer, low beer, high wine, low wine and spirits. NDRI staff have developed a set of conversion factors for estimating the alcohol content of these beverages. This methodology has been in use for many years, has been endorsed in peer-reviewed academic journals and is the basis for a ‘National Alcohol Indicators’ project

funded by the National Drug Strategy (Chikritzhs, T., Jonas, H., Heale, P. *et al.* (2000; Catalano, Chikritzhs & Stockwell 2001).

In Table 1, we present data on annual sales of pure alcohol in: the Port Hedland and East Pilbara Statistical Local Areas (SLA's), which comprise the De Grey Statistical Sub-Division (SSD) centred on the town of Port Hedland; the Fortescue (SSD) centred on the Dampier-Roebourne area; and the Pilbara Statistical Division (SD) as a whole. The data in Table 1 are presented for the financial years 1991–92 to 1998–99. At the time of writing, the 2000–2001 data were not available and there are some reporting anomalies in the 1999–2000 data that have not yet been resolved. However, it may be that there was a reduction in consumption in the latter year. Overall, sales of pure alcohol in the 1991–92 to 1998–99 period averaged 617,915 litres. About 55 per cent of total sales were made in the Fortescue SSD, approximately 45 per cent were made in the De Grey SSD, and 30 per cent in the Port Hedland SLA.

Table 1: Annual sales of pure alcohol and adult per capita consumption (APCC) among the estimated service population aged ≥ 15 years, Pilbara Statistical Division, 1991–92 to 1998–99

Location	1991–92	1992–93	1993–94	1994–95	1995–96	1996–97	1997–98	1998–99
Port Hedland SLA	169,722	161,811	157,367	160,710	169,047	201,100	229,576	191,824
East Pilbara SLA	110,108	104,350	105,386	91,237	93,037	72,710	73,204	78,059
De Grey SSD	279,830	266,161	262,753	251,947	262,084	273,810	302,780	269,883
Fortescue SSD	354,789	343,605	341,075	344,229	338,681	335,247	349,151	367,293
Total Pilbara SD	634,619	609,766	603,828	596,176	600,765	609,057	651,931	637,176
Pilbara SD ESP ≥ 15	37,061	36,398	35,746	35,850	35,001	34,517	35,150	35,253
APCC Pilbara SD	17.12	16.75	16.89	16.63	17.16	17.64	18.55	18.07
APCC WA ^{ref}	9.94	9.95	9.88	10.20	10.00	9.91	10.14	10.62

In a report we prepared for the Bloodwood Tree Association and Mawarnkarra Health Service (Saggers, Gray & Catalano 2001), we calculated per capita alcohol consumption for the Port Hedland Statistical Local Area (SLA) using liquor sales data as the numerator and the total population of the Port Hedland SLA as the denominator. A potential criticism of this approach is that—while the population includes consumers from the immediate hinterland of Port Hedland and South Hedland—it does not include people from the adjacent East Pilbara SLA and the Fortescue Statistical Sub-Division SSD who may purchase alcohol in Port Hedland and South Hedland: thus, over-estimating consumption.

To obviate this criticism, and to provide a *conservative* estimate of per capita alcohol consumption in Port Hedland, for the purpose of this report we have calculated per capita consumption figures for the Pilbara Statistical Division as a whole. As a population denominator, we have used estimated ‘service population’ aged ≥ 15 years. The service population is:

... the population serviced by a particular region. Such a population includes the tourists and visitors to the area and makes allowance for residents who are away from their homes (Catalano, Chikritzhs & Stockwell 2001).

Estimates of the annually adjusted service populations for the Pilbara SD, and the per capita estimates of consumption based on them are presented in Table 1.

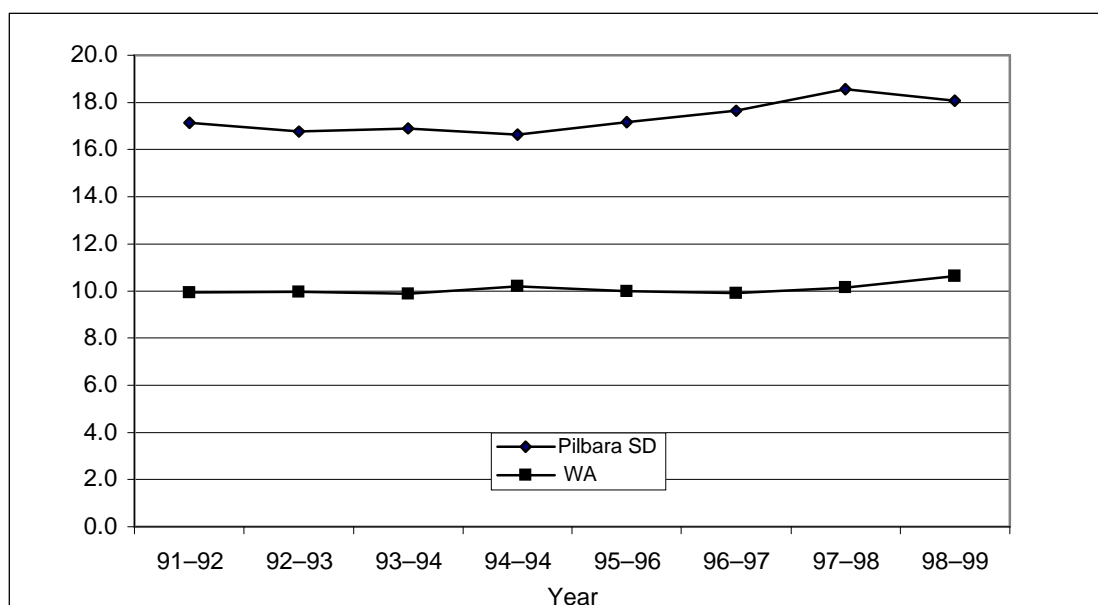


Figure 1: Per capita consumption of pure alcohol, persons aged ≥ 15 years, Pilbara and Western Australia, 1991–92 to 1998–99

Adult per capita consumption of alcohol—that is average consumption among those aged ≥ 15 years—in the Pilbara SD in the period 1991–92 to 1998–99, ranged from a low of 16.63 litres in 1994–95 to a high of 18.55 litres in 1997–98. Overall, the trend was steady and over the period mean per capita consumption was 17.35 litres. In Table 1 comparative data for Western Australia as a whole in the same period are presented, and they are graphed in Figure 1. In Western Australia, per capita consumption ranged from a low of 9.88 litres in 1993–94 to a high of 10.62 litres in 1998–99, and over the period averaged 10.08 litres per person aged ≥ 15 years. As both Table 1 and Figure 1 demonstrate, average annual per capita consumption in the Pilbara for this period was 1.7 times the State average.

Data on the consumption of pure alcohol by beverage type by financial year is presented in Table 2. Most pure alcohol in the Pilbara during this period was consumed as high-strength beer (40.9 per cent). This was followed by low-strength beer (21.9 per cent), high-strength wine (19.5 per cent), and spirits (16.6 per cent). The contribution of low-strength wine to total consumption was negligible (1.0 per cent).

Table 2: Estimated consumption of pure alcohol by beverage type, Pilbara Statistical Division, 1991–92 to 1998–99

Period	High beer	Low beer	High wine	Low wine	Spirits	Total
1991–92	268,813	148,807	121,687	7,052	88,260	634,619
1992–93	243,935	141,989	129,099	7,468	87,275	609,766
1993–94	243,987	134,862	126,051	7,932	90,995	603,828
1994–95	240,323	132,816	116,738	8,713	97,586	596,176
1995–96	236,195	132,521	109,585	8,649	113,815	600,765
1996–97	250,532	131,082	112,523	8,807	106,113	609,057
1997–98	276,328	126,687	125,560	2,882	120,474	651,931
1998–99	264,076	131,554	125,077	213	116,255	637,176
Mean	253,024	135,040	120,790	6,465	102,597	617,915
Percentage	40.9	21.9	19.5	1.0	16.6	

Unlike the Northern Territory, cask wine is not distinguished in the data collected by the Department of Racing Gaming and Liquor. However, Stockwell, Midford, Masters and others (1988) developed a method to estimate the proportion of total high wine sales accounted for by cask wine, and we have used that method in a study of alcohol use in two Western Australian towns (Saggers, Gray, Bourbon & Parker 1998). At the time of preparing this submission, we do not have the necessary data available to make estimates for each year so we have used the assumptions from our 1998 study and data on the volume and dollar value of high-strength wine as reported by the Department of Racing Gaming and Liquor for the period 1991–92 to 1998–99. It must be stressed, however, that this provides only a broad estimate.

For the 1998 study, we first calculated median wholesale prices for random samples of fortified cask wine (n=10), cask wine (n=30), fortified bottle wine (n=50), and bottle wine (n=100) using price data from the February 1996 issue of the *Western Liquor Guide* (Anonymous 1996). Respectively these were \$2.68, \$1.75, \$8.67, and \$10.88 per litre. The Australian Bureau of Statistics (1994) reported that 9.5 per cent of domestic wine sales are of fortified wines. Using this proportion, we estimated the average wholesale cost of cask wine as \$1.84 per litre $[(2.68 \times 0.095) + (1.75 \times 0.905)]$ and bottle wine as \$10.67 per litre $[(8.67 \times 0.095) + (10.88 \times 0.905)]$.

Using these figures the amounts of high alcohol wine sold in casks and bottles were estimated as follows:

V	= Volume of high wine sales 91–92 to 98–99	= 9,372,076 litres
D	= Dollar value of high wines sales 91–92 to 98–99	= \$35,171,133
Cask volume	= $[(10.67 \times V) - D] / (10.67 - 1.84)$	
	= $[(10.67 \times 9,372,076) - 35,171,133] / (10.67 - 1.84)$	
	= 7,341,893 litres	
Bottled volume	= $[D - (1.84 \times V)] / (10.67 - 1.84)$	
	= $[35,171,133 - (1.84 \times 9,372,076)] / (10.67 - 1.84)$	
	= 2,030,183 litres	

Thus, at a total volume of about 7,341,893 litres, cask wine accounted for approximately 78 per cent of high wine sales over the period 1991–92 to 1998–99 and about 15 per cent of total sales of pure alcohol.

In rural and remote areas, it is sometimes asserted that the problem of excessive alcohol consumption and related harm is an *Aboriginal* problem. Gray and Chikritzhs developed a method for estimating both Aboriginal and non-Aboriginal levels of per capita consumption in such situations. This method has been peer-reviewed and published in the *Australian and New Zealand Journal of Public Health* (Gray and Chikritzhs 2000). The method is based on three premises. The first—based on national survey data—is that 62 per cent of Aboriginal and 72 per cent of non-Aboriginal people are either regular or occasional drinkers (Commonwealth Department of Human Services and Health 1996). The second premise—also based on national survey data—is that, on average, those Aboriginal people who drink consume more alcohol than do non-Aboriginal people (Commonwealth Department of Human Services and Health 1996). Estimates of the ratio of the amounts consumed by Aboriginal and non-Aboriginal drinkers come from two sources: regression modelling of data from a survey conducted by the Western Australian Health Department (Stockwell, Daly, Phillips *et al.* 1996); and the unpublished findings of two surveys conducted in the West Kimberley by Dr Peter d’Abbs and his colleagues from the Menzies School of Health Research. These studies independently arrived at an Aboriginal to non-Aboriginal consumption ratio of 1.6:1. The third premise—based on the Australian Bureau of Statistics’ 1996 Census of Population and Housing—is that Aboriginal and Torres Strait Islander people comprise 8.8 per cent of the Pilbara population aged ≥ 15 years. Based on these assumptions—and mean annual sales of pure alcohol of 617,915 litres, and average adult service population of 35,622 persons over the 1991–92 to 1998–99 period—mean Aboriginal and non-Aboriginal per capita consumption were calculated using the following formulae.

APC	= mean annual Aboriginal per capita consumption (litres)	= AC/Ap 72513 / 3135 23.13
nAPC	= mean annual non-Aboriginal per capita consumption	= nAC/nAp 545401 / 32487 16.79
Ap	= estimated Aboriginal service population	= 3,135
Ad	= proportion of Aboriginal drinkers	= 0.62
nAp	= estimated non-Aboriginal service population	= 32,487
nAd	= proportion of non-Aboriginal drinkers	= 0.72
r	= ratio of Aboriginal to non-Aboriginal consumption	= 1.6
XaC	= mean annual consumption of pure alcohol 91–92 to 98–99	= 617,915 = AC + nAc
PCd	= per capita consumption of all drinkers	= XaC / [(Ap*Ad*r) + (nAp*nAd)] 617915 / [(3135 x 0.62 x 1.6) + (32487 x 0.72)] 23.32
AC	= annual Aboriginal consumption	= [(Ap *Ad)*(r*PCd)] [(3135 x 0.62) x (1.6 x 23.32)] 72513
nAC	= annual non-Aboriginal consumption	= (nAp *nAd*PCd) (32487 x 0.72 x 23.32) 545401

The results of these calculations show that estimated per capita consumption over the 1991–92 to 1998–99 period was estimated to be 23.13 litres among Aboriginal adults and 16.79 litres among non-Aboriginal adults. The Aboriginal estimate is 2.29 times, and the non-Aboriginal estimate is 1.67 times, the Western Australian average of 10.08 litres. Furthermore, even if one was to make the assumption that the Aboriginal: non-Aboriginal consumption ratio was as high as 2.0:1, rather than 1.6:1—because of the relative sizes of the populations—non-Aboriginal per capita consumption would still be 16.31 litres of pure alcohol: a rate 1.62 times the State average. These findings indicate that—while they are not as high as those among Aboriginal people—levels of alcohol consumption among non-Aboriginal people in the Pilbara are also a cause for concern.

Alcohol related harm

The alcohol industry makes a significant contribution to the Australian economy and the moderate consumption of alcohol has been shown to have beneficial health effects. However, the misuse of alcohol causes a wide range of harms. These harms include health, social and economic harms and they affect individual drinkers, their families, their local communities, their workplaces, and the nation as a whole. It has been estimated that, nationally, the net cost of alcohol misuse exceeds \$4495 million (Collins & Lapsley 1996:vii). In any particular situation, it is not feasible to document all of the harms caused by alcohol misuse. However, there are a number of measures that are correlated with alcohol consumption and which provide indicators of the wider range of harms caused by alcohol misuse (Chikritzhs, Jonas, Stockwell *et al.* 2000). To illustrate the harm caused by alcohol misuse in the Port Hedland-South Hedland area we present data on two such indicators—alcohol-caused hospital admissions for the Pilbara Health Region and police arrests for offences associated with alcohol in the De Grey SSD. Again, data for these area provide a conservative estimate of alcohol-related harm in the Port Hedland-South Hedland area.

Over the period 1996 to 2000, there was a total of 1,974 hospital admissions in the Pilbara Health Zone for conditions caused by alcohol (Table 3). The most common of these were acute conditions: assaults (621), falls (288), and road injuries (192). The most common chronic condition was alcohol dependence (388). Among Aboriginal females, approximately half of all alcohol caused hospitalisations were for assault. Aboriginal people—while comprising approximately 13 per cent of the total Pilbara Health Zone population—accounted for about 64 per cent of hospitalisations. Using the aetiological fraction method (English *et al.* 1995), and taking account of age differences between these populations, the Health Information Centre at the Department of Health has calculated age standardised rates of hospitalisation per 1000 person years. Table 3 shows that the rates among Aboriginal males were 9.4 times, and among Aboriginal females were 16.9 times, those among their non-Aboriginal counterparts in the Pilbara (Health Information Centre 2001a, 2001b).

In Table 3, comparison is also made between hospitalisation rates among Aboriginal and non-Aboriginal people in the Pilbara, and Aboriginal and non-Aboriginal people in Western Australia as a whole. It shows that among both Aboriginal and non-Aboriginal Pilbara men, the rate ratios were 1.22. That is, the hospitalisation rates among both groups were about 22 per cent higher than among their counterparts in Western Australia as a whole. However, the rates of hospitalisation among Pilbara Aboriginal men are about 11.6 times that among non-Aboriginal men in Western Australia. The rate of hospitalisation among Aboriginal women in the Pilbara is even more alarming, with a rate ratio of 1.71:1 when compared to Aboriginal women in the State, and 16.8:1 when compared to non-Aboriginal women in Western Australia.

Reflecting the data on alcohol consumption, the hospitalisation data show that while the rates among Aboriginal men and women in the Pilbara are extremely high, those among non-Aboriginal men in the Pilbara are also cause for concern.

Table 3: Numbers and age standardised rates (per 1000 person years) of hospitalisations for alcohol caused conditions, Pilbara Health Zone and Western Australia, by Aboriginality, 1996–2000¹

		Aboriginal			Non-Aboriginal		
		Males	Females	Persons	Males	Females	Persons
Pilbara	Number	666	596	1261	532	181	713
	ASR	56.7	52.0	54.1	6.0	3.1	4.8
	95% CI	52.0–61.4	47.7–56.2	51.0–57.2	5.4–6.7	2.4–3.7	4.3–5.2
WA	Number	4,688	3,397	8,084	21,570	14,961	36,531
	ASR	46.4	30.4	38.0	4.9	3.1	4.1
	95% CI	44.9–47.8	29.3–31.5	37.1–38.9	4.9–5.0	3.1–3.2	4.1–4.1
Rate ratio		1.22	1.71	1.42	1.22	1.00	1.17

Source: Health Information Centre, 2001a, 2001b

The other indicator of alcohol-related harm that we have reviewed is police arrest data. In Table 4, we present data for the De Grey Statistical Sub-Division (SSD) and Western Australia as a whole for the period 1994–2000 on arrests for four categories of offences associated with alcohol consumption. Two of these categories of offence—liquor licensing and drink driving offences—are wholly related to alcohol consumption. The other two categories of offences—those against the person and those against good order—are commonly alcohol-related.

Data on the numbers of arrests was supplied by the Western Australian Police Service (through the Crime Research Centre at the University of Western Australia) and there are a number of caveats on it that may affect its accuracy. These caveats are set out in an Appendix to this report. In addition to the caveats specified by the Police Service, the number of arrests might also be affected by different policing practices in different locations. In order to make the De Grey SSD and Western Australian data comparable, we have calculated crude annual arrest rates using total populations counts at the 1991 and 1996 Census' with extrapolations based on changes between them for inter-census years. Given the qualifications we have made, the rates need to be interpreted cautiously. Nevertheless, the rate ratios we have calculated do provide a broad indicator of the differential impact of alcohol consumption in the De Grey SSD and Western Australia as a whole.

Overall, in the period 1994–2000, most alcohol-related offences in the De Grey SSD were for offences against good order. These were followed in frequency by drink driving offences, offences against the person, and liquor licensing offences. However, there were differences by Aboriginality in the offences for which people were arrested. Aboriginal people were more likely to be arrested for offences against good order—52 per cent of offences compared to 36 per cent among non-Aboriginal people. On the other hand, the most common offence category among non-Aboriginal people was drink driving (42 compared to 20 per cent).

Table 4: Numbers and crude arrest rates (per 1000 person years) for offences commonly associated with alcohol, De Grey SSD and Western Australia, by Aboriginality, 1994–2000¹

	Offence group	Aboriginal	Non-Aboriginal	Unknown/missing	Total
De Grey	Liquor Licensing	494	75	13	582
	Drink Driving	1,314	1,000	51	2,365
	Against Person	1,418	428	7	1,853
	Good Order	3,445	857	41	4,343
	Total arrests	6,671	2,360	112	9,143
	Crude rate	281.0	17.3		57.2
WA	Liquor Licensing	4,673	3,028	191	7,892
	Drink Driving	12,881	60,425	2,683	75,989
	Ag. Person	19816	31700	329	51,845
	Good Order	52,160	68,203	1,486	121,849
	Total arrests	89,530	163,356	4,689	257,575
	Crude rate	243.2	13.7		21.0
Rate ratio		1.16	1.26		2.73

1. Source: Data on number of arrests was supplied courtesy of the Western Australia Police Service (see Appendix for caveats)

The crude annual rate of arrests for these four categories of offences was 243.2 per thousand person years among Aboriginal people and 13.7 among non-Aboriginal people—a rate ratio of 16.2:1. The arrest rate ratio for these offences among Aboriginal people in the De Grey SSD compared to Aboriginal people in Western Australia as a whole was 1.6:1 and compared to non-Aboriginal people was 20.5:1. While the difference was not as great, the crude arrest rate for non Aboriginal people in the de Grey SSD was still 26 per cent greater than that for non-Aboriginal people in the State as a whole.

Potential adverse effects of proposed restrictions

In our experience, among the most commonly asserted adverse effects of liquor licensing restrictions such as those proposed for Port Hedland-South Hedland are that:

- they penalise the whole community for the problems of a few; or,
- because consumption is demand driven, controls on supply are ineffective.

Neither a review of the public health literature, nor the empirical evidence from the Pilbara, provide evidence to support these assertions. Furthermore, there is evidence from elsewhere in Australia for the effectiveness of restrictions in reducing supply and alcohol-related harm.

'Restrictions penalise the whole community for the problems of a few'

There are two forms to the assertion that restrictions penalise the whole community for the problems of a few. The first is that alcohol-related harms are caused by a small number of people who consume alcohol far more frequently and in far greater quantities than their fellow citizens. Addressing this proposition requires that we distinguish between both: average levels of alcohol consumption and the way in which alcohol is consumed; and chronic and acute alcohol-related problems.

Public health research has long demonstrated a positive relationship between population level per capita consumption of alcohol and a number of adverse health and social outcomes (Bruun, Edwards, Lumio *et al.* 1975). For example, studies from the United States, Canada, the United Kingdom, Sweden, and Finland demonstrate positive correlations between per capita rates of alcohol consumption and a variety of health and social indicators including cirrhosis and cancer mortality rates, hospital admissions for alcohol dependence, drunkenness convictions, drink driving offences, and crimes of violence (Anglin, Mann & Smart 1995; Kendall 1984; Mann, smart, Anglin & Adlaf 1991; Norstrom 1987; Osterberg 1988). As the summary by d'Abbs and Jones (1996) suggests, these relationships are both variable and complex. Nevertheless, they are clearly demonstrated by the evidence.

More recent research—both in Australia and overseas—has shown that more important than average measures of consumption in determining such outcomes is the amount of alcohol consumed on particular occasions (Hawks 1992; Crawford 1993; Stockwell 1995). Thus, if a person consumes an average of 10 litres of pure alcohol per year, he or she is more likely to cause harm to him or her self if that amount is consumed in a 'binge' fashion as nine standard drinks on two occasions per week, than as two to three standard drinks each day of the week. Research has shown that:

at least 51 per cent of all alcohol consumed in Australia is consumed on occasions when either males exceeded eight units (one unit = 8g alcohol) or women exceeded five units (Stockwell 2001:23).

In any population, those people who consume alcohol with such frequency and in such volume that in common parlance they are labelled ‘alcoholics’ and who thus place themselves at long-term risk of chronic problems such as alcohol dependence or cirrhosis of the liver are a minority. There are many more people who drink at moderate levels in terms of average consumption but whose binge pattern of consumption puts them and others at risk of acute alcohol-related harms such as motor vehicle crashes, falls and violence. In Australia, deaths from such acute causes account for about half of all alcohol-related deaths and two thirds of person years of life lost (Chikritzhs, Jonas, Stockwell *et al.* 2001, cited in Stockwell 2001:23). As a consequence of their larger numbers, such ‘moderate’ drinkers account for a much larger proportion of alcohol-related harm than do those readily identifiable as ‘alcoholics’. This apparently contradictory finding is referred to as ‘the prevention paradox’ (Kreitman 1986; Hawks 1992; Crawford 1993; Stockwell 1995). It is for this reason that alcohol policies and health promotion campaigns have been directed at reducing levels of consumption among all drinkers rather than just those categorised as ‘heavy’ drinkers in terms of average measures of consumption.

The second form of the assertion that restrictions penalise the whole community for the problems of a few, is often more implicitly than explicitly stated. The implication is that the non-Aboriginal community is being penalised for alcohol misuse and related harm among the Aboriginal community. It is true that the level of alcohol consumption among Aboriginal people in the Pilbara is twice that among Western Australians as a whole, and that both alcohol-related hospitalisations and arrests among them are much greater than those among non-Aboriginal people. However, as we have shown in a previous section of this submission, in the Pilbara alcohol consumption among non-Aboriginal people is at least 60 per cent greater than the Western Australian average; hospital admissions for alcohol-caused conditions among non-Aboriginal men are at least 20 per cent higher than among non-Aboriginal males in the State as a whole; and arrests for alcohol-related offences are about 26 per cent greater than for non-Aboriginal people in WA. This evidence indicates that, while alcohol-related problems are extremely high among sections of the Aboriginal population in the Pilbara, they are also of sufficient magnitude in the non-Aboriginal community to require action to reduce them.

‘Restrictions on alcohol supply do not work because consumption is demand driven’

Since the pioneering work of Bruun and his colleagues (1975) over 25 years ago, it has been recognised that levels of alcohol consumption are influenced not only by demand factors arising among drinkers, their drinking settings and cultures, but also by the availability of alcohol—that is, ‘the ease with which alcohol may be purchased for consumption’ (Gruenewald 1993:60). Numerous studies have been undertaken into this relationship and have focused—albeit unequally—on a range of measures; some of which are implemented at the national and

others at the local level. These measures include: legal systems for control and the structure of regulatory agencies; forms of retail availability; price; minimum age limits for consumption; the density of alcohol outlets; types of beverages; and hours and days of sale.

There are several review articles that critically review the findings of these studies (Edwards *et al.* 1994; Gruenewald 1993; Single 1988; Stockwell 1994). The interventions which have the most clearly demonstrated effectiveness are controls on price via the taxation system, and restrictions on the minimum drinking age. Indeed, work by Gray and his colleagues has shown that the imposition of a levy on the sale of cask wine in the Northern Territory led to a significant reduction in alcohol consumption (Gray, Chikritzhs & Stockwell 1999). The reviews also conclude that while earlier work was equivocal in its results, the most recent, methodologically sound studies demonstrate that outlet densities (defined as the number of outlets per unit of population) have a significant positive effect on alcohol sales.

Findings with regard to the influence of hours and days of trading are more equivocal. Edwards and others concluded that:

Most of the studies of changes in hours of sale and opening days for alcohol outlets have demonstrated increased drinking associated with increased number of hours, and decreased drinking with elimination of days of sale together with associated changes in alcohol problems (Edwards, Anderson, Babor *et al.* 1994:144).

Gruenewald, however, argues that too few studies of their effect have been conducted and has called for more research into the issue (1991:73); and Stockwell asserts that the results of such studies are equivocal, though *minor* variations in trading hours are likely to have little impact on overall levels of consumption (1995:120).

Despite this, and general agreement on the need for more research into particular aspects of these relationships, the reviewers are unanimous in their conclusions that—although the relationship is complex and may vary in magnitude over time and place—there is a clearly demonstrable, positive relationship between the availability of alcohol and the level of consumption. In a review conducted under the auspices of the European Office of the World Health Organisation, Edwards and others have written:

The weight of the empirical evidence has supported the argument that limitation on the availability of alcohol can be an effective part of a public health approach to reduce alcohol consumption, and thus to alleviate problems associated with alcohol. While many of these problems are established at state and national levels, others can be established at the community level. The counter argument to the effectiveness of alcohol availability restriction, ‘that people will obtain alcohol no matter the difficulty, particularly heavy drinkers’, is, on the showing of the empirical evidence, not valid (Edwards, Anderson, Babor *et al.* 1994:143).

They caution, however, that their effectiveness or ineffectiveness is contingent upon public support and compliance (1994:145). The implication of all this work is that where consumption

is high and where reduction is warranted—in terms of demonstrably commensurate harms—restrictions on supply can be an effective tool for doing so.

Liquor licensing initiatives and their effects in regional and remote Australia

Our own primary research experience with liquor licensing restriction has been with the evaluation of restrictions in Tennant Creek in the Northern Territory (Gray, Saggars, Atkinson *et al.* 1998, 2000). Restrictions there included:

- a ban on the sale of all wines in casks of >2 litres;
- sales of all wines in casks >2 litres restricted to one transaction per person per day;
- takeaway outlets from hotels and liquor stores to be closed on Thursdays;
- hotel front bars to be closed on Thursdays;
- on week days other than Thursdays, takeaway sales limited to between noon and 9.00pm;
- in front bars, light beer to be the only alcoholic beverage sold between 10.00am and noon; and various other restrictions.

Over the two years following the introduction of the restrictions we found that adult per capita consumption had been reduced by 19.4 per cent from 25.3 litres in 1994–95 to 21.8 litres on 1995–96. This was accompanied by a 28.8 per cent reduction in alcohol-related hospital admissions, and a reduction in the proportion of police arrests on Thursdays from 20.4 to 8.5 per cent. We found that there had been attempts by some people to circumvent the restrictions by shifting to consumption of fortified wines or by increased purchasing from licensed clubs and out-of-town premises that were not subject to the restrictions. However, these attempts had limited impact on the overall effect of the restrictions. We also conducted a random sample survey of the Tennant Creek population and found that a majority of the population supported each of the restrictions, and a majority was in favour of the introduction of additional restrictions.

Similar restrictions on the availability of alcohol both through licensee ‘accords’ and the imposition of conditions upon liquor licenses have been implemented in several locations in regional and remote Australia. Such restrictions have been evaluated in Halls Creek WA (Douglas 1998), Tennant Creek NT (d’Abbs, Togni & Crundall 1996; Gray, Saggars, Atkinson *et al.* 1998, 2000a), Derby WA (d’Abbs & Togni 1998), and Curtin Springs NT (d’Abbs, Togni & Duquemin 1998). Gray (2000) has provided a commentary on these restrictions and lessons to be learnt from them; and the findings of the evaluation studies have been reviewed both in the context of more general alcohol interventions among Aboriginal people (Gray, Saggars, Sputore & Bourbon 2000), and in more specific focus by (d’Abbs & Togni 2000). These reviews reach similar conclusions, and this section of the submission is based on the more detailed review by d’Abbs and Togni. The findings of each of the evaluations are complex and

cannot all be considered in the space available. However, d'Abbs and Togni (2000) produced a series of summary tables which are reproduced below in slightly modified form, and readers are urged to consult these for further details.

Table 5: Summary of restrictions on availability

Locality	On premises	Take-away
Elliott, NT (1991)	Ban on admission of children to public bars	<ul style="list-style-type: none"> • Maximum purchase limit • Cessation of Sunday sales
Halls Ck, WA (1992-)		<ul style="list-style-type: none"> • No sales before noon; • cask wine sales 4-6 pm only; limit of 1 cask per person per day.
Tennant Ck, NT (1995-) (Phase 1)	Front bar restrictions: <ul style="list-style-type: none"> • no Thursday sales; • on other days, 9am-10 pm only; • wine sold only with meals; • before noon, sales of light beer only. 	<ul style="list-style-type: none"> • No sales on Thursdays; • on other days, noon-9 pm only; • no sales of ≥ 4 l wine casks; • limits on sales of 2 l wine casks; • no sales of wine in glass containers >1 litre; • no sales to taxi-drivers for 3rd party sales.
Derby, WA (1997)		<ul style="list-style-type: none"> • No sales on Thursdays; • sales on other days noon-10 pm only; (exemptions apply to both of above) • no sales of ≥ 4 l wine casks.
Curtin Springs, NT (1997)	No sales to Aboriginal people resident in or travelling to NPY lands.	<ul style="list-style-type: none"> • Same as for on-premises.

Note: This table is a summary only; several of the restrictions listed above are subject to additional qualifications.

Source: Based on d'Abbs & Togni 2000:46

The restrictions in each location are summarised in Table 5. Their focus has been on take-away sales and sales of cask wine. The rationale for this has been the perception that such sales are easily accessible, cheap, occur early in the day, and are consumed in an uncontrolled environment. However, in both Tennant Creek and Curtin Springs restrictions on on-premise sales were also implemented.

With the exception of Derby, the impact of these restrictions on total consumption of pure alcohol was significant, though varied (Table 6). In Tennant Creek, during a three month trial period, total consumption fell by 2.7 per cent, and over the three year period following the introduction of restrictions it fell by 19.4 per cent. In Halls Creek in the 12 months following introduction of the restrictions, consumption fell by seven per cent, and in Curtin Springs purchases of alcohol were 79 per cent lower in the first six months, and 59 per cent lower in the second six months, following introduction of restrictions.

Table 6: Apparent impact of restrictions on alcohol purchases

Locality	Impact
Halls Ck, WA	<p>In the 12 months following restrictions:</p> <ul style="list-style-type: none"> • total apparent consumption of alcohol fell by 7% • wine, down by 39% • beer, up by 24% • spirits, up by 10% <p>Weaker effect in following year</p>
Tennant Ck, NT	<ul style="list-style-type: none"> • Total purchases Oct-Dec 1995 2.7% lower than same months of 1994 • During this time, wine sales down by 54% • Full strength beer up by 7% • Partial displacement to other outlets
Derby, WA	<p>Purchases in 1996/97 compared with preceding year:</p> <ul style="list-style-type: none"> • total purchases, down by 0.2% • full-strength beverages, down by 1.9% • low-alcohol beverages, up by 4.2%
Curtin Springs, NT	<ul style="list-style-type: none"> • Purchases of alcohol Jan-June 1997, 79% lower than same months in 1996 • Purchases of alcohol July-Dec 1997, 59% lower than same months in 1996
Tennant Ck, NT	<ul style="list-style-type: none"> • A decline of 19.4 per cent over three years

Source: Based on d'Abbs & Togni 2000:46

The Derby and Curtin Springs evaluations each provide evidence for a significant decrease in offences identified by the police as having a consistently high association with alcohol (Table 7). In Tennant Creek a fall of 14.5 per cent in offences compared to the same period in the preceding year was confined to the first of two three month periods in which restrictions were trialed. However, it was shown that subsequent increases were the result of increased police activity, and that there was actually a decrease in the number of offences committed on Thursdays—the day in which the most stringent restrictions were in place.

Table 7: Impact of restrictions on indicators of public order and selected offences

Locality	Findings
Halls Ck, WA	<ul style="list-style-type: none"> • In first 12 months following restrictions, no change in total number of criminal charges collated by Halls Creek Police Station; • In the <i>following</i> 12 months, number of criminal charges fell by 18% compared to year preceding restrictions.
Tennant Ck, NT (1996)	<ul style="list-style-type: none"> • During Phase 1 of trial, total number of selected offences (assault, criminal damage, unlawful entry, stealing, interfering with motor vehicle) was 14.5% below the number in the corresponding period of 1994. • During Phase 2, number of selected offences was 9.4% <i>higher</i> than in same period in 1994.
Tennant Ck, NT (1998)	<ul style="list-style-type: none"> • Drop in offences recorded during the trial period in earlier evaluation not sustained, although total number in year ended March 1998 was slightly below pre-trial level.
Derby, WA	<ul style="list-style-type: none"> • Total number of offences in selected categories (assaults, sexual offences, damage, motor vehicle offences, threatening behaviour) was 36.7% lower during the trial period than during the corresponding period in 1996, and 28.5% lower than in 1995.
Curtin Springs, NT	<ul style="list-style-type: none"> • Total number of selected offences (same as for Tennant Creek) recorded by Yulara Police Station during first 6 months of trial was 23% lower than corresponding figures in 1996 and 13% lower than the same period in 1995. Total number of offences recorded during 2nd six months of trial was 38% lower than in the same period in 1996, but 71% higher (i.e. 29 compared to 17) relative to figures in the same period in 1995. • At Kulgera Police Station, total number of selected offences in 1997 was 21% lower than in 1996, and the same as for 1995.

Source: Based on d'Abbs & Togni 2000:47

In Derby, inadequate baseline data was available to permit comparison of injury surveillance data in the trial period and no effect of the restrictions on alcohol-related injuries was observed. In Halls Creek, Tennant Creek, and Curtin Springs there were varying declines in health indicators—including, in the Curtin Springs case a decline in road crashes (Table 8). However, attempts to examine indirect effects on well-being, such as monitoring food sales and school attendances did not yield any evidence of impact.

Table 8: Impact of restrictions on health and wellbeing

Locality	Indicator(s)	Key findings
Halls Ck, WA	<ol style="list-style-type: none"> 1. Alc.-related presentations as %age of all presentations at Halls Creek District Hospital. 2. Domestic violence presentations as %age of all outpatient presentations. 3. Royal Flying Doctor Service emergency evacuations. 	<ol style="list-style-type: none"> 1. Decline over 2 years following restrictions. 2. No consistent trend. 3. Number reduced following restrictions.
Tennant Ck, NT (1996)	<ol style="list-style-type: none"> 1. Admissions to A&E section, TC Hospital. 2. Admissions to women's refuge. 3. Food sales, local supermarket. 4. Alc.-related presentations, Anyinginyi Congress Clinic; 5. Attendances at TC Primary School. 	<ol style="list-style-type: none"> 1. Phase 1—34% drop in alc-related admissions; 26% drop in selected diagnostic categories; effect weaker in Phase 2. 2. Phase 1—46% decline in admissions; not sustained in Phase 2. 3. No change indicated. 4. Small falls observed. 5. No effect observed.
Tennant Ck. NT (1998)	<ol style="list-style-type: none"> 1. Acute alcohol-related admissions to local hospital. 	<ol style="list-style-type: none"> 1. Levels remained below pre-trial levels.
Derby, WA	<ol style="list-style-type: none"> 1. Injury surveillance survey, Derby Regional Hospital. 2. Hospital admissions for alcohol-related injuries. 	<ol style="list-style-type: none"> 1. Baseline data inadequate to permit comparison with trial period. 2. No effect observed.
Curtin Springs, NT	<ol style="list-style-type: none"> 1. Alcohol-related after-hours call-outs, Mutitjulu Health Clinic. 2. Alcohol-related contacts, Amata Clinic. 3. Incidence of alcohol-related and other road crashes. 4. Attendances at community schools. 	<ol style="list-style-type: none"> 1. Phase 1—52.4% lower than in 1996; Phase 2—24.2% lower. 2. Phase 1—29.4% lower than in 1996; Phase 2—51.9% lower. 3. No. of crashes 12.8% lower in 1997 than 1996; no alcohol-related crashes involving Aboriginal people during 1997. 4. No impact observed.

Source: Based on d'Abbs & Togni 2000:48

In their review, d'Abbs and Togni wrote that:

A criticism sometimes levelled against local restrictions on availability is that they are the creations of zealous 'do gooders' who impose their designs against the wishes of the majority (2000:49).

However, in the two locations in which community opinion regarding such restrictions has been surveyed, this claim is not supported (Table 9). In a survey following trial restrictions in Tennant Creek, 58 per cent of residents reported being in favour of the restrictions and a majority favoured their retention. In a survey as part of the second evaluation, differential levels of support were found for each individual restriction but a majority favoured each of them. Furthermore, a majority was in favour of additional restrictions. In Derby, 58 per cent of those who took part in a telephone survey were in favour of the restrictions; and small majorities of

Community Development Employment Program workers were in favour of a ban on four litre wine casks and reduced trading hours, but not a ban on takeaway trading on Thursdays. Importantly, however, support for restrictions was qualified by widespread belief that other measures were also needed.

Table 9: Extent of community support for restrictions

Locality	Survey design	Key findings
Tennant Ck, NT (1996)	(Towards end of trial period) household survey, random sample n=273	<ul style="list-style-type: none"> • 58% in favour of trial measures; 21% against; 16% reported mixed reaction. • Majority in favour among both private dwellings and town camps. • Majority favoured retaining restrictions.
Derby, WA	(Towards end of trial period): <ul style="list-style-type: none"> • telephone survey, random sample n=198; • sample of 78 Aboriginal participants in CDEP groups. 	<ul style="list-style-type: none"> • Telephone survey: 58% in favour of restrictions; 24% against; 5% in favour of some measures, against others; • CDEP sample: ban on wine casks supported by 56%; reduced take-away trading hours supported by 53%, but ban on Thursday take-away trading supported by only 42%.
Tennant Ck, NT (1998)	Household survey, n=271	<ul style="list-style-type: none"> • < 30% adversely affected by any restrictions. • Majority supported continuation or strengthening of present restrictions (even though many believed that several restrictions were widely circumvented). • Majority supported additional restrictive measures.

Source: Based on d'Abbs & Togni 2000:48

d'Abbs and Togni concluded that there were three major implications from their review of the evaluation reports—each of which deserves further investigation, but each of which is supported by considerable evidence.

1. Restrictions have a modest but real effect on apparent alcohol consumption

Where restrictions have targeted wine sales, there is evidence of a compensatory shift to other beverages, mainly beer, but this has not completely offset falls in wine sales. Similarly, examination of liquor purchases by neighbouring outlets suggests that falls in apparent consumption in the target community are partially offset by geographical shifts in purchasing patterns, but not to an extent sufficient to negate all of the local reductions in sales.

2. Restrictions have contributed to a significant reduction in alcohol-related harm

Restrictions have contributed to reductions in levels of drunkenness, interpersonal violence and damage to property. The extent to which they also enhance social wellbeing through, for example,

causing expenditure to be diverted from alcohol to food, is unclear. However, the one setting in which possible impact on the workplace was examined—Tennant Creek—revealed that the restrictions were accompanied by reductions in absenteeism.

3. Restrictions on availability are supported by a majority of community residents

Contrary to assertions sometimes aired, local restrictions on availability have widespread (but, of course, not unanimous) community support. However, that endorsement is qualified by a widespread belief that other measures are also needed to reduce alcohol-related harm (2000:50).

Key issues

Issues emerging from the evaluations reviewed by d’Abbs and Togni (2000) and our own work which need to be considered by any group intending to impose or advocate restrictions include: determining community support; identifying the type of restrictions to be imposed; the question of selective versus universal restrictions; the importance of a broad-based strategy in which restrictions are a part; and the various roles adopted by liquor licensing authorities in bringing about restrictions.

Community support

Community support—both Aboriginal and non-Aboriginal—is vital to the successful operation of alcohol restrictions. Community action on alcohol has a lengthy history in Port Hedland. As in towns like Derby and Halls Creek, campaigns to restrict the availability of alcohol have been initiated by local health and other professionals, with the support of some Aboriginal organisations (d’Abbs & Togni 2000). Philp, Cutler & Zilko (1996) provide a useful history of recent community action over excessive drinking in the Hedland area, dating from public meetings in 1986 and focused on attempts to control the supply of alcohol. The Port Hedland Town Council asked Liquorland (South Hedland) to agree to a number of changes in staff, structures, selling practices and alcohol sold. After lengthy negotiations Liquorland only agreed not to sell bottled beer and to change its rubbish policy (to discourage scavenging outside the store) (Philp, Cutler & Zilko 1996:49).

In 1995, after pressure from government and non-government agencies, the Port Hedland Town Council held a public meeting at which Port Hedland liquor outlets agreed to restrict their trading hours, with no sales of alcohol before 10.00am. The effects of the restrictions were not formally evaluated and they ceased later in the year (Philp, Cutler & Zilko 1996:49–50).

By 1997 concern was being directed at the numbers of Aboriginal people living, congregating and drinking around South Hedland open spaces and a Taskforce to advise the South Hedland Enhancement Scheme on the “enhancement of facilities for Aboriginal people” organised a study tour of Alice Springs, Tennant Creek and Darwin to view options available to the operation of town camps. Recommendations stemming from this tour were wide ranging, but

included the introduction of alcohol restrictions, the trialing of ‘wet’ canteens in outlying communities (a suggestion opposed by ‘dry’ communities), and programs similar to the NT’s ‘Living with Alcohol’ program (Enhancement of Facilities for Aboriginal People Taskforce 1997:iv-vii).

Currently there exists a Pilbara Liquor Accord for the Town of Port Hedland which sets out in writing the responsibilities of licensees, crowd controllers, police, and local government with respect to the supply and sale of alcohol. It also outlines best practices, the role of the Accord committee, training for all relevant staff, complaint procedure, and evaluation of the Accord. To our knowledge, no such evaluation has been made. In 2001 after continued community concern an amendment to the Accord was agreed to by all licensees in Port Hedland. Under this amendment licensees agreed to the following:

- no sales of packaged liquor before 10.30am any day;
- no sales of packaged liquor after 8.30pm Monday to Thursday;
- bottle shops to trade between 10.30am and 9.00pm Friday and Saturday; and
- bottle shops to trade between 11.00am and 8.00 pm on Sunday.

Subsequently, however, this agreement broke down and currently most licensed premises are trading according to the limits of their licensing agreements.

Although the Accord has had little success regulating the activities of licensees in Port Hedland, it has been used to attempt to influence the development of better public policy with respect to alcohol elsewhere in the town, and the Port Hedland Town Council has developed guidelines to regulate alcohol consumption in Council facilities and on Council grounds. In a media release on the 17th May 2002 the Deputy Mayor Bob Neville claimed that the Council had accepted most of the recommendations from the Pilbara Liquor Accord, including a general prohibition on the consumption of liquor of more than 3.5 per cent alcohol content on Council recreation reserves, only permitting alcohol consumption on reserves with an Occasional Liquor Licence, and a limit of five Occasional Licences per club per year. Existing Council policy already provides restrictions on the duration of liquor consumption on recreation reserves and also prohibits drinking at junior sporting events. Cr Neville cited the problems associated with widespread drinking in the community, and said that the changes in Council policy would encourage clubs to move into more socially responsible means of fund raising, rather than relying on liquor sales (Town of Port Hedland 2002a; 2002b).

It is clear from this account that concerns about the effects of excessive drinking have a long history in Port Hedland, and are shared by a range of health, social and civic groups, consisting of both Aboriginal and non-Aboriginal people. In response to this, there have been repeated voluntary attempts to regulate the sale and supply of alcohol in the town. However, none of

these has persisted and there is a growing consensus, at least among those people most directly affected, that some broad-based interventions, including enforceable alcohol restrictions, need to be implemented.

There is unambiguous evidence from elsewhere that, once introduced, restrictions enjoy wide community support, even though minority voices opposing restrictions are sometimes more audible (d'Abbs & Togni 2000; Gray, Saggars, Atkinson *et al.* 1998, 2000). However, forming the broad-based coalitions necessary to mount a campaign to introduce restrictions is difficult because of existing tensions in communities: between those with vested interests in the minimal regulation of alcohol and those whose professional and community interests are vested in preventing alcohol-related health and social harms; between Aboriginal and non-Aboriginal people among whom long-held enmities may exist; and between those who philosophically oppose any restrictions on their liberties and those supporting controls of some type. Given the focus on Aboriginal drinking of most campaigns it is apparent that wide-spread Aboriginal support is a necessary, but not sufficient condition for the introduction of restrictions. If this is overlooked, Aboriginal people will, with some justification, see restrictions as simply another disempowering attack on their rights and freedoms.

Type of restrictions

The type of restrictions contemplated should take into account experiences elsewhere in Australia, and include:

- restrictions on on-premises hours or other conditions of trading;
- restrictions on take-away trading conditions;
- restrictions on particular beverages; and
- restrictions on particular liquor outlets (d'Abbs & Togni 2000:51).

In this context it is important to consider the likely impact of the proposal to limit the sale of wine to two litres per customer per day. Cask wine has been a particular target of restrictions in the Northern Territory (d'Abbs & Togni 2001; Gray, Chikritzhs & Stockwell 1999; Gray 2000). Prior to the introduction of restrictions, in Tennant Creek cask wine accounted for 28.4 per cent of pure alcohol consumption, and in Central Australia accounted for 23 per cent (Gray & Chikritzhs 2000). However, as indicated in a previous section of the submission, in the Pilbara, it accounts for only about 15 per cent of consumption; so that here this particular restriction may have less effect than it has had in some Northern Territory locations.

Selective versus universal restrictions

Across Australia, alcohol restrictions have been imposed on whole communities, apart from the case of Curtin Springs where they apply only to Aboriginal people. These restrictions were

negotiated between the licensee and a local Aboriginal group, and required the endorsement of the Human Rights and Equal Opportunity Commissioner (HREOC) in the form of a 'Special Measures Certificate' permissible under the Racial Discrimination Act (1975) s8(1) which states:

Special measures taken for the sole purpose of securing adequate advancement of certain racial or ethnic groups or individuals requiring such protection as may be necessary in order to ensure such groups or individuals equal enjoyment or exercise of human rights and fundamental freedoms shall not be deemed racial discrimination, provided, however, that such measures do not, as a consequence, lead to the maintenance of separate rights for different racial groups and that they shall not be continued after the objectives for which they were taken have been achieved (cited in Race Discrimination Commissioner 1995:137).

The Act will deem discriminatory any proposed restrictions targeting Aboriginal people, unless the HREOC is satisfied that the restrictions are supported by an appropriately representative Aboriginal body, and satisfy all criteria under s8(1). Given this legislation, and the evidence that excessive drinking and alcohol-related harm is a general problem, not simply confined to the Aboriginal population, universal restrictions will be most appropriate in most community settings (d'Abbs & Togni 2000).

Broad-based strategy

Restrictions on alcohol are not, in themselves, sufficient to tackle excessive drinking and alcohol-related harm. They need to be part of a larger strategy tackling the culture of heavy drinking through a range of preventive and treatment programs and activities. In most places throughout Australia where restrictions have been introduced, these broader health and social strategies have been in place, as is the case of Port Hedland. For instance, the Pilbara Public Health Unit, apart from actively participating in the Port Hedland Accord, is involved in a number of alcohol-related interventions aimed at reducing risk factors associated with alcohol and other drug misuse, and alcohol-related injury prevention. The Town of Port Hedland also, has taken a leading role in alcohol-related activities. This includes membership of a working group which is developing a strategic plan to address alcohol issues in the town, participation in an addictions workshop which is currently producing a discussion paper, and a collaborative proposal with Safer WA to the Alcohol Education and Rehabilitation Foundation to investigate the potential for partnerships with Aboriginal people which explore alcohol control measures through existing by-laws. Aboriginal and other non-Aboriginal organisations, too, have been actively involved in alcohol-related prevention and treatment, through the night patrol, sobering up centre, women's refuge, hostel, and their participation on community-wide groups tackling alcohol issues. These activities and services have been conducted over a long period, indicating the commitment of local individuals and organisations to a broad-based alcohol strategy.

Role of liquor licensing authority

The role of liquor licensing authorities in the imposition of alcohol restrictions has varied considerably across Australia—ranging from intervention under the provisions of relevant legislation, simply ratifying local agreements between community stakeholders, to taking no formal part in local restrictions (d’Abbs & Togni 2000:52). In Western Australia, the liquor licensing authority has intervened at the request of local groups in Halls Creek and Derby, and the current hearing in Port Hedland has been the result of concerted attempts by local groups to introduce more rigorous alcohol control measures.

Complementary measures

The National Drug Strategy—to which the Commonwealth and states/territory governments are signatories—provides a three pronged approach to address the misuse of alcohol and other drugs. This is based on demand reduction, supply reduction, and harm reduction (Commonwealth of Australia 1998, 2001). This approach provides a useful framework for considering both existing and additional measures to complement the proposed restrictions in Port Hedland and South Hedland.

Demand reduction

State and regional health plans developed by the Department of Health in Western Australia cite substance misuse as a central concern for health in the Pilbara region. The Pilbara Regional Health Plan, *Norhealth 2020*, identifies three major risk factors for substance misuse in the northwest of the state: high levels of alcohol consumption; high levels of the supply of alcohol; and social, cultural and economic isolation. To tackle the issue of demand reduction, the Health Department has committed itself to:

- increase education and treatment related to alcohol, tobacco and drug use;
- advocate a consistent health promotion message from all health practitioners regarding risks and management of dependency; and
- the integration of preventative and acute care programs;
- the development of a case management approach; and
- the provision of appropriate detoxification, rehabilitation and respite care services ... (Health Department of Western Australia (2000a).

The Western Australian Aboriginal Health Strategy developed in 2000 on the basis of the six Regional Aboriginal Health Plans, also identifies substance misuse as a key health problem, but sees demand reduction as part of a broader strategy to achieve holistic health, through self-determination; appropriate and accessible health care services provided in a culturally secure environment and manner; a coordinated and collaborative intersectoral approach; and improved health financing (Health Department of Western Australia 200b).

In 2001 participants in the Port Hedland and Roebourne Substance Misuse Review for the Office of Aboriginal and Torres Strait Islander Health (Saggers, Gray & Catalano 2001) wanted greater access to both broad-based preventative programs on alcohol and other drugs, and better access to treatment for substance dependent people. They identified children and young people as those with whom more preventive work needs to be done, both in terms of alerting them to the dangers of alcohol and other drugs, and providing healthy alternatives to substance use.

Supply reduction

In Western Australia, the main vehicle for controlling the supply of alcohol is the *Liquor Licensing Act* (1988). In common with similar acts in other states/territory jurisdictions it specifies who can sell or purchase alcohol and under what conditions. Although its impact is limited, the *Aboriginal Communities Act* empowers discrete Aboriginal communities to make by-laws prohibiting consumption of alcohol within their boundaries. Although used more as a revenue raising measure than an alcohol control measure, the Commonwealth Government's powers to impose excise duties and other taxes on alcoholic beverages adds to their price and to some extent affects the willingness of ability of consumers to purchase alcohol.

Norhealth 2020 addresses the issue of the supply of alcohol and has committed itself to support structural solutions, such as alcohol restrictions and accords in the Pilbara region (Health Department of Western Australia 2000a). A similar commitment is made by the Western Australian Aboriginal Health Strategy which identifies the need to decrease risk factors for the harmful consumption of alcohol, through the support of healthy public initiatives such as 'dry' communities and reduced trading hours (Health Department of Western Australia 2000b).

Among the broad-ranging initiatives suggested by participants in the 2001 study in Port Hedland and Roebourne was a recommendation that the supply of alcohol should be reduced, including:

- a reduction in the number of liquor outlets in Port Hedland;
- a reduction in the trading hours of liquor outlets in both Roebourne and Port Hedland; and
- banning of sales of packaged wine in containers of more than two litres in Roebourne and Port Hedland (Saggers, Gray & Catalano 2001:80).

Harm reduction

Apart from those measures already identified, there are also a number of other harm reduction activities and services operating in Port Hedland. These include: the Pakala Patrol located in South Hedland, which assists alcohol-affected people by removing them from public places and conveying them home or to another safe place; the Hedland Sobering-Up Centre/Hedland Homeless Support Service, which offer residential and non-residential services to intoxicated people in order to reduce alcohol-related injury and harm, and incarceration of intoxicated

people; and the women's refuge, which provides accommodation for women and children escaping from domestic violence which is often alcohol-related. In addition, health professionals in the town, such as those employed in the Community Drug Service Teams, also counsel clients on ways in which they can reduce health and social harms related to their substance misuse (Saggers, Gray & Catalano 2001).

Conclusion

By any measure, the average consumption of alcohol in the Pilbara, generally, and in Port Hedland, in particular, is excessive. It is clear that problem drinking is not confined to specific group—such as Aboriginal people—although heavy drinking and related harms among this group are of concern health professionals and community members alike.

Both the statistical indicators of alcohol-related harm, and expressions of community concerns presented in this report, illustrate that excessive consumption is associated with a number of health and social harms in Port Hedland.

Concerted community action by various coalitions of Aboriginal and non-Aboriginal organisations for more than fifteen years have attempted to address problems associated with alcohol misuse—including voluntary accords with local licensees. Despite goodwill, these voluntary agreements have broken down over time.

In addressing such concerns and the need to target populations as well as individuals, the National Drug Strategy—to which Commonwealth and State governments are signatories—have agreed to a broad-based strategy based on demand reduction, harm reduction, and supply reduction. Alcohol restrictions have been a significant way in which communities in various parts of Australia have tackled the issue of supply reduction.

Evaluations of alcohol restrictions in Australia have demonstrated that they can result in reduced consumption of alcohol, and reductions in alcohol-related health and social harms. They have also complemented other strategies addressing excessive alcohol consumption and related harm.

Although community support is difficult to gauge in the absence of systematic research, there is evidence that, over the years, a number of individuals and organisations in Port Hedland are keen to include alcohol restrictions as part of their broad-based strategy to tackle alcohol misuse.

Appendix 1: Caveats on WA Police Service Data

1. The *Data/Information* was supplied courtesy of the Western Australia Police Service.
2. The *Data/Information* was sourced from the Western Australia Police Service's:
 - Criminal Record Reference System (NIS P18s)
 - Juvenile System
 - Lockup Admission System
3. The *Data/Information* is provisional and may be subject to revision.
4. Processed Persons data refers to numbers of offences for which a person has been processed; i.e. arrested, summonsed, formally cautioned or referred to a Juvenile Justice Team program. It does not represent total clearances as clearance figures include offenders subject to statute bar, diplomatic immunity and other related processes. The processed persons data does not necessarily provide the number of offences as more than one offender could be processed for a single offence. Accordingly, the data cannot be used to calculate reported offence numbers or clearance rates. Caution should be exercised in its application.
5. The number of reported offences for a period (eg. Year) comprises all offences reported during that period and may include offences committed during earlier periods. Therefore the reporting of historical offences will inflate the number of reported offences for a period.
6. Offence classifications may alter between periods due to changes in legislation or administrative recording practices. Accordingly, time series may be broken.
7. (Aboriginality/Ethnicity) is derived from the Western Australia Police Service Identity Code field for Ethnic Appearance. The field is completed on the basis on the attending police officer's subjective assessment of the person's appearance, and is recorded for operational purposes only. Care should be exercised in the interpretation of these statistics, as a subjective assessment means it is possible that a person attributed to a particular group does not belong to that group.
8. Time series data may be affected by changes in legislation, coding practices and locality boundaries.

Appendix 2: Clarification of consumption data

Mr Hugh Highman
Director, Liquor Licensing
Department of Racing Gaming and Liquor
PO Box 6119
EAST PERTH WA 6893

Dear Mr Highman

Estimation of per capita alcohol consumption, Pilbara, 1991–92 to 1998–99

As I indicated in the submission on behalf of the Executive Director Public Health to the ‘Section 64 Inquiry – Port Hedland and South Hedland’, Associate Professor Siggers and I calculated per capita consumption of alcohol for the Pilbara Statistical Division (SD) based on the ‘estimated service population’ (ESP). On this basis, average annual adult per capita consumption was 17.35 litres—72 per cent greater than the Western Australian average of 10.08 litres for the same period.

In his cross-examination of me, Mr Tim Monaghan (on behalf of the Victoria Hotel) questioned whether the ESP included an influx of 500 additional workers over part of the time period under consideration. I conceded that no actual population survey, apart from the Census of Population and Housing, had been conducted and therefore that the ESP did not take account of such an influx.

I am writing now to point out that—because the level of alcohol consumption in the Pilbara SD is so high above the State average—the impact of such a population influx on per capita consumption is marginal. This is demonstrated in the table below in which I have calculated annual adult per capita consumption based on ESP plus 500 persons and ESP plus 1000 persons.

Estimates of per capita consumption of pure alcohol Pilbara SD, 1991–92 to 1998–99

	Population	Litres of pure alcohol	Per capita consumption (litres)	Percentage above WA average
Mean ESP 91–92 to 98–99	35,622	617,915	17.35	72%
Mean ESP 91–92 to 98–99 + 500	36,122	617,915	17.11	70%
Mean ESP 91–92 to 98–99 +1,000	36,622	617,915	16.87	67%

If 500 persons are added to the ESP, estimated per capita consumption falls from 17.35 litres to 17.11 and is 70 per cent above the State average. If 1000 persons are added, estimated per capita consumption is 16.87 litres and is still 67% greater than the Western Australian average. It should be noted that these are conservative estimates because I have added the additional numbers for *all* years—not just the particular time periods when the influx occurred. The estimates, like that in the submission, are also conservative in that they do not include alcohol purchased in Perth but consumed in the Pilbara SD.

I trust this further clarifies the issue.

Yours sincerely

Dennis Gray MPH PhD
Associate Professor
 19th June 2002

cc. Dr Virginia McLaughlin, Executive Director Public Health
 Mr Larry Graham, MLA
 Ms Lynn Harding, Pilbara Community Drug Services
 Associate Professor Sherry Sagers

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