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6 February 2008

Dear Jane,

Re: Application A576—Labelling of alcoholic beverages with a pregnancy health advisory label

Please find attached a submission from The Australian Wine Research Institute and the Winemakers' Federation of Australia on behalf of the Australian wine industry with respect to the application by the Alcohol Advisory Council of New Zealand, of 17 February 2007.

Please do not hesitate to contact the industry if we can be of further assistance.

Yours sincerely,

Creina S. Stockley
Health and Regulatory Information Manager
The Australian Wine Research Institute

And

Dominic Nolan
Director of Government and Community Affairs
Winemakers' Federation of Australia



**The Australian Wine Research Institute
and
Winemakers' Federation of Australia**

**Joint Submission to
Food Standards Australia New Zealand**

On

**INITIAL ASSESSMENT REPORT
APPLICATION A576**

**LABELLING OF ALCOHOLIC BEVERAGES WITH A
PREGNANCY HEALTH ADVISORY LABEL**

6 February 2008

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Introduction

The Australian wine industry fully supports and is committed to the goal of reducing alcohol abuse and misuse in Australia, as exemplified by the joint initiatives between the Federal government and the industry, including standard drinks labelling and Drinkwise Australia. The industry, however, believes that a requirement for mandatory health warning labels on alcoholic beverages represents a simplistic, indirect and ineffective blanket measure. The introduction of such a transparent measure not only represents over-regulation, but may significantly compromise effective, ongoing research-based measures that have been established to reduce the incidence of, and problems concomitant with, risk alcohol consumption during pregnancy in specific 'high risk' groups in the general population.

The Australian Wine Research Institute (AWRI) is funded by the Grape and Wine Research Corporation, which is supported by the Australian winemakers and grapegrowers through their investment body, the Grape and Wine Research and Development Corporation with matching funds from the Australian government.

The Winemakers' Federation of Australia (WFA) is the peak national body representing wine enterprises of all sizes across Australia. Voluntary membership represents in excess of 95% of wine production in Australia.

The Australian wine industry is one of our country's major success stories. Over recent decades, the sector has enjoyed strong production and export growth, substantial investment, high levels of innovation and increased employment, particularly in regional communities. The wine industry has contributed positively to the economy, through income and employment particularly in regional areas, as well as through multiplier effects to other industries (including tourism and retail) and the balance of payments in major export earning.

In 2006-07 the value of domestic sales reached \$1.9B and the value of export sales \$3.0B. ABS Census data indicate that direct employment in the grape growing and wine making industries exceeded 30,000 in 2001. In addition, once allied supply industries are taken into account, the number of jobs supported by the wine industry is estimated at around 57,000 people for 2001.

Table 1: Snapshot of the Australian Wine Industry

(2006-07 figures unless otherwise indicated)		
Wineries (2006) ¹	number	2,146
With Cellar Doors	number	1,565
Direct Employment (2001) ²		
Grape Growing	number	15,629
Wine Making	number	14,480
Wine Grape Crush ³	'000 tonnes	1,420
Wine Production ³	million litres	1,050
Domestic Sales - Volume ⁴	million litres	449
Domestic Sales - Value ⁴ (2005/06)	\$A million	1,899
Exports - Volume ⁵	million litres	798
Exports - Value ⁵	\$A million	2,994
Imports - Volume ⁴	million litres	34
Imports - Value ⁴	\$A million	307
Taxation (2006)		
Wine Equalisation Tax	\$A million	660

Goods and Services Tax	\$A million	450
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Sources:

¹ *Australian and New Zealand Wine Industry Directory 2007*

² *ABS Catalogue No: 1329.0 Australian Wine and Grape Industry*

³ *WFA crush estimate. WFA Production estimate based on extraction rate of 740 litres of wine produced per tonne. Extraction rate derived from ABS*

⁴ *ABS Cat No. 8504.0 Sales of Australian Wine & Brandy by Winemakers*

⁵ *AWBC WINEFACTS Statistics*

The industry, mindful of its responsibility as a producer of alcoholic beverages, is actively involved in education and research initiatives. For example, the industry sponsored and is sponsoring both independent and industry-collaborative research programs, and also sponsors the collection, analysis and dissemination of information on all aspects of alcohol consumption, which is available to the community, and actively encourages the inclusion of lectures on the pharmacology and physiology of alcohol in oenology, viticulture and wine-marketing courses, and in alcohol beverage retail/service courses, as well as discussions with, and talks to, community and school groups.

The research programs include gender differences in the metabolism of alcohol, the effects of wine on the human cardiovascular system and in the initiation and progression of certain cancers, and the potential allergenicity of wine and wine products. Current and past collaborators include the CSIRO Division of Human Nutrition, Flinders University, Heart Research Institute, Royal Melbourne Hospital, St Vincent's Hospital Melbourne, The Alfred and Monash University, and The University of Western Australia. Conferences, seminars and symposia on alcohol-allied issues have also been sponsored by the Australian wine industry, the objective of which has been to facilitate discussion and debate between academia, government, health practitioners and industry, in order to give direction to future research, and to future political and social policies.

Alcohol Policy Framework

Following is an extract from the Winemakers' Federation of Australia Policy Statement for the 2007/08 Pre-Budget Submission in relation to the Australian Government alcohol policy and regulatory framework:

- *acknowledges that alcohol is a broadly accepted part of Australian life, and that the policy and regulatory framework should not discourage responsible consumption;*
- *ensures that decisions regarding alcohol policy and regulation are based on sound scientific fact, backed up by reliable evidence;*
- *ensures that there is a formal process of consultation with the Australian wine sector on policy and regulatory positions taken both in domestic and global forums that impact the operating environment of grape growers and winemakers;*
- *consults and actively engages the Australian wine sector on decisions made and positions taken regarding alcohol policy at the World Health Organisation and associated forums;*

This submission to FSANZ is made with these policy principles in mind: based on sound scientific fact backed by reliable evidence.

The Australian wine sector is a major contributor to the economic and social fabric of Australian life. Responsible for employing more than 60,000 Australians, generating more than \$3 billion in export earnings and fostering the prosperity of many regional communities, the Australian wine sector creates a product that is responsibly enjoyed by millions of people around the world every day. When consumed in moderation, in a manner consistent with the existing 2001 NHMRC Australian Alcohol Guidelines, wine is part of a healthy lifestyle.

The industry also recognises when wine or other alcohol products are consumed to excess, either in the short- or long-term, they can contribute to a range of social and physical harms. Alcohol abuse is an unnecessary blight on an otherwise positive industry.

The Australian wine sector has a responsibility to continue working with the Australian Federal Government and the wider community to ensure the benefits of moderate wine consumption are maximised and excessive consumption and associated harms are minimised in every possible way. This includes consultation and partnership across regulatory and policy deliberations for both the domestic and international environment.

The AWRI and WFA are pleased to provide a response to the Initial Assessment Report on Application A576 – Labelling of alcoholic beverages with a pregnancy health advisory label on behalf of the Australian wine sector.

Executive summary

The introduction of labelling of alcoholic beverages with a pregnancy health advisory label is not supported by The Australian Wine Research Institute and the Winemakers' Federation of Australia for the following five reasons based on an evaluation of the scientific literature:

1. Conflicting and inconclusive evidence

The evidence on the impact of low maternal alcohol consumption on the developing foetus is conflicting and inconclusive. While no threshold above which an alcohol-related adverse effect occurs to the developing foetus has been established, the available data to date suggests that no adverse effects occur when up to 83 g or *ca.* eight standard drinks of alcohol is consumed per week.

The data also suggests that there are confounders such as the nutritional status of the mother, her ingestion of drugs including caffeine and nicotine, her age, and her educational, ethnicity, genetic, marital, parity and socio-economic status which contribute to the development of FAS/FASD.

2. Incidence of FAS/FASD in Australia is low

The incidence of FAS in Australia is low, which reflects the size of the readily identifiable 'at risk' group. In Australia, only 1.0–4.3% of the 48–58 % of women who consume alcohol while pregnant, consume excessively and continually, and the incidence of FAS is *ca.* 0.014–0.02/1,000 live births and the incidence of low birth weight is 4/1,000 live births. These statistics have remained stable over the past decade, which reflects the size of the readily identifiable 'at risk' groups.

The incidence of FAS is higher however, in children born to indigenous Australians (Aboriginal Australians), 2.76/1,000 live births, which is consistent with other countries data for indigenous groups. The 'at risk' groups identified include indigenous Australians, heavy alcohol consumers and young Australian women.

This low incidence in comparison with certain other countries, may reflect other different alcohol consumption patterns, diet and lifestyle, which could reduce confounders.

3. Level of awareness is high and there are readily available print and website materials for women

This low incidence may also reflect the high level of awareness of the potential effects of heavy alcohol consumption on the developing foetus during pregnancy. There is a myriad of print and website materials readily available for women, which has been produced by the Australian Federal and State governments, the New Zealand government, allied health organisations and other NGOs.

4. Health warning labels are not an effective strategy to change consumer behaviour

While awareness of consumers may increase with the exposure to health warning labels, the beliefs and behaviour of consumers, and in particular 'at risk' groups, will be not effected.

If a purpose of the labelling is to increase awareness of the label and risk, then data from the USA suggest that this purpose will be achieved, but it does not follow that beliefs and behaviour are effected or influenced.

If, however, the primary purpose of the labelling is to decrease risky alcohol consumption during pregnancy then data from the USA suggest this purpose will not be met. Data collected and collated from the USA, where labelling was introduced in 1988, and that from cigarette smoking labelling in Australia and the USA, demonstrated that the labelling will not effect and decrease risky consumption, in particular that of the 'at risk' groups identified.

In the USA, risky alcohol consumption by these 'at risk' groups has remained static or increased. The incidence of FAS in the USA since the introduction of labelling in 1988 has also remained relatively static, although the awareness of the label and risk has increased.

5. Brief interventions by primary health care providers are an effective strategy to change behaviour

A strategy that has shown to be effective in the USA, both in terms of cost and in decreasing risky alcohol consumption, including in 'at risk' groups, are brief interventions, that is, the screening and interviewing of pregnant women or those planning pregnancy, by primary health care providers.

Australian primary health care providers have already identified, as have the State and Federal governments and NGOs, that better and more education, training and tools are required to instigate these brief interventions and hence to prevent and reduce the occurrence of FAS/FASD.

This strategy is also included as a primary strategy for reducing risky alcohol consumption during pregnancy and the risk of the birth of an alcohol-affected child in both State and Federal governments', and NGO's plans and policies.

6. Potential negative impact on pregnant women

Blanket warnings and recommendations for total abstinence by pregnant women serve little purpose other than to instill unnecessary anxiety, fear and guilt in those women at little or no risk.

Concluding comments

In conclusion, the application from the Alcohol Advisory Council of New Zealand (ALAC) has been prepared on the basis that all women are 'at risk'. It has been demonstrated in the literature, however, that there are readily identifiable 'at risk' groups in a population that behave differently to the 'not at risk' groups; this is reflected in their continuance of alcohol consumption during pregnancy and a consistency of the level of consumption (Hilton and Kaskutas, 1991; Mayer *et al.*, 1991; Hankin *et al.*, 1996; Gladstone *et al.*, 1997; Stutts *et al.*, 1997). Indeed, the 'at risk' groups do not generally perceive that they are significantly 'at risk' (Stutts *et al.*, 1997).

While blanket recommendations such as warning labels on alcoholic beverages, and general campaigns and programs are effective for the 'not at risk' group, the 'at risk' groups have specific problems, which are amplified and exemplified by their excessive consumption.

'At risk' groups in a population behave differently to the 'not at risk' groups (Hilton and Kaskutas 1991, Mayer *et al.* 1991, Hankin *et al.* 1996). Blanket recommendations, such as health warning labels on alcoholic beverages, and general campaigns and programs are effective only for the 'not at risk' groups.

'At risk' groups have specific problems and, therefore, specific and targeted campaigns and programs which tackle the specificities rather than the generalities, will succeed only in reducing the incidence of FAS/FASD in these groups.

It is, therefore, recommended that the current effort and energies being expended by State and Federal governments and NGOs should be redirected to address specific and targeted education of the 'at risk' groups by their:

- community health centre(s);

- general practitioner(s); and
- obstetrician(s)/paediatrician(s).

Professional intervention to alter drinking patterns and confounding problems rather than a 'social' intervention is required.

Initial Assessment questions for public comment

1. What other strategies or programs are there in Australia or New Zealand (initiated by industry, public health, government, and consumer groups) to advise women of childbearing age of the risk of consuming alcohol when pregnant or if planning a pregnancy?

The following is a list of Australian and New Zealand policies and strategies which include an aim to advise women of childbearing age and their general practitioners/obstetricians of the risk of consuming alcohol when pregnant or if planning a pregnancy.

1. National Health and Medical Research Council. Australian alcohol guidelines: health risks and benefits. Canberra: NHMRC, 2001.
2. National Health and Medical Research Council. Is there a safe level of daily consumption of alcohol for men and women? Canberra: NHMRC, 1992.
3. Ministerial Council on Drug Strategy. National clinical guidelines for the management of drug use during pregnancy, birth and the early development years of the newborn. Sydney: NSW Health and Commonwealth of Australia, 2006.
4. Australian National Council on Drugs. Fetal Alcohol Syndrome National Workshop 2002. Canberra: Commonwealth Department of Health and Ageing, 2002. Available from http://www.ncd.org.au/publications/pdf/fas_workshop_report.pdf
5. Australian Government Department of Health and Ageing. Alcohol and your health fact sheet: alcohol and women's health. Canberra: The Department, 2003. <http://www.health.gov.au/internet/wcms/publishing.nsf/Content/publicat-alcohol.htm>.
6. Australian Government Department of Health and Ageing. Alcohol and your health fact sheet: alcohol and pregnancy. Canberra: The Department, 2003. <http://www.health.gov.au/internet/wcms/publishing.nsf/Content/publicat-alcohol.htm>
7. Australian Government Department of Health and Ageing. National alcohol strategy: a plan for action 2001–2003-04. Canberra: Commonwealth of Australia, 2001.
8. New South Wales Health. Pregnancy care. Sydney: NSW Health Department, 2001.
9. Centre for Drug and Alcohol, New South Wales Health. Women and alcohol. Sydney: NSW Government, 2006. <http://www.health.nsw.gov.au/public-health/dpb/publications/womenalc.htm>.
10. Queensland Health. Strategic policy for Aboriginal and Torres Strait Islander children and young people's health 2005–2010. Brisbane: Strategic Policy Branch, Queensland Health, 2005.
11. Queensland Health. A strategic policy for children and young people's health 2002–07. Brisbane: Strategic Policy Branch, Queensland Government, 2002.
12. Government of South Australia Department of Health. Pregnancy information. Preparing for pregnancy. Avoid tobacco, drugs and alcohol. 2006. <http://www.health.sa.gov.au/PREGNANCY/DesktopDefault.aspx?tabid=23>.
13. Tasmanian Government Department of Health and Human Services. Alcohol guidelines: health risks and benefits. Hobart: The Department, 2005. <http://www.dhhs.tas.gov.au/healthyiving/alcohol/alcoholguidelines.php>.
14. Victorian Government Health Information. Alcohol and parents. Melbourne: Department of Human Services, Victorian Government, 2005. <http://www.health.vic.gov.au/drugs/alcohol/parents/faq.htm>.
15. Western Australian Drug and Alcohol Office. Alcohol and your health — Australian alcohol guidelines. Perth: Government of Western Australia, 2006. <http://www.dao.health.wa.gov.au/tabid/176/Default.aspx>
16. Western Australian Department of Health. Alcohol and pregnancy. Perth: Alcohol and Other Drugs Program, Government of Western Australia, 1998.

17. Harris M, Bailey L, Bridges-Webb C, et al. Guidelines for preventive activity in general practice. Melbourne: Royal Australian College of General Practitioners, 2005
18. Royal Australasian College of Physicians, Royal Australian and New Zealand College of Psychiatrists. Alcohol policy: using evidence for better outcomes. Sydney: RACP, 2005.
19. Australian Medical Association. Alcohol consumption and alcohol related problems. AMA position statement. Canberra: AMA, 1998. <http://www.ama.com.au/web.nsf/doc/SHED-5F5GGA>
20. Australian Medical Association. AMA highlights dangers of alcohol during pregnancy [press release]. Canberra: AMA, 2005. <http://www.ama.com.au/web.nsf/doc/WEEN-6FSVM4>
21. New Zealand Ministry of Health. A national drug policy for New Zealand 1998–2003. Wellington: New Zealand Ministry of Health, 1998.

The following tables is included to illustrate the range of policies and strategies and is adapted from: O'Leary, C.M., Heuzenroeder, L., Elliott, E.J., Bower, C. (2007). A review of policies on alcohol use during pregnancy in Australia and other English-speaking countries, 2006. Medical Journal of Australia.,186(9):466-71.

Table 1 Policies on alcohol and pregnancy:

Australian Commonwealth and state and territory governments*

Source	Abstinence	Occasional small amounts	Comments	Evidence base†
Commonwealth Government				
National Health and Medical Research Council (2001)	May be considered	2 per day & < 7 per week is low risk	Should never become intoxicated Risk is highest in the early stages of pregnancy	2
Australian Government Department of Health and Ageing	May be considered	2 per day & < 7 per week is low risk	Should never become intoxicated, but the evidence about low to moderate alcohol consumption is less clear Risk is highest in the early stages of pregnancy	2
Ministerial Council on Drug Strategy National Clinical Guidelines	Safest	2 per day & < 7 per week is low risk, but no level can be assumed to be completely safe	Provide NHMRC recommendations State that no level of alcohol consumption has been determined as completely safe All pregnant women should be asked about their alcohol consumption and given information on the risk associated with drinking alcohol during pregnancy	Point 2, 4
States and territories				
† ACT: no policy	—	—	The ACT Drug and Alcohol Office advised that the information provided to women varies across health service	—

			providers	
NSW Health	Safest	Even a small amount may be harmful	Binge drinking, particularly during the first trimester, is harmful A safe level or safe time for drinking has not yet been determined	5
NSW Health, Centre for Drug and Alcohol	Safest	Moderate alcohol use may be harmful	Heavy drinking is known to be dangerous Moderate use of alcohol defined as 2 drinks per day, 3–4 times a week	5
Queensland Health		Reduction	Alcohol reduction or cessation advised, but no level of alcohol consumption specified	
South Australian Department of Health	Safest	Not advised	Reduce alcohol when planning pregnancy and abstain when pregnant The risks increase with increasing quantity, with harm occurring with high exposure, and a safe level has not yet been determined	5
Tasmanian Department of Health and Human Services	Safest	2 per day & < 7 per week is low risk	Follow the NHMRC guidelines	2
Victorian Department of Health	Safest	2 per day & < 7 per week is low risk	There are varying opinions about the harm from drinking alcohol during pregnancy, but a safe level has not yet been determined Present the NHMRC guidelines (2001) ⁷	2
Western Australian Drug and Alcohol Office	Safest	2 per day & < 7 per week is low risk	Follow the NHMRC guidelines (2001)	2
Western Australian Department of Health	No specific advice	No specific advice	Drinking alcohol at hazardous or harmful levels during pregnancy increases the risk of low birthweight, intrauterine growth retardation and prematurity	2

* Australian standard drink equals 10 g of alcohol. † Key to evidence base: 1 = systematic literature review; 2 = literature review (not systematic review); 3 = broad statement or indication that the policy is based on the evidence, but no specific references provided; 4 = consensus of authors; 5 = not mentioned.

‡ *National clinical guidelines for the management of drug use during pregnancy, birth and the early development years of the newborn.*⁹ NHMRC = National Health and Medical Research Council.

**Table 2 Policies on alcohol and pregnancy:
Australian medical and nursing organisations***

Source	Abstinence	Occasional small amounts	Comments	Evidence base†
Royal Australian College of General Practitioners	Preferable	Limit drinking	Pregnant women and those planning pregnancy should be assessed annually on their quantity and frequency of alcohol intake and the number of alcohol-free days each week High-risk drinkers should receive brief interventions	5
Royal Australian and New Zealand College of Obstetricians and Gynaecologists	—	—	No policy or guidelines identified	—
Australian College of Midwives‡	Safest	2 per day & < 7 per week is low risk	Follows the recommendations set out in the National Clinical Guidelines (NCG)	As per NCG
Royal Australasian College of Physicians, Royal Australian and New Zealand College of Psychiatrists	Safest	No level has been determined completely low risk for the fetus	All pregnant women should be given information on the risk associated with drinking alcohol during pregnancy	5 “Usually based on NHMRC”
Australian Medical Association	Desirable	Not advised	The position statement was written in 1998 and is based on the 1992 NHMRC recommendations In 2005, the AMA President stated that the NHMRC should revise the guidelines on alcohol consumption during pregnancy, indicating that an abstinence message should be given	Point 2, 4

* Australian standard drink equals 10 g of alcohol. † Key to evidence base: 1 = systematic literature review; 2 = literature review (not systematic review); 3 = broad statement or indication that the policy is based on the evidence, but no specific references provided; 4 = consensus of authors; 5 = not mentioned.

‡ Helen Cooke (former executive member of the Australian College of Midwives, Sydney, NSW), personal communication, 2006. NHMRC = National Health and Medical Research Council.

Furthermore, only 12 countries have a guideline for alcohol consumption during pregnancy. Ten of these 12, however, are unanimous in stating that pregnant women or those planning pregnancy should abstain from alcohol. They countries also recommend abstinence during breastfeeding, as alcohol readily crosses into breast milk.

2. What information (from industry, public health, government and consumer groups) is available to women planning a pregnancy or pregnant women, about the risk of consuming alcohol?

The following is a list of Australian and New Zealand as well as international information available to women planning a pregnancy or pregnant women, about the risk of consuming alcohol.

Australia and New Zealand

1. **Alcohol Advisory Council of New Zealand (ALAC):** Pamphlets and fact sheets for women who are pregnant or planning pregnancy. Available at: <http://www.alac.org.nz/pregnancy.aspx>.
2. **The DrugInfo Clearinghouse, Australian Drug Foundation (ADF).** Facts sheets for women who are pregnant or planning pregnancy, which was reviewed by Women's Alcohol and Drug Advisory Service at the Royal Womens' Hospital in Melbourne. Available at http://druginfo.adf.org.au/article.asp?ContentID=aod_pregnancy
3. Australasian Associated Brewers and **Australian General Practice Network.** Video and print resources for general practitioners. Available from www.agpn.com.au
4. **Australian Government Department of Health and Ageing.** Counselling hotline and wallet card for women and fact sheets, pamphlets and kits for general practitioners. Available at <http://www.health.gov.au/internet/main/publishing.nsf/Content/health-publicat.htm> and <http://www.health.gov.au/internet/wcms/publishing.nsf/Content/Publications+Statistics+&+Resources-1>

Australian Women and Alcohol Consumption 1996 - 2003. Available at http://www.health.gov.au/internet/wcms/publishing.nsf/Content/phd-pub-alcohol-women_report-cnt.htm
This report presents results for women in three age cohorts (Younger, Mid-age and Older) from 1996 to 2003 and provides important data on alcohol consumption among Australian women. Feb. 2005
5. **National Organisation for Fetal Alcohol Syndrome and Related Disorders. (NOFASARD)** Pamphlet for pregnant women or women planning pregnancy.. Available at http://www.nofasard.org.au/media/pdfs/alcohol_pregnancy_brochure/brochure1.pdf
6. **New South Wales Health.** Fact sheets and web-links to other web-based resources for pregnant women or women planning pregnancy. Available at www.alcoholinfo.nsw.gov.au/family_wellbeing/pregnancy and <http://www.health.nsw.gov.au/public-health/dpb/publications/womenalc.htm>
7. **New South Wales Centre for Parenting and Research.** Website for pregnant women or those planning pregnancy. Available at <http://www.parenting.nsw.gov.au/uploads/0aac4e14-7cbe-422b-ad88-be5bf9b10aed4.doc>
8. **Northern Territory Department of Health and Community Services.** Alcohol and other drugs. In: Northern Territory Department of Health and Community Services, editor. The Public Health Bush Book. Darwin: Northern Territory Government, 2006.
9. **South Australian Department of Health.** Fact sheet for pregnant women or those planning pregnancy. Available at www.health.sa.gov.au/PREGNANCY/DesktopDefault.aspx?tabid=187
10. **South Australian Government Drug and Alcohol Services Association (DASA):** Assorted reference material including best practice clinical guidelines, daily diary, policies and standards for women, and clinical educators and general practitioners. Available at <http://www.dasc.sa.gov.au/site/page.cfm> and <http://www.dasc.sa.gov.au/site/page.cfm?u=123>
11. **Victorian Government Health Information.** Pamphlets for pregnant women or those planning pregnancy in both indigenous and non-indigenous communities. Available at www.health.vic.gov.au/drugs/alcohol/youth/faq.htm and http://health.vic.gov.au/pdpc/downloads/kit_flipchart.pdf

12. **Victorian Government Health Information.** Web-site and fact sheets for pregnant women. Available at <http://www.health.vic.gov.au/maternity/yourpregnancy/thinking.htm>
13. **Queensland Health.** Strategic policy for Aboriginal and Torres Strait Islander children and young people's health 2005–2010. Brisbane: Strategic Policy Branch, Queensland Health, 2005.
14. **Royal Women's Hospital:** Diary, fact sheets, pamphlets and 7 pdf presentations about the effects of alcohol on women and on pregnant women for pregnant women and for general practitioners [Women's Alcohol & Drug Service](http://www.rch.org.au/rch/index.cfm?doc_id=3834). Available at http://www.rch.org.au/rch/index.cfm?doc_id=3834 and http://www.rch.org.au/emplibrary/econnections/PregnancyDiary.pdf#xml=http://www.rch.org.au/cgi-bin/tehis/webinator/search4/pdfhi.txt?query=alcohol+and+pregnancy&pr=rchmelb_ext&prox=page&rorder=500&rprox=500&rdfreq=500&rfreq=500&rlead=500&sufs=2&order=r&cq=&id=479f2f4e1c and http://www.ichr.uwa.edu.au/files/user22/C_Bower_1.pdf
15. **Rural Health Education Foundation.** Web-site and other material for pregnant women and for general practitioners. Available at <http://www.rhef.com.au/programs/614/614r.html>
16. **Telethon Institute for Child Health Research** The booklet, fact sheet and wallet card for general practitioners. Available at <http://www.ichr.uwa.edu.au/alcoholandpregnancy/resources>
17. **Drug and Alcohol Office, Western Australia/Western Australia Government.** Facts sheets and wallet card for pregnant women and those planning pregnancy. Available at <http://www.dao.health.wa.gov.au/Publications/tabid/99/DMXModule/427/Default.aspx?EntryId=93>

There are also 24 hour confidential telephone counselling services in Australia as follows:

NSW

Alcohol and Drug Information Service (ADIS) - 24hr hotline

Ph: (02) 9361 8000 Toll free number: 1800 422 599

Victoria

Ph: (03) 9416 1818 Toll free number: 1800 136 385

Western Australia

Alcohol and Drug Information Service (ADIS) - 24hr hotline

Ph: (08) 9442 5000 Toll free number: 1800 198 024

Queensland

Alcohol and Drug Information Service (ADIS) - 24hr hotline

Ph: (07) 3236 2414 Toll free number: 1800 177 833

South Australia

Alcohol and Drug Information Service (ADIS) - 24hr hotline

Toll free number: 1300 131 340

Northern Territory

Amity Community Service

Ph: (08) 8981 8030 Toll free number: 1800 629 683

Tasmania

Alcohol and Drug Service South

Toll free number: 1800 811 994

ACT

24 hour Alcohol and Drug Help line

Ph: (02) 6205 4545

International

1. **Alcohol Concern (UK):** [Alcohol and Teenage Pregnancy](#)
A briefing paper aimed at all those working with young people in schools and youth work settings. It contains personal, social and health information for people involved with alcohol education.
[Factsheet: Women and Alcohol](#)
2. **Alcohol Policies Project (USA):** [Fact sheet: Women & Alcohol](#)
3. **Department of Health England.** The pregnancy book. London: National Health System, Department of Health, 2001.
4. **Division of Birth Defects and Developmental Disabilities, National Center on Birth Defects and Developmental Disabilities, USA:** National Task Force on Fetal Alcohol Syndrome and Fetal Alcohol Effect: defining the national agenda for fetal alcohol syndrome and other prenatal alcohol-related effects. Weber MK, Floyd RL, Riley EP, Snider DE Jr; National Task Force on Fetal Alcohol Syndrome and Fetal Alcohol Effect. MMWR Recomm Rep. 2002 Sep 20;51(RR-14):9-12.
5. **Drinksense (UK):** [Factsheet: Alcohol and Women](#)
6. **Health Canada.** Nutrition for a healthy pregnancy – national guidelines for the childbearing years. Ottawa: Health Canada, 1999.
7. **Health Scotland (UK):**
Pamphlet for pregnant women or those planning to be. Available at www.nhshealthquality.org/nhsqis/files/Pregnancy_Record_brochure.pdf
Pamphlet for pregnant women or those planning to be: www.glasgowpharmacyhealthpromotion.scot.nhs.uk/alcohol/alcohol_main.htm
Government guidelines on alcohol consumption and pregnancy. Available at www.shb.scot.nhs.uk/board/meetings/documents/2004/20040126-2004_01.pdf
8. **Institute of Alcohol Studies (UK):** [Factsheet: Alcohol and Women](#)
9. **National Institute of Alcohol Abuse and Alcoholism (NIAAA) (USA):**
[Alcohol—An Important Women's Health Issue](#)
A summary of some of the more practical implications for alcohol and women.
[Alcohol: A Women's Health Issue](#)
A booklet on the unique effects of alcohol on women. August 2003
[Assessing the Impact of Maternal Drinking During and After Pregnancy](#)
An article about the impacts of drinking during pregnancy.
[Drinking and Your Pregnancy](#)
A short series of questions and answers about drinking during pregnancy.
[Drinking Moderately and Pregnancy: Effects on Child Development](#)
Research findings that indicate “moderate” drinking has much more impact on child development when the mother consumes several drinks in a single day than when she drinks the same quantity in doses of one to two drinks per day over several days.
10. **Robert Wood Johnson Foundation (USA):** PowerPoint presentation for policymakers. [Substance Abuse During Pregnancy: Time for Policy to Catch up with Research](#) .
11. **Scottish Executive (UK):** [Problem substance use in pregnancy and reproductive health](#)
Part of a series of guides on developing and implementing Integrated Care Pathways (ICPs), which can assist agencies to develop local ICPs for specific processes and procedures involved in the management of problem substance use during different phases of the reproductive health cycle. It covers the risks of physical, psychological and social harm associated with drug and alcohol use during pregnancy.
12. **Scottish National Health Service (UK):** [Substance Misuse in Pregnancy](#) Resource pack for professionals that aims to establish a ‘framework for care’ so that all women who use drugs can be offered appropriate support before, during and after the birth of their child.

13. **The Royal College of Obstetricians and Gynaecologists (UK):** Alcohol consumption and the outcomes of pregnancy. London: The Royal College of Obstetricians and Gynaecologists, 2006.
14. **United States Dept of Justice (USA):** [The Special Needs of Women with Co-Occurring Disorders Diverted from the Criminal Justice System](#) This material is intended to provide diversion program and specialty court staff with an overview of the issues specific to women involved with diversion programs/specialty courts, as well as to provide key areas of modification to services to improve and enhance services for women. April 2004
15. **United States Surgeon General (USA).** Material and web-site material for general practitioners, policy makers and the general public. Available at www.hhs.gov/surgeongeneral/pressreleases/sg02222005.html

3. What published and unpublished information is available that may provide answers to the risk assessment questions regarding FASD that will be addressed at Draft Assessment?

Below is the list of published references which are cited in this submission as well as additional relevant references. These references will provide answers to the risk assessment questions regarding FASD that will be addressed at Draft Assessment. Copies can be provided on request.

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4. What other data are available regarding alcohol consumption by women of childbearing age and during pregnancy in Australia and New Zealand?

From the recent Australian Longitudinal Study on Women's Health 1996–2003, 91% of young women aged between 18–23 years consumed alcohol. Of these, 5% of consumed alcohol at an amount and pattern associated with long-term harm according to the NHMRC Australian Alcohol Guidelines, and 71% at an amount and pattern associated with short-term harm. As this population group aged, their consumption changed and the percentage at risk of harms reduced (Clemens et al. 2007), which is consistent with observations from other longitudinal studies.

A recent study of alcohol consumption during pregnancy in non-indigenous West Australian women, suggests that while 79.8% of women reported consuming alcohol in the three months before pregnancy, 58.7% drank alcohol in at least one trimester of pregnancy (Colvin et al. 2007). This was despite receiving advice or guidance to abstain. Interestingly, the proportion of women consuming one to two drinks on a typical occasion did not change significantly during pregnancy, but the number of occasions declined.

Although the proportion of women consuming more than two standard drinks on a typical occasion declined after the first trimester, 19.0% of women consumed this amount in at least one trimester of pregnancy and 4.3% of women consumed five or more standard drinks on a typical occasion in at least one trimester of pregnancy. In the first trimester of pregnancy, however, 14.8% of women drank outside the current NHMRC guideline for alcohol consumption in pregnancy, although this percentage decreased to 10% in the second and third trimesters. It is the first trimester of pregnancy in particular, where there is highest risk of alcohol-related harm to the developing foetus, which is stated in the current Guidelines. The West Australian population of women can be considered to be representative of the population of women in the other Australian States and Territories.

Another similar study undertaken in Perth women suggests while 67.3% of women reported consuming alcohol before pregnancy, 32% of these women ceased consuming alcohol during pregnancy, although the remaining 48% of these women consumed alcohol during pregnancy, with 82.2% of these women consuming up to two standard drinks per week. At 4, 6 and 12 months postpartum, 46.7%, 47.4% and 42.3% of breastfeeding women were consuming alcohol, respectively, up to two standard drinks per week (Giglia and Binns 2007). Similarly, from data sourced from the 2004 National Drug Strategy Household Survey, the majority of women consuming alcohol during pregnancy and/or whilst breastfeeding, reported consuming infrequently, where only 1% consumed alcohol daily and only 10% 1–2 days per week (Wallace et al. 2007).

Interestingly, from a 1988 study of changes in alcohol usage during pregnancy in a sample of 112 pregnant South Australian women, 86 of whom drank alcohol before pregnancy, One hundred per cent of drinkers reported a reduced intake of alcohol. A reduction in drinking during pregnancy was related directly to an antenatal emotional attachment to the fetus and related inversely to feelings of irritability towards the fetus (Condon and Hilton 1988).

In summary, irrespective of advice or guidance to the contrary, approximately one half to two thirds of Australian women consume alcohol during their pregnancy.

In contrast, from a 2002 New Zealand prospective cohort study which explored the demographic profile of 665 women consuming alcohol during pregnancy and after giving birth, only 26% of women continue to drink alcohol during pregnancy. At six weeks after giving birth, however, 54% had commenced consuming alcohol (McLeod et al. 2002).

5. Are there any other data available on the incidence of FAS/FASD in Australia or New Zealand?

There can be no dispute that the consumption of alcohol, under certain conditions, can cause fetal alcohol syndrome (FAS), which was independently described by Lemoine in 1968 and by Jones and Smith in 1973, nor can the tragedy of a child with FAS be underestimated. FAS is a term applied to children who exhibit three diagnostic criteria—reduced growth, craniofacial and neurological abnormalities, and certain cardiac, central nervous system limb and urogenital malformations (Sokol and Clarren, 1989; Aase *et al.*, 1995; Jacobson *et al.*, 1996). FAS is more likely to occur in babies born to women who excessively consume alcohol habitually and continually during pregnancy, approximately 50 to 60 g alcohol per day, especially during the first trimester, although there are confounding factors (Abel 1996, Moore and Jacobson 1994, Jacobson and Jacobson 1994). Foetal alcohol syndrome disorder (FASD), however, is a term which has been applied to children with a range of abnormalities and/or problems, both behavioural and growth, where it is purported that the mother has consumed alcohol during pregnancy (Little and Wendt, 1991; Aase *et al.*, 1995; Abel and Hannigan, 1995). Interestingly, as this term may have been indiscriminantly applied initially, it was recommended in 1993 at the annual meeting of the Research Society on Alcoholism that FASD (or foetal alcohol effects), be abandoned as a diagnosis (Aase *et al.*, 1993). There is no objective laboratory test for diagnosing FAS or FASD.

The risk and incidence of alcohol-related foetal abnormalities needs to be put into perspective for the Australian population.

Although data on the birth prevalence of FAS in Australia are limited, they suggest that population rates are substantially lower than in North America, France, Italy and Sweden (Sampson *et al.* 1997, Chambers *et al.* 2005, May 2006). This probably reflects differences in alcohol consumption culture and hence consumption patterns and practices between Australia and the other countries. However, the prevalence of FAS in Indigenous Australian or Aboriginal children is much higher than for non-indigenous Australian children (Bower *et al.* 2000, Harris and Bucens 2003, Elliott *et al.* 2005) in keeping with findings from other indigenous populations (May *et al.* 1991, Burd and Moffatt 1994, Stratton *et al.* 1996, Sampson *et al.* 1997, Chambers *et al.* 2005).

Concerning the West Australian data on the incidence of FAS, approximately three quarters of these diagnoses occurred in Aboriginal children; the birth prevalence was 1.1/1,000 live births compared with 0.02/1,000 live births for non-Aboriginal children (Bower *et al.* 1994). Indeed, in 1994, it was postulated that the incidence of FAS in Australia was 1 to 2/1,000 live births (Lipson 1994); this estimate was from unpublished obstetric hospital data. In 1995, from data collected for the National Drug Strategy, there were no hospital admissions assigned to FAS and thus an incidence could not be determined (English *et al.* 1995); this was also observed in other epidemiological studies (Gibson *et al.* 1983, Lumley *et al.* 1985, Bell and Lumley 1989, Walpole 1990).

Furthermore, these data estimate that the incidence of low birth weight resulting from excessive and heavy consumption of alcohol was extremely small, 0.4/1,000. In 2000, the incidence of FAS from the Births Defects Registry in WA with additional data from the Rural Paediatric Service (RPS) database was still 0.02/1,000 for non-Aboriginal children but had increased to 2.76/1,000 for Aboriginal children in WA (Bower *et al.* 2000). The incidence of FAS from the Victorian Birth Defects Register was similarly extremely small, 0.006/1,000, although the incidence increased to 0.014/1,000 live births following further assessment of the Register (Allen *et al.* 2007).

These figures reflect the low prevalence of excessive or heavy consumption of alcohol by non-indigenous women during pregnancy in Australia. For example, as previously stated, a recent study of

alcohol consumption during pregnancy in non-indigenous West Australian women, suggests that while 79.8% of women reported consuming alcohol in the three months before pregnancy, 58.7% drank alcohol in at least one trimester of pregnancy (Colvin et al. 2007) and only 4.3% of women consumed five or more standard drinks on a typical occasion in at least one trimester of pregnancy. The West Australian population of women can be considered to be representative of the population of women in the other Australian States and Territories.

6. Are there any other data available relating to the level of awareness amongst women of childbearing age of the risk of consuming alcohol when planning to become pregnant and during pregnancy in Australia and New Zealand?

The available data relating to the level of awareness amongst women of childbearing age of the risk of consuming alcohol when planning to become pregnant and during pregnancy in Australia suggests that the level of awareness is high. The level of awareness amongst breast feeding women is, however, low. For example, in another study by Giglia and Binns (2007) it was shown that while the majority of participants in the study were aware of the recommendations regarding alcohol during pregnancy, there was a variable level of knowledge regarding consuming alcohol and breastfeeding among Australian mothers. The participants in the study were largely unaware of the effects of alcohol on breastfeeding performance and the development of the infant. The majority of the women in the focus groups also expressed concern at the lack of guidance available regarding 'safe' or 'low risk' alcohol consumption practices during lactation. They felt that a similar level of information to alcohol and pregnancy was required to provide direction and support during lactation. There is no data available relating to the level of awareness amongst women in New Zealand.

7. Do you think a health advisory statement about the risk of consuming alcohol when planning to become pregnant and during pregnancy on all alcoholic beverage containers should be required? Why/why not?

The Australian wine sector does not support this application for the provision of a health advisory statement on all alcoholic beverage containers. A health advisory statement about the risk of consuming alcohol when planning to become pregnant and during pregnancy should not be required on all alcoholic beverage containers for two reasons.

1. Conflicting evidence

The **first reason** why a health advisory statement about the risk of consuming alcohol when planning to become pregnant and during pregnancy should not be required on all alcoholic beverage containers is that the available evidence continues to be conflicting as to whether any amount of alcohol harms the foetus (Maier and West 2001; O'Leary 2004).

The consumption of heavy amounts of alcohol by pregnant women has unequivocally been associated with adverse effects on the developing foetus (Maier and West 2001). While a recent review found no consistent convincing evidence of greater harm to the foetus from prenatal binge drinking (Henderson et al. 2007), heavy episodic consumption may result in higher maternal and foetal maximum blood alcohol concentrations followed by withdrawal episodes compared with continuous heavy consumption. Harm to the foetus varies significantly with the quantity of alcohol consumed, and also with the frequency with which it is consumed and the timing of the consumption to the gestational age of the foetus (May 2005). However, "a high level of alcohol intake alone generally does not result in a diagnosis of FAS" (Day 1992). Indeed, the current and nutritional status of the mother and her body mass index, her gravity and parity, her ingestion of drugs including caffeine and nicotine, and her educational, ethnicity, genetic, marital, parity and socio-economic status contribute to the development of FAS (Aase 1981, Sokol et al. 1986, Michaelis and Michaelis 1994, Abel and Hannigan 1995, Jacobson et al. 1996, May et al. 2004). For example, pregnant women who binge drink are also more likely to use cigarettes and illicit psychotropic drugs such as marijuana, cocaine than non-binge drinking pregnant women (Gladstone et al. 1997). Furthermore, the level of risk of an FAS birth is influenced by behavioural and environmental conditions that vary between individual women and between populations (May et al. 2004), which may influence the inter-country variation observed in the incidence of FAS.

A 1998 meta-analysis of approximately 20,000 exposed fetuses, determined there was no evidence that light and moderate consumption increased the risk of foetal abnormalities, where moderate consumption was defined as greater than two standard drinks or *ca.* 20 g of alcohol per week but less than two standard drinks or *ca.* 20 g per day in the first trimester (Polygenis et al. 1998). A recent review on the effects of light to moderate prenatal alcohol consumption on foetal and early infant development, however, concluded that there was no convincing evidence of adverse effects when up to 83 g alcohol is consumed per week (Henderson et al. 2007).

In 2007, the UK National Institute of Clinical Excellence stated that pregnant women can safely consume up to one and a half standard drinks per day after the first trimester, which is *ca.* 8–12 g

alcohol/day. The UK guidelines of 2007¹ consequently recommend abstinence during pregnancy and advise against intoxication, but importantly also recommend that women who do choose to consume alcohol before and during pregnancy, should consume no more than 8–16 g of alcohol once or twice a week. The former U.K. guidelines of 1995, however, recommended that pregnant women or those planning pregnancy should reduce their alcohol consumption to no more than 8–16 g of alcohol per week, based on a review and report by the Department of Health's Expert Committee on Toxicology (1995) which concluded that consumption of 16 g of alcohol per day and above was associated with reduced birthweight, but there was no convincing evidence that 8–16 g of alcohol per week has any adverse effects on the developing foetus.

The relationship between alcohol consumption and other pregnancy outcomes apart from FAS appears controversial and uncertain. For every paper that claims that any alcohol negatively influences a birth outcome, another paper refutes it. For example, Kesmodel et al. (2001) observed an increased risk of preterm delivery with consumption of five or more alcoholic drinks per week at 16 weeks gestation and with consumption of more than one to two drinks per week at 30 weeks gestation but Albertsen (2004) did not with four drinks per week over the gestation period. An increased risk of preterm birth was also not observed by Parazzini et al. 2003, however, until more than three drinks on average per day were consumed.

Concerning low birth rate, while Covington et al. (2002) observed that more than 14 alcoholic drinks/week decreased birth weight and length, and lower weight at age seven years, O'Callaghan et al. (2003) did not observe this. Furthermore, Mariscal et al. (2006) observed that alcohol consumption of less than 6 g/day, actually decreased the risk for low birth weight but the risk was increased when more than 12 g/day of alcohol was consumed. The risk was decreased again when the 12 g/day was confined to weekends for non-cigarette smoking women. This also shows the confounding of cigarette smoking and the importance of influence of patterns of alcohol consumption.

Concerning spontaneous abortion, while Kesmodel et al. (2002) observed an increased in risk of spontaneous abortion when five or more alcoholic drinks/week were consumed in the first trimester, which was corroborated by Henriksen et al. (2004) but at 10 or more alcoholic drinks/week, but not by Maconochie et al. (2006).

Concerning neurobehaviour and cognition, O'Callaghan et al. (2007) did not observe any adverse attention, learning or cognition outcomes when less than one alcoholic drink/day was consumed but drinking more than this in late pregnancy and indeed binge drinking, was associated with an increased risk of overall learning difficulties. D'Onofrio et al. (2007), however, observed that polydrug use during pregnancy was a better indicator of behavioural and learning difficulties.

2. Lack of effectiveness of warning labels at changing behaviour

The **second reason** why a health advisory statement about the risk of consuming alcohol when planning to become pregnant and during pregnancy should not be required on all alcoholic beverage containers is that the available evidence clearly demonstrates that warning labels about alcohol use in pregnancy are not effective at reducing alcohol consumption during pregnancy. While there was an increase in awareness of, exposure to and recognition memory of the label in the USA, health

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warning labels on alcoholic beverages are ineffective at changing consumer behaviour (MacKinnon et al. 2000), there was no beneficial change in beliefs and alcohol consumption attributable to the warning in beliefs, particularly in 'at risk' groups. Awareness and knowledge of labels are not associated with behavioural change. This is further discussed in the answer to Question 8.

8. What further evidence is available about the use and/or effectiveness of a health advisory statement on alcoholic beverage containers regarding the risk of consuming alcohol when planning to become pregnant and during pregnancy?

Health warning labels are intended to alter an individual's perceived vulnerability to the potential harms disclosed (Oliver and Berger 1979, Erackers et al. 1984).

1. Policy must be based on relevant and accurate information

The Australian wine sector supports the provision of relevant and useful information based on the available scientific evidence. The available evidence clearly demonstrates that warning labels about alcohol use in pregnancy are not effective at reducing alcohol consumption during pregnancy and are not effective at preventing or reducing the incidence of FAS in the population as exemplified in the USA where health warning labels for alcoholic beverages were introduced 20 years ago.

2. The example of health warning labels for alcoholic beverages in the USA

The health warning label for alcoholic beverages "women should not drink alcoholic beverages during pregnancy because of the risk of birth defects", was legislated and enacted in the USA in November 1988 as the *Alcoholic Beverage Labelling Act 1988* under the *Omnibus Drug Act 1988*, approximately 20 years after it was first proposed. It was primarily introduced in response to uncertainties of the state of knowledge in 1988. For example, while heavy maternal alcohol consumption was associated with foetal alcohol syndrome (FAS), the data on light to moderate maternal alcohol consumption were inconsistent and inconclusive. Thus it was considered prudent to recommend that the only 'safe' level of consumption during pregnancy was complete abstinence. It was also introduced along with another warning label because of the escalating economic and health 'costs' of alcohol-related problems in the USA.

Not every woman who consumes alcohol whilst pregnant, however, will give birth to a child with FAS or even an alcohol-affected child (foetal alcohol disorder spectrum). In 1995, Abel estimated that only 4.3% of heavy consumers give birth to a child with FAS. Therefore, there are other factors that predispose or place women at greater risk of giving birth to an alcohol-affected child. The factors and hence 'at risk' groups of women that have been identified include maternal age, gravidity and parity (Sokol et al. 1986, Jacobson et al. 1996), marital and socio-economic status (Abel 1995, Chambers et al. 2005), ethnicity (Abel and Hannigan 1995), genetics (Goodlett et al. 1989, Streissguth and Dehaene 1993, Rasheed et al. 1997, Su et al. 2001, Warren et al. 2001, May et al. 2004), nutritional status (May et al. 2004), polydrug use including cigarette smoking, and caffeine, cocaine and marijuana use (D'Onofrio et al. (2007) and maternal alcohol metabolism (Chernoff 1980, Warren et al. 2001), as well as length of alcohol drinking 'career' (May et al. 2004).

US legislators assumed that knowledge of specific health warnings on labels equates with a change in behaviour specific to that health warning, that is, for an 'intervention' to be effective, the label had to be observed and changes first needed to occur in knowledge of the risk associated with a behaviour. This is not the case.

3. Effectiveness of health warning labels for alcoholic beverages re pregnancy

One year following inclusion of the health warning labels for alcoholic beverages in the USA, there were increases in the awareness, exposure and recognition memory of the general public; this change was slow to grow (Mayer *et al.* 1991, Scammon *et al.* 1992). Exposure, however, was inconsistent across populations, where 6 and 18 months after their introduction, men, 18–29 year-olds, heavy consumers and the tertiary educated had more likely seen the labels than the other populations groups

(Kaskutas and Greenfield 1992, Graves 1993, Greenfield *et al.* 1999). Even 50 months after their introduction, women older than 29 years were less likely to have seen the warning labels.

From these initial studies, however, there were no significant or substantial positive changes in actual or intended behaviour regarding the consumption of alcohol, or in the attitudes, beliefs and perceptions about the risks described on the warning labels (Mayer *et al.* 1991, Marzis *et al.* 1991, Kaskutas and Greenfield 1992, Greenfield *et al.* 1993, Hilton 1993, McKinnon *et al.* 1993, US Department of Health and Human Services 1993); significant funding for the studies has been provided by the National Institute on Alcohol Abuse and Alcoholism. Furthermore, the general public who consumed a chronic heavy amount of alcohol, that is, one of the groups 'at risk', believed that there was less risk associated with the consumption of alcohol than those who abstained, or consumed a light or moderate amount of alcohol (Andrew *et al.* 1991, Patterson *et al.* 1992, Hankin 1994).

In addition, data from a study of African Americans, that is, another 'at risk' group, showed also that while awareness changed, behaviour did not (Hankin *et al.* 1993a, 1993b, Hankin *et al.* 1995). Indeed, the decrease in maternal consumption was relatively minor (approximately a half to one drink per week, an amount which would not be expected to influence their pregnancy) and did not impact on the heavy consumers. A subsequent study of pregnant urban Native and African Americans showed that although frequently exposed to the warning labels, only 20% knew that FAS was related to alcohol consumption and all were uncertain about the actual consequences of FAS, or about the value of reducing intake at any time during pregnancy (Kaskutas 2000).

The results from these subsequent studies are consistent with initial studies which suggested that women 'at risk' were less responsive to media/promotion campaigns (Little *et al.* 1981; Streissguth *et al.* 1982, Weiner *et al.* 1989, Kaskutas and Graves 1994, Kaskutas *et al.* 1998). This implies that targeted education efforts are required for the 'at risk' group.

While it may be argued that 18 to 24 months post implementation may be insufficient time to observe changes in the overall consumption of alcohol (Scammon *et al.* 1991), data from a six-year study of African Americans showed also that while awareness changed initially and then plateaued after approximately three years of warning labels, there was no change in the behaviour of a specific 'at risk' group of chronic and heavy consumers of alcohol (Hankin *et al.* 1993a, 1993b, Hankin *et al.* 1995). Yet another study observed that in an 'at risk' group, multiparae ignore the labelling and actually increase their consumption of alcohol whilst pregnant (Hankin *et al.* 1996). This is despite the increased risks for alcohol-related birth defects with increasing age. Indeed, warning labels, similar to other communication-only strategies or tools, are less effective in reducing alcohol consumption among pregnant women (Kaskutas *et al.* 1998).

Interestingly, while alcohol consumption among pregnant US women declined from 1998 to 1992, it subsequently increased from 1992 to 1995 (Ebrahim *et al.* 1998). Of more significance, however, was the initial decrease followed by subsequent increase in frequent alcohol consumption from 1998 to 1995, where 87% of frequent consumers 'binged' and were also cigarette smokers.

Furthermore, there is no evidence to suggest that there has been a decrease in the incidence of FAS since warning labels were introduced, and indeed the data available suggest that the incidence of FAS has remained relatively stable over the past decade in the USA (Ebrahim *et al.* 1998, Eustace *et al.* 2003, Sokol *et al.* 2003, Astley 2004).

4. Other health warning label for alcoholic beverages in the USA

The other health warning label for alcoholic beverages that was introduced in 1988 was the "Consumption of alcoholic beverages impairs your ability to drive a car or operate machinery, and

may cause health problems". Research results indicate that the 'at risk' group of drink drivers recalled readily the warning label, however, recall had no significant effect or impact on the risk assessment of, for example, driving after consuming two or more alcoholic drinks. Additionally, this group considered that drink driving was less risky than the general, 'not-at-risk' public (Parker *et al.* 1994). Other research indicates that the perceived level of risk associated with drink driving decreased following the introduction of the warning label (Greenfield and Kaskutas 1993).

5. The example of health warning labels for cigarettes in the USA and Australia

In the USA, health warning labels on cigarette packages were introduced in 1966 and were subsequently revised in 1985). Studies on the awareness of these labels and their effectiveness in changing consumer behaviour have only shown a moderate awareness and knowledge of the labels among adults and adolescents. Little data has been documented, however, on cessation or otherwise of cigarette smoking, and limited effectiveness is this implied in that previously generated (Robinson and Killen 1997). Adolescent consumer behaviour is of particular importance as more than 90% of adult smokers began smoking when they were adolescents and in the USA (US Department of Health and Human Services 1994), smoking amongst this age group has increased by approximately 30% from 1991 to 1995 (Johnston *et al.* 1996). In 1997, a study was undertaken by Robinson and Killen in 17047 adolescents of mean age 14.9 years, to determine whether they were aware, and had knowledge, of the labels and whether this had influenced, positively or negatively their cigarette smoking. The data generated indicated that awareness and knowledge did not influence behaviour amongst adolescents, and hence the health warning labels on cigarette packages were ineffective.

In Australia, health warnings on cigarette packages were introduced in 1987 and were subsequently reviewed and revised in 1995. The review indicated that although there was an increase in the awareness and knowledge of the labels in the first few months after their introduction, this increase was not sustained (Hill 1988, Borland and Hill 1997b). This results of this review also included adolescents (Centre for Behavioural Research in Cancer 1992). In addition, the hypothesised linkage between awareness, knowledge and effectiveness, that is, a change in consumer behaviour, was not observed (Borland and Hill 1997a,b). While the revised labels have moderately increased awareness and knowledge in the population per se, no effect on consumer behaviour, such as cessation of smoking has been observed (Borland 1997).

6. Conclusions

In conclusion, previously implemented health warning labels for either alcohol or cigarettes have been not been successful in changing consumer behaviour, where awareness and knowledge of a labels is not associated with behavioural change.

Indeed, specifically concerning health warning labels for alcoholic beverages, despite an increase in awareness of, and memory or recognition for, the alcohol warning labels, over the past two decades since its introduction in the USA, there has been no demonstrable effect of the warning on risk perception (Scammon *et al.* 1991, Hilton 1993, MacKinnon *et al.* 1993, Edwards *et al.* 1994, Andrews 1995). Similarly, changes in alcohol consumption behaviour attributable to the health warning labels have not yet been observed (Hilton 1993, Hankin 1996). Indeed, although young (women) adults, Indigenous alcohol consumers and heavy alcohol consumers, which are identified as 'at risk' groups, are more aware disbelieve and discount such information, and are less likely to modify their pattern of alcohol consumption than 'not-at-risk' consumers (Andrews *et al.* 1991, Andrews 1995, Mazis *et al.* 1991, MacKinnon 1995, DeCarlo 1997, MacKinnon *et al.* 2001).

Thus, although the groups most 'at risk' and 'in need' of adopting the information of the alcohol warnings are aware of, and can recall, the information in warning labels, they are, however, the least likely to accept the warnings.

7. Comments from other countries which have assessed health warnings labels for alcoholic beverages

Applications for health warning labels for alcoholic beverages have also been assessed by Canada and the United Kingdom (UK) over the past decade.

In 1996, while both the Addiction Research Foundation (ARF) and Canadian Centre for Substance Abuse (CCSA) supported the theory of labels, they considered that, in practice, their effect on consumer beliefs and behaviour would be minimal (Canada House of Commons Standing Committee on Health 1996). Indeed, the CCSA stated that they have “seen no direct, incontrovertible evidence that applying warning labels to alcoholic beverage containers has any impact on reducing the problems associated with abusive drinking”. It was also stated by the ARF that “judging from the fairly subtle effects that these types of warnings have on beliefs and behavioural intentions, it is unlikely that warning labels, effectively worded and prominently placed, will have a large effect on behaviour in and of themselves” (Canada House of Commons Standing Committee on Health 1996).

Also during this Canadian assessment, the former Deputy Minister of Community Occupational Health, Alberta, asserted that the established educational programs have “created a sufficiently aware public that the kind of simple message that can practically be applied to bottles and packages is no longer of any real value” (Canada House of Commons Standing Committee on Health 1996). The Canadian parliament debated and assessed warning labels for alcoholic beverages in 1995, 1996, 2001, 2004 and 2007. Support has not necessarily been unanimous among parliamentarians for the private members’ business (for example, Bill C-251 of 2007; (http://lists.von.ca/pipermail/fasd_canadian_link/2007-May/000039.html)).

The UK House of Lords rejected legislation for health warning labels on alcoholic beverages in 1991, following similar comments and conclusions. Indeed, the then Parliamentary Secretary of Health argued that “...the problem of alcohol misuse is complex. It would be rather difficult to devise a clear, non-misleading and concise message which would effectively inform consumers about all aspects of the alcohol-related harm” [Hansard Parliamentary Debates (Lords) 1991].

In May 2007, the UK Department of Health published a Memorandum of Understanding (MOU) on a voluntary agreement with the alcohol beverage industry for a UK-wide scheme for the inclusion of Sensible Drinking Messages (SDM) on alcohol labels. Key points are of the MOU are:

- the agreement is voluntary;
- the Government recognized that it may not be practicable or may be disproportionately costly for labels of some products to carry all of any aspects of the SDM; and
- although the Government has a preferred format, they have agreed that businesses should have flexibility in how any information is presented as long as it is legible.

It was also agreed in May 2007, that the Government would review uptake of the SDM at the end of 2008, and that if industry implementation failed to meet expectations, the Government would consult on the need for legislation.

Companies willing to implement this voluntary agreement can include some or all of the following information:

- the number of UK standard units in the label;
- a responsibility message;

- the Government's recommendations for safe drinking guidelines; and
- the DrinkAware website.

In addition, the UK Government is also encouraging companies to include sensible drinking information for pregnant women on labels.

In November 2007, however, another private members bill was introduced (first reading) into the UK House of Lords on alcohol labelling, and has had a second reading and has progressed to the committee stage for detailed examination. Despite the progress the Bill has made so far, it does not have the support of the UK Government.

The Finnish Government, however, did pass legislation for health warning labels for alcoholic beverages in 2007, although not unanimously (104:71), along with bans and limits on alcohol advertising. The Parliamentary Social Affairs and Health Committee, however, stated in their report to the Finnish Government that the effect or impact of such labels is likely to be only "very slight". The Health and Social Services Minister in Finland recently announced that she is planning to abandon these plans as she does not believe that labels would have a significant impact on excessive drinking or contribute to harm reduction (Centre for Beverage Alcohol 2008).

8. Application A576 must be considered in isolation

The FSANZ IAR states "The applicant does not claim that the presence of the health advisory label will directly lead to behavioural change and a reduction in alcohol consumption", and further goes on to acknowledge the complexities involved with achieving behavioural change.

While the applicant states that the advisory labels should be introduced as an essential part of "a nationwide strategy to increase awareness of the potential danger of drinking during pregnancy", they effectively admit that the advisory labels on their own are ineffective. The application can not be assessed on the basis of effectiveness with a non-existing program.

The Australian wine sector considers that a strong program to develop consistent and accurate information to provide as a resource for general practitioners and obstetricians would be a far more targeted and effective strategy for alleviating the incidence of FAS and FASD. This is outside the scope of FSANZ consideration of Application A576.

9. What wording for a statement about the risk of consuming alcohol when planning to become pregnant and during pregnancy would be appropriate on an alcoholic beverage container to raise awareness in pregnant women and women planning to become pregnant?

Research suggests that telling an individual that a behaviour is harmful or providing information about the risk associated with a behaviour is insufficient to affect an individual's actions. In addition, increasing an individual's knowledge about a health risk does not necessarily cause that individual to change or modify negative or risky behaviour (Eggs 1989).

To change the behaviour of an individual is complex, for example, an individual must:

- feel personally susceptible to the health risk;
- believe that the risk can cause a significant harm; and
- know what actions can be taken to avoid the harm, and also know the cost or benefit of the actions; if the costs outweigh the benefits, the action to avoid the harm is unlikely to be taken.

Personal susceptibility or relevance is affected by a range of social and psychological factors, which act to establish the context of the judgement regarding credibility and hence the eventual effectiveness of the warning label (Cvetkovich and Earle 1995). Indeed, for a health warning label to be effective, it should involve the individual consumer, such that the individual will read the warning and process the information contained in the warning. It should also be relevant to the individual, as well as believable and credible.

Research has demonstrated that health warning labels are more effective when they are simple, clear, easily understood as well as provide believable and credible information (Ayres et al. 1989, Hilton 1993). While these objectives may sound straightforward, they are difficult to achieve given the degree of scientific debate and conflicting evidence and advice regarding the effects of light alcohol consumption on developing foetus and on human health per se.

As concluded by Stockwell (2006) "Reviews and primary studies concerning the impacts of the US alcohol warning label experience...agree fairly closely that impacts on drinking behaviour are either nonexistent or minimal."

It is unlikely, however, in the absence of a wide range of other strategies to encourage Australians to consume alcohol more responsibly, that the alcohol warning labels would on their own result in an overall reduction in heavy alcohol consumption or specific risk behaviours such as heavy alcohol consumption by pregnant women.

10. What further evidence is relevant to the wording of such a statement, such as its likely effectiveness or appeal to women of childbearing age and/or understanding of the statement by women of childbearing age?

It is considered that product warnings can not readily and reliably be targeted to 'high risk' groups and individuals, such as excessive consumers of alcohol, whether regular consumer or 'binge drinkers'. The personal experiences affecting judgements of personal risk, motivations for high risk behaviour and the individual pharmacological and physiological properties of, and responses to, alcohol, all make the design of warnings that are effective with these individuals difficult. Young people, for example, who are an 'at risk' group, may have difficulty in judging or perceiving risks associated with alcohol consumption. This is because if an event has not occurred to an individual, and he/she cannot associate it with a certain risk, then the individual may perceive that the risk may not occur in the future—that is, the risk is not related or relevant to them personally (Patterson *et al.* 1992). Also, 'at risk' individuals apparently give greater weight to uneventful experiences with alcohol interpreted to indicate that it carries low risk (Cvetkovich and Earle 1994, 1995). Indeed, the possibility that there are different reasons and motivations for high-risk behaviour makes it difficult to target messages to these individuals. Heavy alcohol consumers also perceive the risk of alcohol-related harm as low and less believable (Andrews *et al.* 1991, Andrews 1995) than do light alcohol consumers.

Results from a relatively recent ethnically diverse sample of US high school students involved in a multi-media, peer-reviewed educational presentation designed to reduce the incidence of FAS, demonstrates that while the presentation increased participant's knowledge regarding FAS, it had no effect on participants' attitudes, beliefs about the potential harms of consuming alcohol whilst pregnant or, importantly, their intention to consume alcohol whilst pregnant (LaChausse 2006).

Results from a study of both US and Australian college/university students, demonstrates that young Australian women perceive less risk associated with consuming alcohol whilst pregnant than young American women, and in particular for low levels of alcohol consumption (Creyer *et al.* 2002). Less risk is also perceived by both Australian and American young women binge drinkers. This statistic is particularly relevant as one of the 'at risk groups' for having an alcohol-affected child is heavy alcohol consumers in either continuous or binge pattern. In Australia, 18% of 18-23 year-old women binge drink once a week or more, that is, they consume five or more standard alcoholic drinks on one occasion, while 21% binge drink once a month, compared to 6% and 8% 45-50 year-old women, respectively, although only 0.6% of 18-23 year-old women currently consume heavy amounts of alcohol continuously (Carr-Gregg *et al.* 2003, Clemens *et al.* 2007). Among another 'at risk group', 14% of 18-24 year-old Indigenous Australian women binge once a week or more although 25-34 year-old Indigenous Australian women have the highest rate of binge drinking (<http://www.abs.gov.au/AUSSTATS/abs@.nsf/mf/4832.0.55.001/>). Heavy alcohol consumption is associated with an increased risk of other health-risk behaviours such as unsafe sex and correspondingly unplanned pregnancies (PHE 19. Canberra: Australian Institute of Health and Welfare, 1999). The average age of having a baby in Australia is currently 27-29 years (AIHW Cat. No. PER 29; Perinatal Statistics Series No. 16.).

Furthermore, health consciousness is also not related to either moderate or heavy alcohol consumption such that health conscious individuals are not more likely to accept health warning labels (De Carlo 1997).

11. What are the advantages and disadvantages of a written statement compared with a pictorial image for conveying the risks of consuming alcohol when planning a pregnancy and during pregnancy?

No comment. This question will be answered in light of the strong opposition to the rest of the submission which is based on a review of the recent and relevant scientific literature.

12. What percentage of alcohol by volume should be used to determine which alcoholic beverages are to carry an advisory statement, if required?

No comment. This question will be answered in light of the strong opposition to the rest of the submission which is based on a review of the recent and relevant scientific literature.

13. What is the likely impact on consumers, industry, and/or government if the *status quo* was maintained?

There would be no impact on consumers, industry and/or government if the *status quo* was maintained.

14. What is the likely impact on consumers, industry, and/or government if an advisory statement on the risks of consuming alcohol when planning a pregnancy and during pregnancy is required on alcoholic beverage containers?

1. Wine consumers

There are two likely impacts on consumers if an advisory statement on the risks of consuming alcohol when planning a pregnancy and during pregnancy is required on alcoholic beverage containers. The first impact is likely to be an increase in awareness although there will be no decrease in heavy consumption in the 'at risk' groups. The second impact is likely to be vilification of pregnant women who consume alcohol, either privately or publicly. The biased and distorted estimates of risk implied on the health warning labels that the consumption of any alcohol during pregnancy will adversely affect the foetus, may lead women to abort their foetuses unnecessarily or, at a minimum, to experience debilitating anxiety and guilt (Weiner *et al.*, 1989).

Such an advisory statement is inconsistent with commentary from the Ministerial Council on Drug Strategy's *National clinical guidelines for the management of drug use during pregnancy, birth and the early development years of the newborn*, the *National Report Fetal Alcohol Syndrome National Workshop 2002*, and the Royal Australian and New Zealand College of Obstetricians and Gynaecologists, as follows:

1. From the Ministerial Council on Drug Strategy. *National clinical guidelines for the management of drug use during pregnancy, birth and the early development years of the newborn*. Sydney: NSW Health and Commonwealth of Australia, 2006
(http://www.health.nsw.gov.au/pubs/2006/pdf/ncg_druguse.pdf):

3.1.2 Advice on drinking alcohol in pregnancy

All pregnant women should be given information on the risks associated with drinking alcohol during pregnancy and advised that no completely safe level of alcohol consumption has been determined for the fetus. *Level of evidence: Consensus*

Comment: An abstinence-based approach is not recommended, in part because it could result in disproportionate anxiety among women with an unplanned pregnancy, many of whom consume some alcohol before they know they are pregnant, but usually without harmful consequences for the infant. Anxiety about alcohol consumption has sometimes resulted in precipitous decisions to terminate a pregnancy (See National Report Fetal Alcohol Syndrome National Workshop 2002. Australian National Council on Drugs and National Expert Committee on Alcohol).

2. From the *National Report Fetal Alcohol Syndrome National Workshop 2002*. Australian National Council on Drugs and National Expert Committee on Alcohol:

"...prohibition advice on alcohol probably leads to greater fetal mortality than a more balanced approach. Certainly, I cannot recall how many women I have observed who acquired a termination of pregnancy, when unplanned, and following a party. The anxiety and precipitous decisions of such women are enhanced by a prohibition program, and the preventive effect is likely to be minimal.

The larger proportion of women who plan pregnancy do reduce alcohol intake or mainly abstain. That is, most pregnancy booklets or pre-pregnancy clinics contain or provide information regarding alcohol and the developing fetus. Different studies in different communities show however that more conceptions are unplanned than are planned."

3. From the Royal Australian and New Zealand College of Obstetricians and Gynaecologists:

“urging pregnant women not to drink at all could cause unnecessary panic and lead to healthy babies being terminated”.

2. Wine producers

The impact on wine producers from a mandatory change in labelling requirements would be significant, particularly for smaller producers. Label changes attract costs for label redesign and printing costs. Providing additional mandatory information is a difficult exercise in the already often tight constraints of available space.

Furthermore, the Australian wine sector supports public health efforts in targeted and scientifically proven programs. It is an intention of the WFA to investigate options available for targeted investment in programs through the industry-funded body DrinkWise Australia that deliver cultural change to the way Australians consume alcohol.

15. How would labelling alcoholic beverages compare in terms of effectiveness and cost effectiveness with other public health measures to inform pregnant women of the risks of alcohol consumption during pregnancy?

There are other public health measures which are *both* cost effective and effective at reducing heavy alcohol consumption in 'at risk' groups.

As noted by the US Centre for Disease Control and Prevention in 2002, knowledge is not enough to change norms and actual behaviour. US studies suggest that screening, brief interventions and motivational interviewing for pregnant women and those planning pregnancy are effective at reducing alcohol consumption during pregnancy and hence at reducing the risk of giving birth to an alcohol-affected child (Floyd et al. 2005, Krulewitch 2005, Mengel et al. 2006).

All are cost-effective interventions, where cost savings from the identification of potential maternal alcohol problems are also significant.

These are specific and targeted strategies on an individual rather than group or population level. Women are generally receptive to interventions during pregnancy as they focus primarily on positive health behaviours (Morse and Hutchins 2000).

Primary health care providers, that is, general practitioners, as well as obstetricians, midwives and nurses, and even dieticians and nutritionists, play a pivotal role in identifying both pregnant women and those planning pregnancy at high risk of giving birth to an alcohol-affected child, and providing them with advice, counseling, treatment and referral as appropriate. This strategy has unanimous support among the American College of Obstetricians and Gynecologists, the American Academy of Paediatrics, the US Office of the Surgeon General and the US Department of Health and Human Services.

Validated screening instruments are available for screening pregnant and non-pregnant women of reproductive age including T-ACE, TWEAK and AUDIT (Floyd et al. 2005; www.nih.gov/publications/Assessing/Alcohol/Index.htm).

Brief interventions involved one to three short (5-10 minute) sessions comprised of personal feedback on alcohol-related health problems and risk, as well as advice, options of treatment and self-help (Ockene et al. 1999, Chang et al. 1999, 2000, 2005, 2006, Reiff-Hekking et al. 2005). Several controlled studies have examined the effectiveness and impact of brief interventions with pregnant women, and all concur that pregnant women following the brief intervention were up to five-times more likely to abstain from alcohol completely or at least reduce their alcohol consumption from heavy to light, with improved birth outcomes (Hankin et al. 2000, Handmaker and Wilbourne 2001, Hankin 2002, Sokol et al. 2003, O'Connor and Whaley 2007, Chang 2004). Inclusion of the pregnant woman's partner in the brief intervention improved the outcome for heavy alcohol consumers (Chang et al. 2005). Thus brief interventions appear to be an appropriate effort to modify problematic and potentially problematic alcohol consumption and to avert its adverse consequences in at risk pregnant women or those planning pregnancy. Even for women who are not 'at risk', a routine screening provides an opportunity to discuss the health effects of alcohol consumption in a nonjudgemental, health-orientated setting to convey the message that these issues are important to the pregnancy and birth outcomes.

Motivational interviewing involves more comprehensive counseling and guides the recipients to explore their ambivalence about changing behaviour while focusing on the perceived discrepancy between current behaviours and overall goals (Miller and Rollnick 2002). It is particularly effective in

reducing the consumption of heavy consumers. For example, in a pilot study of motivational interviewing, which was an empathic, participant-centred but directed session focusing on the health of the participant's unborn baby, all participants reduced their alcohol consumption and maximum blood alcohol concentrations throughout their pregnancy (Handmaker et al. 1999). Another pilot study entitled the Project CHOICES targeted non-pregnant women at high risk of an heavy alcohol-exposed pregnancy and hence giving birth to an alcohol-affected child (The Project CHOICES Intervention Research Group 2003). It consisted of four brief motivational interviews. At the six-month followup, 68.5% had reduced their risk.

The impediments to implementing the screenings, brief intervention and motivational interviewing include commitment, inadequate knowledge and skills among health care providers reinforced by limited education and training in medical school and in general practice, lack of time, and system barriers such as lack of intervention tools, protocol, referral or treatment resources (Nevin et al. 2002, Mengel et al. 2006). These impediments have been identified by both US and Australian primary health care providers.

In a survey of 1,143 primary health care providers in Western Australia, only 45% routinely ask about alcohol consumption during pregnancy and only 25% routinely provide information on the potential consequences of heavy alcohol consumption during pregnancy and only 13% provide advice consistent with the current NHMRC Australian Alcohol Guidelines. They identified the need for educational material for both their patients and themselves (Payne et al. 2005, Elliot et al. 2006, Peadon et al. 2007).

A Healthy Habits training program was effectively initiated in the USA to address clinician certainty and confidence in diagnosing problematic alcohol consumption (Seale et al. 2005).

Concerning primary health care for Indigenous Australian and Torres Strait Islander women, the provisions of maternity services must also be culturally relevant and culturally safe to be effective (Kruske et al. 2006). Guidelines and strategies for such provisions are being addressed (Queensland Health. Strategic policy for Aboriginal and Torres Strait Islander children and young people's health 2005–2010. Brisbane: Strategic Policy Branch, Queensland Health, 2005; *National Report Fetal Alcohol Syndrome National Workshop 2002*. Australian National Council on Drugs and National Expert Committee on Alcohol).

Relevant excerpts are included here from the Ministerial Council on Drug Strategy. National clinical guidelines for the management of drug use during pregnancy, birth and the early development years of the newborn. Sydney: NSW Health and Commonwealth of Australia, 2006 (http://www.health.nsw.gov.au/pubs/2006/pdf/ncg_druguse.pdf):

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3.1.3 Aboriginal and Torres Strait Islander women

Health care workers must become familiar with local drinking habits, patterns and terminology (eg 'charged up', 'nugu') to ensure accurate assessment of risk and its management. *Level of evidence: Consensus*

Comment: Patterns of consumption of alcohol vary markedly in Aboriginal and Torres Strait Islander communities from non-Indigenous communities: Aboriginal and Torres Strait Islander communities have higher proportions of both non-drinkers and of hazardous/harmful drinkers. Assessment can be difficult because heavy drinking and group drinking are often the norm (that is, involving more than half the community) and are related to external factors, such as canteen hours and 'pay days'. Therefore, alcohol consumption can be difficult to quantify in terms of standard drinks. Nevertheless, it can be categorised according to the Australian Alcohol Guidelines risk categories www7.health.gov.au/nhmrc/publications/_files/ds9.pdf.

3.1.4 Access to treatment

Pregnant women identified as consuming risky levels of alcohol (as defined in the Australian Alcohol Guidelines) should have priority access to alcohol treatment services, including comprehensive assessment and detoxification, but also including therapeutic options such as brief intervention, cognitive behavioural therapy and group sessions. *Level of evidence: Consensus*

The need for detoxification is an indication for inpatient admission and treatment. Pregnant women who require alcohol detoxification should be admitted into a supportive health care environment and provided with continuity of care, including ongoing counselling. Women who are withdrawing from alcohol should be supported with medication and nutritional and vitamin supplementation and should have access to appropriate maternal and fetal monitoring. The therapeutic environment should be sensitive to gender and cultural issues that influence the acceptability of treatment. *Level of evidence: Consensus*

And from the *National Report Fetal Alcohol Syndrome National Workshop 2002*. Australian National Council on Drugs and National Expert Committee on Alcohol

Data

- Questions relating to alcohol and other drug consumption around conception/pregnancy need to be standardised and included in all (NT) databases relating to maternal and child health, and pregnancy outcomes.
- Training for alcohol screening needs to be provided to health professionals.
- National guidelines for screening for alcohol use in pregnancy are needed.

Who needs information?

- immunisation clinics provide window of opportunity, both for diagnosis and intervention and prevention of FAS
- health care workers
- teachers
- school child health nurses
- policy makers to be well informed to prioritise resource allocation.

General observations

- lack of data about preventive interventions
- 'lost evidence base' — unevaluated 'wild' interventions
- need flexibility in evaluation approaches
- need to be responsive to wider social factors
- need to be inclusive of other services
- need to recognise prevention potential with those already afflicted (mothers of FAE children and FAE grown-ups)
- need to think STRATEGICALLY

Caveats

- missing groups — family services, corrections, disability, special education
- need to focus on wider impact of alcohol on developmental health
- not just an Indigenous issue, need particular strategies for particular groups