

Second evaluation of the voluntary labelling initiative to place pregnancy health warnings on alcohol products

Final Report

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.SIGGINS MILLER

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Main Messages

Consideration of the evidence from all sources of data in this evaluation leads to the following main messages:

- There has been improvement in the number of pregnancy warning labels on alcohol products.
- The majority of labels remain visible and readable; and there are high rates of compliance with the NHMRC guidelines. However, there is room for continued improvement.
- There has been significant increase in the acceptance by industry of their role in the promotion of responsible drinking; and of the role of pregnancy warning labels in a broader comprehensive social marketing strategy to reduce alcohol related harm.
- Alcohol manufacturers nationally and internationally have increased their health-related labelling and public education activities.
- There is no apparent change in the extent and nature of legislation and regulation of alcohol labelling nationally or internationally.
- The first evaluation found that the greatest room for improvement in the short term was within the Ready to Drink (RTD) and Dark Spirit product categories. In the second evaluation these two product categories have demonstrated the greatest improvement since the time of the first evaluation.
- In the second evaluation, the product category with the greatest room for improvement is domestic craft beer. There have been recent changes in the peak bodies to which these boutique brewers relate. If the voluntary labelling initiative is to continue, government will need to be mindful of these changes.
- There has been an increase in unprompted consumer awareness of health messages about drinking while pregnant. The major sources of these messages appear to be healthcare professionals or informational posters and pamphlets and other mass mediated educational materials. Fewer than 12% of people who were aware of health messages about drinking while pregnant said that a label on an alcohol product was the source of information.
- There was no significant increase in the prompted awareness of the pictogram pregnancy warning labels. However, there was a statistically significant increase in prompted awareness of the text-based pregnancy warning labels. This may be because those alcohol product categories where the presence of labels increased the most (RTDs and Dark Spirits) mostly carried text-based warnings.
- The results of this evaluation reinforce the findings of the first, that: given the current availability of evidence, warning labels should be seen as only one part of the mix of comprehensive social marketing campaigns and other health promotion endeavours.

Executive summary

Alcohol exposure in pregnancy is a risk factor for poor pregnancy and child outcomes. Labels can contribute to increasing awareness and understanding of the risks of drinking alcohol during pregnancy. Implemented in the context of an integrated strategy, the pregnancy labels on alcohol products might contribute to awareness and understanding because they act as a reminder or prompt a conversation.

In December 2011, in its response to the report on the *Labelling Logic Review of Food Labelling Law and Policy 2011*, the Legislative and Governance Forum on Food Regulation (FoFR) provided the alcohol industry with a two-year period, commencing December 2011, to adopt the voluntary initiative to place pregnancy health labels on alcohol products, before regulating such a change.

In January 2014, the Commonwealth of Australia through the Department of Health (the Department) engaged Siggins Miller Consultants to undertake the *Evaluation of the voluntary labelling initiative to place pregnancy health warnings on alcohol products*. The aim of the evaluation was to assess the progress and success of Australian alcohol industry action towards implementing pregnancy health warnings on alcohol product labels at the end of the two-year period to December 2013, as measured by market capture, visibility, consistency of message with NHMRC Australian guidelines and consumer awareness.¹ FoFR considered the results of this evaluation in 27 June 2014² and determined:

- Overall percentage of products with a pregnancy health warning label was encouraging, in particular the wine, beer and cider industries, but that there is a wide band of variability across product types.
- Ministers noted and expressed concern with the low uptake in the mixed alcoholic beverages or ready to drink category.
- Ministers agreed to continue to work with industry to ensure increased uptake particularly with companies where the uptake is lower such as the ready to drink industry
- The Forum agreed to extend the existing trial on voluntary uptake of pregnancy health warnings on alcohol product labels, and to undertake a review in two years
- Work with industry on consistent and effective messaging was to continue, acknowledging that work to inform and target at risk consumers should be part of a broader strategy, including community education and targeted advice to women who are pregnant or planning pregnancy.

In line with this determination by FoFR the Department engaged Siggins Miller in late 2016 to undertake the second evaluation of the voluntary labelling initiative to place pregnancy health warnings on alcohol products, which will comply with the original Terms of Reference of the first evaluation.

¹ The NHMRC guidelines present a review of the evidence on risks associated with alcohol drinking during pregnancy, note the limitations of the studies, and that the current evidence does not warrant a “conclusion that drinking alcohol at low-moderate levels during pregnancy is safe.”

² [Australian Government Department of Health](#)

Findings

Breadth and quantity of alcohol products (primary containers) labelled by market share

Based on those products with the greatest market share and which collectively represent ~75% of the total volume of alcohol sold in each alcohol market, 75.3% of products have a pregnancy health warning. This is an increase of 15.5 percentage points compared to the previous evaluation. In contrast, only 47.8% of all alcohol products available for sale had a pregnancy health warning label which was an increase of 9.6 percentage points compared to the previous evaluation. A reasonable interpretation of these results is that the most appropriate method of assessing the extent to which pregnancy labels have been implemented depends upon which strategy of raising awareness is thought to be most effective:

- If it is thought that by targeting the products that are most commonly consumed, then considering the products that represent the majority of the market share is appropriate. Between 39.5% and 100% of these products (after adjusting for market share of each product) have a pregnancy health warning label across product types.
- If it is thought that by targeting the products that consumers are exposed to, or are potentially exposed to, at the point of purchase, then considering all products that are for sale is appropriate. Between 19.4% and 66.5% of all products available for sale have a pregnancy health warning label across product types.

The substantial difference in pregnancy warning labels by product category is potentially of concern. A potential contributing factor may be parallel importing – an issue identified by the industry which may affect product markets differently (see Appendix 5 for a summary of the results of the key informant interviews).

The lowest observed proportion of products with a pregnancy health warning was within the premium or craft beer category. This may be owing to the nature of manufacturers of those products, specifically, the scale of their operations relative to other manufacturers that typically use similar packaging types.

It is apparent that adoption and implementation of the pregnancy health warnings labels has increased over time. For example, between 23.1% and 45.5% of the sampled wine products with a vintage year of 2012 carried a pregnancy health warning compared to a range of 40.7% and 55.2% in 2015. This is an encouraging sign. However, it is uncertain whether this rate will continue to grow at the same pace as observed in the past.

In general, the proportion of alcohol products with a pregnancy label has increased since the previous evaluation. There is evidence that those products that represent in sales volume the greater proportion of market share have a higher proportion of products with a pregnancy health warning. Since the last evaluation, this proportion has increased at a greater rate than all the products available for sale. Further, the proportion of products with a label (and the increase since the last evaluation) was greater in those products manufactured internationally, compared to those manufactured in Australia. This may be because those products imported into Australia are more likely to have been manufactured by larger firms.

The product category with the greatest room for further improvement is the premium or craft beer category. This may be because products in this category are potentially more likely to be manufactured by smaller firms. Taking all these findings into account, it would appear from the field study that the remaining challenge for the voluntary labelling initiative is to improve the uptake of pregnancy health warnings by smaller scale domestic manufacturers.

Economic impacts associated with the voluntary pregnancy health warning labelling initiative

The estimated average cost per stock keeping unit was \$338.76. The total cost to industry for labelling the Stock Keeping Units (SKUs) available for sale in 2017 is estimated to be \$3.5 million. In a sensitivity analysis, the proportion of SKUs that carry a pregnancy health warning from those products that comprise the top 75% of market leading products was used instead; the resultant cost to industry was estimated as \$5.5 million. This cost estimate is less than the previous evaluation as where zero cost responses from survey participants were excluded from the estimation of the average cost per label, the responses from this survey warrants their consideration and inclusion of average cost.

The fact that pregnancy health warnings occupy space on a label that could be used for other purposes (i.e. including further tasting notes, other promotional and branding material) or that health warnings may reduce the aesthetics of the label were both identified as a potential non-monetary cost. On the other hand, the inclusion of a pregnancy health warning as an opportunity to be associated with the responsible consumption of alcohol was identified as a potential non-monetary benefit. It was also identified that, for smaller packages (e.g. 50ml bottles), it may not be physically possible to accommodate a pregnancy health warning without substantial change to the current package / labelling. Due to the design of the voluntary initiative, updating labels could be achieved within other standard business operations and as such, the overall cost to industry has been able to be kept low.

Consistency of the pregnancy warning message across product labels and with the 2009 NHMRC guidelines that 'it is safest not to drink while pregnant'

Producers used either or both the text label 'it is safest not to drink while pregnant' and the pregnancy silhouette pictogram label. The most commonly used pregnancy health warning label is the pictogram by itself (76%). However, it must be noted that the four product groups with the largest growth in the proportion of products with a pregnancy health warning have the highest proportion of text style pregnancy health warnings compared to other alcohol product groups. Namely, RTDs (79.9% of warnings were text or text and pictogram), dark spirits (41.3%), white spirits (33.1%), and international beer (13.8%). Of the 24.1% of labels that use text, 90.6% are consistent with the National Health and Medical Research Council (NHMRC) recommendation that it is safest not to drink alcohol while pregnant.

Visibility and readability of pregnancy health warnings on alcohol products

A majority of pregnancy health warnings were visible and readable, being of average or greater size (88.4%) than the DWA labelling manual and templates, and of average or better legibility or prominence (93% and 90% respectively), both of which are encouraging. The majority of pregnancy health labels were located on the back or side of the product (85.7%).

Consumer awareness of pregnancy warning labels on alcohol products

A total sample of 5,399 completed the consumer awareness survey in the first evaluation while 5,622 respondents completed the survey in the second evaluation.

Overall, a significantly more respondents in the total sample indicated that they were aware of any messages or campaigns about drinking alcohol when pregnant from the first (62.4%) to the second evaluation (71.1%). When asked to describe the messages or campaigns that they have seen or heard, very few nominated the pictogram and text label on alcohol products at both timepoints.

Most common source of information about drinking alcohol when pregnant was medical practitioners at both the first (41.4%) and second (54.5%) evaluation. Compared to the first evaluation, significantly higher proportion of respondents in the second evaluation reported receiving information about drinking alcohol when pregnant through: alcohol products; licensed

retail outlets; other licensed outlets; and medical practitioners. Although all reported sources of information grew significantly from time one to time two, the rate of growth was highest for information found by respondents on alcohol products.

Once respondents were prompted with the text label, significantly more respondents in the second evaluation were aware of it than those in the first. On the other hand, the awareness level of the pictogram did not significantly differ across the two timepoints when prompted.

The results suggest that there has been an increase in the unprompted awareness of health messages about drinking while pregnant. The major sources of these messages appear to be healthcare professionals or informational posters and pamphlets and other mass mediated educational materials. Without prompting, fewer than 12% of people who were aware of the health messages about drinking while pregnant nominated a label on an alcohol product as the source of information. Those who were aware of the labels (both text and pictogram), after being prompted, felt that the use of green colour can confuse readers by suggesting that alcohol should be consumed, and red colour should be used to indicate danger.

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Second evaluation of the voluntary labelling initiative to place pregnancy health warnings on alcohol products

Final Report

Section 1 Introduction

Alcohol exposure in pregnancy is a risk factor for poor pregnancy and child outcomes. High-level or frequent intake of alcohol in pregnancy increases the risk of miscarriage, stillbirth and premature birth, and alcohol related birth defects and neurological problems described in the literature since 1968 under the umbrella of Fetal Alcohol Syndrome (FAS), and more recently Fetal Alcohol Spectrum Disorders (FASD).³ Despite potential dangers to children's health, drinking by pregnant women is common in Anglo-Saxon countries such as Australia.⁴

In Australia, the proportion of women who self-report drinking during pregnancy appears to have decreased over time (60% in 2007 to 51% in 2010 and 53% in 2013). Over 50% of pregnant women consumed alcohol before they knew they were pregnant, and 1 in 4 continued to drink, even once they knew they were pregnant. In 2013, of those who did consume alcohol, most (96%) usually consumed 1–2 standard drinks.⁵

1.1 Background to the labelling initiative

In 2009, the Australia and New Zealand Food Regulation Ministerial Council (Ministerial Council) announced the review of Food Labelling Law and Policy – the *Labelling Logic Review of Food Labelling Law and Policy* (the Review).

In 2009, in the period leading up to the release of the Review and the Government's response to it, DrinkWise Australia (DWA) (an independent not for profit organisation established by industry focused on promoting change towards a healthier and safer drinking culture in Australia) took the initiative to research and develop four warning labels for the alcohol industry, including pregnancy warnings.

The 2009 National Health and Medical Research Council's (NHMRC) *Australian guidelines to reduce health risks from drinking alcohol*, Guideline 4A stated that "For women who are pregnant or planning a pregnancy, not drinking is the safest option."

In December 2011, in its response to the Review, the Legislative and Governance Forum on Food Regulation (FoFR) (formerly known as the Ministerial Council) stated its intention to provide the alcohol industry with a two-year period to December 2013 to adopt voluntary initiatives to place pregnancy health labels on alcohol products, before regulating such a change. FoFR acknowledged that industry had already made efforts to introduce warnings on labels voluntarily and committed to working with industry over the voluntary pregnancy health warning labelling period.

By the time of the release of the government response to the Review, DWA and industry were already engaged in looking at the issue of consumer advisory information including pregnancy health warning labelling on alcohol products. DWA had conducted market research on behalf of industry peak bodies in 2010/11. In July 2011, DWA launched the alcohol industry initiative to place a range

³ National Health and Medical and Medical Research Council (2009). *Australian guidelines to reduce health risks from drinking alcohol*. Canberra: Commonwealth of Australia.

⁴ World Health Organisation (2010). *Global strategy to reduce the harmful use of alcohol*. Geneva: World Health Organisation (WHO)

⁵ Australian Institute of Health and Welfare (2014). National Drug Strategy Household Survey detailed report 2013. [Australian Institute of Health and Welfare](#)

of health information and responsible drinking labels on alcohol products. Industry peak bodies in turn were working to engage as many producers as possible in health labelling initiatives.

After a 6 - 9 month set up period aimed at achieving consistency and buy-in about placing pregnancy health warning labels on primary packaging of alcohol products as a minimum, producers commenced labelling products. An agreement between DWA and the Winemakers Federation of Australia (WFA) enabled winemakers who were not members of DWA to access the DWA labelling templates via a DWA dedicated winemakers portal in September 2012.

1.2 This Evaluation

In January 2014, the Commonwealth of Australia through the Department of Health (the Department) engaged Siggins Miller Consultants to undertake the *Evaluation of the voluntary labelling initiative to place pregnancy health warnings on alcohol products*. The aim of the evaluation was to assess the progress and success of Australian alcohol industry action towards implementing pregnancy health warnings on alcohol product labels at the end of the two-year period to December 2013, as measured by market capture, visibility, consistency of message with NHMRC Australian guidelines and consumer awareness.⁶ FoFR considered the results of this evaluation in 27 June 2014.⁷ The conclusions and outcomes were:

- Overall percentage of products with a pregnancy health warning label was encouraging, in particular the wine, beer and cider industries, but there is a wide band of variability across product types.
- Ministers noted and expressed concern with the low uptake in the mixed alcoholic beverages or ready to drink category.
- Ministers agreed to continue to work with industry to ensure increased uptake particularly with companies where the uptake is lower, such as the ready to drink industry.
- The Forum agreed to extend the existing trial on voluntary uptake of pregnancy health warnings on alcohol product labels, and to undertake a review in two years.
- Work with industry on consistent and effective messaging was to continue, acknowledging that work to inform and target at risk consumers should be part of a broader strategy, including community education and targeted advice to women who are pregnant or planning pregnancy.

In line with this determination by FoFR, the Department engaged Siggins Miller in late 2016 to undertake the second evaluation of the alcohol industry voluntary pregnancy warning labels on alcohol products, which would comply with the original Terms of Reference of the first evaluation.

The project has entailed the evaluation of the alcohol industry voluntary labelling initiative, responding to the Terms of Reference below, to measure the progress and success of the voluntary labelling initiative as measured by market capture, visibility, consistency of message with NHMRC Australian guidelines,⁸ consumer awareness of the alcohol warnings on labels, and understanding of the message that they contain.

The evaluation is intended to assess the alcohol industry actions in implementing pregnancy health warnings on alcohol product labels that were to be completed by the end of the two-year period,

⁶ The NHMRC guidelines present a review of the evidence on risks associated with alcohol drinking during pregnancy, note the limitations of the studies, and that the current evidence does not warrant a “conclusion that drinking alcohol at low-moderate levels during pregnancy is safe.”

⁷ [The Australian Government Department of Health](#)

⁸ The NHMRC guidelines message is as follows: “For women who are pregnant or planning a pregnancy, not drinking is the safest option.”

June 2016. The evaluation may be used to inform future decision-making processes by Ministers regarding alcohol labelling. The second evaluation began 6 months after the implementation timeframe noted above.

1.2.1 Terms of Reference for the Evaluation

The process of the evaluation has been highly consultative, and has included consultations with States and Territories, the alcohol industry, and key public health organisations in accordance with the following terms of reference:

- a) The primary focus of the evaluation will be to analyse the progress of alcohol industry action towards implementing voluntary pregnancy health warnings about the risks of drinking while pregnant on alcohol product labels, specifically:
 - i. Measuring the breadth and quantity of alcohol products and containers that carry the pregnancy warning label and/or the pictogram with respect to the market share of those products
 - ii. Updating economic impacts associated with placing pregnancy health warning labels on alcohol products
 - iii. Assessing how consistent the wording of the pregnancy warning message is across product labels and with the NHMRC Australian Guidelines to reduce health risks from drinking alcohol that 'it is safest not to drink while pregnant'
 - iv. Assessing the visibility and readability of alcohol warning labels looking at size, font, colour and placement of pregnancy warning messages on labels in the context of broader labelling requirements
 - v. Examining consumer awareness of the alcohol warnings on labels and understanding of the message and/or pictograms they contain.
- b) The evaluation will consider issues associated with products which are imported or which have an extended shelf life or cellar release date. The evaluation will also be mindful of international regulations and evidence.
- c) In terms of the broader context for the project, the evaluation will also consider associated industry initiatives designed to supplement and leverage the impact of warning labels on alcohol products. It will also consider the role of activities funded by Government to support these warnings including a point of sale information project, and a project targeting consistent messaging by health professionals about the content of the NHMRC Guidelines.
- d) The evaluation will be undertaken through a three-stage process:
 - Stage one: Revise and update the first evaluation framework in consultation with the Department, to guide this second evaluation process.
 - Stage two: undertake an update of the analysis of the industry initiatives and economic impacts and develop an interim report.
 - Stage three: undertake an update of quantitative analysis of labelling initiative at the end of the voluntary period, and develop a final report.

The evaluation will conduct sectoral and community consultations as agreed with the Department and include extensive consultations with states, territories, the alcohol industry and key public health organisations.

The evaluation was undertaken in the period December 2016 to May 2017.

1.3 Evaluation approach

The methodology to fulfil the Terms of Reference included:

- a field study of outlets to assess the proportion of alcohol products with a pregnancy health warning label in terms of market share, products available for sale, and the consistency of the messages on pregnancy labels with the NHMRC guidelines, as well as their size, legibility and prominence (detailed in Appendix 2)
- an analysis of the estimated cost to industry of placing pregnancy health warning labels on alcohol products (detailed in Appendix 3)
- a survey to examine consumer awareness and understanding of pregnancy labels on alcohol products (detailed in Appendix 4)
- interviews with key informants to understand the context within which industry was implementing the initiative, from both industry, government and public health perspectives (detailed in Appendix 5).
- Update literature and document reviews (detailed in Appendix 6) to summarise:
 - current evidence surrounding alcohol exposure in pregnancy as a risk factor for poor pregnancy and child outcomes
 - legislation, regulation and guidance on size and legibility of consumer information labelling on alcohol products nationally and internationally
 - the activities of industry and government being conducted in parallel with the voluntary pregnancy health warning labelling of alcohol products
 - reviews of evidence for the effectiveness of labelling
 - reviews of the literature on social marketing best practice.

1.4 This report

This report presents the results of each aspect of the methodology and an analysis of data from all sources to address the Terms of Reference.

Section 2 Field study of outlets

The field study of outlets (study) was designed to measure the extent to which alcohol products⁹ carry a pregnancy health warning label (text and/or a pictogram), and an examination of the extent to which the warning labels are consistent with the NHMRC guidelines, are legible and are prominent. Given that the overarching aim of the study is to provide information to help inform judgements about the likely exposure of drinkers to a pregnancy health warning label, and drinkers' family members and friends, there are two possible methods for measuring exposure. First, identifying those alcohol products that comprise the majority of the alcohol market share in Australia, and checking those products for a pregnancy health warning label. The logic of this approach is that a majority of people will be exposed to the most commonly sold brands of alcohol. Second, identifying a wide-range of alcohol products that are actually for sale in a variety of alcohol outlets, then randomly sampling from these products to check them for a pregnancy health warning label. The logic of this approach is to identify the extent to which purchasers are exposed to warning labels, irrespective of their actual purchasing choices. [This approach is subsequently reported as *Aim One*].

The second method could also help explore whether manufacturers might have implemented the voluntary code by prioritising the application of warning labels to particular types of products (e.g. those sold most commonly or those that they market to women). The primary strength of the first approach is that it facilitates an exploration of labelling by market share. The primary strength of the second approach is that it allows greater analysis of whether there are differences in pregnancy health warning labelling between different product types. [This approach is subsequently reported as *Aim Two*].

In line with the methodology in the agreed Evaluation Framework, the specific aims of this study were:

1. To identify the proportion of market-leading alcohol products consumed in Australia that have a pregnancy health warning label and/or a pictogram (*Aim One*)
2. To identify the proportion of alcohol products for sale in alcohol outlets in Australia that have a pregnancy health warning label and/or a pictogram (*Aim Two*), and to identify:
 - a. if that proportion differs by product type (e.g. beer vs wine vs spirits)
 - b. if that proportion differs by state/territory
 - c. the extent to which warning labels are consistent with NHMRC guidelines
 - d. the size of the warning label with respect to DWA guidelines, and its location
 - e. the extent to which warning labels are legible and prominent with respect to FSANZ legibility requirements.

Study Design and sample selection

Identification of market leading products (Aim One)

Market leading products were considered with respect to seven broad market categories (Beer, Cider, White Wine < \$20, White Wine > \$20, Red Wine > \$20, Spirits, and Ready to Drink products). Within each of these categories, the brands that constitute 75% of each of these broad markets by

⁹ Packaged-alcohol products available for sale are defined as those stocked on shelves sold through retail outlets and exclude products that are exclusively for sale direct to consumers, such as via wine clubs, cellar door or other distribution networks. In 2010, store-based retailing accounted for 98.4% of off-site (i.e. not on licensed premises) alcohol expenditure. (Euromonitor International (2011) *Wine-Australia* in Country Sector Briefing April 2011. Euromonitor International: Australia

volume were identified using data provided by IRI¹⁰. Only individual products were included in this study.

Identification of products for sale in alcohol outlets (Aim Two)

All alcohol products sold in retail outlets were eligible for this study and were divided into 12 categories:

- Red wine retail price <\$20
- Red wine retail price > \$20
- White wine retail price < \$20
- White wine retail price > \$20
- Cider
- Domestic brand full strength beer
- Domestic brand mid-strength beer
- Australian craft and / or premium beer
- International brand beer
- Dark spirits
- White spirits
- RTD.

A sample size of 3,512 products was estimated to provide a 95% confidence interval of $\pm 5\%$ with respect to the estimated proportion of products with a pregnancy health warning label for each of the 12 alcohol product categories. The total number of Stock Keeping Units (SKUs) available within each group was estimated from data provided by IRI¹¹. The sample was stratified by state/territory¹², based on population size¹³, and further stratified across five retail chains¹⁴, based on the number of retail outlets operated by each retail chain¹⁵. To ensure representation across different areas within each capital city, the sample was further stratified by city district (generally north, south, east and west districts)¹⁶.

To assess the consistency of pregnancy warning labels with respect to NHMRC guidelines, of the pregnancy health warning labels that use text (either alone or in combination with a pictogram) the words were compared to the NHMRC guideline that 'it is safest not to drink while pregnant.'

Field researchers reviewed and evaluated the size of the pregnancy label in relation to the average pictogram and text provided by the DWA guidelines, which our researchers measured as being approximately 0.5cm x 0.7cm. Sizes of labels were classified as being below this standard, standard or above standard size. Given there are no standard recommendations for the location of the pregnancy label, the field researchers noted the location on each alcohol product sampled. The extent to which warning labels are legible and prominent was assessed relative to standard FSANZ Food Standard 1.2.9: Legibility Requirements (details of assessment criteria used are provided in

¹⁰ Excerpts provided by industry with permission for use in this study

¹¹ [IRI Growth Delivered](#)

¹² Sampling alcohol products in the NT was omitted from the project brief because of timeframes and budget. Instead, the required sample within each category was stratified by state/territory to ensure proportional representation nationally, based on population size

¹³ This implicitly assumes that population size is proportional to product availability, and this is constant across Australia.

¹⁴ The five organisations included account for approximately 92.8% of the retail outlets in Australia.

¹⁵ McKusker Centre for Action on Alcohol and Youth (2014)

http://mcaay.org.au/assets/publications/industryindustryindustry-guides/mcaay_majorsalesoutlets_feb2014-final.pdf

¹⁶ In Canberra and Hobart, only one outlet was sampled per district.

Appendix 2.2.3). Labels were classified as 'low' if they met only some of the criteria, 'standard' if they met all criteria and 'above' if they met and exceeded at least one of the criteria.

In addition, the location of manufacture reported on the product label of each sample was recorded. If an Australian location was provided, the Australian state/territory of manufacture was reported; if it was an international location, the country of origin was reported.

Data collection (sampling) procedure

For both studies, the same lead research officers visited the selected bottle shops in each capital city in each state/territory. The sampling procedure and the sample are described in detail at Appendices 2.1.1 and 2.2. A total of 78 outlets were sampled across Australia. Details of the final number of stores sampled by state/territory and retail chain are presented in Table 3 in Appendix 2.1.1. Participating stores by retail chain was consistent with the sampling frame with a small number of independent retail stores included in the sample.

In total, 14 stores declined during the 6-week sampling period. If declined, an alternative was selected from a list of randomly selected replacement retailers in the same region and within the same retailer group. If the alternative selected from the replacement list also declined to participate, then the process of selecting alternatives was repeated. If the second alternative store declined (i.e. the third store approached) then the sample was not replaced. The stores that declined were generally smaller outlets. Those who declined most commonly said that they had not received communication from management or that they did not understand the project objective.

2.1 Results

2.1.1 Aim One sample characteristics (market leading products)

Of the 157 identified market leading brands for study one, 141 brands were sampled, representing a 90% completion rate. For each brand, multiple SKUs were sampled, with a total of 962 SKUs included in this study. A description of the Aim One sample is provided in Table 4 in Appendix 2.1.1. The vintage year for wine samples ranges from 2007 to 2016 with fewer than 10% of the wines sampled having a vintage of 2012 or earlier.

2.1.2 Aim One data analyses

The number of products that had a pregnancy health warning label for each market is provided in Table 1 below. In order to approximate the proportion of products sold that carry a pregnancy health warning label, a brand was weighted by the proportion of SKUs that had a label and then subsequently weighted by that brand's corresponding market share (Appendix 2.3). That is, those products that represent a larger proportion of the volume of alcohol sold (by product category) were weighted higher than those products that represent a smaller proportion.

Table 1: Proportion of products with pregnancy health warning by market

Market	Previous		Sample		Current	
	Unadjusted %	Adjusted %			Unadjusted %	Adjusted ¹ % (range)
Spirits	18 (37.5%)	46.0%	38	196	149 (76.0%)	79.5% (35.7% - 96.3%)
Wine	71 (73.2%)	78.2%	78	287	209 (72.8%)	-
Red Wine < \$20	-	-	15	76	62 (81.6%)	86.7% (64.0% - 92.7%)
Red Wine > \$20	-	-	29	93	67 (72%)	75.9% (54.2% - 83.7%)
White Wine < \$20	-	-	12	41	40 (97.6%)	99.0% (95.9% - 99.0%)
White Wine > \$20	-	-	22	77	40 (51.9%)	46.6% (39.5% - 61.4%)
Beer	14 (66.7%)	81.3%	12	95	85 (89.5%)	96.0% (80.5% - 100%)
RTD	3 (23.1%)	24.5%	8	63	48 (76.2%)	82.6% (54.0% - 93.7%)
Cider	4 (80.0%)	79.9%	5	34	24 (70.6%)	38.8% (27.4% - 53.9%)
Total	110 (59.8%)	-	141	962	724 (75.3%)	-

Of those products that represent ~75% of the alcohol market, between 51.9% and 97.6% have a pregnancy health warning of some type depending on the product market. After adjusting for market share of each brand, between 39.5% and 100% of those products that represent 75% of the alcohol market carry a pregnancy health warning. Apart from the white wine > \$20 and cider markets, there is evidence that those brands with greater market share are more likely to have a pregnancy warning label.

2.1.3 Aim Two sample characteristics (all products)

A final sample size of 3,612 SKUs was achieved. The sample collected for Aim Two is presented in Tables 6 and 7 of Appendix 2.1.1. The distribution of the products sampled reflects the representative sampling strategy (i.e. across states/territories/retail chains/city districts) and the estimated number of samples required by product group. Of the 3,612 samples, 75.6% were individually packed. For all wine groups, the majority of samples collected had a vintage year of 2015 or later.

2.1.4 Aim Two data analysis

The results for the proportion of products that had a pregnancy health warning for each product group are provided in Table 2 below.

Across all product groups, 47.8% of products sampled carried a pregnancy health warning of some type. This ranged from 19.4% for premium/craft beer to 66.5% for Ready to Drink beverages. Compared with the findings of the previous evaluation, the largest increase in the proportion of SKUs with a pregnancy health warning was in the RTD product group (increase of 44.3 percentage points) followed by the dark spirits groups (increase of 27.3 percentage points).

Table 2: Proportion of products with pregnancy health warning by market

Product Group	Any Pregnancy health warning (n/N, %)		
	Previous	Current	Difference
Dark Spirits	116/353 (32.9%)	201/334 (60.2%)	27.3%
White Spirits	63/168 (37.5%)	157/285 (55.1%)	17.6%
RTD	36/162 (22.2%)	218/328 (66.5%)	44.3%
Cider	43/122 (35.3%)	107/298 (35.9%)	0.6%
Int. Beer	43/153 (28.1%)	174/344 (50.6%)	22.5%
Prem/Craft Beer	36/226 (15.9%)	66/340 (19.4%)	3.5%
Full Beer	28/75 (37.3%)	83/214 (38.8%)	1.5%
Mid/light Beer	14/42 (33.3%)	42/121 (34.7%)	1.4%
Red Wine < \$ 20	237/421 (56.3%)	203/361 (56.2%)	-0.1%
Red Wine > \$20	160/472 (33.9%)	131/327 (40.1%)	6.2%
White Wine < \$ 20	198/410 (48.3%)	187/335 (55.8%)	7.5%
White Wine > \$20	161/382 (42.2%)	159/325 (48.9%)	6.7%
Missing	20/34 (58.8%)	0	
Total	1,155/3,020 (38.2%)	1728/3612 (47.8%)	9.6%

For those states where substantial samples were collected (NSW = 969; VIC = 994; QLD = 749; WA = 453), rates across all product groups were relatively consistent (44.6% - 54.8%).

Adoption and implementation of pregnancy health warning labels over time

The proportion of products with a pregnancy label by year is presented in Table 3 below for wine products. Over time adoption and implementation of pregnancy health warnings has increased. For wines with a vintage year of 2012, for example, between 23.1% and 45.5% of the sample carried a pregnancy health warning compared to a range of 40.7% to 55.2% in 2015.

Table 3: Proportion of wine with pregnancy health warning by year

Product group	Year							
	<2010	2011	2012	2013	2014	2015	2016	Total
Red Wine < \$20	1 (25.0%)	1 (12.5%)	10 (45.5%)	34 (65.4%)	48 (56.5%)	58 (55.2%)	22 (61.1%)	174 (55.6%)
Red Wine > \$20	8 (25.0%)	2 (20.0%)	13 (40.6%)	30 (44.1%)	36 (44.4%)	31 (43.0%)	2 (18.2%)	122 (39.9%)
White Wine < \$20	2 (33.3%)	1 (33.3%)	3 (33.3%)	10 (40%)	15 (45.5%)	40 (50.0%)	50 (51.0%)	121 (47.6%)
White Wine > \$20	6 (75.0%)	1 (14.3%)	3 (23.1%)	8 (50.0%)	19 (61.3%)	37 (40.7%)	48 (55.2%)	122 (48.2%)

Comparison of the proportion of products with a pregnancy health warning between individual and multi-packaged SKUs is provided in Table 4 below.

The proportion of products that carry a pregnancy health warning varies between individually and multi packaged products. Individual packaged products have a much higher proportion of products with a pregnancy health warning (54.0%) compared to multi-packs (28.4% and 29.7% for 3-12 pack and 20+ pack SKUs respectively).

Table 4: Proportion of products with pregnancy health warning by package type

Product Group	PACKAGE		
	Individual	3-12 pack	20+ pack
Dark Spirits	198 (60.0%)	3 (75%)	
White Spirits	156 (54.9%)	1 (100%)	
RTD	108 (73.0%)	89 (60.1%)	21 (65.6%)
Cider	77 (45.8%)	25 (24%)	5 (19.2%)
Int. Beer	110 (65.1%)	39 (32.2%)	25 (46.3%)
Prem/Craft Beer	44 (24.6%)	13 (10.6%)	9 (23.7%)
Full Beer	68 (82.9%)	7 (8.6%)	8 (15.7%)
Mid/light Beer	37 (90.2%)	2 (4.8%)	3 (7.9%)
Red Wine < \$ 20	201 (56.5%)	2 (40%)	(0%)
Red Wine > \$20	131 (40.7%)		
White Wine < \$ 20	187 (56.0%)		
White Wine > \$20	158 (49.5%)	1 (16.7%)	(0%)
Total	1,475 (54.0%)	182 (28.4%)	71 (29.7%)

Domestic and international comparisons

The proportion of Australian manufactured products that carry a pregnancy health warning was compared to the proportion of products of international origin, as shown in Table 5 below. Apart from RTDs, internationally manufactured products had a higher proportion of SKUs with a pregnancy health warning than Australian manufactured products. The increase in the proportion of SKUs with a pregnancy health warning was greater for internationally manufactured products compared to Australian manufactured products (6 percentage point increase and 15.8 percentage point increase in Australian and internationally manufactured products respectively).

Table 5: Proportion of products with a pregnancy health warning by location of manufacture

Product group	Current		Previous	
	Aust.	International	Aust.	International
Dark Spirits	16/103 (16%)	36/77 (46.8%)	97/245 (40%)	165/257 (64.2%)
White Spirits	15/47 (32%)	37/88 (42%)	48/117 (41%)	120/197 (60.9%)
RTD	26/140 (19%)	217/325 (66.8%)	9/19 (47%)	1/3 (33.3%)
Cider	18/79 (23%)	66/228 (28.9%)	24/41 (59%)	41/70 (58.6%)
Int. Beer	9/27 (33%)	28/57 (49.1%)	33/125 (26%)	146/287 (50.9%)
Red Wine < \$ 20	199/337 (59%)	174/310 (56.1%)	37/67 (55%)	29/51 (56.9%)
Red Wine > \$20	135/406 (33%)	113/287 (39.4%)	25/63 (40%)	18/40 (45%)
White Wine < \$ 20	164/324 (51%)	134/246 (54.5%)	33/70 (47%)	53/89 (59.6%)
White Wine > \$20	107/255 (42%)	106/217 (48.8%)	54/126 (43%)	53/108 (49.1%)
Total	783/2,081 (38%)	1098/2496 (44%)	363/880 (41%)	626/1102 (56.8%)

Type of labels and text consistency with NHMRC guidelines

A comparison of the proportion of pregnancy health warning labels that are pictogram only, vs text only, vs pictogram and text is provided in Table 6 below. Overall, a majority of pregnancy health warning labels use a pictogram only (76%). However, RTD products predominantly use text warning types (79.4%) with dark spirits and white spirits products also reporting relatively high proportions of text warning types (40.8% and 31.8% respectively). Additionally, of those pregnancy health warning labels that use text, an estimated 91% of labels are consistent with NHMRC recommendations, ranging from 62% to 100%.

Table 6: Proportion of pregnancy health labels by label type and text consistency with NHMRC guidelines

Product Group	No warning	Pregnancy Health Warning Type			Consistent
		Pic	Text	T + P	
Dark Spirits	133	118 (58.7%)	82 (40.8%)	1 (0.5%)	73 (88%)
White Spirits	128	105 (66.9%)	50 (31.8%)	2 (1.3%)	43 (82.7%)
RTD	110	44 (20.2%)	173 (79.4%)	1 (0.5%)	173 (99.4%)
Cider	191	104 (97.2%)	3 (2.8%)	0 (0%)	3 (100%)
Int. Beer	170	150 (86.2%)	23 (13.2%)	1 (0.6%)	17 (70.8%)
Prem/Craft Beer	274	58 (87.9%)	6 (9.1%)	2 (3%)	5 (62.5%)
Full Beer	131	82 (98.8%)	1 (1.2%)	0 (0%)	1 (100%)
Mid/light Beer	79	41 (97.6%)	1 (2.4%)	0 (0%)	1 (100%)
Red Wine < \$ 20	158	186 (91.6%)	16 (7.9%)	1 (0.5%)	13 (76.5%)
Red Wine > \$20	196	118 (90.1%)	12 (9.2%)	1 (0.8%)	13 (100%)
White Wine < \$ 20	148	168 (89.8%)	19 (10.2%)	0 (0%)	18 (94.7%)
White Wine > \$20	166	137 (86.2%)	22 (13.8%)	0 (0%)	18 (81.8%)
Total	1,884	1,311 (75.9%)	408 (23.6%)	9 (0.5%)	378 (90.6%)

Comparison of the proportion of pregnancy health labels that were smaller or larger than the average is provided in Table 7 below. Additionally, a comparison of the location of health warning labels is also provided. The majority of pregnancy health labels (82%) are of an average¹⁷ or larger size and 65% are placed on the back of the product.

¹⁷ Field researchers reviewed and evaluated the size of the pregnancy label in relation to the average pictogram and text provided by the DWA guidelines, which was approximately 0.5cm x 0.7cm.

Table 7: Proportion of pregnancy health labels by size and location

Product Group	Size			Location			
	Smaller	Standard	Larger	Back	Front	Side	Top/Bottom
Dark Spirits	20 (10%)	168 (84%)	12 (6%)	162 (81%)	3 (1.5%)	30 (15%)	5 (2%)
White Spirits	13 (8.4%)	135 (87.1%)	7 (4.5%)	110 (70.5%)	1 (0.6%)	43 (27.6%)	2 (0.6%)
RTD	19 (8.7%)	172 (78.9%)	27 (12.4%)	56 (25.7%)	4 (1.8%)	53 (24.3%)	105 (28.4%)
Cider	26 (24.3%)	73 (68.2%)	8 (7.5%)	54 (50.5%)	3 (2.8%)	26 (24.3%)	24 (19.6%)
Int. Beer	68 (39.1%)	88 (50.6%)	18 (10.3%)	78 (44.8%)	11 (6.3%)	50 (28.7%)	35 (19.5%)
Prem/Craft Beer	8 (12.7%)	39 (61.9%)	16 (25.4%)	24 (38.1%)	2 (3.2%)	16 (25.4%)	21 (33.3%)
Full Beer	5 (6%)	72 (86.7%)	6 (7.2%)	24 (28.9%)	2 (2.4%)	44 (53%)	13 (13.3%)
Mid/light Beer	3 (7.1%)	36 (85.7%)	3 (7.1%)	18 (42.9%)	(0%)	19 (45.2%)	5 (7.1%)
Red Wine < \$ 20	12 (5.9%)	186 (92.1%)	4 (2%)	171 (84.7%)	1 (0.5%)	28 (13.9%)	2 (1%)
Red Wine > \$20	5 (3.9%)	122 (94.6%)	2 (1.6%)	123 (95.3%)	(0%)	4 (3.1%)	2 (1.6%)
White Wine < \$ 20	8 (4.3%)	174 (94.1%)	3 (1.6%)	151 (81.6%)	(0%)	34 (18.4%)	0 (0%)
White Wine > \$20	13 (8.2%)	144 (90.6%)	2 (1.3%)	147 (92.5%)	(0%)	7 (4.4%)	5 (3.1%)
Total	200 (11.6%)	1,409 (82.1%)	108 (6.3%)	1,118 (65.1%)	27 (1.6%)	354 (20.6%)	219 (9.7%)

Legibility and Prominence

The legibility and prominence of pregnancy health labels with respect to the FSANZ legibility requirements are summarised in Table 8 below. The majority of pregnancy health labels across all product types (i.e. the total) were assessed as standard or above in terms of both legibility (93%) and prominence (90%).

Table 8: Proportion of pregnancy health labels by legibility and prominence

Product Group	Legibility			Prominence		
	Low	Standard	Above	Low	Standard	Above
Dark Spirits	7 (3.5%)	149 (74.5%)	44 (22%)	11 (5.5%)	172 (86%)	17 (8.5%)
White Spirits	4 (2.6%)	144 (92.9%)	7 (4.5%)	6 (3.9%)	143 (92.3%)	6 (3.9%)
RTD	34 (15.6%)	155 (71.1%)	29 (13.3%)	57 (26.1%)	152 (69.7%)	9 (4.1%)
Cider	7 (6.5%)	91 (85%)	9 (8.4%)	24 (22.4%)	82 (76.6%)	1 (0.9%)
Int. Beer	27 (15.5%)	123 (70.7%)	24 (13.8%)	42 (24.1%)	125 (71.8%)	7 (4%)
Prem/Craft Beer	15 (23.8%)	41 (65.1%)	7 (11.1%)	3 (4.8%)	55 (87.3%)	5 (7.9%)
Full Beer	7 (8.4%)	66 (79.5%)	10 (12%)	3 (3.6%)	78 (94%)	2 (2.4%)
Mid/light Beer	7 (16.7%)	32 (76.2%)	3 (7.1%)	3 (7.1%)	39 (92.9%)	(0%)
Red Wine < \$ 20	7 (3.5%)	191 (94.6%)	4 (2%)	7 (3.5%)	190 (94.1%)	5 (2.5%)
Red Wine > \$20	2 (1.6%)	124 (96.1%)	3 (2.3%)	4 (3.1%)	122 (94.6%)	3 (2.3%)
White Wine < \$ 20	6 (3.2%)	136 (73.5%)	43 (23.2%)	10 (5.4%)	170 (91.9%)	5 (2.7%)
White Wine > \$20	6 (3.8%)	93 (58.5%)	60 (37.7%)	10 (6.3%)	143 (89.9%)	6 (3.8%)
Total	129 (7.5%)	1345 (78.3%)	243 (14.2%)	180 (10.5%)	1471 (85.7%)	66 (3.8%)

2.2 Key findings – Aim One

Overall, an estimated 75.3% of those products that comprise approximately 75% market share of each respective alcohol category carry a pregnancy health label. This has increased from 59.8% observed in the first evaluation. After adjusting for market share of each brand, between 39.5% and 100% of those products that represent 75% of their respective alcohol markets carry a pregnancy health warning. This has increased from the previous report that found between 24.5% and 81.3% carry a pregnancy health warning after adjusting for market share. Apart from the white wine > \$20 and cider markets, there is evidence that those brands with greater market share are more likely to have a pregnancy warning label.

2.3 Key findings – Aim Two

The proportion of all alcohol products for sale that have a pregnancy label varies between 19.4% and 66.5% by product type, with 47.8% of all products carrying a pregnancy health warning label. This represents an increase in the overall proportion of alcohol products that have a pregnancy health warning of 9.6 percentage points. Those alcohol products with the largest increases in the proportion of products with a pregnancy health warning were RTDs (44.3 percentage point increase); dark spirits (27.3 percentage point increase), white spirits (17.6 percentage point increase) and international beers (22.5 percentage point increase). Individually packaged products, wines with a later vintage and those manufactured internationally have higher proportions of products with a pregnancy health warning label than their respective complements.

The most commonly used pregnancy label is the pictogram by itself (79%). However, it must be noted that the four product groups with the largest growth in the proportion of products with a pregnancy health warning have the highest proportion of text style pregnancy health warnings, compared to other alcohol product groups. These are: RTDs (79.9% of warnings were text or text and pictogram), dark spirits (41.3%), white spirits (33.1%), and international beer (13.8%).

Of the 24.1% of labels that use text, 90.6% are consistent with the NHMRC recommendation. The majority of pregnancy health warnings are on the back or side of the product (85.7%) and are of average or greater size (88.4%). With respect to legibility, 92.5% of pregnancy health warnings were considered of standard or better and 89.5% were of standard or better prominence.

2.4 Methodological considerations

It is important to recognise that the results from both Aim One and Aim Two are with respect to those products that were on the shelf in retail outlets at the time the data were collected. It is plausible that this may represent an underestimate of the proportion of all products that are currently manufactured with a pregnancy health warning (e.g. because of the natural time lag between production and appearance at retail outlets).

The analysis of the extent to which warning labels are consistent with NHMRC guidelines, size, position, and are legible and prominent, was conducted only in the context of the study that examined the range of alcohol products that are actually for sale in a variety of alcohol outlets, as opposed to those products that comprise the majority market share. This means that the findings about consistency, legibility and prominence of pregnancy health warning labels do not necessarily reflect those products that are consumed by the majority of drinkers in Australia. They do, however, represent a much greater range of label types (n=3,612), compared to the relatively small number of label types that were included in the 75% of market share analysis (n=962 labels).

2.5 Conclusions

Based on those products that represent ~75% share of each market, the proportion of products with a pregnancy health label is 75.3%, and increase of 15.5 percentage points compared to the previous evaluation. In contrast to the market leading products, only 47.8% of *all* alcohol products available for sale had a pregnancy health warning label which was an increase of 9.6 percentage points compared to the previous evaluation. A reasonable interpretation of these results is that the most appropriate method of assessing the extent to which pregnancy labels have been implemented depends upon which strategy of raising awareness is thought to be most effective:

- If it is thought that the strategy should be targeting the products that are most commonly consumed, then considering the products that represent the majority of the market share is appropriate. Between 39.5% and 100% of these products (after adjusting for market share) have a pregnancy health warning label across product types.
- If it is thought that the strategy should be targeting the products that consumers are exposed to, or are potentially exposed to, at the point of purchase, then considering all products that are for sale is appropriate. Between 19.4% and 66.5% of these products have a pregnancy health warning label across product types.

The substantial difference in pregnancy warning labels by product category is potentially of concern. A potentially contributing factor may be parallel importing – an issue identified by the industry which may affect product markets differently (see Appendix 5 for a summary of the results of the key informant interviews). The lowest observed proportion of products with a pregnancy health warning was within the premium or craft beer category. This may be owing to the nature of manufacturers of those products, specifically, the scale of their operations relative to other manufacturers that typically use similar packaging types.

It is apparent that adoption and implementation of the pregnancy health warnings labels has increased over time. For example, between 23.1% and 45.5% of the sampled wine products with a vintage year of 2012 carried a pregnancy health warning compared to a range of 40.7% and 55.2% in 2015. This is an encouraging sign; however, it is uncertain if this rate will continue to grow at the same pace as has been observed in the past.

In general, the proportion of alcohol products with a pregnancy label has increased since the previous evaluation. There is evidence that those products that represent the greater proportion of market share (in sales volume) have a higher proportion of products with a pregnancy health warning and have increased this proportion since the last evaluation and at a greater rate than all products available for sale.

Further, the proportion of products with a label (and the increase since the last evaluation) was greater in those products manufactured internationally, compared to those manufactured in Australia. This may be because those products imported into Australia are more likely to have been manufactured by larger firms.

The product category with the greatest room for further improvement is the premium or craft beer category. This may be because products in this category are potentially more likely to be manufactured by smaller firms. Taking these findings into account, based on the field study it appears that the remaining challenge for the voluntary labelling initiative is improving the uptake of pregnancy health warnings among smaller scale domestic manufacturers.

Section 3 Alcohol industry survey of voluntary pregnancy labelling costs

The alcohol industry online survey of voluntary pregnancy labelling costs was designed to determine the costs associated with actions taken by industry members to implement the voluntary pregnancy labelling initiative. In total, 79 responses to the survey were received which included small, medium and large companies. The majority of respondents were from companies where the main activity was manufacturing, the other two respondents represented an importer/distributor company and an industry representative group. The percentages reported are presented as proportions of total respondents who answered each question, as opposed to the total number of respondents who completed the entire survey. The profile of respondents to the survey is provided in Appendix 3.

3.1 Operation details

Types of package/labels used

A total of 70 respondents indicated the types of product package/labels used across their company's product range with 59 respondents indicating the number of their products which use each package/label (see Table 9). The most commonly reported type of product package/label was a "glass bottle approx. 750ml," which was used by 53 of the 70 companies (75.71%). The least commonly used package/label type was the "multiple (shrink-wrapped)" used by only one company (1.43%). "Glass bottle approx. 750ml" had the highest range and average number of company product lines of any type of package/label, followed by "glass bottle (beer) approx. 375ml."

Table 9: Types of product package/labels used by companies

Product package/label	Number of companies using package/label type in range	Average number of company products using package/label type	Range of number of company products using package/label type
Glass bottle approx. 750ml	53 (75.71%)	1,051.8	3 to 40,000
Glass bottle (wine) approx. 375ml	30 (43%)	9.7	1 to 55
Glass bottle approx. 187ml	11 (15.71%)	13.3	1 to 60
Wine cask	5 (7.14%)	44.0	2 to 105
Glass bottle (beer) approx. 375ml	14 (20%)	40.8	1 to 300
Metal can approx. 375ml	10 (14.29%)	35.1	1 to 119
Multiple (cardboard)	13 (18.57%)	38.1	1 to 200
Multiple (shrink-wrapped)	1 (1.43%)	100.0	100 to 100
Carton approx. 30	11 (15.71%)	14.3	1 to 55
Beer mini keg	2 (2.86%)	4.0	1 to 7

Fewer than half of all respondents (n=28, 41.18%) indicated that their company uses a product package/label other than those listed in Table 9.

Units sold per year

The number of units (across all product lines and SKUs) sold by respondent companies ranged from 5 to 1.5 billion, with a median of 30,000.¹⁸

¹⁸ A stock keeping unit (SKU) is a distinct item, such as a product or service, as it is offered for sale that embodies all attributes associated with the item and that distinguish it from all other items. For a product, these attributes include, but are not limited to, manufacturer, product description, material, size, colour, packaging, and warranty terms
[Wikipedia - Stock Keeping Unit](#)

3.1.1 Adoption of labelling initiative reported by respondents

Reported proportion of product lines with a pregnancy label

The estimated average proportion of company product lines with a pregnancy health label was 60.9%; with proportions ranging from 0 to 100%.

Reported use of pregnancy health warning labels across product package/label types

Respondents reported on the number of product lines across each of the product package/label types for which they had incorporated a pregnancy health warning on the label (refer Table 10).

Table 10: Proportion of product lines with pregnancy health warning labels per product package/label type

Product package/label	Number of product lines	Average proportion with a pregnancy label	Range
Glass bottle approx. 750ml	158,611	59.5%	0% - 100%
Glass bottle approx. 375ml	5985	52.7%	0% - 100%
Glass bottle approx. 187ml	146	69.6%	0% - 100%
Wine cask	220	99%	95% - 100%
Glass bottle (beer) approx. 375ml	445	79.4%	0% - 100%
Metal can approx. 375ml	405	87.1%	40% - 100%
Multiple (cardboard)	392	67.5%	0% - 100%
Multiple (shrink-wrapped)	100	50%	50% - 50%
Carton approx. 30	2,632	72.1%	0% - 100%
Beer keg mini	8	47.5%	0% - 95%
Other	40,702	58.8%	0% - 100%

Introduction of pregnancy labels/package

Respondents indicated that pregnancy health warnings had been introduced on their company's product labels/packages between 2007 and March 2017 (n = 41).

Type of pregnancy health warning labels used

Respondents were asked to select the different types of pregnancy health warning labels incorporated on their SKUs. Forty-three of the 51 respondents who answered indicated that their products display the pregnancy pictogram label (84%). Fewer than one third of the respondents used a boxed pregnancy text label (n=15, 30%), and only one used the NHMRC pregnancy text label (refer to Table 11).

Twelve respondents indicated that their company had incorporated more than one type of label; most of these used both the pictogram label and boxed pregnancy text (n=10).

Table 11: Types of pregnancy health warning labels used

Type of pregnancy health label	n (51)	%*
Pictogram label	43	84%
Boxed pregnancy text label	15	30%
Text only	1	2%

*Percentages are presented as the proportion of all respondents to this question who have implemented each label type, therefore percentages do not add up to 100

The two respondents who indicated that their company uses an “other” label provided details about non-pregnancy statements (e.g. “Think Safe. Drink Safe. Under 18. On medication. Driving. Wants you to enjoy this wine responsibly. Know the facts drinkwise.org.au”; and “drinkwise.org.au”).

3.2 Cost estimates

Additional cost items

Respondents were asked whether there were any cost items in addition to:

- a) Redesign and approval of artwork
- b) Production of new print plates
- c) Administration costs associated with those changes.

Of the 58 who responded, eleven indicated that additional cost items needed to be considered, with ten providing reasons. Five respondents said that additional costs were “material write-offs”; two stated “Social as well as economic cost. Offending pregnant women”; one stated “relabelling of imported products”, one stated “staff training”, and another stated that it was the cost associated with “time to market’.

Total cost estimates per item

Estimates were provided by forty respondents for the total costs associated with implementing pregnancy health warning labels across each of the identified cost items. Average estimated total costs outlined in Table 12 show that the costliest item associated with the labelling was production of new print plates. Eight respondents provided estimates for any additional cost items (i.e. material write offs and relabelling of imported products). Where a respondent only provided a range of values, the midpoint was used.

The estimated average cost per labelled SKU was \$338.76. This is lower than that estimated for a minor labelling change to a glass bottle (\$3,967) reported by PricewaterhouseCoopers in its 2008 report to FSANZ.¹⁹

A majority of respondents identified that cost items: redesign and approval of artwork (n=36, 65%), and production of new print plates (n=49, 89%) were completed externally with only 20% (n=11) of respondents indicating external completion for administration, and 30% (n=3) for additional costs.

¹⁹ PricewaterhouseCoopers (2008). Cost schedule for food labelling changes: Final report. Food Standards Australia and New Zealand p 3

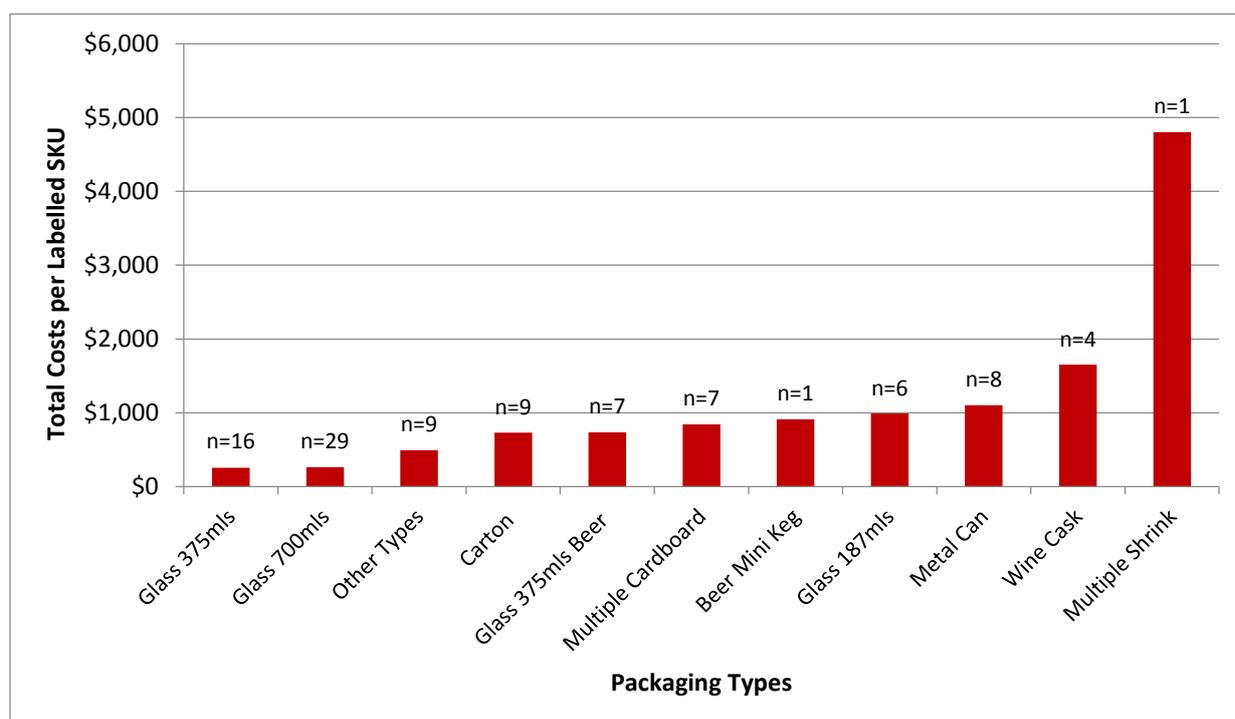
Table 12: Estimated costs per cost item per SKU

Cost item	Average estimated cost per labelled SKU	Range of estimated total cost per labelled SKU
Cost Item Breakdown		
Redesign and approval of artwork	\$95.66	\$0.00 - \$1,132
Production of new print plates	\$210.85	\$0.00 - \$3,397
Administration costs	\$67.16	\$0.00 - \$1,000
Additional Costs	\$7.31	\$0.00 - \$126
Total Cost	\$338.76	\$0.00 - \$4,665

Costs per packaging types

A breakdown according to the different packaging types as shown in Figure 1 (for breakdown of estimated cost items per SKU according to packing types, see Table 13 in Appendix 3.1). The top three most expensive types to label with a pregnancy warning are multiple shrink-wrapped (n=1), wine casks (n=4) and metal cans (n=8). Some of the packaging types such as multiple-shrink wrapped and beer mini keg had only one respondent providing data for a cost per labelled SKU estimation. Therefore, these estimates may not be robust due to the limited data set.

Figure 1: Total costs per SKU according to packaging types



Indirect costs and benefits

The opportunity cost of the package space that a pregnancy health warning occupies as well as the potential benefit from improving a company’s reputation (from including a pregnancy health warning on their products) were identified as potential key indirect costs and benefits. Fourteen out of forty-nine respondents reported that their company considered the inclusion of a pregnancy health warning on their product labels or packaging as a reduction in the capacity or scope to provide alternative information (29%). Reasons provided by seven respondents indicated impacts

upon product and marketing information e.g. wine tasting notes. Another respondent indicated that the additional label impacted upon the size of the product bar code. A further three respondents reported reducing font size of other statements e.g. additives or potential allergens, and logos e.g. recycling, and possibly making these messages less legible. One respondent reported the removal of other statements such as 'drink wise' to accommodate the inclusion of a pregnancy health warning message.

Another respondent indicated that the inclusion of additional information might require an increase in the size of a label resulting in significant machine and bottle changes affecting the cost of production. A comment made by one respondent was that the company is voluntarily exploring alternative means of providing information 'off label' via a website e.g. for nutritional information.

Zero cost estimates

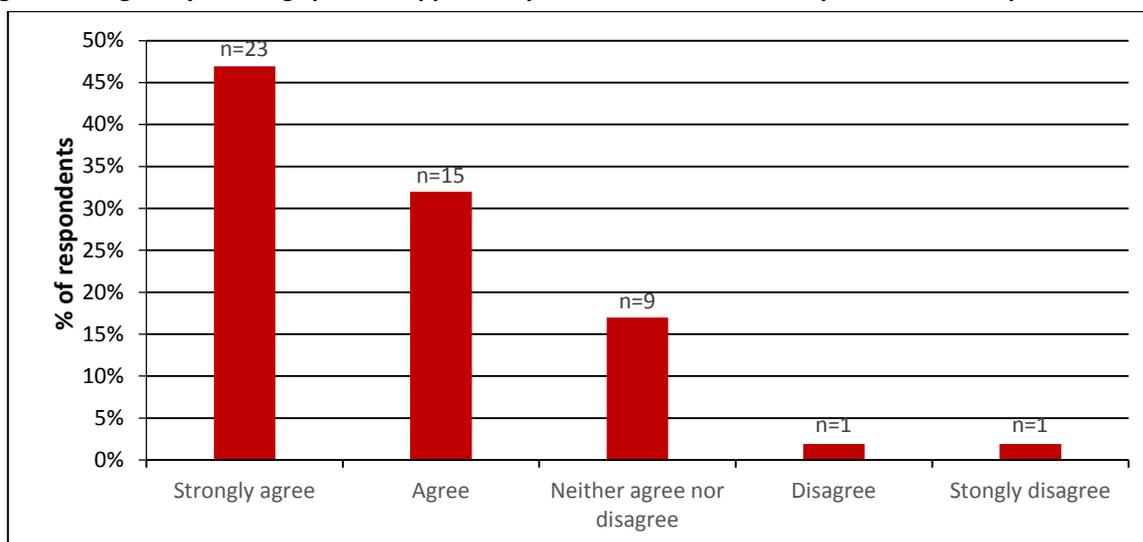
Owing to the four-year period for implementing the pregnancy health warning, some manufacturers were able to incorporate the pregnancy health warning as part of an otherwise scheduled change in the product label. This resulted in some manufacturers reporting that no marginal costs to the company were incurred due to the timeframe available as part of the voluntary pregnancy health warning initiative. It was reported that management of costs was also facilitated because the companies could maintain some flexibility with respect to the pregnancy health warning design and location.

Four participants (all wine producers) indicated that there were no additional costs. Three of the four wine producers indicated that label changes routinely occur annually and therefore the addition of voluntary pregnancy warnings was achieved for no additional cost. In the final cost estimates, these zero values were incorporated into the calculations of the average cost per cost item (i.e. redesign and approval of artwork; production of new print plate etc.) per labelled SKU in order to capture these values.

Responsible consumption of alcohol

Respondents were asked to what extent they agreed with the statement "my company considers the inclusion of a pregnancy health warning as an opportunity to be associated with the responsible consumption of alcohol." As demonstrated in Figure 2, the most common response was "strongly agree" (n=23, 47%) followed by 15 respondents (31%) selecting 'agree'. Nine respondents (18%) selected 'neither agree nor disagree'. One respondent (2%) each selected either 'strongly disagree' or 'disagree'.

Figure 2: Pregnancy warnings provide opportunity to be associated with responsible consumption of alcohol



The indirect costs and benefits associated with including a pregnancy health warning, whilst potentially not insignificant, were not included in the final estimated cost to industry.

Total cost to industry

The total cost to industry is estimated as the number of SKUs that have adopted the pregnancy health warning multiplied by the average total cost per SKU (\$338.76) for implementing the change to labels.

Table 13: Estimated total cost to industry

Market	Total Active SKUs	Proportion with warning	Number of Labelled SKUs	Total Cost to industry
Beer	4,492	38.8%	1,743	\$590,459
Cider	1,022	35.9%	367	\$124,325
Wine	11,688	50.4%	5,891	\$1,995,635
Spirits	2,783	57.8%	1,609	\$545,065
Ready To Drink	1,572	66.5%	1,045	\$354,004
TOTAL	21,557	47.8%	10,304	\$3,490,583

The total estimated cost to industry of adopting the voluntary initiative is estimated at \$3.5 million. This is significantly dependent on the estimated number of SKUs within the industry, the proportion of those SKUs that have a pregnancy health warning and the per average total SKU cost of implementing the pregnancy health warning.

A series of one-way sensitivity analyses were conducted to test the sensitivity of the estimated cost figure with alternative parameter estimates. These are presented in Table 4 below. The results from the sensitivity analyses indicate that the total cost figure is particularly sensitive to the estimated cost per SKU to apply a pregnancy health warning label. If the cost estimate from PriceWaterhouse Coopers is used instead of the cost derived from the industry survey, the total cost is estimated as \$40.8 million. The estimates are also sensitive to estimates regarding proportion of products with a pregnancy health label. If the estimates from the market leaders study (Aim One in Section 3 above) is used, the cost is estimated as \$5.5 million.

Table 14: Sensitivity analysis of cost estimates

Sensitivity Analysis	Total Cost to industry
Base Case	\$3,490,583
Increase in number of SKUs by 10% (total of 23,713 vs 21,557)	\$3,970,250
Increase in Proportion of SKUs (estimates based on market leaders vs all products)	\$5,498,895
Increase in cost per SKU to include pregnancy health label (PwC estimate)	\$40,875,968

3.3 Conclusions

The estimated average cost per stock keeping unit was \$338.76.²⁰ The total cost to industry for labelling the SKUs available for sale in 2017 is estimated to be \$3.5 million. In a sensitivity analysis, the proportion of SKUs that carry a pregnancy health warning from those products that comprise the top 75% of market leading products was used instead; the resultant cost to industry was estimated as \$5.5 million. This cost estimate is less than the previous evaluation, where zero cost responses

²⁰ A stock keeping unit (SKU) is a distinct item, such as a product or service, as it is offered for sale that embodies all attributes associated with the item and that distinguish it from all other items. For a product, these attributes include, but are not limited to, manufacturer, product description, material, size, colour, packaging, and warranty terms
[Wikipedia - Stock Keeping Unit](#)

from survey participants were excluded from the estimation of the average cost per label. The responses from this survey warrant the consideration and inclusion of average cost.

The opportunity cost of the package space that a pregnancy health warning occupies as well as the potential benefit from improving a company's reputation (from including a pregnancy health warning on their products) were identified as potential key indirect costs and benefits. This could be particularly relevant for smaller packages (e.g. 50 ml), where it is very difficult to accommodate the labels as well as the mandatory labelling requirements. Updating labels could be achieved within other business processes, thus allowing flexibility for producers to incorporate labelling at their own pace. Consequently, the cost to industry has been able to be kept low.

Section 4 Consumer awareness and understanding of pregnancy health warning labels

The consumer awareness online survey was designed specifically to gather data regarding the extent and nature of consumer awareness of the pregnancy health warnings on alcohol product labels and their understanding of the message and/or pictograms in these labels. In line with evidence summarised in Section 5 below and in more detail in Appendix 6, that labelling on its own will only affect awareness and/or prompt further information seeking, the survey did not seek to measure effects of labels on attitude change, changes in behavioural intentions, or behaviour change.

The survey asked respondents about their awareness of pregnancy-related messages and campaigns. Unprompted approaches rely solely on respondents' recall of alcohol warning messages on alcohol products in the absence of prompts. Use of prompts (in this case the DWA pictorial and text alcohol warning messages provided to the Australian alcohol industry as part of the voluntary initiative) were used to further examine consumer awareness. Open ended questions were used to establish consumer understanding of the pregnancy warning labels (pictogram and text labels).

The survey for the second evaluation was conducted from 10 February 2017 to 24 March 2017. In total, 5,622 respondents completed the survey. The sample provided the desired population representativeness across target groups, geographies and socioeconomic status (see sample framework and detailed demographic information in Tables 14 & 15 in Appendix 4.1). We compared responses of the total sample and those of the target group of women (comprising (1) women who were currently pregnant, (2) were planning to become pregnant in the next two years, or (3) had a child under 18 months of age) in the first evaluation with those in the second evaluation.

The online survey design is detailed in Appendix 4.2. The statistical analyses used are detailed in Appendix 4.4.

Statistical analyses (independent sample t-tests and hierarchical logistic regressions) were conducted to determine whether the observed difference in responses between the first and second evaluation on the variables of interest reached levels of statistical significance. The variables of interest include: unprompted awareness, prompted awareness of the pictogram and prompted awareness of the text label. Descriptive analyses for age, gender, alcohol use, income level, education level and target groups were found to be statistically significantly different across the first and second evaluation. As such, these variables were then included as control variables when conducting regression analysis on the variables of interest. We also compared the key categories that emerged from qualitative responses in the first evaluation with those from the second. No statistical analyses were performed for qualitative responses.

4.1 Findings

Table 15 below presents the comparison of consumer awareness and understanding of the pregnancy warning labels between the first and second evaluation.

Table 15: Consumer awareness of pregnancy labels

Construct	Response	Total sample; n (%)			Women; n (%) ¹		
		1 st evaluation (T ₁)	2 nd evaluation (T ₂)	Differences (T ₂ -T ₁ %)	1 st evaluation (T ₁)	2 nd evaluation (T ₂)	Differences (T ₂ -T ₁ ; %)
Quantitative responses							
Unprompted awareness (recall)							
Campaign or message awareness	Yes	3,386 (62.4%) N = 5,426	3,998 (71.1%) N = 5,622	8.7%*	2,100 (67.7%) N = 3,102	2,185 (76.3%) N = 2,866	8.6%
Sources of messages or campaign about drinking while pregnant²							
On alcohol products		1,196 (22.0%)	1,540 (38.5%)	16.5%*	911 (29.4%)	1,030 (47.1%)	17.7%*
In licensed retail outlets		370 (6.8%)	527 (13.2%)	6.4%*	249 (8.0%)	285 (13.0%)	5.0%*
Other licensed outlets (such as services clubs, sports clubs or pubs)		310 (5.7%)	485 (12.1%)	6.4%*	199 (6.4%)	285 (13.0%)	6.6%*
Medical practitioner offices		2229 (41.1%)	2,179 (54.5%)	13.4%*	1,537 (49.5%)	1,346 (61.6%)	12.1%*
Prompted awareness (recall)							
Pictogram awareness	Have seen label	1,807 (33.3%)	1,733 (30.8%)	-2.5%	1,309 (42.2%)	1,113 (38.9%)	-3.3%
Text label awareness	Have seen label	1,078 (19.9%)	1,456 (25.9%)	6%*	816 (26.3%)	931 (32.5%)	6.2%*

Note: *indicates significant results of $p < .05$ when comparing the responses between the first and second evaluation (controlling for age, gender, alcohol use, income level, education level and target groups). Statistical comparisons were only performed for quantitative responses.

¹Target group = women who were currently pregnant, were planning to become pregnant in the next two years, or have a child under 18 months of age.

² Respondents could indicate multiple sources of messages or campaign of drinking alcohol when pregnant.

Table 16: Qualitative responses of consumer awareness and their understanding of pregnancy warning labels.

Construct	Response	Total sample; n (%)		Women; n (%) ¹	
		1 st evaluation (T ₁)	2 nd evaluation (T ₂)	1 st evaluation	2 nd evaluation
Qualitative responses					
Unprompted awareness (recall)²					
Campaign or message recall description	Pregnant lady symbol on alcohol products	183 (5.8%)	196 (4.9%)	134 (4.3%)	149 (6.8%)
	Messages on alcohol products	231 (7.3%)	343 (8.6%)	176 (5.7%)	248 (11.4%)
Understanding³					
 Pictogram understanding	Don't drink alcohol when pregnant	4,576 (92.5%)	4,522 (80.4%)	2627 (84.7%)	2,382 (83.2%)
	Alcohol causes harm to unborn child or mother	113 (2.3%)	121 (2.2%)	65 (2.1%)	55 (1.9%)
 Text label understanding	Don't drink alcohol when pregnant	1,478 (34.9%)	2,907 (51.7%)	732 (23.6%)	1,505 (52.5%)
	Alcohol causes harm to unborn child or mother	1,288 (30.4%)	1,490 (26.5%)	798 (25.7%)	860 (30.0%)

¹Target group = women who were currently pregnant, were planning to become pregnant in the next two years, or have a child under 18 months of age.

² The key categories that emerged for this construct are only presented in Table 16 as they are relevant to the key research questions (i.e., respondents' unprompted recall of pregnancy warning labels on alcohol products).

³ The total percentage of responses for each question under the construct 'Understanding' is not 100%. The full list of key categories that emerged from the qualitative responses are presented in Appendix 4.4.

4.1.1 Awareness

Unprompted recall of pregnancy warning labels

When unprompted, more respondents within the overall sample and in the target group of women in the second evaluation indicated that they saw general campaigns or messages about pregnant women and alcohol consumption. In particular, all respondents in the second evaluation were 1.4 times as likely to report seeing campaigns or messages about pregnant women and alcohol consumption (OR = 1.40; 95% CI, 1.27 - 1.55). There was no significant difference between the proportion of respondents who reported seeing campaigns or messages about drinking when pregnant for the target group of women between the two timepoints (OR = 1.12; 95% CI = 0.99 - 1.26).

When asked to describe the messages or campaigns they have heard or seen, very few respondents described the labels on alcohol products. At both timepoints, fewer than 10% of all respondents and those in the target group of women recalled the pictogram, that was described by respondents as the “pregnant lady symbol on alcoholic products”. Compared to the number of respondents who recalled the pictogram, slightly more respondents across the total sample and target group of women reported a nondescript alcohol warning label, using words such as “messages on bottles” or “messages on bottles of alcohol with warnings”.

Those who reported being aware of any messages about drinking alcohol when pregnant were then asked to indicate where they have seen them. The common source of information reported by respondents at both timepoints was medical practitioners. Compared to the first evaluation, significantly higher proportion of the total respondents in the second evaluation reported receiving information about drinking alcohol when pregnant through:

- alcohol products (OR = 2.71, 95% CI = 0.94 - 0.96)
- licensed retail outlets (OR = 2.13, 95% CI = 1.81 - 2.51)
- other licensed outlets, such as service clubs, sports clubs or pubs (OR = 2.43, 95% CI = 2.05 - 2.89)
- medical practitioners (OR = 1.84, 95% CI = 1.67 - 2.04).

Similarly, significantly more women in the second evaluation reported receiving information about drinking alcohol when pregnant through:

- alcohol products (OR = 2.75, 95% CI = 2.41 - 3.13)
- licensed retail outlets (OR = 2.02, 95% CI = 1.66 - 2.46)
- other licensed outlets, such as service clubs, sports clubs or pubs (OR = 2.69, 95% CI = 2.19 - 3.30)
- medical practitioners (OR = 1.78, 95% CI = 1.57 - 2.02).

Although all reported sources of information grew significantly from time one to time two, the differences between the two timepoints were the greatest for alcohol products in the total sample (16.5%) and the target group of women (17.7%).

Prompted recall - Pictogram label

Fewer respondents (in the total sample and in the target group of women) in the second evaluation reported awareness of the DWA green pregnancy pictogram label than those in the first. This difference did not reach statistical difference for the total sample (OR = 1.00, 95% CI = 0.91 - 1.10) and those in the target group of women (OR = 1.03, 95% CI = 0.92 - 1.16).

Prompted recall - Text label

Table 15 above shows a significantly higher proportion of respondents in the second evaluation for both groups reported awareness of the text label after being prompted. Specifically, all respondents (OR = 1.62; 95% CI = 1.45 - 1.81) and those in the target group of women (OR = 1.62; 95% CI = 1.43 - 1.84) in the second evaluation were 1.6 times as likely to report that they were aware of the label after being exposed to it.

4.1.2 Understanding

Pictogram label

Overall, key categories that emerged from the first evaluation about respondents' understanding of the pictogram were similar in the second evaluation. Additional key categories were also found in the second evaluation. They are, for example, 'the green colour sends a confusing message to the readers' and 'misinterpretation of the label (e.g., "It's okay to drink when you're pregnant")'.

Fewer respondents (in the total sample and in the target group of women) in the second evaluation expressed the pictogram to mean "do not drink alcohol when pregnant" when compared to the first. A similar trend was observed for respondents who understood the pictogram to mean "alcohol causes harm to the unborn child" in both the overall sample and in the target group of women.

Respondents in the first and second evaluation also expressed the view that using the colour red for the pictogram would be more effective because the colour red itself signals that it is a warning. In particular, 2.6% (n= 144) of all respondents in the second evaluation described that the green colour as sending a confusing message about the dangers of drinking while pregnant. Overall, these findings suggest that depicting the pictogram in red rather than green may help to avoid consumer confusion about the message.

Text label

Key categories relating to respondents' understanding of the text label from the first evaluation were similar to those found from the second. Results from the second evaluation also revealed additional categories, including: 'the text refers to a warning' and 'comments about the message or physical attribute of the label'.

Of the responses that are categorised as 'comments about the message or physical attribute of the label', 59 respondents (1%) felt that the text label was good and directs people to where they can find more information, while 38 respondents (0.7%) felt that the message on the text label was not strong enough and the green colour sends a confusing message to readers.

Over 50% of all respondents and those in the target group of women in the second evaluation understood the text label to mean "don't drink alcohol when pregnant". Specifically, more respondents (in the total sample and in the target group of women) described the text label to mean "don't drink alcohol when pregnant" in the second evaluation than in the first.

When compared to the first evaluation, fewer respondents in the total sample at the second timepoint understood the text label to mean "alcohol causes harm to the unborn child" (26.5% vs 30.4%). However, an opposite trend was observed for respondents in the target group of women (30.0% in the second evaluation compared to 25.7% in the first evaluation).

4.2 Conclusions

A total sample of 5,399 completed the consumer awareness survey in the first evaluation while 5,622 respondents completed the survey in the second evaluation.

Overall, significantly more respondents in the total sample indicated that they were aware of any messages or campaigns about drinking alcohol when pregnant from the first (62.4%) to the second evaluation (71.1%). When asked to describe the messages or campaigns that they have seen or heard, very few nominated the pictogram and text label on alcohol products at both timepoints.

The most common source of information about drinking alcohol when pregnant was medical practitioners at both the first (41.4%) and second (54.5%) evaluation. Compared to the first evaluation, a significantly higher proportion of respondents in the second evaluation reported receiving information about drinking alcohol when pregnant through: alcohol products; licensed

retail outlets; other licensed outlets; and medical practitioners. Although all reported sources of information grew significantly from time one to time two, the rate of growth was highest for information found by respondents on alcohol products.

Once respondents were prompted with the text label, significantly more respondents in the second evaluation were aware of it than those in the first. On the other hand, the awareness level of the pictogram did not significantly differ across the two timepoints when prompted.

The results suggest that there has been an increase in the unprompted awareness of health messages about drinking while pregnant. The major sources of these messages appear to be healthcare professionals or informational posters and pamphlets and other mass mediated educational materials. When unprompted, fewer than 12% of people who were aware of the health messages about drinking while pregnant nominated a label on an alcohol product as the source of information. Those who were aware of the labels (both text and pictogram), after being prompted, felt that the use of the colour green can confuse readers by suggesting that alcohol should be consumed, and the colour red should be used to indicate danger.

Section 5 Key contextual factors

5.1 International trend to incorporate pregnancy health warning labels on alcohol products

Alcohol labelling regulation nationally and internationally is expressed through one or a combination of mechanisms, including: food standards laws and codes; industry initiatives to promote healthy use of alcohol through labelling or point-of-sale advertising; or voluntary agreements reached between industry and government in relation to alcohol and labelling.²¹ Our review of the literature in relation to requirements for, or the adoption of, health warning labelling and specifically pregnancy health warning labelling of alcohol products, internationally, revealed that in the period 2009 to 2014, the number of countries with pregnancy health labelling of alcohol products increased from six to 33 (see Appendix 6.8.3).

Of the 33 countries with pregnancy health warning labels, 29 are implementing voluntary pregnancy warning labelling initiatives. South Africa, the Russian Federation and the United States are the only countries with both mandatory health warning labels and prescribed pregnancy health warning labels. The only other country to have mandatory pregnancy health warning labels is France, where it is the only mandatory health warning label. Twenty five of the 29 countries with voluntary pregnancy labelling initiatives currently use the red pregnant lady pictogram mandated in France (see Table 34 in Appendix 6.12).

Since 1995 in Australia, the Food Standards Australia New Zealand (FSANZ) Code has required labels on alcoholic beverage containers to legibly display consumer information about volume, standard drinks and ingredients. While the FSANZ Code does not require that alcohol product labels display directional information about safe consumption or warnings about health risks associated with drinking alcohol, it does provide guidance about legibility and prominence (contrast and size).

Both industry and public health sectors support a minimum standard set by government for consistent content, size, and placement to be applied to the pregnancy health warning labels. DWA developed a manual and label templates for use by industry members to guide consistent labelling.

5.2 The role of the voluntary pregnancy health warning labelling initiative in raising awareness of risks and harms of alcohol consumption during pregnancy

Both public health and industry key informants to this Evaluation reported that there is uncertainty about the magnitude of effect that pregnancy health warning labels on alcohol products alone can achieve in changing the drinking patterns of women who are pregnant or planning to become pregnant (see Appendix 5).

Reflecting on the experience of the voluntary initiative to date, key informants agreed that:

- Australians have a right to know that alcohol should not be consumed by women who are pregnant in order to make better decisions about alcohol consumption; and this right should be respected
- Labels are one way of contributing to awareness of the issue, but of themselves pregnancy health warning labels do not change drinking behaviours
- Pregnancy health warnings on alcohol products is one mechanism intended to improve the awareness of the community of the potential for alcohol-related harms from drinking whilst pregnant
- The main impact of the labels is to remind and prompt further information seeking or some interpersonal communication if people see it and are prompted to wonder what it means.

²¹ Stockwell T (2006). *A review of research into the impacts of alcohol warning labels on attitudes and behaviour*. British Columbia, Canada: University of Victoria, Centre for Addictions Research of BC

5.3 Evidence based social marketing campaigns

Industry, public health and government key informants reinforced the evidence for what works in awareness, attitude and behaviour change. That is, a comprehensive integrated approach sustained over time and emphasising the need to address the sensitive issues through interpersonal communication and relationship with a trusted health professional.

5.4 Australian women's attitudes, knowledge and patterns of behaviour

A 2010 study of Australian women's knowledge and attitudes regarding drinking alcohol while pregnant found that most of the 1,103 women surveyed agreed that pregnant women should not drink alcohol (80.2%) and 97% agreed that alcohol can affect the unborn child. However, awareness of the specific risks to the unborn child arising from drinking alcohol during pregnancy was poor in the Australian female childbearing population.²² Since 2011, the Foundation for Alcohol Research and Education (FARE) has conducted annual polling on awareness of the harms caused by drinking alcohol, including drinking while pregnant or breastfeeding. For its 2014 poll, FARE used a Galaxy Research questionnaire online to survey 1,545 respondents over the age of 18 years across Australia.²³ The survey results showed that:

- 78% (65% in 2013) of Australians believed that pregnant women should not consume any alcohol in order to avoid harm to the fetus
- 50% (47% in 2013) were aware of Fetal Alcohol Syndrome and related disorders
- 15% (15% in 2013) believed that pregnant women can drink in moderation (safely drink small amounts of alcohol without harming their baby).

5.5 The role of industry and government parallel initiatives

The DWA point of sale project incorporated the DWA pregnancy text and pictogram labels, and engaged alcohol retailers and producers in providing responsible messages to consumers about reducing harmful drinking, particularly during pregnancy, and to promote and explain new labels through a media campaign involving dissemination of resources and website material. The materials integrated the pregnancy health warning labels; promoted the DWA "Get the Facts" badge; and provided expert opinion and information and guidance in line with the NHMRC guidelines about alcohol and pregnancy. Industry key informants believed that the labelling initiative and the point of sale project served to increase DWA's profile as a provider of credible online health information.

Industry stakeholders who participated in the stakeholder consultation process described several parallel initiatives which have been designed to complement their compliance with the voluntary code conducted in line with DWA. Stakeholders advised the evaluation that these parallel or complementary initiatives are based on research conducted by the Australian Institute of Health and Welfare (AIHW)²⁴ and align with World Health Organisation (WHO) recommendations and the International Alliance for Responsible Drinking (IARD) codes. Examples provided by industry of parallel initiatives include DrinkIQ²⁵ and Drink Smart²⁶ by manufacturers Diageo and Beam Suntory

²² Peadon E, Payne J, Henley N, D'Antoine H, Bartu A, O'Leary C, Bower C, Elliot EJ (2010). Women's knowledge and attitudes regarding alcohol consumption in pregnancy: a national survey. *BMC Public Health*. 10: 510. DOI: 10.1186/1471-2458-10-510

²³ Foundation for Alcohol Research and Education (2014). Annual Alcohol Poll: Attitudes and behaviours. Canberra: FARE

²⁴ Australian Institute of Health and Welfare (2014). National Drug Strategy Household Survey detailed report 2013. [Australian Institute of Health and Welfare](#)

²⁵ [Drinkiq.com](#)

²⁶ [Drinksmart.com](#)



and Pernod Ricard's Smart Barometer²⁷ and Responsib'ALL Day²⁸. Industry representatives also noted their compliance with the Alcohol Beverages Advertising Code (ABAC)²⁹.

Industry associations such as the Australian Liquor Stores Association (ALSA)³⁰ have been involved in joint campaigns in relation to responsible drinking with the Commonwealth Department of Health.

The National Organisation for Fetal Alcohol Syndrome Spectrum (NOFASD),³¹ as a health promotion not-for-profit, provides website resources, online and telephone support services, workshops and training programs to promote prevention of alcohol exposed pregnancies in Australia and improve the quality of life for those living with Fetal Alcohol Spectrum Disorders (FASD). In addition, NOFASD advocate mandatory pregnancy labelling on alcohol products.

The Department of Health and Human Services in Tasmania utilises the "Women Want to Know" project developed by FARE³² to encourage health professionals to discuss alcohol and pregnancy with women.

The New South Wales Ministry of Health runs "Stay Strong and Healthy It's Worth It Campaign"³³ which is an Aboriginal Prenatal alcohol and other drug (AOD) initiative which aims to raise awareness of the risks of AOD consumption during pregnancy. Resources include radio advertisements, posters, postcards, illustrated story books and Facebook pages and posts.

²⁷ [The Smart Barometer](#)

²⁸ <https://www.pernod-ricard.com/en/media/press-releases/6th-edition-pernod-ricard-responsiball-day/>

²⁹ [The ABAC Scheme Limited](#)

³⁰ [Australian Liquor Stores Association](#)

³¹ nofasd.org.au

³² fare.org.au/

³³ www.healthinonet.ecu.edu.au/key-resources/programs-projects?pid=1532

