



IMPLICATIONS FOR ONTARIO:

Awareness of FASD



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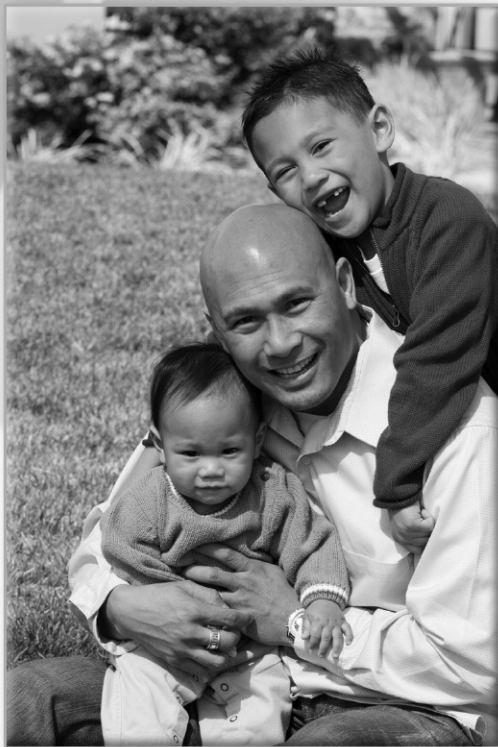
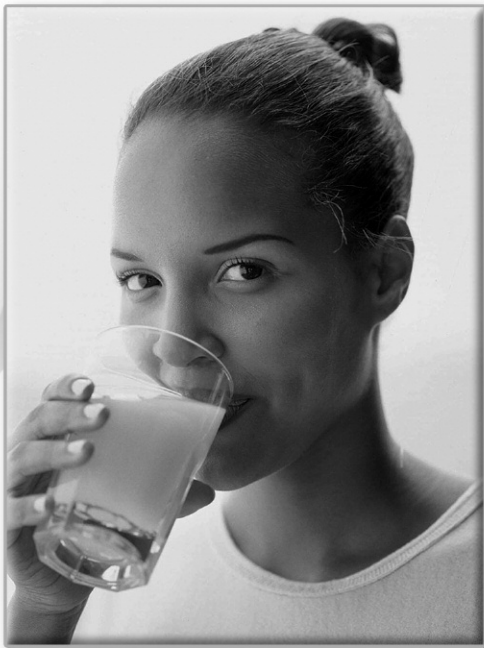
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The opinions expressed in this publication are those of the survey participants and the author and do not necessarily reflect the views of the Public Health Agency of Canada or the government of Ontario.



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I. Introduction

I.1 PURPOSE

The National office of the Public Health Agency of Canada contracted Environics Resource Group to complete three successive national surveys related to FASD. The surveys took place in 1999, 2002 and 2006 (Environics, 2006; Environics 2002; Environics, 2000). The Ontario Regional office then contracted the Best Start Resource Centre to develop a brief internal report outlining the implications of the survey results to Ontario.

This report explores the new data on general public awareness about FASD, and considers implications to program planning in Ontario. It builds on newly released statistical reports, putting the information into the context of recommended prevention activities in Ontario. The report looks at where we have come from, where we are now, and suggests further actions to address FASD. Recommendations for communities, FASD interest groups, service providers who work with pregnant women, health care providers, policy makers and researchers are included. This report shares information of relevance to identifying populations that would benefit from increased awareness, choosing key messages for these populations, and selecting strategies to reach specific populations.

In order to plan effective FASD strategies, the reader may need additional FASD information, for example, information about alcohol use in pregnancy and FASD, information about health professionals' knowledge and attitudes, or information on planning comprehensive strategies, training opportunities and awareness strategies.

The reader is encouraged to use this report in conjunction with the following resources:

- Alcohol Use During Pregnancy and Awareness of FAS (Environics reports from 2000, 2002 and 2006)
- Research Update: Alcohol Use in Pregnancy
- FASD: A Framework for Action
- What We Have Learned: Key Canadian FASD Awareness Campaigns
- Knowledge and Attitudes of Health Professionals about FASD

These resources are available through the Public Health Agency of Canada website at: http://www.phac-aspc.gc.ca/fasd-etcaf/publications_e.html



1.2 FETAL ALCOHOL SPECTRUM DISORDER (FASD)

Alcohol use in pregnancy can result in serious health concerns for the mother and the fetus, and can have life-long consequences for the baby. Health Canada recommends no alcohol use, throughout pregnancy (Health Canada, 1996). Fetal Alcohol Spectrum Disorder (FASD) is the umbrella term used to describe the range of harm that may result from prenatal exposure to alcohol. These concerns can include health, physical, developmental, intellectual and social challenges. The term FASD includes the diagnostic categories of Fetal Alcohol Syndrome (FAS), partial FAS (pFAS), Alcohol-Related Neuro-Developmental Disorder (ARND) and Alcohol-Related Birth Defects (ARBD) (Chudley et al, 2005). FASD has immense emotional and financial costs for the individual, family, community and society.

FASD is still a relatively new issue for Ontario. With the exception of a few stellar programs, Ontario has been slower to acknowledge and address FASD than the western provinces. In the past few years Ontario has made considerable progress, learning quickly from the western provinces, and has implemented significant strategies including awareness campaigns, conferences, physician training programs, improved diagnostic services etc. Ontario has taken a lead role at the national level in several areas including respectful services for women who struggle with alcohol use, physician training, warning signs in licensed establishments and development of awareness campaigns. Ontario has succeeded in implementing several FASD initiatives of international significance.

While many important strategies have been initiated in the province, Ontario can still make progress towards a province-wide commitment to the issue and a comprehensive provincial plan to address FASD. The March 2006 survey of awareness of FASD can help service providers and interest groups select and define future strategies for Ontario (Environics, 2006).

1.3 STRATEGIES TO ADDRESS FASD

Many groups have a keen interest in preventing and addressing alcohol use in pregnancy, and in providing intervention and support to individuals and families affected by FASD. A comprehensive strategy is needed to address FASD, incorporating key approaches such as information and supports for women struggling with alcohol use, health care provider screening for alcohol use in pregnancy, early diagnosis of FASD and intervention and supports for families affected by FASD (Health Canada, 2003b).

The Public Health Agency of Canada developed a national FASD Framework for Action (Health Canada, 2003b) including goals related to:

- Increasing public and professional awareness and understanding of FASD and the impact of alcohol use during pregnancy
- Developing and increasing capacity
- Creating effective national screening, diagnostic and data reporting tools
- Expanding the knowledge base and facilitating information exchange
- Increasing commitment and support for action to address FASD



Awareness provides the foundation for health behaviour change (see Figure 1). Awareness campaigns are most effective in reaching large populations at lower risk (THCU, 1999). In this case, this means lower risk for problem drinking. Campaigns are usually designed to reach populations that could change their behaviour based on information alone. Complementary strategies are critical, reaching successively smaller populations with more specific risks and concerns, for example screening all women of childbearing age for alcohol use, providing supports to women who struggle with alcohol use and FASD diagnosis (see Figure 1).

The general public needs to know about potential health risks, what they can do to make a difference, and where they can get more information and support, in order to address their health concerns. During the process of health behaviour change in a community, increases in awareness are expected first (for example awareness that no alcohol is the safest choice in pregnancy), then changes in behaviour (for example, lower rate of alcohol use in pregnancy) and finally changes in disease (less children are born with FASD). Awareness strategies are an important component of a comprehensive plan to address FASD, but in themselves are not enough (Health Canada, 2003b). Carefully selected awareness strategies should be combined with other complementary strategies to address FASD at a local, provincial and national level.

Surveys of awareness can be used to monitor changes in knowledge, attitudes, reported and intended behaviours in a specific population. They can also gather important information about factors that influence behaviour, how an audience prefers to receive information, and about recall of a specific strategy (for example an awareness campaign). This type of information is critical in planning effective FASD strategies.

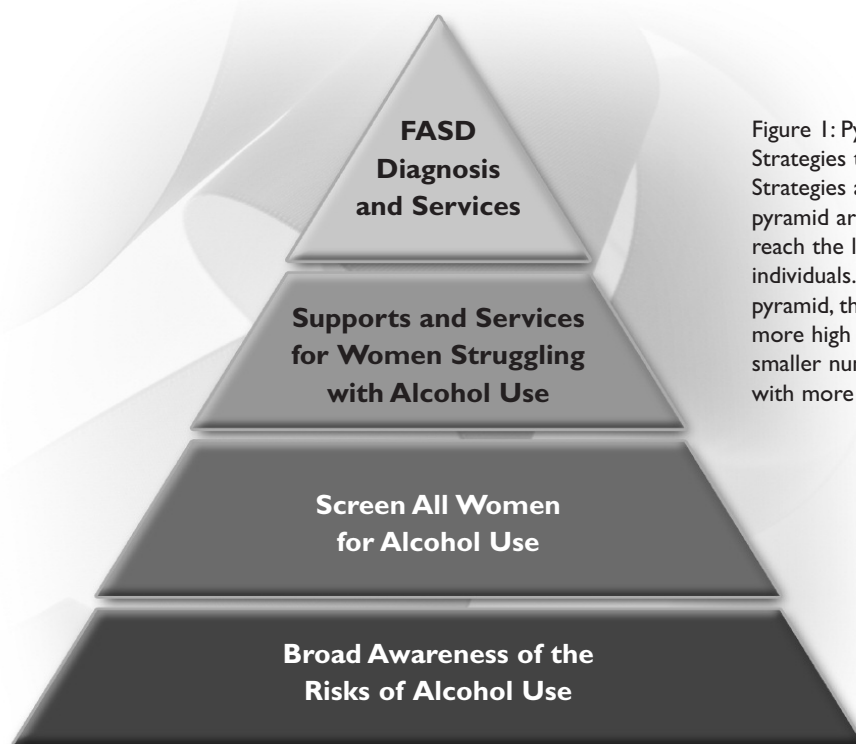


Figure 1: Pyramid of Key Strategies to Address FASD. Strategies at the bottom of the pyramid are broad based and reach the largest number of individuals. As you move up the pyramid, the strategies become more high risk, reaching a smaller number of people with more specific needs.



1.4 THE SURVEYS

The three national surveys completed by Environics Research Group provide valuable information and insights that can guide our efforts to select, design and monitor the impact of strategies to address FASD. The surveys mark our progress in general public awareness about FASD and indicate areas of ongoing concern.

SURVEY METHODOLOGY

Environics completed national phone surveys of women aged 18 to 40 and male partners of women age 18 to 40 in 1999, 2002 and 2006 (Environics, 2006; Environics, 2002; Environics, 2000). Samples for the surveys were derived from a combination of random digit dialing and return-to-sample design. The sampling was designed to reach gender quotas of 75% women and 25% men and to include geographic representation. Over sampling was conducted among Aboriginal men and women. The final results were weighted to reflect actual proportions in the population.

The sample size for the 2006 survey was 3,633 nationwide (2,724 women and 909 men) with 393 Ontario respondents (289 women and 104 men). The margin of error for the national data was ± 1.9 for women and ± 3.3 for men. For Ontario, the margin of error was ± 5.8 for women and ± 9.6 for men. The earlier surveys had smaller national sample sizes (1,205 nationwide respondents including 399 Ontario respondents in 1999 and 1,207 nationwide respondents including 398 Ontario respondents in 2002).

The goals of the 2006 survey were to:

- Assess awareness, knowledge, attitudes and behaviour among population segments
- Track changes since 1999 and 2002
- Measure awareness of information initiatives and effectiveness of information vehicles

The survey included questions related to awareness of behaviours promoting healthy pregnancy, awareness/beliefs about alcohol use during pregnancy, awareness of FAS/FASD/alcohol-related birth defects, recall of information and advertising, best sources of information, support for policy/communications initiatives, personal behaviour and influence of partners, advice from doctors, and awareness of levels of alcohol consumption.

The survey determined levels of respondent binge drinking by asking how many times, over the last 6 months, women consumed 4 or more drinks in 4 hours, or men consumed 5 or more drinks in 4 hours.

For detailed information on the methodology of the surveys, see the Environics reports available at: http://www.phac-aspc.gc.ca/fasd-etcaf/publications_e.html



I.5 THIS REPORT

SURVEYS

This report focuses mainly on the Ontario data from the 1999 and 2006 surveys, in order to determine trends over time, in a manner that is easy to follow. It examines the data that is most relevant to FASD work in Ontario. This report focuses on trends that are significant at the 95% confidence interval. Differences between 1999 and 2006 were calculated by Z test. The cut-off for statistical significance was set at $p = 0.10$.

LOWER LEVELS OF ALCOHOL USE

While there is general agreement that there is no known safe amount of alcohol during pregnancy, there are disagreements about the risks of very low levels of alcohol use in pregnancy. There are also differences of opinions about the amount of alcohol that constitutes “light drinking”, “a small amount of alcohol”, “social drinking” and “occasional alcohol use”. While it is clear that regular, moderate, heavy and binge drinking are risky in pregnancy, there is no clear evidence for measurable risks related to very small amounts of alcohol, for example one or two drinks during the entire pregnancy.

Due to the lack of research evidence in this area, and the lack of agreement on terms, it is difficult to say whether responses are incorrect or correct to some questions in this survey. One example from the survey is the following true or false statement:

- A small amount of alcohol use during pregnancy can usually be considered safe.

Experts have differing opinions about whether this statement can be considered “true” or “false”.

For the purposes of this report, any amount of alcohol (small, occasional, regular, moderate, heavy, binge) during pregnancy is considered to be a possible risk. In public awareness campaigns we need to continue to provide clear recommendations about not drinking any alcohol, throughout pregnancy. During individual counselling, health care providers can offer other important messages, where appropriate, for example offering re-assurance about the minimal risks resulting from a very small amount of alcohol consumed before a woman knew she was pregnant, or assisting a woman who is unable to stop drinking, to reduce her alcohol use.

LIMITATIONS

Some sample sizes in the Ontario data are very small. Caution is advised in interpreting the data in sub-groups where n is less than 100, for example populations that are Aboriginal, not born in Canada, drink at higher levels or have a lower level of education, as well as sub-groups for the questions asked only of male or female respondents.



2. National Highlights

This section provides brief highlights about FASD awareness in Canada. Overall, there are high and growing levels of awareness about FASD at the national level. More detailed information about national trends can be found in the 2006 Environics report. Ontario trends are reviewed in detail in Section 3.

LEVELS OF AWARENESS

There is a high level of understanding in Canada that alcohol use in pregnancy is harmful to the unborn baby. There is an almost universal recognition that, the more a pregnant woman drinks, the greater the risk to her baby. There is high recognition of the terms FAS, FASD and alcohol-related birth defects. There is room for increased awareness about the effects of smaller amounts of alcohol and about the effects on the fetus.

TRENDS OVER TIME

In Canada, there is growing knowledge about the risks of alcohol use in pregnancy, and of the specific consequences for the baby. Awareness is also increasing about the harm that can be done by any amount of alcohol in pregnancy, even small amounts.

SOURCES OF INFORMATION

Clinical settings such as doctors' offices, as well as the media are seen as the best potential sources of information about alcohol and pregnancy at the national level; however, about half of Canadian women do not recall receiving information about alcohol and pregnancy from their own doctor.

There was strong support for government advertising strategies as well as a range of warning strategies, including warning messages on alcohol advertising and warning labels on alcohol products.

ALCOHOL USE IN PREGNANCY

Most Canadian women say they would stop drinking alcohol if they were pregnant. While most Canadian men indicate that they would encourage their pregnant partner to stop drinking, most Canadian women indicate that they would not be influenced by their partners' behaviour, whether it was supportive or unsupportive.

POPULATIONS OF INTEREST

Awareness campaigns should be tailored to the information needs of specific populations. The national data shows that different groups, based on age, income, education, gender or level of alcohol use could benefit from different information related to prenatal alcohol exposure. At the national level, populations that have lower levels of awareness include women with lower socio-economic status as well as men (Environics, 2006).



3. Ontario Highlights

This section provides a summary of the Ontario results. There are many similarities with the national statistics, however Ontario levels of awareness are lower in some areas, and there are different populations of interest in this province. The implications to program planning in Ontario are discussed in Sections 4 and 5. Again caution is advised in interpreting results for some sub-groups (see page 9).

3.1 ALCOHOL USE BEFORE PREGNANCY

Women are encouraged to stop drinking prior to conception as alcohol use in the first trimester of pregnancy can result in serious birth defects. The fetus is at risk if women wait to stop drinking until they suspect they are pregnant, or until their health care provider confirms the pregnancy (BSRC, 2002).

Respondents were asked if alcohol use before pregnancy can harm a baby, even if a woman stops alcohol use during the pregnancy. The results are:

	1999	2002	2006
True	41	39	39
Not True	51	51	55

Table 1: Alcohol Use Before Pregnancy Can Harm the Baby Even if the Woman Stops Alcohol Use During Pregnancy, Ontario

In all 3 surveys about half of the respondents thought that alcohol use before pregnancy would not harm a baby, if a woman stops alcohol use during pregnancy.

Unfortunately the question itself may have caused some confusion. It is not clear whether this question is asking about alcohol use prior to conception, or alcohol use in the early stages of pregnancy. Alcohol use prior to conception could not harm the baby, however, alcohol use early in pregnancy could harm the baby. Questions that clearly differentiate between alcohol use prior to conception, and alcohol use in different stages of pregnancy, would be helpful in understanding knowledge levels in this area. In an Ontario survey of women of childbearing age in 2004, 78% of respondents believed that women who are planning a pregnancy should stop drinking before they get pregnant (Best Start, 2006).

3.2 ALCOHOL USE DURING PREGNANCY

There are many important things that pregnant women can do to increase their chances of having a healthy baby. Smoking, lack of access to healthy food, and alcohol use all have potentially serious consequences on prenatal health. Alcohol use in pregnancy is the leading preventable cause of birth defects and learning problems in children (Health Canada, 2003b). Addressing alcohol use in pregnancy is one of the most important things that women can do to increase their chances of having a healthy pregnancy.

Respondents were asked to list the most important things that pregnant women can do to increase the likelihood that their baby will be born healthy. The three most common top of mind responses were:

	1999	2006
Eat well/good nutrition/vitamins	76	89
Cut down/stop smoking	63	52
Cut down/stop alcohol use	51	52

Table 2: Top of Mind Mention of the Most Important things Pregnant Women Can Do to Have a Healthy Baby, Ontario

Respondents consistently mentioned alcohol use as one of the top 3 most important things that pregnant women can do in pregnancy and about half of the respondents indicated that alcohol use was one of the most important things that women can do in pregnancy. This top of mind awareness indicates that respondents are aware that alcohol use is a priority health issue during pregnancy. Respondents who binge drank 4 or more times in the last 6 months were more likely to mention addressing alcohol use as one of the most important things that pregnant women can do.

There are many things that can have a potentially serious impact on prenatal health and development, one of which is alcohol. Populations with lower and higher socio-economic status are impacted by different determinants of health. Pregnant women with lower incomes may be more concerned about their ability to access healthy food and safe housing. The survey results support this – women with the lowest incomes are most likely to indicate that healthy eating is one of the most important things women can do in pregnancy. The top of mind results about the importance of stopping or cutting down alcohol use in pregnancy are influenced by levels of awareness, and by the priority health concerns in a specific population. Overall however, alcohol was seen as one of the 3 most important concerns in pregnancy.

Respondents were also asked specifically about the importance of cutting down or stopping alcohol use during pregnancy, in order to increase the likelihood that their baby would be born healthy.

	1999	2002	2006
Most important	63	55	56
Very important	35	43	42
Less important	2	2	1

Table 3: Perceived Importance of Cutting Down or Stopping Alcohol Use in Pregnancy, Ontario

In all 3 surveys, the majority of respondents said that cutting back or stopping alcohol use was the most important, or a very important thing to do during pregnancy, in order to have a healthy baby. This also indicates a high level of awareness of the importance of addressing alcohol use in pregnancy. Respondents who were female or had a university education were more likely to say that cutting down or stopping alcohol use was the most important thing that women could do to increase the likelihood of having a healthy baby.



3.3 EFFECTS ON THE BABY

Alcohol use during pregnancy can negatively impact the growth and development of the fetus, resulting in a range of birth defects as well as life-long learning and social problems (Health Canada, 2003b).

While we are learning more about prenatal alcohol exposure, there are many things that are still unclear. For example, it is clear that alcohol use can cause specific types of harm to the fetus, however we have a lot to learn about the mechanism of harm, how to predict risks in individual women, and how to intervene effectively. An experienced FASD researcher may still say that the effects on the developing fetus are unclear.

Respondents were asked about specific consequences of prenatal alcohol exposure:

	The Effects on the Fetus are Unclear			Alcohol Use in Pregnancy Leads to Life-long Disabilities			The Effects Usually Disappear as the Child Grows Older		
	1999	2002	2006	1999	2002	2006	1999	2002	2006
True	-	36	30	94	92	96	8	4	4
Not True	-	60	65	4	5	3	81	91	92

Table 4: Perception of Long-term Impact of Prenatal Alcohol Exposure, Ontario

There is a significant decrease in the proportion of respondents who feel that the effects of alcohol on the fetus are unclear ($p < .10$). In 2006, 30% of the respondents felt that the effects on the fetus were unclear.

There is a significant increase in the proportion of respondents who believe that the effects of alcohol use in pregnancy do not disappear as the child grows older ($p < .01$). In all 3 surveys, the majority of respondents were aware that alcohol use in pregnancy can lead to disabilities that do not disappear as the child grows older. These results show a very high level of awareness linking prenatal alcohol exposure with life-long effects on the child. Respondents who were more likely to think that alcohol use in pregnancy can lead to life-long disabilities in the child included individuals who were younger than 35, had not completed high school, Aboriginal, or binge drank 2-3 times in the last 6 months. Respondents who were less likely to think that alcohol use in pregnancy can lead to life-long disabilities included individuals who were 35 and older.

3.4 AWARENESS OF FETAL ALCOHOL SYNDROME

The terminology around prenatal alcohol exposure, diagnostic and otherwise, evolves as we learn more about this issue. Fetal Alcohol Syndrome (FAS) is the diagnostic term for an individual with prenatal alcohol exposure who exhibits delayed growth, central nervous system impairment and specific facial characteristics (Chudley et al, 2005). Fetal Alcohol Spectrum Disorder (FASD) is the umbrella term that describes the range of harm that may occur as a result of prenatal alcohol exposure (Chudley et al, 2005).

Respondents were asked if they had heard of Fetal Alcohol Syndrome. In 2006, the question was adjusted to include both FAS and FASD. Results include:

	1999	2002	2006
Yes	79	85	88
No	21	15	12

Table 5: Have Heard of FAS, Ontario

There was a significant increase in the proportion of respondents who had heard of FAS ($p < .01$). Most respondents in all 3 surveys had heard of the term FAS. Respondents with university education were more likely to indicate that they had heard of FAS. Respondents who were not born in Canada were less likely to have heard of FAS.

Respondents who had heard of FAS were asked to describe FAS. In 2006, the question was adjusted to include both FAS and FASD. The most common responses can be grouped as:

	1999	2002	2006
Cognitive effects	31	43	41
Prenatal exposure to alcohol	41	36	34
Physical effects	20	19	31
Development effects	18	20	26
Behavioural effects	8	16	19
Infant addiction	23	21	12
Low birth weight	7	7	5

Table 6: Top of Mind Recall of Characteristics of FAS, Ontario



In all 3 surveys, respondents mentioned many of the cognitive, developmental, physical and behavioural characteristics of FAS. In 2006 they had a higher top of mind awareness of the cognitive effects (41%), than of the physical (31%), developmental (26%) and behavioural effects (19%). About one third of respondents (34%) in 2006 had a top of mind awareness of the association of FAS with prenatal alcohol exposure. There was a significant increase in the proportion of respondents who indicated that FAS was associated with cognitive ($p < .05$), developmental ($p < .02$) and behavioural effects ($p < .01$). There were significant decreases in the proportion who mentioned prenatal alcohol exposure ($p < .10$) and infant addiction ($p < .01$). As the knowledge of Ontarians increases about FAS, the top of mind awareness of specific features of FAS is increasing, and general comments about prenatal alcohol exposure or infant withdrawal are decreasing.


3.5 DIFFERENT LEVELS OF ALCOHOL USE IN PREGNANCY

The risk of serious harm to the baby increases with the amount of alcohol consumed in pregnancy (BSRC, 2002). While it is generally agreed that there is no safe level of alcohol use in pregnancy, even amongst the experts, there is disagreement about the risks related to a small amount of alcohol in pregnancy, and how to define a small amount of alcohol in pregnancy.

Respondents were asked a range of true or false questions about different levels of alcohol use. The questions and summary of responses are:

	Response	1999	2002	2006
A small amount of alcohol use during pregnancy can usually be considered safe.	True	50	56	42
	Not true	48	43	57
A small amount of alcohol consumption during pregnancy would never lead to serious harm to the baby.	True	29	25	24
	Not true	66	73	74
A moderate amount of alcohol consumption during pregnancy can usually be considered safe.	True	24	27	19
	Not true	74	72	80
The more alcohol a pregnant woman drinks, the more harm may be done to the baby.	True	98	97	98
	Not true	2	3	2
The more alcohol a pregnant woman drinks, the more likely that the baby will be harmed.	True	99	98	98
	Not true	1	2	2
Any alcohol consumption during pregnancy can harm the baby.	True	63	58	69
	Not true	36	40	31

Table 7: Beliefs about Different Levels of Alcohol Use in Pregnancy, Ontario



There was a significant increase in the belief that a small amount of alcohol is risky in pregnancy ($p < .02$). In 2006, over half of the respondents believed that a small amount of alcohol in pregnancy has some risk (57%), and most felt that it could lead to serious harm (74%). Respondents who were more likely to believe that a small amount of alcohol was safe in pregnancy included individuals who were male, aged 25 or older, had a university education, work full time, higher income or 7 or more alcoholic drinks per week. Respondents who were more likely to think that a small amount of alcohol was unsafe in pregnancy included individuals who were female, under age 25, not working, not born in Canada, or drank 3 or less alcoholic drinks per week.

There is a statistically significant increase in awareness of the risks of moderate drinking in pregnancy ($p < .05$). In 2006, 80% of respondents did not believe that a moderate amount of alcohol in pregnancy could usually be considered safe. It is a concern that 19% of respondents felt that moderate drinking in pregnancy is usually safe during pregnancy. Respondents who were more likely to think that moderate drinking was safe in pregnancy included respondents who were male, aged 25 or older or drank 7 or more alcoholic drinks each week. Respondents who are more likely to think that moderate drinking in pregnancy was unsafe were under age 25, not born in Canada or drank 3 or less alcoholic drinks a week.

Awareness of the direct relation between the amount of alcohol use and increased harm to the baby was almost universal. In 2006, 98% of respondents believed that the more you drink, the more likely the baby would be harmed, and the more harm that may be caused to the baby. Respondents who were most likely to recognise the direct relation between amount of alcohol and risk to the baby had a lower level of education, were Aboriginal or not born in Canada.

There was a significant increase in awareness of the risks of any amount of alcohol in pregnancy ($p < .10$). In 2006, 69% of respondents agreed that any alcohol consumption could harm the baby. Respondents who were female, under age 25, did not work, or drank 3 or less alcoholic drinks per week were more likely to agree that any amount of alcohol could harm the baby. Respondents who were male, older than 25, working full time, higher income, or drank more than 4 drinks a week are more likely to disagree with the statement that any alcohol could harm the baby.

3.6 OCCASIONAL AND REGULAR ALCOHOL USE IN PREGNANCY

The impact of alcohol use in pregnancy is directly related to the amount of alcohol consumed (BSRC, 2002). The risks related to occasional alcohol use are lower than the risks of regular alcohol use, although no amount of alcohol can be considered completely safe in pregnancy.

To get a better understanding of the beliefs about the risks of occasional alcohol use in pregnancy, respondents were asked about the safety of drinking:

- Two alcoholic drinks on two or three different occasions during the pregnancy.
- One or two alcoholic drinks during the pregnancy.



	Total of 1-2 Alcoholic Drinks During Pregnancy			2 Alcoholic Drinks on 2-3 Different Occasions		
	1999	2002	2006	1999	2002	2006
Very safe	27	29	17	11	12	6
Somewhat safe	39	33	31	33	36	26
Not very safe	15	16	21	29	25	28
Not at all safe	17	22	30	26	28	40

Table 8: Perceived Safety of Occasional Alcohol Use During Pregnancy, Ontario

There were significant increases in the belief that even occasional alcohol use in pregnancy has some risks ($p < .01$). In 2006, 30% of respondents felt it was not at all safe to drink 1-2 alcoholic drinks in the pregnancy, and 40% felt that 2 alcoholic drinks on 2-3 different occasions in pregnancy is not at all safe. Respondents who felt that occasional alcohol use in pregnancy was not at all safe were more likely to drink one or less alcoholic drinks a week. Respondents who felt that occasional alcohol use was very safe were more likely to drink 4 or more drinks per week or to binge drink 3 or more times in the last 6 months.

To get a better understanding of the beliefs about the risks of regular alcohol use, respondents were asked about the safety of drinking:

- One alcoholic drink each day during the pregnancy.
- Three or four alcoholic drinks each weekend during the pregnancy.

	1 Alcoholic Drink each Day			3-4 Alcoholic Drinks Each Weekend		
	1999	2002	2006	1999	2002	2006
Very safe	1	1	*	1	*	*
Somewhat safe	6	8	5	4	3	2
Not very safe	26	22	21	24	24	18
Not at all safe	67	69	74	70	72	79

Table 9: Perceived Safety of Regular Alcohol Use During Pregnancy, Ontario

* indicates less than one percent

There were significant increases in awareness that regular drinking in pregnancy was not at all safe. In 2006, 74% of respondents felt that 1 drink a day was not at all safe, and 79% felt that 3-4 drinks each weekend was not at all safe. Respondents who were more likely to think that regular alcohol use in pregnancy was not at all safe, included respondents who were female, under age 25 years of age, or drank less than 1 alcoholic drink per week.

3.7 QUANTIFYING DIFFERENT LEVELS OF DRINKING

Alcohol use can be categorized in different ways, and safe limits are different for men and for women. The Low Risk Drinking Guidelines indicate that low risk drinking for women who are not pregnant is no more than 2 standard drinks per day, up to 9 standard drinks per week (OPHA et al, 2003). A standard drink is 5 oz of wine, 1.5 oz of sprits or 12 oz of beer (OPHA et al, 2003).

For women who are pregnant or planning a pregnancy, no alcohol is clearly the safest choice and light, moderate, heavy and binge drinking are not recommended (Health Canada, 1996). However, health care providers can assess women prior to pregnancy for higher levels of alcohol use, in order to identify women who may have more difficulty stopping drinking, women who may be at risk of an unplanned pregnancy, and women who may be at risk for health and social problems due to their level of alcohol use (BSRC, 2002).

There are many different definitions for binge, light, moderate and heavy drinking. Commonly used definitions are:

- **Binge drinking** – 4 or more drinks per occasion for women and 5 or more drinks per occasion for men
- **Light drinking** – May relate to occasional alcohol use, or low levels of alcohol use, however there is no consistent definition
- **Moderate drinking** – Drinking that is consistent with the Low Risk Drinking Guidelines, i.e. for women, up to 9 standard drinks per week, with no more than 2 standard drinks per day
- **Heavy drinking** – Drinking that is inconsistent with the Low Risk Drinking Guidelines, i.e. for women, more than 9 standard drinks per week, or more than 2 standard drinks per day

In 2006, respondents were asked how many alcoholic drinks, over the course of an evening, are considered binge drinking, light drinking, moderate drinking and heavy drinking for a woman:

	Average Number of Drinks per Evening
Light Drinking	1.48
Moderate Drinking	2.72
Heavy Drinking	5.88
Binge Drinking	6.74

Table 10: Average Number of Drinks Per Evening for Different Levels of Drinking for a Woman, Ontario, 2006



Respondents, on average, over-estimated the amount of alcohol that was consistent with binge drinking, moderate drinking and heavy drinking in women. Moderate drinking for women is defined as no more than 2 drinks per day, however respondents indicated an average of 2.72 drinks per evening. Heavy drinking for women is more than 2 drinks per day, and respondents indicated an average of 5.88 drinks per evening. Binge drinking is defined as 4 or more drinks per occasion for women, and respondents indicated 6.74 drinks per evening. Since there is no formal definition of light drinking, it is not possible to assess the responses in this category. Younger age and increased levels of personal alcohol use were associated with higher estimates of the number of drinks that were considered to be binge, light, moderate and heavy drinking.

3.8 RECALL SEEING INFORMATION

Respondents were asked if they had seen any information about the effects of alcohol use on a baby during pregnancy:

	1999	2002	2006
Yes	73	66	69
No	26	33	30

Table 11: Recall Seeing Information about Effects of Alcohol Use in Pregnancy, Ontario

In 2006, 69% of respondents remembered seeing information about the effects of alcohol use in pregnancy. Respondents who were female or worked part-time were more likely to have seen information about alcohol use in pregnancy.

3.9 BEST SOURCE OF INFORMATION

Respondents were asked about the best sources for information about FASD and about the effects of alcohol use during pregnancy. The most common top of mind responses were:

	1999	2002	2006
Doctor, doctors office, clinic, hospital, public health	55	40	37
TV, newspapers, other media	9	29	34
Internet	7	7	7
Books, Magazines	11	9	3

Table 12: Top of Mind Mention of Best Source of Information about Alcohol Use in Pregnancy, Ontario

Information in clinical settings (37%) and on TV and in other media (34%) were by far the most common top of mind suggestions for the best sources of information about FAS and the effects of alcohol use in pregnancy in 2006. Information in clinical settings was of special interest to respondents who were female, aged 30 and older, had a university education or a higher income. Respondents who binge drank more than 4 times in the last 6 months showed an increased interest in information on the television and through other media.

It is interesting to note that the interest in information in clinical settings is decreasing over time ($p < .01$), while the interest in use of broad media is increasing ($p < .01$). It is possible that, in 1999, alcohol use was seen as a personal concern of a pregnant woman that was best addressed by her physician. Our knowledge about the factors that influence alcohol use in pregnancy is increasing, and there is an increasing understanding that there are broad influences on alcohol use in pregnancy. Perhaps there is a higher recognition that the general public needs to know about alcohol and pregnancy, not just the pregnant woman and her physician.

Despite growing accessibility to the Internet, interest is consistent (7%), rather than increasing. Interest in information in books and magazines was low in 2006 (3%).

Respondents were also asked about the effectiveness of a range of specific awareness strategies:

Table 13:
Perceived
Effectiveness
of Different
Strategies,
Ontario, 2006

	Not Very Effective	Somewhat Effective	Very Effective
Sending materials to doctors/health professionals to inform patients	7	18	76
Posters in waiting rooms and clinics	4	24	72
Television ads	7	25	68
Posters/brochures in pharmacies/drug stores	14	40	46
Radio ads	19	39	42
Ads on buses/subways/bus shelters	22	35	42
Inserts/ads in magazines/newspapers	18	42	40
Pamphlets/brochures/other publications	15	49	37
Website	32	38	30

Again, respondents perceived the most effective strategies to be clinical settings and television. There was significantly less interest in Internet strategies as compared to other strategies. The trends for specific populations are explored in Section 4.



3.10 WARNING STRATEGIES

Warnings about alcohol use in pregnancy can occur in a variety of settings, such as on alcohol products, in alcohol advertising, or on signage in restaurants, bars or clubs. Currently in Ontario, all establishments that serve or sell alcohol (for example licensed restaurants, bars and clubs as well as beer and liquor stores) must post specific warning signs about the risks of alcohol use in pregnancy. Warning labels on alcohol products and on alcohol advertising is not currently legislated in Ontario, or at the federal level.

Respondents were asked how they felt about warning strategies about the risks of alcohol use during pregnancy on alcohol product labels, on alcohol advertising and in restaurants, bars and clubs. The results are:

	Warnings on Alcohol Product Labels		Warnings on Alcohol Advertising		Warning Signs in Restaurants		Warning Signs in Bars or Clubs	
	1999	2006	1999	2006	1999	2006	1999	2006
Strongly approve	67	65	71	72	37	45	51	59
Somewhat approve	24	25	22	24	41	36	30	26
Somewhat disapprove	5	5	4	3	13	13	11	8
Strongly disapprove	4	4	2	1	9	6	9	6

Table 14: Opinions Regarding Warning Strategies about Alcohol Use in Pregnancy, Ontario

The majority of respondents strongly approved or somewhat approved of all warning strategies. The highest support was for warning labels on alcohol products and warnings on alcohol advertising. There was less support for warning signs in bars, clubs and restaurants, however strong support is increasing ($p < .05$). In 2006, 96% of respondents approved of warnings on alcohol advertising, 90% approved of warning signs on alcohol products, 85% approved of warning signs in bars or clubs and 81% approved of warning signs in restaurants. In general, respondents who were more likely to be in support of warning strategies included respondents who were female, younger, lower education, not working, lower income, lower alcohol use or Aboriginal. The trends for specific populations are further explored in Section 4.

3.11 GOVERNMENT ADVERTISING

Respondents were asked how they felt about government-sponsored advertising about the risks of alcohol use during pregnancy:

	1999	2006
Strongly approve	80	80
Somewhat approve	17	17
Somewhat disapprove	1	2
Strongly disapprove	2	1

Table 15: Opinions Regarding Government-sponsored Advertising about Alcohol Use in Pregnancy, Ontario

There was consistent strong support for government-sponsored advertising about the risks of alcohol use in pregnancy. In 2006, 97% of respondents approved of government sponsored advertising about prenatal alcohol exposure. Respondents who were female, not working or low alcohol use were more likely to be in favour of government sponsored advertising about alcohol and pregnancy.

3.12 INTENDED BEHAVIOUR IF PREGNANT

Most women who are aware of the risks of prenatal alcohol exposure stop drinking during pregnancy. Some pregnant women require additional support and services to help them stop drinking. Issues such as addiction, dependence, poverty, violence etc. can make it difficult for some women to stop or cut back their drinking in pregnancy (BSRC, 2002).

Female respondents were asked if they would change their alcohol use if they were to become pregnant:

	1999	2002	2006
Not change alcohol use	4	7	2
Cut back on alcohol use	10	13	6
Stop alcohol use	66	61	72
Don't use alcohol	20	19	19

Table 16: Intended Choices about Alcohol Use if Pregnant, Ontario

Since 1999 a decreasing proportion of respondents indicated that they would cut back their alcohol use if pregnant ($p < .10$). In 2006, most respondents (72%) indicated that they would stop drinking alcohol if they became pregnant. Only a small proportion said they would reduce their alcohol use (6%) or would not change their alcohol use (2%).



3.13 INFLUENCE OF PARTNER

Many things influence alcohol use in pregnancy, including positive or negative influences of the partner, family and friends. While many organizations recommend that partners, families and friends take specific actions to help a pregnant women not drink in pregnancy, we have a lot to learn about what pregnant women consider to be supportive, controlling, considerate or annoying.

Female respondents were asked if their alcohol use would change if their spouse or partner:

- Continued to drink alcohol during their pregnancy
- Stopped drinking alcohol during their pregnancy
- Encouraged them to stop or cut back during their pregnancy
- Offered them alcohol during their pregnancy

	If Partner Continues to Drink			If Partner Stops Drinking			Partner Encouraged you to Stop/Cut Back			Partner Offered you Alcohol		
	1999	2002	2006	1999	2002	2006	1999	2002	2006	1999	2002	2006
More likely to drink alcohol	3	3	3	3	9	9	8	22	17	2	4	4
Less likely to drink alcohol	18	17	16	27	26	27	40	28	26	26	24	23
No difference	72	73	73	62	57	56	42	41	45	63	65	64
Don't drink alcohol	7	7	8	7	7	8	10	10	10	9	7	10

Table 17: Perceived Influence of Partners Behaviour on Alcohol Use in Pregnancy, Ontario

Most female respondents indicated that their partners' behaviour would not influence their own alcohol use if they were pregnant, whether the partner showed behaviour that is considered supportive (partner stops drinking or encourages pregnant woman to stop drinking) or non-supportive (partner continues to drink or offers the pregnant woman alcohol).

While supportive partner behaviours were likely to make some women feel they would decrease their alcohol use in pregnancy, even unsupportive behaviours prompted some women to feel they would decrease their alcohol use in pregnancy. Some respondents indicated that partner behaviours (both supportive and un-supportive) would make them more likely to drink in pregnancy. Of all partner behaviours, encouragement from a partner to stop or cut back alcohol use in pregnancy is most likely to make women say they would increase their alcohol use in pregnancy (17%). The partner behaviours that are most likely to make women say they would decrease their alcohol use in pregnancy include a partner who stops drinking (27%) and encouragement from a partner (26%).

The level of alcohol use of female respondents appears to affect their response to the behaviour of the partner. Women who drank on a weekly basis, or binge drank 4 or more times in the last 6 months appeared to be more likely to be influenced by their partners' behaviour, whether the behaviour was supportive or non-supportive. Women who binge drank at this level indicated that they would be less likely to drink if their partner:

- Continued to drink in pregnancy
- Stopped drinking
- Encouraged them to stop or cut back

This data raises many questions about the influence of partners behaviour, how partners can best support pregnant women in addressing their alcohol use, and about the type of recommendations that service providers should provide to partners of pregnant women.

3.14 INTENDED BEHAVIOUR OF MALE PARTNERS

Alcohol use in pregnancy is influenced by many factors, including social norms and social support. It is not solely the responsibility of pregnant women.

Male respondents were asked, if their spouse or partner were to become pregnant, they would be likely to:

- Stop drinking alcohol
- Encourage her to stop or cut back on her alcohol use during pregnancy

Table 18:
Intended
Behaviour of
Male Partner
Regarding
Alcohol Use
in Pregnancy,
Ontario

	Would Encourage Pregnant Partner to Stop or Cut Back			Would Stop Drinking		
	1999	2002	2006	1999	2002	2006
Very likely	80	91	89	31	45	41
Somewhat likely	5	2	4	25	24	20
Not very likely	4	1	2	24	18	17
Not at all likely	5	5	5	12	11	20

Since 1999 an increasing proportion of male respondents said they would be very likely to encourage their pregnant partner to stop or cut back their alcohol use ($p < .10$). In 2006, most male respondents (89%) indicated that they would be very likely to encourage their partner to stop or cut back her alcohol use. However, male respondents were less likely to indicate that they would stop drinking themselves during the pregnancy. Male respondents who were less than age 25, had not completed high school or were Aboriginal were more likely to indicate that they would encourage their pregnant partner to stop or cut back. Male respondents who were younger, had less than high school education, lower income, or drank at lower levels were more likely to say they would stop drinking themselves if their partner was pregnant.



3.15 ADVICE RECEIVED FROM A DOCTOR

Health care providers are identified as one of the most important sources of information about alcohol use in pregnancy. They play a critical role in screening for alcohol use, and in providing timely information, intervention and referrals before and during pregnancy (BSRC, 2002).

Female respondents were asked about the advice they had received from their doctor about alcohol consumption during pregnancy. This question was only asked in 2006.

	2006
No alcohol at all, don't drink	31
Reduce consumption, moderation	10
It can harm the baby, not good for baby	5
Gave me pamphlets	3
Glass of wine is OK	3
None	47

Table 19: Recall of Advice Received from a Doctor about Alcohol Use in Pregnancy, Ontario, 2006

In 2006, 47% of all respondents and 30% of women who were currently pregnant, did not recall receiving any advice from their doctor about alcohol and pregnancy. Only a small proportion of respondents (3%) recalled receiving print materials. Only one third (36%) reported that they received correct advice about alcohol use in pregnancy (i.e. no alcohol at all, don't drink, can harm the baby). Thirteen percent reported that they were provided with incorrect advice about alcohol use in pregnancy (i.e. reduce alcohol use, drink in moderation, a glass of wine is OK in pregnancy). Women who did not recall receiving any advice about alcohol and pregnancy from their physician were more likely to be less than age 25, or to binge drink 4 or more times in the last 6 months.





4. Implications to Ontario FASD Campaigns

The 2006 survey clearly indicates the progress that Ontario has made in awareness of the risks of alcohol use in pregnancy. In most areas, Ontario awareness is now comparable to the national data; however, Ontario lags behind on a few subjects. As compared to the Canadian population, Ontario respondents had lower awareness of the impact of small amounts of alcohol, were more likely to think that a small amount of alcohol in pregnancy could never lead to serious harm in the baby, and were less likely to believe any amount of alcohol can harm the baby (Environics, 2006).

In the past Ontario focussed on sharing general messages with a broad audience, for example campaigns for all women of childbearing age about the harm that can be caused by alcohol use in pregnancy. Now there is a need for specific information for certain sub-populations.

This section refers to general trends seen in the 2006 Environics data for Ontario. It shares implications for future Ontario FASD awareness campaigns, focussing on population of interest, key messages and strategies. For cautions in interpreting the Ontario data, see page 9. Within any population, there may be local communities that have lower levels of awareness, or different information needs. Service providers and FASD interest groups are encouraged to use the information derived from the Environics reports in conjunction with their knowledge of factors in play in their own community.

For information about developing alcohol and pregnancy awareness campaigns, see:

- Keys to a Successful Alcohol and Pregnancy Communication Campaign, <http://www.beststart.org>
- What We Have Learned: Key Canadian FASD Awareness Campaigns, http://www.phac-aspc.gc.ca/fasd-etcaf/publications_e.html

4.1 CHOOSING A POPULATION OF INTEREST

When developing awareness strategies, it is important to carefully select the population of interest, prior to considering the details of the campaign, i.e. the key messages, images, strategies etc (BSRC, 2003). Populations of interest may be chosen due to a number of different factors, for example lower levels of awareness, higher risks (i.e. more likely to drink alcohol in pregnancy), or due to their influence (i.e. in providing support or information to pregnant women). Awareness strategies are most effective when tailored to a specific population of interest (THCU, 1999). Each population of interest has its own information needs, and engages in different information seeking behaviours.

In general, this survey showed higher levels of awareness in respondents who were female, younger, lower alcohol use, Aboriginal or not born in Canada (see Table 20). However, service providers and interest groups may still have reasons to consider these populations for future FASD awareness strategies, either due to the need for specific messaging, or because of local variations in awareness.

In contrast, women under age 25 were less likely to recall receiving information from their doctor about FASD. Younger women must be receiving their information about alcohol and pregnancy from other sources.

There are lower levels of awareness in some groups (see Table 20). It is recommended that Ontario priorities for awareness strategies about FASD include:

- Populations with higher socio-economic status
- Populations that are older than 35
- Populations with higher levels of alcohol use
- Men

Table 20: Levels of Awareness in Different Groups. Trends are significant at the 95% confidence interval. Ontario, 2006

	Higher Levels of Awareness in Specific Areas	Lower Levels of Awareness in Specific Areas
Men		• Risks of any, small and moderate alcohol use in pregnancy
Women	<ul style="list-style-type: none"> • Importance of addressing alcohol use in pregnancy • Risks of any, small and regular alcohol use in pregnancy 	
Younger	<ul style="list-style-type: none"> • Prenatal alcohol exposure leads to life-long disabilities • Risks of a any, small, moderate and regular alcohol use in pregnancy 	• Estimates of binge, light, moderate and heavy drinking
Older		<ul style="list-style-type: none"> • Prenatal alcohol use leads to life-long disabilities • Risks of any, small and moderate alcohol use in pregnancy
Low Education	<ul style="list-style-type: none"> • Prenatal alcohol exposure leads to life-long disabilities • Direct relationship between amount of alcohol and risk to baby 	
High Education	<ul style="list-style-type: none"> • Importance of addressing alcohol use in pregnancy • Heard of FAS 	• Risks of small alcohol use in pregnancy
Low Income High Income		• Risks of any or small alcohol use in pregnancy
Lower Alcohol Use	• Risks of any, small, occasional, regular and moderate alcohol use in pregnancy	
Higher Alcohol Use	<ul style="list-style-type: none"> • Importance of addressing alcohol use in pregnancy • Prenatal alcohol exposure leads to life-long disabilities 	<ul style="list-style-type: none"> • Risks of any, small, occasional, and moderate alcohol use in pregnancy • Estimates of light, moderate and heavy drinking
Not Born in Canada	<ul style="list-style-type: none"> • Direct relationship between amount of alcohol and risk to baby • Risks of small and moderate alcohol use in pregnancy 	• Heard of FAS
Aboriginal	<ul style="list-style-type: none"> • Prenatal alcohol exposure leads to life-long disabilities • Direct relationship between amount of alcohol and risk to baby 	



WOMEN OVER AGE 35, WITH HIGHER SOCIO-ECONOMIC STATUS

In Ontario there is a demographic trend towards increased maternal age in the first pregnancy. In 2003, 20% of live births in Canada were to women over the age of 35 (BSRC, 2007). This trend is led largely by the interest in pursuing higher education, establishing a career and reaching a level of economic stability, before starting a family. The rate of planned pregnancies is higher in this population, and women over age 35 are more likely to seek out information prior to pregnancy, to talk with a health care provider before pregnancy, and to make health changes at least 3 months before they hope to be pregnant (BSRC, 2007). These present key health promotion opportunities.

It is important to keep in mind that the demographics of alcohol use are very different from the demographics for smoking. Women who are older, have a higher level of education or a higher income are more likely to say they drank during their last pregnancy (Health Canada, 2003a; Dell & Roberts, 2006). Women over the age of 35 may drink socially at work functions or with co-workers. They may continue to drink alcohol during pregnancy at work functions to conceal the pregnancy from colleagues. The results of this survey, and statistics on alcohol use in pregnancy, reinforce that one important “high-risk” population for alcohol use in pregnancy is women who are older, have higher education and higher incomes.

Awareness strategies for this population need to acknowledge the role that alcohol plays in their lives, as well as providing important information about the consequences of alcohol use in pregnancy, and clarifying that no amount of alcohol is safe in pregnancy.

WOMEN WITH HIGHER LEVELS OF ALCOHOL USE

This survey shows that individuals with higher levels of alcohol use are aware that prenatal alcohol exposure is an important issue and can lead to life-long disabilities. However, many believe that only higher amounts of alcohol are a concern in pregnancy. Awareness campaigns designed for pregnant women with higher levels of alcohol use should acknowledge that some people find it hard to stop drinking and that help is available. They can clarify that there is no safe amount of alcohol in pregnancy and that stopping at any time can make a difference. The main focus of campaigns for this population should be linking women to supports and services.

YOUNG WOMEN AND BINGE DRINKING

While younger women have higher levels of awareness, they also drink more frequently and have higher levels of binge drinking (Dell & Roberts, 2006), higher levels of risk taking and subsequent unplanned and unprotected sexual activity (Boyce et al, 2003). Their estimates of light, moderate, heavy and binge drinking are higher than average.

Reaching young women who binge drink is a priority. An awareness campaign that focuses on prenatal alcohol exposure may not engage this population, nor would it reflect of the range of concerns that result from the level of alcohol use and associated behaviours. Curriculum materials that look broadly at alcohol use, sexual health, communication skills and self-esteem, in addition to services around alcohol use may be more effective.



MEN

Alcohol use in pregnancy is influenced by a wide range of family and societal factors, and should not be seen as the sole responsibility of the pregnant woman. To date the highest priority has been to inform women who are pregnant or planning a pregnancy about the risks of prenatal alcohol exposure. Many campaigns are also designed to reach partners, friends, family or community members, to encourage a broad awareness of the risks, and support for pregnant women around alcohol use.

There is a cost to adding additional strategies to include men, family or community in campaigns about alcohol use in pregnancy. If focussing on the role of men, service providers and interest groups need to carefully consider their intent. Campaigns could be designed to encourage partners of pregnant women to practice behaviours that support pregnant woman in not drinking, and/or they could share information about the impact of alcohol on the fetus. This survey indicates that partners could benefit from an increased understanding of prenatal alcohol exposure, and of effective ways to support their partner in not drinking.

Supportive partner behaviours may result in increased alcohol use by pregnant woman. Instead of recommending specific supportive behaviours in campaigns for men (i.e. encourage your pregnant partner not to drink), perhaps we should be recommending that partners ask the pregnant woman how she would like to be supported and what would be helpful to her. We need to learn more about the influence of the partners' behaviour during pregnancy, so we can increase the likelihood of making appropriate recommendations. Campaigns that include messages about how to support a pregnant partner should be tested carefully with both men and women to decrease the risks of unintended negative consequences.

UNREACHED POPULATIONS

Further investigation is needed in determining the information needs of specific unreached subpopulations such as women who are living on the streets etc.



4.2 CHOOSING KEY MESSAGES

Key messages should be selected in a strategic way, based on existing knowledge levels in the population of interest. Campaigns can be expensive and often involve considerable staff/volunteer commitment. Ontario has come a long way and many potential key messages about alcohol and pregnancy are already very well understood. Unless there is a specific local need, it is not recommended that future Ontario campaigns focus on the following messages, as the level of awareness is already very high:

- Importance of addressing alcohol use during pregnancy
- Prenatal alcohol exposure can lead to life-long disabilities
- Recognition of the term FAS
- Direct relationship between amount of alcohol and risk to the baby
- Risks of heavy, regular or binge drinking in pregnancy

The results of this survey indicate lower levels of awareness about some topics (see Table 20). It is recommended that Ontario priorities for awareness strategies about FASD include:

- Risks of small, occasional and moderate amounts of alcohol in pregnancy
- Developmental, physical and behavioural consequences of prenatal alcohol exposure
- Quantifying different levels of alcohol use

Key messages about amount of alcohol in pregnancy are less well understood by a range of populations, including respondents who were older, male, of higher socio-economic status or had higher alcohol use. Key messages about quantifying different levels of alcohol use are less well understood by respondents who were younger or had higher levels of alcohol use.

All campaigns should continue to include messages about where women can get more information or support to stop drinking in pregnancy.

Further investigation is required around the perceived safety of some types of alcohol in pregnancy, and of drinking prior to conception and at different times in pregnancy.



4.3 CHOOSING STRATEGIES

The strategies used in awareness campaigns should be based on the interests and information seeking behaviour of the intended population. Some strategies are suited to specific populations. For example, women with lower or higher socio-economic status, women with higher and lower levels of alcohol use, and women who are younger or older, have different information needs and can be reached through different strategies.

Most respondents in this survey clearly indicated a preference for awareness strategies that include information in clinical settings, and through television and other media (see Table 21). Unfortunately, these are among the more expensive strategies. Developing health care provider resources, large print runs, large mail-outs, designing media tools, and large media buys can be costly. Service providers and interest groups will need to strategize carefully to define effective ways to reach their audience within budget, or through community partnerships. Service providers and interest groups are encouraged to look at low cost ways to get information into clinical settings and the media, in addition to investigating alternate strategies to reach the population of interest.

It is important to identify strategies that are effective in reaching priority populations. As with many health promotion strategies, there are challenges in reaching the remaining populations that have lower levels of knowledge, or higher levels of risk, as compared to selecting strategies for a large mainstream population.

This survey identifies that there are few strategies that are seen as more effective in reaching respondents who are older, of higher socio-economic status, or have a higher level of alcohol use (see Table 21) and in reaching men. Clinical settings and the media appear to be important strategies in reaching these populations. More research is needed on how to reach populations with lower levels of awareness, and higher rates of alcohol use in pregnancy.

The support for warning strategies about alcohol use in pregnancy was high across the range of populations (see Table 21). Examples of warning strategies include signs, coasters or posters in establishments licensed to serve or sell alcohol, messages on cash register receipts, messages on liquor bags, labels on alcohol products, and messages in alcohol advertising. Service providers and interest groups can consider a range of local warning strategies. In addition, some potential warning strategies fall under provincial and federal mandates. Many warning strategies are already in place in different areas of Canada. Ontario has taken a lead role in implementing warning signs in establishments licensed to serve or sell alcohol, and can learn from the warning strategies used in other provinces and territories.



	Effective Campaign Strategies	Effective Warning Strategies
Men	<ul style="list-style-type: none"> • Information in clinical settings • Television ads 	<ul style="list-style-type: none"> • Warning labels on alcohol products • Warning messages on alcohol ads
Women	<ul style="list-style-type: none"> • Information in clinical settings • Television ads 	<ul style="list-style-type: none"> • Warning labels on alcohol products • Warning messages on alcohol ads • Warning signs in bars and clubs
Younger	<ul style="list-style-type: none"> • Information in clinical settings • Television ads • Transit ads • Posters, brochures in pharmacies 	<ul style="list-style-type: none"> • Warning labels on alcohol products • Warning messages on alcohol ads • Warning signs in bars and clubs • Warning signs in restaurants
Older	<ul style="list-style-type: none"> • Information in clinical settings • Television ads 	<ul style="list-style-type: none"> • Warning labels on alcohol products • Warning messages on alcohol ads • Warning signs in bars and clubs
Low Socio-economic Status	<ul style="list-style-type: none"> • Information in clinical settings • Television ads • Inserts and ads in print media • Transit ads • Posters, brochures in pharmacies 	<ul style="list-style-type: none"> • Warning labels on alcohol products • Warning messages on alcohol ads • Warning signs in bars and clubs • Warning signs in restaurants
High Socio-economic Status	<ul style="list-style-type: none"> • Information in clinical settings • Television ads 	<ul style="list-style-type: none"> • Warning labels on alcohol products • Warning messages on alcohol ads • Warning signs in bars and clubs
Lower Alcohol Use	<ul style="list-style-type: none"> • Information in clinical settings • Television ads 	<ul style="list-style-type: none"> • Warning labels on alcohol products • Warning messages on alcohol ads • Warning signs in bars and clubs
Higher Alcohol Use	<ul style="list-style-type: none"> • Information in clinical settings • Television ads 	<ul style="list-style-type: none"> • Warning labels on alcohol products • Warning messages on alcohol ads
Not Born in Canada	<ul style="list-style-type: none"> • Information in clinical settings • Television ads • Transit ads 	<ul style="list-style-type: none"> • Warning labels on alcohol products • Warning messages on alcohol ads • Warning signs in bars and clubs • Warning signs in restaurants
Aboriginal	<ul style="list-style-type: none"> • Information in clinical settings • Television ads • Inserts and ads in print media • Transit ads • Posters, brochures in pharmacies • Radio ads 	<ul style="list-style-type: none"> • Warning labels on alcohol products • Warning messages on alcohol ads • Warning signs in bars and clubs • Warning signs in restaurants

Table 21: Campaign strategies rated as “very effective” and warning strategies rated “strongly approve” by at least 50% of the respondents in the specific population, Ontario, 2006





5. Recommendations for Ontario

The results of this survey show that there is still a need to increase public awareness in some critical areas, for example the effects of small and moderate amounts of alcohol in pregnancy. However, the results also clearly indicate that campaigns to raise awareness in some areas are unwarranted. For topics such as alcohol use leading to life-long disabilities in the child, awareness in Ontario is almost universal.

This survey also points to the need to learn more about awareness in a few key areas and to have a better understanding of how to reach specific populations. An ongoing commitment to monitoring general public awareness is needed, in order to guide our progress and decisions about future strategies.


The results also lead to recommendations to groups that are positioned to influence FASD, including service providers, FASD interest groups, health care providers, educators, funders, policy makers and researchers.

SERVICE PROVIDERS AND FASD INTEREST GROUPS

This survey deals mainly with general public awareness and strategies that influence awareness. Service providers and interest groups who are striving to increase FASD awareness at the local or provincial level are encouraged to learn from this report, invest their time and funds in populations with lower levels of awareness, in key messages that are less well understood, and in strategies that are most likely to reach the population of interest. Service providers and FASD interest groups are also encouraged to carefully plan their awareness campaigns, making conscious decisions about the population of interest, key messages, strategies and tone of the campaign. It is important to choose approaches that are effective, sensitive, positive and respectful, and to avoid shame, blame and judgment. Awareness strategies should recognise the reasons that women drink alcohol in pregnancy, and the difficulties that some women have in stopping drinking (Burgoyne, 2006). Service providers and interest groups are encouraged to think about how their awareness strategies fit with a comprehensive plan to address FASD.

HEALTH CARE PROVIDERS

Health care providers are seen as one of the most credible sources of information about prenatal health; however, this survey indicates a low recall of health care provider discussion about prenatal alcohol exposure with female patients of childbearing age, even if they were pregnant. Other research also reinforces that health care providers do not consistently ask female patients about alcohol use, prior to, or during pregnancy (Health Canada, 2005; Nevin et al, 2002). Health care providers are encouraged to screen all women for alcohol use, regardless of age and socio-economic status, and to discuss the effects of alcohol use in pregnancy, prior to and during pregnancy (BSRC, 2002). In addition, health care providers can offer a range of patient information about alcohol and pregnancy, including posters and brochures. Health care providers are encouraged to access training on how to assess and address alcohol use in pregnancy.



In addition, it should be a priority to design and offer training opportunities for health care providers about discussing, assessing and addressing alcohol use in pregnancy, including information about screening, brief interventions and appropriate referrals.

EDUCATORS

In order to make a long-term investment in addressing FASD, educators are encouraged to consider an age appropriate curriculum that provides information about prenatal alcohol exposure and FASD. A provincial curriculum could be modeled after curricula that are used in other provinces, and could build on their experiences in designing and implementing teaching materials on this topic. Educating young people about prenatal alcohol exposure is a long-term investment in prevention of FASD. In order to address the broad information needs of young people, this curriculum should link to information about sexual health, communication skills, self-esteem and local services.

FUNDERS

It is recommended that funders support awareness strategies that use evidence to carefully select populations of interest, key messages and strategies. The Environics data indicates a higher need for Ontario FASD campaigns for women who are of higher socio-economic status, older, and higher alcohol use, as well as campaigns for men. Important messages include the risks of small and moderate amounts of alcohol, the developmental, physical and behavioural consequences of prenatal alcohol exposure and quantifying different levels of alcohol use. Important strategies include clinical settings and the media. When funding awareness campaigns, these areas should be considered to be priorities, or evidence based information should be provided to support alternate approaches for specific sub-populations or communities.

Funders are also encouraged to consider funding a broader range of interventions to prevent FASD, including school based curricula and training for health care providers.

POLICY MAKERS

Warning strategies are an important part of a broad prevention plan to address alcohol use in pregnancy. They show government commitment to the issue of FASD and acknowledge the serious consequences of prenatal alcohol exposure. There is strong support for a range of warning strategies about the risks of alcohol use in pregnancy, in association with alcohol products, advertising, purchasing and serving alcohol. Policy makers are encouraged to continue to investigate policy opportunities to warn women of the risks of alcohol use in pregnancy.

Policy makers are also encouraged to consider a range of educational opportunities for example mandating educational components for individuals training to be doctors, midwives or nurses and a standard curriculum for elementary and secondary schools.



RESEARCHERS

More research is needed in several areas to continue to improve awareness about FASD. We need to learn more about effective ways to reach priority populations including women who are older, of higher socio-economic status and who drink more. We also need to learn more about innovative strategies that are effective in reaching men and young women. More research is needed about the role of partners and how they can support pregnant women. Additional research is needed to determine awareness of perceived risks of different types of alcohol, of alcohol use prior to pregnancy and in the three trimesters of pregnancy.

Groups implementing awareness strategies are encouraged to put in place effective evaluation protocols to monitor and learn from their work. We also need to continue to track awareness at the provincial level, in order to monitor our progress and to guide our future strategies.

WORKING TOGETHER AT THE PROVINCIAL LEVEL

Ontario has come a long way, very quickly, in developing innovative, effective, and stellar programs and services to address FASD. As we expand our work in this area, there is an increased need to work together at the provincial level, to learn from each other, build on our knowledge, support each others work, make better use of funding, increase coordination of services and avoid unnecessary duplication. The results of this survey, especially the strong support for government advertising and warning strategies, indicate support for Ontario to build on its successes and to continue to expand its commitment to FASD.



6. Summary of Ontario Results

LEVELS OF AWARENESS

The following list presents a summary of the Ontario results:

1. Awareness is increasing in most areas.
2. There are high levels of awareness in the following topic areas:
 - Stopping or cutting back alcohol use in pregnancy is important
 - Prenatal alcohol exposure leads to life-long disabilities
 - Recognition of the term FAS
 - Risks of regular alcohol use
 - Direct relation between level of alcohol use and to the risk to the fetus
3. Most women, if pregnant, plan to stop drinking alcohol.
4. The majority of men would encourage their pregnant partner to stop drinking, but would be less likely to stop drinking themselves.
5. Many women receive no information, or misinformation from their doctor about alcohol use and pregnancy.
6. There is a high level of support for a range of warning strategies, and for government-sponsored advertising.

PRIORITY POPULATIONS

Populations with lower levels of awareness in Ontario include:

- Populations with higher socio-economic status
- Populations that are older than 35
- Populations with higher levels of alcohol use
- Men

PRIORITY MESSAGES

Key messages that are less well understood in Ontario include:

- Risks of small, occasional and moderate amounts of alcohol in pregnancy
- Developmental, physical and behavioural consequences of prenatal alcohol exposure
- Quantifying different levels of alcohol use

PRIORITY STRATEGIES

The most important strategies for sharing information about FASD in Ontario include:

- Information in clinical settings
- Information provided through television and other media
- Warning strategies



7. References

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The Best Start Resource Centre supports service providers across Ontario through consultation, training and resources, in the area of preconception, prenatal and child health. The Best Start Resource Centre is a key program of the Ontario Prevention Clearinghouse (OPC).