



Implications for Ontario:  
**Awareness of  
FASD in 2009**

**best start**  
**meilleur départ**

by/par health **nexus** santé



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### **Disclaimer**

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

In 2009, the Prevention Working Group of FASD Stakeholders of Ontario implemented a survey of awareness of FASD in Ontario, building on previous provincial data about FASD. This research examined opinions regarding the following:

- Perception of the safety of drinking alcohol during pregnancy
- Comprehension of the risks of alcohol use
- Likelihood of changing alcohol consumption behaviour during pregnancy
- Awareness of FAS/FASD
- Best sources for information about FAS/FASD
- Level of support for warning strategies about alcohol use in pregnancy

This report explores the new evidence on general public awareness about FASD, 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:

- FASD Prevention: Canadian Perspectives (2008)
- What We Have Learned: Key Canadian FASD Awareness Campaigns (2006)
- Research Update: Alcohol Use in Pregnancy (2005)
- Knowledge and Attitudes of Health Professionals about FASD (2004)
- FASD: A Framework for Action (2003)
- Alcohol Use During Pregnancy and Awareness of FAS (EnviroNics reports from 2000, 2002 and 2006)

These resources are available through the Public Health Agency of Canada website at: [www.phac-aspc.gc.ca/fasd-etcaf/publications-eng.php](http://www.phac-aspc.gc.ca/fasd-etcaf/publications-eng.php)

## **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.

Ontario has made considerable progress in addressing FASD, 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, for example the interest in the Supporting Change training for physicians and the Breaking the Cycle Program.

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 coordinated provincial plan to address FASD. The 2009 survey of awareness of FASD can help service providers and interest groups select and define future prevention strategies for Ontario.

### 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 FASD

Awareness provides the foundation for health behaviour change (see Figure 1.3). 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 1.3).

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 1.3:** 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.

To learn more about the range of FASD prevention strategies, see FASD Prevention: Canadian Perspectives, at [www.phac-aspc.gc.ca/fasd-etcaf/publications-eng.php](http://www.phac-aspc.gc.ca/fasd-etcaf/publications-eng.php)

## I.4 THE SURVEYS

### 2009 SURVEY

Most 2009 survey questions were derived from questions used in 1999, 2002 and 2006 surveys, so trends could be compared over time. In addition, new questions were added to determine possible levels of misunderstanding about safe amounts of alcohol in pregnancy, safe times for alcohol use in pregnancy, safe kinds of alcohol in pregnancy, and when women planning a pregnancy should stop drinking alcohol.

Leger Marketing conducted the 2009 survey, provided the data analysis and identified preliminary trends. The 2009 survey included 400 Ontario residents, including 300 women aged 18-40, and 100 men who were spouses or partners of women aged 18-40. The survey used random digit dialing from a sample pulled from across the province, ensuring that numbers from across Ontario were included.

For samples of these sizes, results can be considered accurate to within the following margins of error:

- Total n = 400: +/-4.9%, 19 times out of 20
- Women n = 300: +/-5.7%, 19 times out of 20
- Men n = 100: +/-9.8%, 19 times out of 20







Survey sample demographics include:

|                                              | Proportion of Respondents |
|----------------------------------------------|---------------------------|
| <b>Age of Women</b>                          |                           |
| 18-34                                        | 53%                       |
| 35+                                          | 46%                       |
| <b>Highest Level of Education</b>            |                           |
| High School                                  | 18%                       |
| College                                      | 31%                       |
| University                                   | 51%                       |
| <b>Annual Family Income</b>                  |                           |
| Under \$60,000                               | 31%                       |
| Over \$60,000                                | 54%                       |
| <b>Marital Status</b>                        |                           |
| Married or Living as a Couple                | 79%                       |
| Widowed, Separated, Divorced                 | 4%                        |
| Single                                       | 17%                       |
| <b>Weekly Alcohol Consumption</b>            |                           |
| No Alcohol in the Last Month                 | 54%                       |
| 1-3 Drinks per Week in the Last Month        | 36%                       |
| 4+ Drinks per Week in the Last Month         | 7%                        |
| <b>Binge Drinking (5+ Drinks in 4 Hours)</b> |                           |
| No Binge in Last 6 Months                    | 72%                       |
| 1+ Binges in Last 6 Months                   | 26%                       |
| <b>Place of Origin</b>                       |                           |
| Born in Canada                               | 75%                       |
| Born in Another Country                      | 25%                       |
| <b>First Nation/Inuit/Métis</b>              | 3%                        |

**Table 1.4:** Summary of Demographics of 2009 Respondents

## PREVIOUS SURVEYS

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, 2000; Environics 2002; Environics, 2006). Ontario data from the 2006 survey was compared to the data from the 2009 survey. Differences between were calculated by z test.

Environics completed the surveys by phone with women aged 18 to 40 and male partners of women age 18 to 40. Samples for the surveys were derived from a combination of random digit dialling 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 included 393 Ontario respondents (289 women and 104 men). The margin of error for the Ontario data was  $\pm 5.8$  for women and  $\pm 9.6$  for men. A total of 399 Ontario respondents were included in 1999, and 398 Ontario respondents in 2002.

For detailed information on the methodology of these surveys, see the Environics reports available at: [www.phac-aspc.gc.ca/fasd-etcaf/publications\\_e.html](http://www.phac-aspc.gc.ca/fasd-etcaf/publications_e.html)

#### **LIMITATIONS:**

Limitations of this report include:

- The surveys were completed by phone which may result in an under-representation of lower income respondents.
- The surveys did not access cell phone numbers. Some Ontarians have a cell phone, but not a land line. The implications to the results of this survey are uncertain.
- The 2009 survey was completed in English and previous surveys were conducted in French and English. The surveys were not conducted in other languages.
- While all surveys used random samples, resulting variation in survey demographics may affect comparisons.
- The surveys were completed by 2 different marketing companies, over a 10 year time period and there were some differences in survey methodologies.



#### **PLEASE NOTE:**

Data categories in this report may add up to slightly over or slightly under 100%. This may be due to rounding, or because response categories for don't know/not sure/refused were not included in the data table.

Table titles indicate the subpopulations that are represented in the data. The discussion below each table provides relevant information about other populations in the survey data.

In this report the term “significant” refers to statistical significance. In the tables, bold is used to indicate 2009 results that are statistically different from 2006 results with a minimum 95% confidence interval.



## I.5 THIS REPORT

### SURVEYS

This report focuses mainly on the Ontario data from the 2006 and 2009 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 a minimum 95% confidence interval.

### 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 potential 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.



## 2. Ontario Results

This section provides detailed Ontario results. For a summary of survey highlights, see Section 5. The implications to program planning in Ontario are discussed in Sections 3 and 4.

### 2.1 ALCOHOL USE DURING PREGNANCY

There are many important things that pregnant women can do to increase their chances of having a healthy baby. Addressing alcohol use in pregnancy is one of the most important things that women can do prior to or during pregnancy. 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).

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 | 2009 |
|----------------------------------|------|------|------|
| Eat well/good nutrition/vitamins | 76%  | 89%  | 89%  |
| Cut down/stop smoking            | 63%  | 52%  | 49%  |
| Cut down/stop alcohol use        | 51%  | 52%  | 45%  |

**Table 2.1a:** Top of Mind Mention of the Most Important things Pregnant Women Can Do to Have a Healthy Baby, Ontario (responses from male and female respondents)

There was a significant decrease in the proportion of respondents that indicated that cutting down or stopping alcohol use was one of the most important things that women can do (52% in 2006 and 45% in 2009).

There are many things that can have a potentially serious impact on prenatal health and development, one of which is alcohol. 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. Respondents consistently mentioned alcohol use as one of the top 3 most important things that pregnant women can do in pregnancy. Almost half (45%) of the respondents indicated that alcohol use was one of the most important things that women can do in pregnancy.

Half of men (51%), and a slightly smaller percentage of women (43%), spontaneously mentioned the decrease of alcohol. This top of mind awareness indicates that respondents were aware that alcohol use is a priority health issue during 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 | 2009 |
|------------------------------|------|------|------|------|
| Most important               | 63%  | 55%  | 56%  | 57%  |
| Very important               | 35%  | 43%  | 42%  | 41%  |
| Less important/Not Important | 2%   | 2%   | 1%   | 2%   |

**Table 2.1b:** Perceived Importance of Cutting Down or Stopping Alcohol Use in Pregnancy, Ontario (responses from male and female respondents)

There were no statistical differences between the results from 2006 and from 2009.

In all 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 had high school education and/or who drank 1 to 3 drinks a week in the last month were more likely to believe that cutting down or stopping alcohol use was important to increase the likelihood of having a healthy baby.

## 2.2 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).

Respondents were asked if:

- Alcohol use during pregnancy can lead to life-long disabilities in a child.
- The effects of alcohol use on a child usually disappear as the child grows older.

|          | Alcohol Use in Pregnancy Leads to Life-long Disabilities |      |      |      | The Effects Usually Disappear as the Child Grows Older |      |      |      |
|----------|----------------------------------------------------------|------|------|------|--------------------------------------------------------|------|------|------|
|          | 1999                                                     | 2002 | 2006 | 2009 | 1999                                                   | 2002 | 2006 | 2009 |
| True     | 94%                                                      | 92%  | 96%  | 94%  | 8%                                                     | 4%   | 4%   | 9%   |
| Not True | 4%                                                       | 5%   | 3%   | 5%   | 81%                                                    | 91%  | 92%  | 84%  |

**Table 2.2:** Perception of Long-term Impact of Prenatal Alcohol Exposure, Ontario (responses from male and female respondents)

There was a significant increase in the proportion of respondents who believed that the effects of alcohol use in pregnancy disappear as the child grows older (4% in 2002 and 9% in 2009).

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 high level of awareness linking prenatal alcohol exposure with life-long effects on the child.

Those who had seen advertising about alcohol use in pregnancy were more likely to believe that alcohol use could lead to life-long disabilities and were significantly less likely to believe that the effects of alcohol use disappear as the child grows older.

University educated respondents were significantly less likely to recognise that alcohol use in pregnancy could lead to life-long disabilities in the child. Those who were more likely to think that the effects could disappear as the child grows older included respondents who were male, had not heard of FAS/FASD and/or had not seen advertising about alcohol use in pregnancy.

### 2.3 AWARENESS OF FAS / FASD

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 in as a result of prenatal alcohol exposure (Chudley et al, 2005).

Respondents were asked if they had heard of Fetal Alcohol Syndrome or Fetal Alcohol Spectrum Disorder. Results include:

|     | 2006 | 2009 |
|-----|------|------|
| Yes | 88%  | 83%  |
| No  | 12%  | 17%  |

**Table 2.3a:** Have Heard of FAS or FASD, Ontario (responses from male and female respondents)

There was a significant decrease in the proportion of respondents who had heard of FAS/FASD (88% in 2006 and 83% in 2009).

Most respondents had heard of the terms FAS/FASD. Awareness was significantly higher among women, those that had seen advertising about alcohol use in pregnancy, those with a post-secondary education, and those who were born in Canada.

Respondents who had heard of FAS/FASD were asked to describe FAS/FASD. The most common responses can be grouped as:

|                              | 2006 | 2009 |
|------------------------------|------|------|
| Cognitive effects            | 41%  | 51%  |
| Prenatal exposure to alcohol | 34%  | 40%  |
| Physical effects             | 31%  | 31%  |
| Development effects          | 26%  | 26%  |
| Behavioural effects          | 19%  | 16%  |
| Infant addiction             | 12%  | 13%  |
| Low birth weight             | 5%   | 7%   |

**Table 2.3b:** Top of Mind Recall of Characteristics of FAS or FASD, Ontario (responses from male and female respondents)

There was a significant increase in the proportion of respondents who indicated that FAS/FASD was associated with cognitive effects (41% in 2006 and 51% in 2009).



In all surveys, respondents mentioned many of the cognitive, developmental, physical and behavioural characteristics of FAS/FASD. In 2009 the most common top of mind responses were concerning the cognitive effects.

Demographically, those with a university education and/or who drank 0 to 3 drinks a week in the last month were significantly more likely to mention cognitive effects. Those with a university education and/or were born in Canada were significantly more likely to mention physical effects (37% vs. 25% college or 21% less). Men were significantly more likely to say they didn't know, or not to answer.

## 2.4 TYPES OF ALCOHOL

There are no safe types of alcohol in pregnancy. The impact of the alcohol is related to the alcohol content of the beverage and amount consumed.

Respondents were asked if there were safe types of alcohol during pregnancy. The results are:

|                                                 | 2009 |
|-------------------------------------------------|------|
| There are no safe kinds of alcohol in pregnancy | 81%  |
| Yes some kinds of alcohol are safe in pregnancy | 17%  |
| Wine is safe in pregnancy                       | 10%  |
| Beer is safe in pregnancy                       | 5%   |
| Coolers are safe in pregnancy                   | 1%   |
| Spirits are safe in pregnancy                   | 0%   |
| Other types of alcohol are safe in pregnancy    | 3%   |

**Table 2.4:** Safe Kinds of Alcohol During Pregnancy, Ontario (responses from male and female respondents)

This question was not asked in the 1999, 2002 and 2006 surveys.

Most of the respondents (81 %) correctly identified that there are no safe kinds of alcohol during pregnancy. Some respondents incorrectly indicated that there are safe kinds of alcohol in pregnancy (17%) with 10% believing wine was safe, 5% believing beer was safe, 1% believing coolers were safe, 0% believing spirits were safe, and 3% believing other types of alcohol were safe.

Those with a high school education were more likely to think there is a safe kind of alcohol in pregnancy (26%). Respondents with a university or college education were more likely to say there is no safe kind of alcohol in pregnancy (83%). Those with a high school education or drank 4 or more drinks per week in the last month were more think wine was safe in pregnancy (20%). Respondents who had not seen advertising on alcohol use in pregnancy were more likely to think wine was safe (14%).

## 2.5 WHEN WOMEN SHOULD STOP DRINKING ALCOHOL

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 when a woman should stop drinking alcohol, if she was thinking of becoming pregnant. The results are:

|                                               | 2009 |
|-----------------------------------------------|------|
| Before she gets pregnant                      | 68%  |
| Once she thinks she might be pregnant         | 28%  |
| Once her doctor confirms that she is pregnant | 4%   |

**Table 2.5:** When women should stop drinking, if they are thinking of becoming pregnant, Ontario (responses from male and female respondents)

This question was not asked in the 1999, 2002 and 2006 surveys.

Most of the respondents (68%) correctly identified that women planning a pregnancy should stop drinking alcohol prior to conception. Some respondents incorrectly indicated that women planning a pregnancy should stop drinking alcohol once they thought they might be pregnant (28%) or once their doctor confirmed the pregnancy (4%).

Respondents who earned less than \$60,000 per year, had not seen advertising about alcohol use in pregnancy, and/or did not drink any alcohol in the last month were more likely to indicate that a woman should stop drinking once her doctor confirms that she is pregnant.

## 2.6 TIMING OF ALCOHOL USE IN PREGNANCY

Among other things, the impact of alcohol use in pregnancy is related to the developmental stage of the fetus. In the first trimester, alcohol use can cause birth defects. In the third trimester alcohol use is linked to lower birth weights. Alcohol use at any time in a pregnancy can negatively impact the developing brain of the fetus. These impacts have life-long consequences.

Respondents were asked if there were safe times for alcohol use in pregnancy. The results are:

|                               | 2009 |
|-------------------------------|------|
| No safe time                  | 79%  |
| First trimester is safe       | 5%   |
| Second trimester is safe      | 3%   |
| Third trimester is safe       | 5%   |
| Any time in pregnancy is safe | 4%   |
| Don't know, no answer         | 6%   |

**Table 2.6:** Safe Times for Alcohol Use in Pregnancy, Ontario (responses from male and female respondents)





This question was not asked in the 1999, 2002 and 2006 surveys.

Most respondents recognised that there is no safe time for alcohol use in pregnancy (79%). A small proportion of respondents believed that it was safe to drink any time in pregnancy (4%). Some respondents believed that there were specific safe times for alcohol consumption in pregnancy, i.e. the first (5%), second (3%) or third (5%) trimester.

Respondents who did not report drinking any alcohol in the last month and/or did not report binge drinking in the last 6 months were significantly more likely to say there is no safe time. Respondents who drank 4 or more drinks per week in the last month were significantly more likely to believe the third trimester is safe.

## 2.7 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 known safe level of alcohol use in pregnancy, research has not yet established the measurable risks of small amounts of alcohol in pregnancy, nor how to define a small amount of alcohol in pregnancy.

Respondents were asked how many drinks would be considered safe in pregnancy. The results are:

|                            | 2009 |
|----------------------------|------|
| None                       | 54%  |
| Less than 1 drink per week | 27%  |
| 1 drink per week           | 7%   |
| 2 drinks per week          | 2%   |
| 3 drinks per week          | 1%   |
| 5 or more drinks per week  | 8%   |

**Table 2.7a:** Safe Amounts of Alcohol in Pregnancy, Ontario (responses from male and female respondents)

This question was not asked in the 1999, 2002 and 2006 surveys.

Over half of the respondents correctly indicated that no amount of alcohol was considered safe in pregnancy (54%). Twenty-seven percent believed that less than 1 drink a week was safe, 7% thought 1 drink a week was safe, and 2% thought that 3 drinks a week was safe. Eight percent of respondents thought that 5 or more drinks a week was safe in pregnancy. When the “no alcohol is safe” responses were removed, the average number of drinks that was considered safe was 2.2 drinks per week.

Respondents who did not drink any alcohol in the last month and/or did not report binge drinking in the last 6 months were more likely to feel that no alcohol is safe.

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 | 2009 |
|------------------------------------------------------------------------------------------------------|----------|------|------|------|------|
| A small amount of alcohol use during pregnancy can usually be considered safe.                       | True     | 50%  | 48%  | 56%  | 43%  |
|                                                                                                      | Not true | 42%  | 57%  | 43%  | 55%  |
| A small amount of alcohol consumption during pregnancy would never lead to serious harm to the baby. | True     | 29%  | 25%  | 24%  | 26%  |
|                                                                                                      | Not true | 66%  | 73%  | 74%  | 71%  |
| A moderate amount of alcohol consumption during pregnancy can usually be considered safe.            | True     | 24%  | 27%  | 19%  | 24%  |
|                                                                                                      | Not true | 74%  | 72%  | 80%  | 74%  |
| The more alcohol a pregnant woman drinks, the more harm may be done to the baby.                     | True     | 98%  | 97%  | 98%  | 97%  |
|                                                                                                      | Not true | 2%   | 3%   | 2%   | 3%   |
| The more alcohol a pregnant woman drinks, the more likely that the baby will be harmed.              | True     | 99%  | 98%  | 98%  | 96%  |
|                                                                                                      | Not true | 1%   | 2%   | 2%   | 3%   |
| Any alcohol consumption during pregnancy can harm the baby.                                          | True     | 63%  | 58%  | 69%  | 72%  |
|                                                                                                      | Not true | 36%  | 40%  | 31%  | 26%  |

**Table 2.7b:** Beliefs about Different Levels of Alcohol Use in Pregnancy, Ontario (responses from male and female respondents)

There were no statistical differences between the data from 2006 and from 2009.

In 2009, over half of the respondents believed that a small amount of alcohol in pregnancy has some risk (55%), and most felt that it could lead to serious harm (71%). It is a concern that 24% of respondents in 2009 felt that moderate drinking is usually safe during pregnancy.

Awareness of the direct relation between the amount of alcohol use and increased harm to the baby was almost universal. In 2009, almost all 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. In 2009, 72% of respondents agreed that any alcohol consumption could harm the baby.

Those who said they had seen advertising about alcohol use in pregnancy were significantly less likely to believe that a small or moderate amount of alcohol could be considered safe. Men were significantly more likely to believe that a small amount of alcohol would never lead to serious harm. Those who drank 0 to 3 drinks per



week in the last month and/or did not report binge drinking in the last 6 months were significantly less likely to believe that a small amount of alcohol is considered safe and that any amount of alcohol could harm the baby. Respondents who were male, drank 4 or more drinks per week in the last month and/or with a high school education were significantly more likely to recognize that the risk of harm increases with the amount you drink.



## 2.8 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 | 2009 | 1999                                          | 2002 | 2006 | 2009 |
| Very safe       | 27%                                            | 29%  | 17%  | 21%  | 11%                                           | 12%  | 6%   | 7%   |
| Somewhat safe   | 39%                                            | 33%  | 31%  | 31%  | 33%                                           | 36%  | 26%  | 28%  |
| Not very safe   | 15%                                            | 16%  | 21%  | 20%  | 29%                                           | 25%  | 28%  | 27%  |
| Not at all safe | 17%                                            | 22%  | 30%  | 28%  | 26%                                           | 28%  | 40%  | 38%  |

**Table 2.8a:** Perceived Safety of Occasional Alcohol Use During Pregnancy, Ontario (responses from male and female respondents)

There were no statistical differences between the data from 2006 and 2009.

In 2009, 28% of respondents felt it was not at all safe to drink 1-2 alcoholic drinks in the pregnancy, and 38% felt that 2 alcoholic drinks on 2-3 different occasions in pregnancy is not at all safe.

Those who did not drink alcohol in the last month were significantly more likely to say it is not safe to drink occasionally in pregnancy. People with an income over \$60,000 and/or who drank 4 or more drinks per week were significantly more likely to say it is safe.

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 | 2009 | 1999                              | 2002 | 2006 | 2009 |
| Very safe       | 1%                         | 1%   | 0%   | 1%   | 1%                                | 0%   | 0%   | 1%   |
| Somewhat safe   | 6%                         | 8%   | 5%   | 3%   | 4%                                | 3%   | 2%   | 2%   |
| Not very safe   | 26%                        | 22%  | 21%  | 21%  | 24%                               | 24%  | 18%  | 20%  |
| Not at all safe | 67%                        | 69%  | 74%  | 75%  | 70%                               | 72%  | 79%  | 78%  |

**Table 2.8b:** Perceived Safety of Regular Alcohol Use During Pregnancy, Ontario (responses from male and female respondents)

There were no statistical differences between the data from 2006 and 2009.

In 2009, 75% of respondents felt that 1 drink a day was not at all safe, and 78% felt that 3-4 drinks each weekend was not at all safe.

When comparing average responses for each of the 4 above levels of alcohol use, respondents indicated the following order, from less serious to more serious in pregnancy:

1. 1 or 2 alcoholic drinks during the pregnancy
2. 2 alcoholic drinks on 2-3 different occasions during the pregnancy
3. 1 alcoholic drink each day during the pregnancy
4. 3-4 alcoholic drinks each weekend during the pregnancy.

## 2.9 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, 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 2009, 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 |            |
|-------------------|--------------------------------------|------------|
|                   | 2006                                 | 2009       |
| Light Drinking    | 1.5                                  | 1.9        |
| Moderate Drinking | 2.7                                  | 3.0        |
| Heavy Drinking    | 5.9                                  | 5.9        |
| Binge Drinking    | 6.7                                  | <b>4.9</b> |

**Table 2.9:** Average Number of Drinks Per Evening for Different Levels of Drinking for a Woman, Ontario (responses from male and female respondents)

There was a significant decrease in the amount of alcohol that constituted binge drinking for women (6.7 drinks per occasion in 2006 and 4.9 drinks per occasion in 2009). However, this is still higher than the accepted definition of 4 drinks per occasion for women.

Respondents, on average, over-estimated the amount of alcohol that was consistent with 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 3.0 drinks per evening. Heavy drinking for women is more than 2 drinks per day, and respondents indicated an average of 5.9 drinks per evening. Since there is no formal definition of light drinking, it is not possible to assess the responses in this category.

In general, respondents who reported binge drinking in the last 6 months were more likely to have higher estimates for each level of alcohol use.

## 2.10 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 | 2009 |
|-----|------|------|------|------|
| Yes | 73%  | 66%  | 69%  | 65%  |
| No  | 26%  | 33%  | 30%  | 34%  |

**Table 2.10:** Recall Seeing Information about Effects of Alcohol Use in Pregnancy, Ontario (responses from male and female respondents)

There was no statistical difference between the data from 2006 and 2009.

In 2009, 65% of respondents remembered seeing information about the effects of alcohol use in pregnancy. This information was significantly more likely to be seen by women, those planning on having children in the next two years, those who were aware of FAS/FASD, with a university education, and/or those born in Canada.

## 2.11 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 | 2009 |
|---------------------------------------------------------|------|------|------|------|
| Doctor, doctors office, clinic, hospital, public health | 55%  | 40%  | 37%  | 43%  |
| TV, newspapers, other media                             | 9%   | 29%  | 34%  | 16%  |
| Internet                                                | 7%   | 7%   | 7%   | 23%  |
| Books, Magazines                                        | 11%  | 9%   | 3%   | 10%  |

**Table 2.11:** Top of Mind Mention of Best Source of Information about Alcohol Use in Pregnancy, Ontario (responses from male and female respondents)

There was a significant increase in respondents who mentioned the internet as a good source of information about FASD and the effects of alcohol during pregnancy (7% in 2006 and 23% in 2009), and a significant increase in those who mentioned books and magazines as good sources of information (3% in 2006 and 10% in 2009). There was a significant decrease in respondents who indicated that the media was a good source of information (34% in 2006 and 16% in 2009).

Information in clinical settings (43%) was the most common top of mind suggestion for the best source of information about FASD and the effects of alcohol use in pregnancy in 2009.

Those with children were significantly more likely to have seen the information at a health care providers' office, while those with no children, or older children were significantly more likely to have seen the information on TV. Those not born in Canada were significantly more likely to have seen the information on the internet.



## 2.12 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 Advertising |      |      | Warnings on Alcohol Product Labels |      |      | Warning Signs in Bars or Clubs |      |      | Warning Signs in Restaurants |      |      |
|---------------------|---------------------------------|------|------|------------------------------------|------|------|--------------------------------|------|------|------------------------------|------|------|
|                     | 1999                            | 2006 | 2009 | 1999                               | 2006 | 2009 | 1999                           | 2006 | 2009 | 1999                         | 2006 | 2009 |
| Strongly approve    | 71%                             | 72%  | 65%  | 67%                                | 65%  | 59%  | 51%                            | 59%  | 56%  | 37%                          | 45%  | 45%  |
| Somewhat approve    | 22%                             | 24%  | 27%  | 24%                                | 25%  | 29%  | 30%                            | 26%  | 27%  | 41%                          | 36%  | 33%  |
| Somewhat disapprove | 4%                              | 3%   | 5%   | 5%                                 | 5%   | 7%   | 11%                            | 8%   | 12%  | 13%                          | 13%  | 15%  |
| Strongly disapprove | 2%                              | 1%   | 3%   | 4%                                 | 4%   | 3%   | 9%                             | 6%   | 5%   | 9%                           | 6%   | 6%   |

**Table 2.12:** Opinions Regarding Warning Strategies about Alcohol Use in Pregnancy, Ontario (responses from male and female respondents)

Overall, results were comparable in 2006 and 2009 in terms of support for warnings about alcohol use in pregnancy. The only significant change was a decrease in the strong support for warnings on alcohol advertising (72% in 2006 and 65% in 2009).

The majority of respondents strongly approved or somewhat approved of all warning strategies. The highest support was for warnings on alcohol advertising and warning labels on alcohol products. There was less support for warning signs in bars, clubs and in restaurants. In 2009, 92% of respondents approved of warnings on alcohol advertising, 88% approved of warning signs on alcohol product labels, 83% approved of warning signs in bars or clubs and 78% approved of warning signs in restaurants.

In general, women, those who drank 0-3 drinks per week in the last month, those who did not report binge drinking in the last month, and those planning to have a pregnancy in the next 2 years were more likely to approve of warning strategies.

### 2.13 INTENDED BEHAVIOUR IF PREGNANT

Most women who are aware of the risks of prenatal alcohol exposure stop drinking before or 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 | 2009 |
|-------------------------|------|------|------|------|
| Not change alcohol use  | 4%   | 7%   | 2%   | 3%   |
| Cut back on alcohol use | 10%  | 13%  | 6%   | 9%   |
| Stop alcohol use        | 66%  | 61%  | 72%  | 53%  |
| Don't use alcohol       | 20%  | 19%  | 19%  | 34%  |

**Table 2.13:** Intended Choices about Alcohol Use if Pregnant, Ontario (responses from female respondents)

As compared to 2006, there was an increase in female respondents in 2009 who indicated that they did not use alcohol (19% in 2006 and 34% in 2009), and a decrease in respondents who indicated they would stop drinking if they became pregnant (72% in 2006 and 53% in 2009). When looking only at female alcohol users, in 2006 89% planned to stop drinking if pregnant, and in 2009 the proportion was 80%.

In 2009, about half of all respondents (53%) indicated that they would stop drinking alcohol if they became pregnant. Only a small proportion said they would reduce their alcohol use (9%) or would not change their alcohol use (3%).

Respondents who were significantly more likely to indicate they would stop drinking if pregnant included those who were aware of FAS/FASD, university educated, born in Canada, and/or reported binge drinking in the last 6 months.

### 2.14 INFLUENCE OF PARTNER

Many things impact on 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                          | 2006 | 2009 | 1999                      | 2006 | 2009 | 1999                                    | 2006 | 2009 | 1999                        | 2006 | 2009 |
| More likely to drink alcohol        | 3%                            | 3%   | 4%   | 3%                        | 9%   | 7%   | 8%                                      | 17%  | 15%  | 2%                          | 4%   | 3%   |
| Less likely to drink alcohol        | 18%                           | 16%  | 15%  | 27%                       | 27%  | 22%  | 40%                                     | 26%  | 27%  | 26%                         | 23%  | 25%  |
| No difference / don't drink alcohol | 80%                           | 81%  | 79%  | 69%                       | 64%  | 68%  | 52%                                     | 55%  | 55%  | 72%                         | 74%  | 68%  |

**Table 2.14:** Perceived Influence of Partners Behaviour on Alcohol Use in Pregnancy, Ontario (responses from female respondents)

There were no statistical differences concerning responses about the impact of the partners' behaviour on drinking of women if they were pregnant (comparison on 2006 and 2009 data).

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 was most likely to make women say they would increase their alcohol use in pregnancy (15% in 2009), and most likely to make women say they would decrease their alcohol use in pregnancy (27% in 2009).

In all response categories women reported that they would be less likely to drink in pregnancy (regardless of the actions of their partner), if they had seen advertising about alcohol use in pregnancy.

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.

## 2.15 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.

|                   | Would Encourage Pregnant Partner to Stop or Cut Back |      |      |      | Would Stop Drinking |      |      |      |
|-------------------|------------------------------------------------------|------|------|------|---------------------|------|------|------|
|                   | 1999                                                 | 2002 | 2006 | 2009 | 1999                | 2002 | 2006 | 2009 |
| Very likely       | 80%                                                  | 91%  | 89%  | 91%  | 31%                 | 45%  | 41%  | 48%  |
| Somewhat likely   | 5%                                                   | 2%   | 4%   | 3%   | 25%                 | 24%  | 20%  | 18%  |
| Not very likely   | 4%                                                   | 1%   | 2%   | 0%   | 24%                 | 18%  | 17%  | 17%  |
| Not at all likely | 5%                                                   | 5%   | 5%   | 3%   | 12%                 | 11%  | 20%  | 14%  |

**Table 2.15:** Intended Behaviour of Male Partner Regarding Alcohol Use in Pregnancy, Ontario (responses from male respondents)

There were no statistical differences between 2006 and 2009 responses from male respondents about their intended behaviour if their partner was pregnant.



In 2009, most male respondents (94%) indicated that they would be 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 (66%).

Men who were significantly less likely to say they would stop drinking if their partner was pregnant, drank 4 or more drinks per week over the last month and/or reported 3 or more episodes of binge drinking in the last 6 months.





## 2.16 ADVICE RECEIVED FROM A DOCTOR

Health care providers are consistently 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.

|                                         | 2006 | 2009       |
|-----------------------------------------|------|------------|
| No advice                               | 47%  | 43%        |
| No alcohol at all, don't drink          | 31%  | <b>39%</b> |
| It can harm the baby, not good for baby | 5%   | 4%         |
| Reduce consumption, moderation          | 10%  | <b>3%</b>  |
| Glass of wine is OK                     | 3%   | 5%         |
| Gave me pamphlets                       | 3%   | 4%         |

**Table 2.16:** Recall of Advice Received from a Doctor about Alcohol Use in Pregnancy, Ontario (responses from female respondents)

Compared to 2006, there was a significant increase in respondents who reported that they were told by their physician not to drink if they were pregnant (31% in 2006 and 39% in 2009). There was also a significant decrease in respondents who reported that their doctor told them to reduce their alcohol consumption or to drink in moderation if pregnant (10% in 2006 and 3% in 2009). The changes in this data indicate an increase in appropriate advice, and a decrease in inappropriate advice from physicians regarding alcohol use in pregnancy.

In 2009, 43% of all respondents, and 32% of women who were planning a pregnancy in the next 2 years, did not recall receiving any advice from their doctor about alcohol and pregnancy. Only a small proportion of respondents (4%) recalled receiving print materials.

The female respondents who were significantly less likely to report receiving information about alcohol use in pregnancy included those who did not have children, those that did not plan to have children in the next 2 years and/or individuals aged 18-34.



### 3. Implications to Ontario FASD Campaigns



The 2009 survey clearly indicates the status of awareness of the risks of alcohol use in pregnancy. Overall, the level of awareness is high, and consistent with previous years, with some areas of concern. Respondents who indicated that they had seen advertising about alcohol use in pregnancy had higher levels of awareness in most areas.

This section refers to general trends seen in the 2009 data for Ontario. It shares

implications for future Ontario FASD awareness campaigns, focussing on populations of interest, key messages and strategies. However, 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 this report in conjunction with their knowledge of factors in play in their own community.

#### 3.1 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. significantly 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 and/or had lower levels of alcohol use. 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.

##### **ALL WOMEN**

Information about alcohol use in pregnancy should be readily available to all women who could become pregnant. While awareness is high in many areas, this survey shows decreases in awareness in some areas, and reinforces the need for continued access to key information about alcohol use in pregnancy and FASD.



## **WOMEN WITH HIGHER LEVELS OF ALCOHOL USE**

This survey shows that individuals with higher levels of alcohol use had lower levels of awareness. Awareness campaigns designed for pregnant women with higher levels of alcohol use should acknowledge that some people find it difficult 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**

Younger women 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). 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 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. Some 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 awareness about alcohol use in pregnancy and FASD.

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 recommend that partners ask pregnant woman how they would like to be supported and what would be helpful. 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 in high risk situations.

### 3.2 CHOOSING KEY MESSAGES

The survey results support the need to continue to reinforce key messages about alcohol use in pregnancy. 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 during pregnancy
- Prenatal alcohol exposure can lead to life-long disabilities
- Recognition of the terms FAS and FASD
- 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. It is recommended that Ontario priorities for awareness strategies about FASD include:

- It is safest to stop drinking prior to conception
- No amount of alcohol is safe in pregnancy
- There is no safe time to drink alcohol in pregnancy
- No safe type of alcohol is safe in pregnancy

All prevention strategies should include links to additional supports and services related to alcohol use in pregnancy and FASD.

### 3.3 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. 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.



Most respondents in this survey clearly indicated a preference for awareness strategies that include information in clinical settings, the internet and through television and other media. Unfortunately, some of these strategies are more expensive. 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, on the internet and in the media, in addition to investigating alternate strategies to reach the population of interest.

The support for warning strategies about alcohol use in pregnancy was high across the range of populations. 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. 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.





## 4. Recommendations for Ontario

The results of this survey show that there is a need to increase and maintain 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 (see Section 3).

The results also have implications for different 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**

The survey focuses mainly on general public awareness and strategies that influence awareness. Service providers and interest groups who are striving to increase awareness at the local or provincial level are encouraged to learn from this report, investing 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 child-bearing age, even if they were planning a pregnancy in the next 2 years. 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 provide a range of patient information about alcohol and pregnancy, including posters and brochures. Health care providers can access training on how to assess and address alcohol use in pregnancy (MDCme.ca).



## **EDUCATORS**

In order to make a long-term investment in addressing FASD, policy makers are encouraged to consider an age appropriate provincial curriculum that provides information about prenatal alcohol exposure and FASD. It 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. This data indicates that some populations have lower levels of awareness, for example, women with higher levels of alcohol use. Important messages include the risks of small and moderate amounts of alcohol, and the benefits of stopping drinking prior to conception. Important strategies include clinical settings, the internet 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 and 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 training 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. More research is needed about the role of the partner and how they can support pregnant women. Groups implementing awareness strategies are encouraged to put in place effective evaluation protocols to monitor changes in awareness and behaviour, in order to 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 developed innovative, effective, and stellar programs and services to address alcohol use in pregnancy and 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 warning strategies, indicate support for Ontario to build on its successes and to continue to expand its commitment to FASD.





## 5. Summary of Ontario Results

The 2009 data is consistent with data from 2006 in most areas, and overall indicates a high level of awareness concerning alcohol use in pregnancy and FASD, as well as some areas of concern.

### HIGH LEVELS OF AWARENESS IN 2009

- There are high levels of awareness in the following topic areas:
  - Stopping or cutting back alcohol use in pregnancy is important (98%)
  - Prenatal alcohol exposure leads to life-long disabilities (94%)
  - No safe kinds of alcohol in pregnancy (81%)
  - No safe time to drink in pregnancy (79%)
  - Direct relation between level of alcohol use and to the risk to the fetus (97%)
- There was an increase in recognition of the cognitive effects of prenatal alcohol exposure (41% in 2006 and 51% in 2008).
- Most women, if pregnant, plan to stop drinking alcohol (80% of women who drink).
- The majority of men would encourage their pregnant partner to stop drinking (94%), but would be less likely to stop drinking themselves (66%).

### OF CONCERN IN 2009

While most results were encouraging, other results indicated areas of concern:

- Fewer respondents mentioned cutting down/stopping alcohol use as one of the most important things that pregnant women can do (52% in 2006, 45% in 2009).
- There was an increase in the proportion of respondents who thought that the effects of FASD disappeared as the child grows older (4% in 2006, 9% in 2009).
- There was less recognition of the terms FAS/FASD (88% in 2006 and 83% in 2009).
- Some respondents (17%) felt there were safe types of alcohol in pregnancy, with wine (10%) and beer (5%) most commonly mentioned as safe in pregnancy.
- There was confusion about when to stop drinking (32% felt women should quit drinking in early pregnancy, as opposed to before conception).



- Some respondents (15%) felt there were safe times to drink in pregnancy.
- When asked how many drinks were considered safe in pregnancy, only 54% of respondents indicated that no alcohol was safe in pregnancy. Eight percent of respondents felt that 5 or more drinks a week were safe in pregnancy.
- There was continued confusion about the potential impact of small and moderate amounts of alcohol use in pregnancy. In 2009, 24% of respondents believed that moderate alcohol use in pregnancy can usually be considered safe.
- In 2009, 80% of women who drank alcohol indicated that they would stop drinking alcohol if they became pregnant. This is a decrease from 2006, when 89% said they would stop drinking if pregnant.
- Many women reported that they received no information (43%), or misinformation (8%) from their doctor about alcohol use and pregnancy.

The results showed strong support for a range of strategies to warn people about the risks of alcohol use in pregnancy. Those that had seen or heard information about alcohol use in pregnancy or FASD had higher levels of awareness. Health care provider offices were considered to be the best sources of information on this topic.





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The Best Start Resource Centre supports service providers across Ontario through consultation, training and resources, in the areas of preconception, prenatal and child health. The Best Start Resource Centre is a key program of Health Nexus.