

Alcohol and Pregnancy: Warning Signage Information Kit for Local Governments in British Columbia

SEPTEMBER 2014



BRITISH
COLUMBIA



British Columbia
Centre of Excellence
for Women's Health



ACKNOWLEDGEMENTS:

Prepared for the Ministry of Health by Gerald Thomas (Ph.D), Okanagan Research; and Nancy Poole, BC Centre of Excellence for Women's Health.

*Copyright © 2014, Province of British Columbia.
All rights reserved.*

Table of Contents

INTRODUCTION	1
CREATING LOCAL BYLAWS UNDER THE <i>COMMUNITY CHARTER ACT</i>: AUTHORITY AND PROCESS	2
<i>PROCEDURE</i>	2
<i>CURRENT FASD WARNING SIGN BYLAWS IN B.C.</i>	3
FACTORS ASSOCIATED WITH THE EFFECTIVENESS OF FASD PREVENTION SIGNAGE	4
<i>VISIBILITY</i>	4
<i>COMPREHENSION</i>	4
<i>RECALL</i>	4
<i>POSITIVITY</i>	4
FASD PREVENTION MESSAGING CONTENT	5
CHECKLIST AND GUIDELINES FOR FASD WARNING AND PREVENTION SIGN DEVELOPMENT	6
SITUATING MUNICIPAL BYLAWS IN THE CONTEXT OF B.C.'S STRATEGIC PLAN ON FASD AND NATIONAL FASD PREVENTION FRAMEWORKS AND ACTIONS	7
SUMMARY	9
REFERENCES	10
APPENDIX I: MUNICIPAL JURISDICTIONS IN B.C. WITH BYLAWS REQUIRING POINT-OF-SALE FASD WARNING OR PREVENTION SIGNS	13
APPENDIX II: BRITISH COLUMBIA COMMUNITY CHARTER PUBLIC HEALTH BYLAWS REGULATIONS	14
<i>PUBLIC HEALTH BYLAWS REGULATION</i>	14
APPENDIX III: ALCOHOL AND PREGNANCY MESSAGING DIRECTED TO WOMEN AT VARIOUS LEVELS OF RISK	15
<i>MESSAGES FOR WOMEN OF CHILDBEARING AGE</i>	15
<i>MESSAGES FOR PREGNANT WOMEN</i>	16
<i>WOMEN WHO MAY HAVE CONSUMED ALCOHOL PRIOR TO PREGNANCY AWARENESS</i>	16



Introduction

Fetal alcohol spectrum disorder (FASD) is the term used to describe a continuum of birth defects and disabilities associated with prenatal alcohol exposure. The disabilities associated with FASD can include physical, mental and behavioural difficulties, and learning disabilities. The Public Health Agency of Canada now considers FASD to be the leading cause of preventable developmental disability among Canadian children, affecting an estimated one per cent of the population. Currently, there are approximately 350,000 Canadians living with FASD-related conditions, with an estimated 3500 new cases each year. The public health burden of FASD is significant, with the average lifetime cost of care for each person with FASD estimated at \$1.5 million (Public Health Agency of Canada, 2012). FASD is also associated with significant social and emotional costs to children and families, which are difficult to quantify and therefore not included in most estimates of social costs.

Alcohol warning signs are a universal prevention approach, which can be effective for transferring information about alcohol-related risks to specific populations (Kalsher, Clarke & Wolgalter, 1993). A number of jurisdictions around the world use point-of-sale FASD warning and prevention signs to raise public awareness about the risks of drinking in pregnancy. For example, at least 19 US states currently require at least some types of alcohol retail outlets to post signs warning of the dangers of prenatal drinking (SAMHSA, 2013). In the province of Ontario, Sandy's Law requires most establishments selling alcohol to post FASD warning signs, with the Alcohol and Gaming Commission of Ontario providing [standardized warning signs](#) for download from their website.¹

¹ Although there is no provincial law requiring their posting, the BC Liquor Distribution Branch also provides [FASD and other alcohol-related messaging materials](#) free of charge for download or by order from their website.

Local governments in British Columbia have authority to enact bylaws to protect health and serve other matters in the public interest under the *Community Charter Act* (2003). Over the last decade, several B.C. municipalities have passed bylaws under the *Community Charter Act* requiring alcohol retailers to post point-of-sale FASD warning or prevention signs, including [Nanaimo \(2013\)](#), [Maple Ridge \(2012\)](#), [Kelowna \(2009\)](#), [Kamloops \(2008\)](#) and [Prince George \(2003\)](#).

The purpose of this information kit is to provide city councils in British Columbia with the rationale for point-of-purchase FASD warning and prevention sign bylaws, as well as details on the political requirements for enacting such bylaws under the public health component of the Community Charter Act.

According to a review of lessons learned from Canadian FASD messaging campaigns (Health Canada 2006), universal prevention messages related to prenatal drinking have several potential uses. These include:

1. Influencing knowledge and levels of awareness, changing attitudes and beliefs, and (with sufficient exposure) reducing risk behaviours;
2. Encouraging information seeking;
3. Conveying information about how to make positive change;
4. Indicating where to receive support and services; and
5. Encouraging people who already know the facts.

This resource includes a discussion of the form and types of messages that can be provided via FASD prevention signs, including examples of recommended messages designed to help prevent/reduce drinking in pregnancy and promote health among women of childbearing ages.

Creating Local Bylaws Under the *Community Charter Act*: Authority and Process

British Columbia enacted the *Community Charter Act* in 2003 to provide municipal governments with the authority and flexibility to respond to the needs and changing circumstances of their communities across multiple domains of public interest, including health, environment and others. The *Community Charter Act* gives municipal governments the authority to pass bylaws in order to protect, promote or preserve the health of individuals, and to serve the maintenance of sanitary conditions in the municipality. Presently, at least ten B.C. municipalities have used the authority of the act to pass bylaws requiring liquor stores and establishments selling alcohol within their jurisdictions to post FASD warning signs under their mandate to protect public health. Appendix I lists these municipalities and their corresponding bylaw numbers, dates of passage and web address of the bylaw (if available).

PROCEDURE

Although not complicated, passing bylaws to protect public health under the *Community Charter Act* does have certain legal limitations and requirements (see Appendix II for a full-text version of the regulation). In terms of limitations, public health bylaws enacted under the act cannot limit, or potentially limit, any individual's access to health services, and may not affect the personnel, financial or other resources of a regional health board, the Nisga'a Nation or the Provincial Health Services Authority unless it is approved by the Minister of Health. In terms of procedural requirements, municipal governments are required to consult with their regional health board and/or the local medical health officer in the development of the bylaw and, once the bylaw is passed, it must be formally deposited with the Minister of Health before it comes into effect. Beyond these minor legal limitations and requirements, municipal governments are authorized to use the flexibility and authority conveyed to them by the *Community*

Charter Act to pass bylaws to protect, promote or preserve public health.

In designing and implementing FASD warning and prevention sign bylaws, councils may want to consider including provisions to evaluate the effectiveness of the signs for raising awareness of the risks of prenatal drinking, cultivating broad community support for all women to have healthy pregnancies, and reducing stigma for their community members affected by FASD-related conditions. Evaluations could involve verifying compliance rates with the signage bylaw, and measuring changes in levels of awareness and attitudes about prenatal drinking, FASD and social stigma. This can be accomplished through enforcement compliance checks, surveys or focus groups. However conducted, evaluations are helpful in determining the effectiveness of the warning and prevention signs, as well as identifying what does and does not work in the respective community. Finally, pre-implementation surveys can also be used to collect information on existing beliefs and this information is crucial for tailoring warning and prevention signs to the particular knowledge and attitudes of the local population.

Once the bylaw has been passed by the local government, it must be deposited with the minister. Send the complete bylaw and council endorsement to:

Executive Director, Health Protection Branch
Ministry of Health
1515 Blanshard St. 4th Floor
Victoria, BC V8W 3C8
Phone: 250 952-1469
Fax: 250 952-1713
Email: HealthProtection@gov.bc.ca



CURRENT FASD WARNING SIGN BYLAWS IN B.C.

A review of FASD warning sign bylaws in Nanaimo, Maple Ridge, Kelowna, Kamloops and Prince George reveals some commonalities and differences in their approaches (see Appendix I for online links). All five of these bylaws require proprietors who sell alcohol for both off-premise consumption (e.g., liquor stores) and on-premise consumption (e.g., restaurants, bars, and clubs) to post FASD warning signs. In all cases, off-premise stores are required to post signs near the entrance or customer checkout, while on-premise establishments are required to post near the entrance/checkout and in all bathrooms.² All of these bylaws require only text on the warning signs, with Maple Ridge providing an optional colour graphic for proprietors who choose to use them in their establishments.

Four of the five bylaws focus on requiring liquor stores and licenced premises to post signs conveying information about the risks of drinking in pregnancy. The one exception is Prince George, where the required language reads “Healthy Communities Support Women and Their Partners to Avoid Alcohol During Pregnancy.” This message is unique because it is designed to build community support to assist all women of childbearing ages to have healthy pregnancies. Four out of the five bylaws specify the exact wording of the warning, the size of the signs and the sizing of the text, with Kamloops being the exception. Four out of five bylaws specify that contraventions of the bylaw are met with fines ranging from \$50 to \$500 (no fines are specified in the Maple Ridge bylaw).

² The Maple Ridge bylaw is unique because it also requires U-vin and U-brew establishments to post signs in plain view near the entrance and because it requires all menus in licenced establishments include a reduced version of the warning.

Factors Associated with the Effectiveness of FASD Prevention Signage

The effectiveness of warning labels and other forms of universal prevention for raising awareness of issues is based on several factors, including their ability to be noticed, understood and accurately recalled by the audiences for whom they are intended. Research indicates that effective FASD warning signs contain a signal word or phrase to attract attention, clear identification of the risk and explanation of the consequences if exposed to the hazard, and directives for avoiding the hazard.

VISIBILITY

- » Attention is enhanced when warning messages are larger in size, in easily readable text, in colour, contain graphics or images, and when they rotate to introduce variation in content.
- » Physical layout and placement of the message is also important for noticeability. Messages containing vertical text, placed too low or too high, hidden from view, or otherwise not placed for convenient viewing are less likely to attract attention.
- » Placing FASD signage in close proximity to the hazard (e.g., in liquor stores, bars and restaurants where alcohol is sold) make it more likely that those who should see the message are exposed to it on at least a semi-regular basis.

COMPREHENSION

- » Understanding improves when the message contains simple, clear and direct information. Indistinct or ambiguous messages (e.g., drink responsibly) do not convey meaningful information about alcohol-related risks or how to avoid them, and are therefore less likely to contribute to changes in awareness, attitudes and behaviour.
- » Readability and comprehension are enhanced when text is in both upper and lower case letters.
- » Literacy, language and cultural barriers should be taken into account in message design.



RECALL

- » Accurate recall relates directly to the experiences and perspective of the observer, with greater recall associated with messages of personal relevance. Research has shown women of childbearing ages were especially likely to recall warnings about birth defects.
- » Recall also appears to be affected by the number and ordering of messages. Consumers may have limited ability to remember multiple messages, and earlier messages are more memorable than later ones.

POSITIVITY

- » Warning signs with messaging designed to elicit guilt or shame are not generally effective for helping risky drinkers shift toward healthier choices involving alcohol (Agrawal & Duhachek, 2010; Cismaru, Deshpande, Thurmeier, Lavack & Agrey, 2010).

FASD Prevention Messaging Content

Messages targeted at a general audience can provide basic information such as this advice from *Canada's Low-Risk Alcohol Drinking Guidelines*: "Pregnant? Zero is the safest. If you are pregnant or planning to become pregnant the safest choice is to drink no alcohol at all."

They can also include information about where to learn more about FASD or where to find resources in the community to support individuals who may be concerned about their alcohol consumption.

Messages for the general population are also best suited for cultivating broad social support to assist all women to have healthy pregnancies, and to reduce social stigma for those who are affected by FASD. A good example is the Prince George FASD warning signs: "Healthy Communities Support Women and Their Partners to Avoid Alcohol During Pregnancy."

EXAMPLE OF A RECOMMENDED MESSAGE:

This poster and pamphlet available from B.C. liquor stores in September 2013 (FASD Awareness Month) provides a supportive message to a general audience. It suggests FASD prevention is a concern for the entire community and requires involvement from multiple stakeholders. It also focuses on benefits of stopping alcohol use for both mothers and babies.



Messages can emphasize there is no known level of safe consumption.

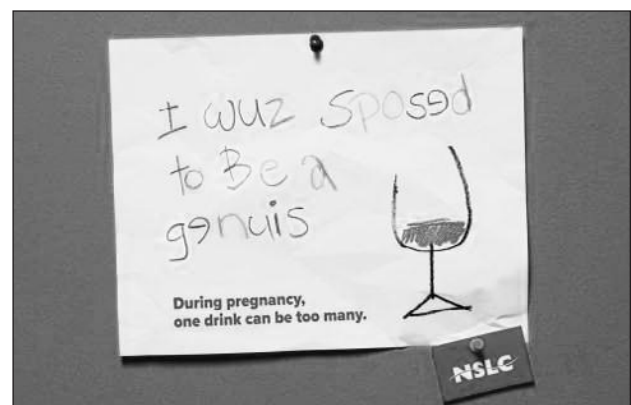


Messages to be avoided include: "Take an active stand against drinking while pregnant," and "Provide pregnant women with information on the risks of FASD." These types of messages contribute to an environment of pressure and scrutiny, which is not helpful for women who are having a difficult time not drinking. Further, these messages are not necessary for women who do not have alcohol problems and are able to stop drinking once they learn they are pregnant.

In the event that your community will undertake broader FASD prevention efforts, beyond warning signage, further recommendations regarding the content of messages directed to pregnant women are included in Appendix III.

EXAMPLE OF A MESSAGE TO AVOID:

This campaign from the Nova Scotia Liquor Corporation was criticized as creating negative and inappropriate perceptions about the nature of FASD and the abilities of individuals with FASD. Further research suggests one drink over an entire pregnancy is unlikely to result in FASD.



Checklist and Guidelines for FASD Warning and Prevention Sign Development

1. Does the content of the message align with current public health guidelines and the latest scientific evidence (e.g., *Canada's Low-Risk Alcohol Drinking Guidelines* provide advice based on evidence)?
2. Is the message easily comprehensible (e.g., printed in large, easily readable text)? Has literacy or cultural barriers been considered?
3. If one of the goals of the message is to encourage information seeking, does the message include contact information (e.g., phone number, website) of resources in the community?
4. Does the message contain simple, clear and direct information about the risks of alcohol or how to avoid them? Avoid indistinct or ambiguous messages such as "drink responsibly" or "think before you drink."
5. If the message is designed to elicit strong emotions (e.g., through fear-based language or graphic image), have possible unintended consequences been considered and minimized (e.g., avoidance of seeking help by women with alcohol problems, women who consumed alcohol prior to pregnancy awareness considering abortion) and minimized?
6. Is the message designed to attract attention (e.g., printed in colour, contains graphics or images)?
7. Will variation in content be introduced over time to better increase recall and allow for tailoring messages to various target groups and message purpose (e.g., raising awareness of risk, cultivating broad social support)?
8. Has the location and placement of the message been considered during development? Will the message be placed prominently in places frequented by the target audience to maximize noticeability?
9. Has the message been designed with a particular target audience in mind (e.g., young women, partners of women of child-bearing age)?
10. Have enforcement, compliance and evaluation of the warning messages been incorporated into the strategy?

Situating Municipal Bylaws in the Context of B.C.'s Strategic Plan on FASD and National FASD Prevention Frameworks and Actions

Fetal Alcohol Spectrum Disorder: Building on Strengths — A Provincial Plan for B.C. 2008–2018 states that a comprehensive approach for preventing FASD should include:

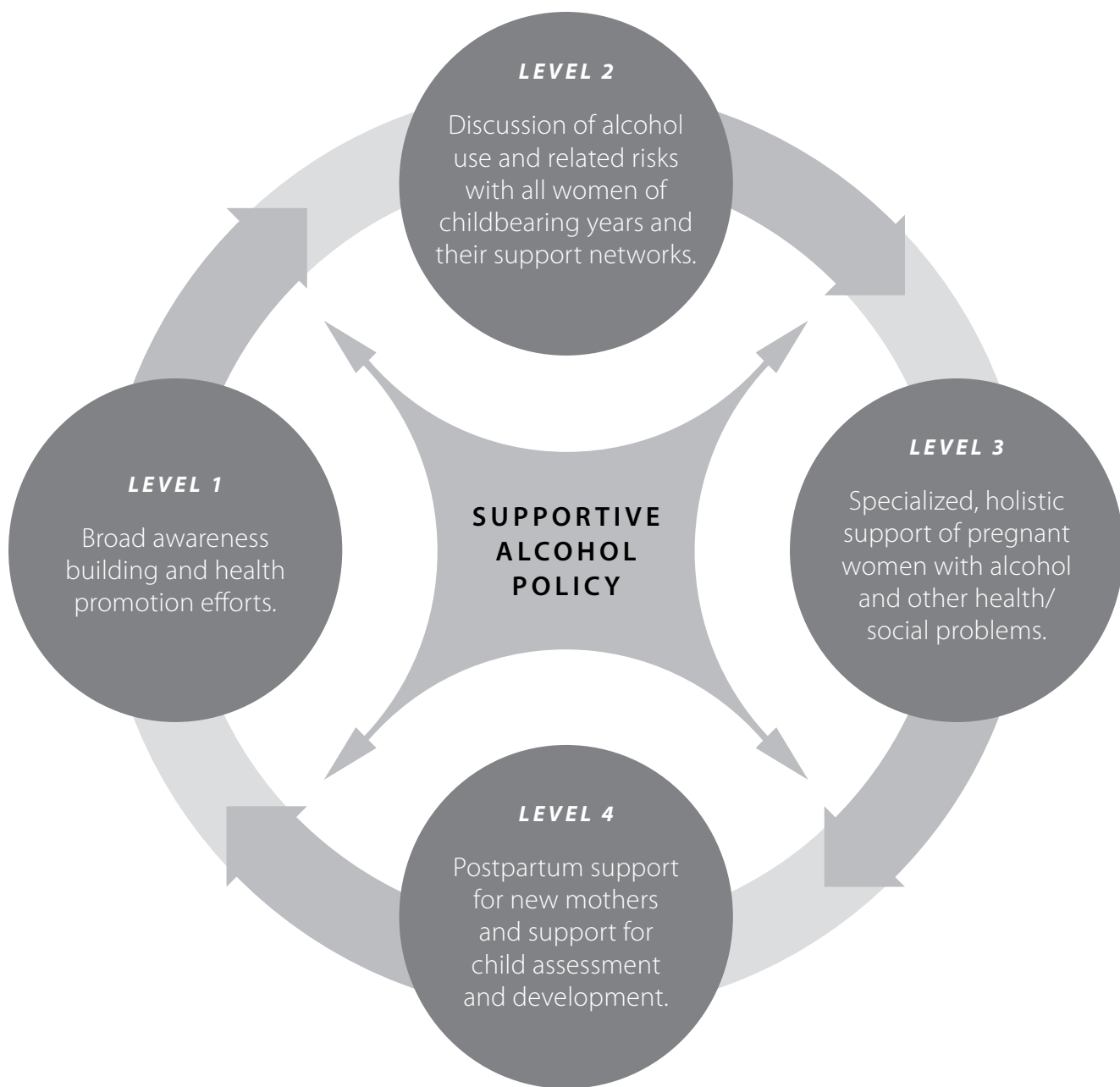
- » Broad public awareness campaigns and health promotion efforts;
- » Discussion of pregnancy and alcohol use with all women in their childbearing years and their support networks;
- » Specialized holistic support of pregnant women with alcohol problems/addiction and other health/social problems; and
- » Post-partum support and support for new mothers directed at improving their health and social networks as well as the health of their present and future children.

Under the first goal of increasing public awareness about FASD, B.C.'s ten-year plan suggests communities explore innovative awareness raising strategies to: (1) educate the public about the risks of prenatal drinking, (2) build community support to assist all women of child bearing ages to have healthy pregnancies, and (3) reduce the challenges and stigma experienced by people living with FASD-related conditions. While it is more common for point-of-purchase warning signs to serve the first goal of raising awareness about the risks of prenatal drinking, all three of these important awareness raising goals can be furthered through municipal bylaws requiring alcohol retailers to post FASD warning and prevention signs.

It is quite common for women in Canada to consume alcohol in the time between conception and becoming aware that they are pregnant, given the high prevalence of frequent drinking among women

in their childbearing years, and the fact that at least half of all pregnancies are unplanned. Further, a key predictor of continuing to drink in pregnancy is the pattern of drinking engaged in prior to the pregnancy. Women who are regular heavy drinkers are more likely to have problems stopping drinking after becoming aware they are pregnant (Skagerström, Chang & Nilsen, 2011). These circumstances suggest efforts to prevent drinking in pregnancy through warning signage could be enhanced by broader messaging about low-risk drinking designed to reduce the prevalence of risky drinking among women overall.





The Public Health Agency of Canada and the CanFASD Research Network recommend municipal policy and awareness building be linked to other levels of FASD prevention, including brief intervention (Level 2), specialized holistic support (Level 3) and postpartum support (Level 4).
 (See graphic above.)

See the following documents for details on the multi-level prevention approach recommended by the Public Health Agency of Canada.

- » *Fetal Alcohol Spectrum Disorder (FASD) Prevention: Canadian Perspectives*. Public Health Agency of Canada, 2008. <http://www.phac-aspc.gc.ca/hp-ps/dca-dea/prog-ini/fasd-etcaf/publications/cp-pc/pdf/cp-pc-eng.pdf>
- » *Prevention of Fetal Alcohol Spectrum Disorder: A multi-level model*. CanFASD Research Network, 2013 www.canfasd.ca

Summary

Municipal governments can pass bylaws in order to protect, promote or preserve the health of individuals. Signage on FASD prevention created through bylaws can serve to:

- » Increase awareness of the risk of prenatal drinking;
- » Build community support to assist all women of child bearing ages to have healthy pregnancies; and
- » Reduce the challenges and stigma experienced by people living with FASD-related conditions.

The key messages to be conveyed, to support change and reduce stigma, as recommended in guidelines and by health practitioners are:

1. It is safest not to drink alcohol during pregnancy (or from the *Canada Low-Risk Alcohol Drinking Guidelines*: “If you are pregnant or planning to become pregnant, or about to breastfeed, the safest choice is to drink no alcohol at all”).
2. If you are already pregnant, it is never too late to reduce or stop drinking.
3. There is no safe time, no known safe amount, and no safe kind.

In addition, a message about community support may be relevant, such as:

4. Healthy communities support women and their partners to avoid alcohol during pregnancy.

Research on universal prevention strategies, such as alcohol warning signs and labels, suggests message designs and placement, which maximize noticeability, comprehension and recall, are more likely to lead to changes in consumer beliefs and, potentially, behaviour.

FASD warning signs and other similar universal prevention efforts (e.g., alcohol warning labels) are just one aspect of a comprehensive approach to the prevention of FASD, which includes strategies designed to educate, support and empower pregnant women to make healthy choices regarding alcohol.



References

- Agostinelli, G. & Grube, J. (2002) Alcohol counter-advertising and the media; A review of recent research. *Alcohol research & health*, 26(1):15-21.
- Agrawal, N. & Duhachek, A. (2010). Emotional compatibility and the effectiveness of anti-drinking messages: A defensive processing perspective on shame and guilt. *Journal of marketing research*, 47(2):263-273.
- Anderson, P., Chisholm, D. & Fuhr, D. (2009). Effectiveness and cost-effectiveness of policies and programmes to reduce the harm caused by alcohol. *Lancet*, 372(9682):2234-46.
- Argo, J. & Main, K. (2004). Meta-analyses of the effectiveness of warning labels. *Journal of public policy & marketing*. 23(2):193-208.
- Babor, T., Caetano, R., Casswell, S., Edwards, G., Giesbrecht, N., Graham, K., et al. (2010). *Alcohol: No ordinary commodity, Research and public policy*, (2nd edition). New York: Oxford University Press.
- Barrett, M., Wong, F. & McKay, D. (1993). Self-reported alcohol use among women of childbearing age and their knowledge of alcohol warning labels and signs. *Archives of family medicine*, 2(12):1260-1264.
- BC Ministry of Children and Family Development (2008). Fetal Alcohol Spectrum Disorder: Building on strengths. A provincial plan for British Columbia, 2008-2018. Accessed Oct. 11, 2013 from: www.mcf.gov.bc.ca/fasd/pdf/FASD_TenYearPlan_WEB.pdf
- Capara, D., Soldin, O. & Koren, G. (2004). To label or not to label: The pros and cons of alcohol warning labels in pregnancy. *Journal of FAS international*, 2(e:9):1-3.
- Carr-Gregg, M. & Lennox, N. (1994). According to the Surgeon General... Is there a case for warnings on alcohol advertisements in Australia? *Health promotion journal of Australia*, 4(1):22-25.
- Cismaru, M., Deshpande, S., Thurmeier, R., Lavack, A. & Agrey, N. (2010). Preventing fetal alcohol spectrum disorders: The role of protection motivation theory. *Health marketing quarterly*, 27(1):66-85.
- Creyer E., Kozup J. & Burton S. (2002). An experimental assessment of the effects of two alcoholic beverage health warnings across countries and binge-drinking status, *Journal of consumer affairs*, 36(2):71-202.
- Eurocare (2011). What's not on the bottle. Brief overview of the state of play in alcohol labelling. Downloaded Oct.11, 2013 from: www.eurocare.org/library/updates/what_s_not_on_the_bottle_brief_overview_of_state_of_play_in_alcohol_labelling
- Fenaughty, A. & MacKinnon, D. (1993). Immediate effects of the Arizona alcohol warning poster. *Journal of public policy & marketing*, 12(1), 69-77.
- France, K., Donovan, R., Henley, N., Bower, C., Elliott, E. et al. (2013). Promoting abstinence from alcohol during pregnancy: Implications from formative research. *Substance Use & Misuse*, Early Online:1-13. DOI: 10.3109/10826084.2013.800118.
- French, K., Frasier, T., & Frasier, C. (1996). Knowing when to say when and why: Media messages aimed at preventing women's alcohol consumption. *Evaluating women's health messages: A resource book*. (pp. 190-199). Thousand Oaks, CA US: Sage Publications.
- Graves, K. (1994). Relationship between cumulative exposure to health messages and awareness and behavior-related drinking during pregnancy. *American journal of health promotion*, 9(2): 115-124.
- Giesbrecht, N., Ialomiteanu, A. & Anglin, L. (2005). Drinking patterns and perspectives on alcohol policy: Results from two Ontario surveys. *Alcohol & alcoholism*, 40 (2):132-39.
- Greenfield, T., Graves, K., & Kaskutas, L. (1999). Long-term effects of alcohol warning labels: Findings from a comparison of the United States and Ontario, Canada. *Psychology & marketing*, 16(3):261-282.
- Greenfield, T., Ye, Y. & Giesbrecht, N. (2007). Views of alcohol control policies in the 2000 National Alcohol Survey: What news for alcohol policy development in the US and its States? *Journal of substance use*, 12(6):429-445.

- Guillemont, J., & Léon, C. (2008). Alcool et grossesse: connaissances du grand public en 2007 et évolutions en trois ans. *Évolutions*, 15(June 2008):1-6.
- Hankin, J. (2002). Fetal alcohol syndrome prevention research. *Alcohol research & health: The journal of the National Institute on Alcohol Abuse & Alcoholism*, 26(1):58-65.
- Hankin, J., Firestone, I., Sloan, J., Ager, J., Goodman, A., Sokol, R., & Martier, S. (1993). The impact of the alcohol warning label on drinking during pregnancy. *Journal of public policy & marketing*, 12(1):10-18.
- Hankin, J., Sloan, J., & Sokol, R. (1998). The modest impact of the alcohol beverage warning label on drinking during pregnancy among a sample of African-American women. *Journal of public policy & marketing*, 17(1):61-69.
- Health Canada (2006). *What we have learned: Key Canadian FASD awareness campaigns*. Health Canada: Ottawa, ON. Accessed Oct. 13, 2013 from: www.phac-aspc.gc.ca/publicat/fasd-ac-etcaf-cs/pdf/fasd-ac-etcaf-cs_e.pdf
- Jones, S. & Gregory, P. (2009). The impact of more visible standard drink labelling on youth alcohol consumption: Helping young people drink (ir) responsibly? *Drug and alcohol review*, 28(3):230-234.
- Kalsher, M., Clarke, S. & Wogalter, M. (1993). Communication of alcohol facts and hazards by a warning poster. *Journal of public policy & marketing*, 12(1):78-90
- Kaskutas, L. (1995). Interpretations of risk: The use of scientific information in the development of the alcohol warning label policy. *International journal of the addictions*, 30(12):1519-1548.
- Kaskutas, L. & Graves, K. (1994). Relationship between cumulative exposure to health messages and awareness and behavior-related drinking during pregnancy. *American journal of health promotion*, 9(2):115-124.
- Kaskutas, L. & Greenfield T. (1997). Behaviour change: The role of health consciousness in predicting attention to health warning messages. *American journal of health promotion*, 11(3):183-93.
- Kaskutas, L., Greenfield, T., Lee, M. & Cote, J. (1998). Reach and effects of health messages on drinking during pregnancy. *Journal of health education*, 29(1):11-20.
- Kerr, W., Greenfield, T., Tujague, J. & Brown, S. (2005). A drink is a drink? Variations in the alcohol content of beer, wine and spirits drinks in a U.S. methodological sample. *Alcohol: Clinical & experimental research*, 29(11):2015-21.
- Kerr, W. & Stockwell, T. (2011). Understanding standard drinks and drinking guidelines. *Drug & alcohol review*, 31(2):200-205.
- Laugherty, K., Young, S., Vaubel, K. & Brelsford, J. (1993). The noticeability of warnings on alcoholic beverage containers. *Journal of public policy & marketing*, 12(1):11-20.
- Loxley, W., Toumbourou, J., Stockwell, T., et al. (2004). *The prevention of substance use, risk and harm in Australia: A review of the evidence*. Canberra: Australian Government Department of Health and Ageing.
- MacKinnon, D., Nohre, L., Cheong, J., Stacy, A., & Pentz, M. (2001). Longitudinal relationship between the alcohol warning label and alcohol consumption. *Journal of studies on alcohol*, 62(2):221-227.
- Mazis, M., Morris, L., & Swasy, J. (1991). An evaluation of the alcohol warning label: Initial survey results. *Journal of public policy & marketing*, 10(1):229-241.
- Parackal, S., Parackal, M., Harraway, J. & Ferguson, E. (2009). Opinions of non-pregnant New Zealand women aged 16-40 years about the safety of alcohol consumption during pregnancy. *Drug & alcohol review*, 28(2):135-141.
- Prugh, T. (1986). Point-of-purchase health warning notices. *Alcohol health & research world*, 10(4):36-38.
- Public Health Agency of Canada (2012). Fetal alcohol spectrum disorder: A framework for action. Accessed Sept. 6, 2013 from: www.phac-aspc.gc.ca/publicat/fasd-fw-etcaf-ca/pdf/fasd-fw_e.pdf
- Room, R., Graves, K., Giesbrecht, N. & Greenfield, T. (1995) Trends in public opinion about alcohol policy initiatives in Ontario and the US 1989-91. *Drug & alcohol review*, 14(1):35-47.

Scholes-Balog, K., Heerde, J. & Hemphill, S. (2012). Alcohol warning labels: Unlikely to affect alcohol-related beliefs and behaviours in adolescents. *Australian & New Zealand journal of public health*, 36(6):524-529.

Skagerström, J., Chang, G. & Nilsen, P. (2011). Predictors of drinking during pregnancy: A systematic review. *Journal of women's health*, 20(6):901-913.

Stead, M., Gordon, R., Holme, I., Moodie, C., Hastings, G. & Angus, K. (2009). Changing attitudes, knowledge and behaviour: A review of successful initiatives. Joseph Rowntree Foundation, UK. Accessed July 18, 2011 from: www.jrf.org.uk/sites/files/jrf/alcohol-attitudes-behaviour-full.pdf

Stockley, C. (2001). The effectiveness of strategies such as health warning labels to reduce alcohol-related harms: An Australian perspective. *International journal of drug policy*, 12(2):153-166.

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

Strahan E., White, K., Fong, G., Fabrigar, L., Zanna, M. & Cameron, R. (2002). Enhancing the effectiveness of tobacco package warning labels: A social psychological perspective. *Tobacco control*, 11(3):183-90.

Substance Abuse and Mental Health Services Administration (SAMHSA) (2013). State laws related to posting of alcohol warnings at point of sale. Accessed Oct. 13, 2013 from: fasdcenter.samhsa.gov/publications/signageLaws.aspx

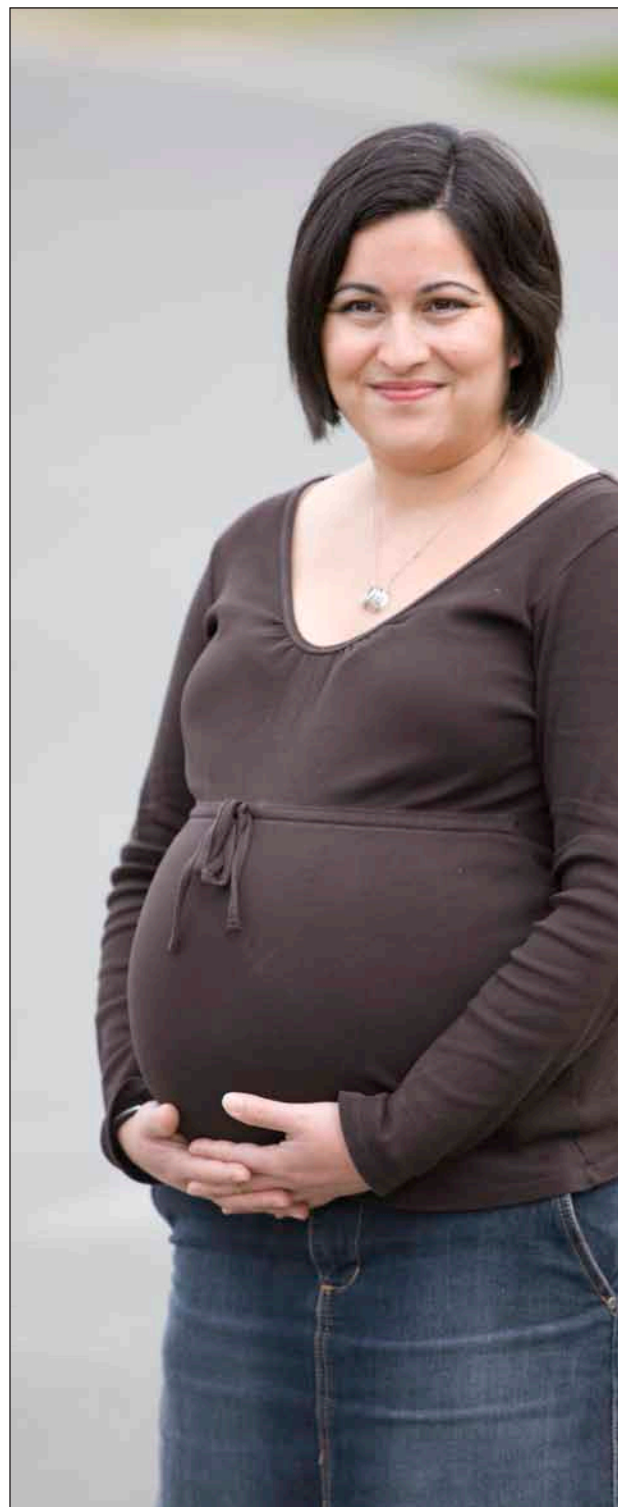
Thomas, G., Gonneau, G., Poole, N. & Cook, J. (in press). The effectiveness of alcohol warning labels in the prevention of FASD: A brief review. *International journal of drug & alcohol research*.

Thomson, L., Vandenberg, B. & Fitzgerald, J. (2012). An exploratory study of drinkers views of health information and warning labels on alcohol containers. *Drug & alcohol review*, 31(2):240-247.

Ward, B. (2011). Identifying environmental effects on alcohol use and social-norms: The socio-environmental context model. *Journal of human behavior in the social environment*, 21(5):502-520.

Wilkinson, C. & Room, R. (2009). Warnings on alcohol containers and advertisements: International experience and evidence on effects. *Drug & alcohol review*, 28(4):426-435.

Wogalter, S., Conzola, V. & Smith-Jackson, T. (2002). Research-based guidelines for warning design and evaluation. *Applied ergonomics*, 33(3):219-230.



Appendix I: Municipal Jurisdictions in B.C. with Bylaws Requiring Point-of-Sale FASD Warning or Prevention Signs³

<i>MUNICIPALITY</i>	<i>BYLAW NO. (WITH ONLINE LINKS IF AVAILABLE)</i>	<i>DATE PASSED</i>
City of Prince George	<i>FASD Warning Sign Bylaw No. 5705, 1991</i>	1991, amended 2003
City of Courtenay	FASD Warning Sign Bylaw No. 2386, 2004	2004
City of Port Alberni	FASD Warning Sign Bylaw No. 4558	2004
Village of Cumberland	FASD Warning Sign Bylaw No. 802	2005
City of Quesnel	FASD Warning Sign Bylaw No. 1579	2005
Town of Comox	FASD Warning Sign Bylaw No. 1482	2005
City of Kamloops	<i>FASD Warning Sign Bylaw No. 24-43, 2008</i>	2008
City of Kelowna	<i>FASD Sign Bylaw No. 7538</i>	2009
Maple Ridge	<i>Business Licencing and Regulation Bylaw No. 6815-2011</i>	1995 (repealed), superseded in 2011
City of Nanaimo	<i>Business License Amendment Bylaw 2013 No. 5351.10</i>	2013

³ This is not an exhaustive list of B.C. municipalities with FASD sign bylaws as some local governments may have passed bylaws prior to, or outside the authority of, the *Community Charter Act*.

Appendix II: British Columbia Community Charter Public Health Bylaws Regulations

Copyright (c) Queen's Printer,
Victoria, British Columbia, Canada.

IMPORTANT INFORMATION

B.C. Reg. 42/2004
Deposited February 12, 2004
Community Charter

PUBLIC HEALTH BYLAWS REGULATION

Note: Check the *Cumulative Regulation Bulletin 2013* for any non-consolidated amendments to this regulation that may be in effect.

DEFINITIONS

In this regulation:

- » **"Act"** means the *Community Charter*;
- » **"Medical health officer"** has the same meaning as in the *Health Act*;
- » **"Minister"** means the minister designated under the Responsible Minister Regulation, B.C. Reg. 330/2003, as the minister responsible in relation to bylaws under section 8 (3) (i) of the Act;
- » **"Nisga'a Nation"** has the same meaning as in the Nisga'a Final Agreement as defined in section 1 of the *Nisga'a Final Agreement Act*;
- » **"PHSA"** means the Provincial Health Services Authority, a society incorporated under the *Society Act*; and
- » **"Regional health board"** means a board as defined in section 1 of the *Health Authorities Act*.

RESTRICTIONS AND CONDITIONS ON PUBLIC HEALTH BYLAWS

(1) For the purposes of section 9 (4) (a) of the Act, bylaws made by a council under section 8 (3) (i) [public health] of the Act in relation to the following matters are subject to the restrictions

and conditions set out in subsection (2):

- a. The protection, promotion or preservation of the health of individuals;
- b. The maintenance of sanitary conditions in the municipality;
- c. The restriction, or potential restriction, of any individual's access to health services; and
- d. Any matter that may affect the personnel, financial or other resources of a regional health board, the Nisga'a Nation or the PHSA.

(2) Subject to subsection (3), for the purposes of section 9 (4) (b) of the Act, the following restrictions and conditions apply:

- a. A council may not adopt a bylaw in relation to a matter referred to only in subsection 1 (a) or (b) unless the bylaw or a copy of it is deposited with the minister;
- b. A council may not adopt a bylaw in relation to a matter referred to only in subsection 1 (c) or (d) unless the bylaw is approved by the minister; and
- c. Before adopting a bylaw in relation to matters referred to in subsection 1 (a), (b), (c) or (d), a council must consult with
 - (i) the regional health board, or
 - (ii) the medical health officer responsible for public health matters within the municipality.

(3) A bylaw in relation to a matter referred to in both:

- a. Subsection (1) (a) or (b); and
- b. Subsection (1) (c) or (d) is subject to subsection 2 (b).

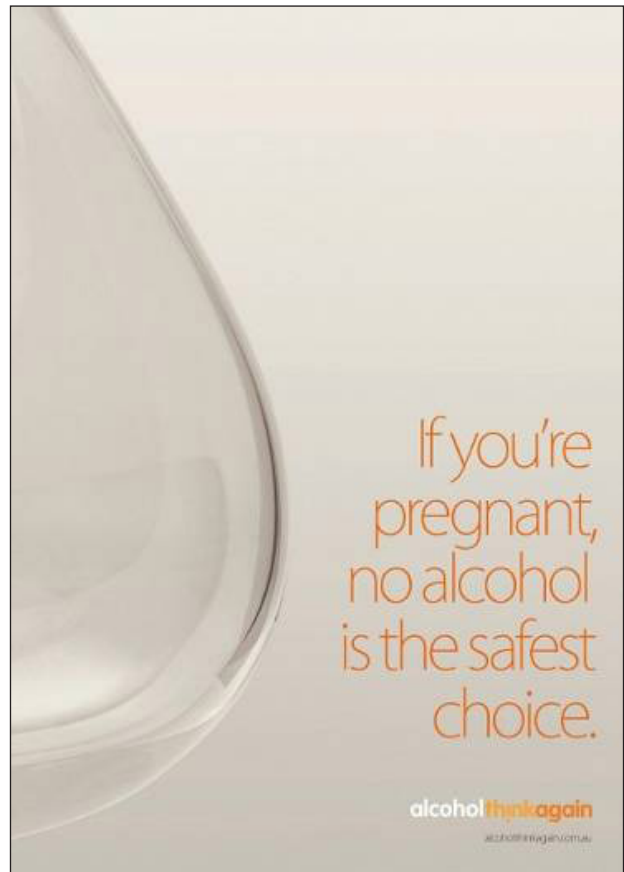
[Provisions of the Community Charter, S.B.C. 2003, c. 26, relevant to the enactment of this regulation: section 9]

Appendix III: Alcohol and Pregnancy Messaging Directed to Women at Various Levels of Risk

MESSAGES FOR WOMEN OF CHILDBEARING AGE

Alcohol use during pregnancy is influenced by many factors unrelated to pregnancy, including women's drinking patterns prior to pregnancy. Information about the risks of alcohol consumption can more broadly encourage women to monitor their alcohol consumption to ensure it is low-risk.

They can also make changes to their drinking based on their individual needs and particular life circumstances. Messages focusing on women's empowerment, or on creating a supportive environment in which women are able to make decisions to promote their own health, can be effective. Messages specific to alcohol and pregnancy can be incorporated into these types of communications strategies.



EXAMPLES OF A RECOMMENDED MESSAGE:

This multi-stage "Alcohol. Think Again." campaign from Australia addressed several issues related to alcohol misuse, emphasizing sex-differences and a range of effects on women's health. www.alcoholthinkagain.com.au

MESSAGES FOR PREGNANT WOMEN

Messages targeted at pregnant women should be balanced and informative. Indistinct or ambiguous messages about the risks of alcohol use during pregnancy should be avoided (e.g., “Think before you drink” or “Alcohol can harm your unborn baby.”) as they do not convey meaningful information about alcohol-related risks or help women to place the risks into context.



EXAMPLE OF A MESSAGE TO AVOID:

This poster from the Alberta Gaming and Liquor Commission uses a graphic image of a fetus and the title “When You Drink, They Drink.” While attention-grabbing, these types of messages can increase shame among pregnant women with alcohol problems and deter women from seeking support or talking openly about their alcohol consumption. For women who are able to stop drinking more easily after learning they are pregnant, this type of approach is not needed.

In the past decade, awareness about FASD has increased and the majority of women are aware alcohol consumption can cause harm during pregnancy. However, helpful messages can focus on areas of ambiguity such as whether the risk is the same throughout pregnancy or whether risk is minimal at low levels of alcohol consumption. Messages can emphasize there is no known level of safe consumption (e.g., “No safe time. No safe kind. No safe amount.”)

Messages to be avoided include: “When you drink during pregnancy so does your baby.” Lessons from the tobacco and pregnancy field indicate these messages are not effective and can be perceived as shaming and blaming women who are unable to stop drinking during pregnancy due to problems with alcohol dependence. For individual women, the health of the baby can be an important motivator in abstaining from alcohol, but from a broad-based public health perspective, these messages have the potential to increase stigma and isolation for women who continue to drink in pregnancy.

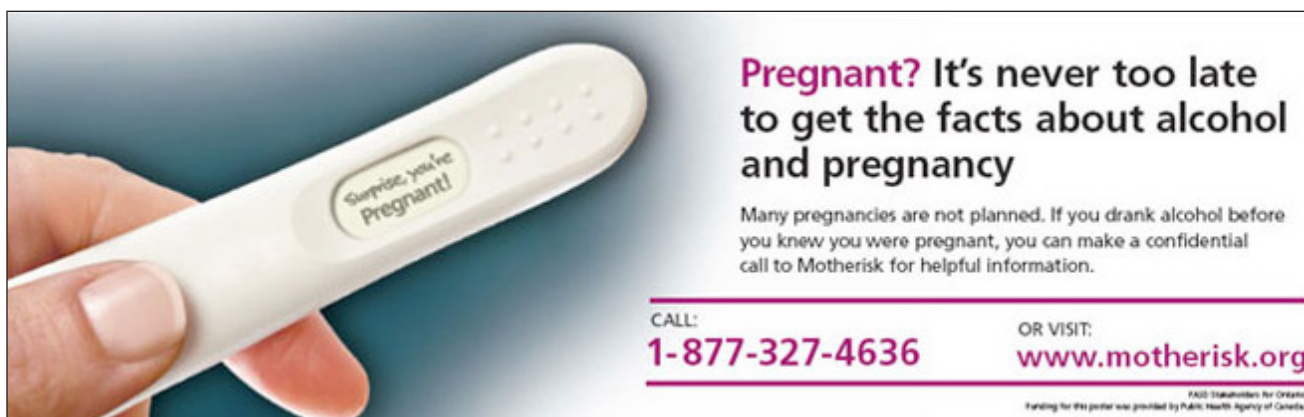
WOMEN WHO MAY HAVE CONSUMED ALCOHOL PRIOR TO PREGNANCY AWARENESS

Abstinence-based messages are not the only approach to delivering information about the risks of FASD. Messages suggesting fetal alcohol spectrum disorder is 100 per cent preventable are controversial as alcohol use often happens before a woman recognizes that she is pregnant. Also, drinking has co-factors, which are challenging to change such as nutrition, poverty, violence, addictions, and mental health issues. As nearly 50 per cent of pregnancies are unplanned, many women will consume alcohol prior to learning they are pregnant. Messages can provide information about the degree of risk related to various levels of alcohol consumption and encourage women to seek counselling and support from a health professional.

Messages should avoid implying women who abstain from alcohol are caring and responsible and women who do not stop drinking alcohol before or during pregnancy are ignorant, irresponsible or do not care about their babies. Addiction issues span society and many women struggle with alcohol misuse prior to pregnancy. For these women, abstaining from alcohol use during pregnancy can be difficult or impossible without strong social support. Depending on the intended location of a warning sign, harm

reduction-oriented messages may be appropriate to help increase social support for women who may have consumed alcohol before they knew they were pregnant and those who find it difficult to stop drinking after learning they are pregnant.

When developing signage for the purposes of preventing FASD, it can help to tailor messages to one of the three target audiences mentioned above. This will help better reach and engage members of your community in the message being conveyed.



EXAMPLE OF A RECOMMENDED MESSAGE:

This poster from Motherisk (Ontario) is targeted at women who consumed alcohol prior to becoming aware that they are pregnant. Rather than blaming women for drinking alcohol during pregnancy or increasing anxiety about possible harms, it encourages women to seek information and support from a health professional.



EXAMPLES OF A MESSAGE TO AVOID:

This sign from FASDWorld Toronto (www.fasworld.com) may be interpreted as suggesting women who do not stop drinking alcohol during pregnancy are irresponsible or uncaring of their fetus. The use of a naked belly as an image does not emphasize health and well-being for both mother and child and may be offensive to some members of the community (Health Canada, 2006).



BRITISH
COLUMBIA