FASD: The Prevention Conversation Literature Review / Environmental Scan

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1. Background

"FASD: The Prevention Conversation – A Shared Responsibility" is a provincial initiative of the FASD Cross-Ministry Committee.

The objectives of the project are to:

- Increase the capacity of health and social service provided across the province to educate and support women and their partners, using evidence-based practices to screen for alcohol use in pregnancy and intervene appropriately and effectively;
- Increase awareness among women of childbearing age and their partners about the effects of binge drinking during pregnancy with a focus on early stage when pregnancy status may not be known.

2. Scope of the Literature Review and Environmental Scan

FASD prevention work is complex. It involves multi-sectorial, holistic approaches over time, addressing multiple determinants of health.

The scope of this review is limited to the first and second levels of FASD Prevention, based on the four-part framework for FASD prevention and promotion of women's and children's health that was developed in (Poole, 2008). Each level of prevention are described in detail in Fetal Alcohol Spectrum Disorder (FASD) Prevention: Canadian Perspectives published by Public Health Agency of Canada in 2008 and available for reading in html format or for downloading as a pdf document at http://www.phac-aspc.gc.ca/fasd-etcaf/index-eng.php

The first level of prevention is defined as: "broad awareness building and health promotion efforts". It aims at raising public awareness through campaigns and other broad strategies.

The second level of prevention is defined as: "discussion of alcohol use and related risks with all women of childbearing years and their support networks". It provides opportunities for girls, women of childbearing age and their networks to have safe discussions about pregnancy, alcohol use and related issues.

The third level: "specialized, holistic support of pregnant women with alcohol and other health / social problems", and the fourth level: "postpartum support for new mothers assisting them to maintain / initiate changes in their health and social networks and to support the development of their children", are beyond the scope of the project.

The Institute of Health Economics notes that the research on first and second levels of FASD prevention is limited, and that there is a lack of peer-reviewed published Canadian research. This limits the ability to translate research findings into practice within the Canadian context (Institute of Health Economics, 2013).

3. Literature / Gray Literature Review

3.1. Alcohol use among women of child bearing age

Ann Dowsett Johnston (Johnston, 2012), an award-winning Canadian Journalist, spent a year investigating why Canadian women drink, as part of the Atkinson Fellowship in Public Policy. She spoke to many women and gathered their stories. She found that most women were unwilling to share their real names, because of the stigma attached to admitting

having an alcohol problem. Many people are unaware that the risks of drinking far outweigh the protective factors. They don't know that women respond differently to alcohol than men, and alcohol affects women's bodies differently than men's bodies. Alcohol consumption is on the rise in much of the world, including Canada, and women often drive the growth, especially women in high-status occupations. Women have become a significant target market for the alcohol industry, which became "pink, sweet and female-focused". The author notes that Alberta and Nova Scotia are the only two Canadian Provinces with an alcohol strategy in place. She urges others to view alcohol as a public health issue, and to invest in research and intervention addressing the "epidemic of women's drinking."

The Center for Diseases Control (CDC) is involved in large-scale studies on alcohol use, prevention and intervention initiatives in the United States. (http://www.fasdsoutheast.org/documents/fasdTtT2012/CDC%20Update.pptx). Their research, based on data collected between 2006 and 2010 confirmed that there was wide spread use of alcohol among women in United States. Almost 8% of pregnant women and 51% of non-pregnant women reported drinking alcohol in the past 30 days. Among pregnant women, the highest estimates of use were among women aged 35 to 44 years old, Caucasian women, college graduates and employed. Fifteen percent of non-pregnant women and 1.4% of pregnant women reported binge drinking in the past 30 days. CDC currently focuses on testing alcohol screening and brief intervention practices on a large scale in various settings, including colleges, Aboriginal communities, and primary health care settings. They have developed alcohol screening and brief implementation guidelines that are currently piloted and tests.

In Canada, according to the 2011 Canadian Alcohol and Drug Use Monitoring Survey (Health Canada, 2012), 78% of Canadians, 15 years or older, reported drinking in the past year. Almost three quarters (74.3%) of females reported past-year alcohol use.

The Maternity Experience Survey (Public Health Agency of Canada, 2011) was a national survey of Canadian women that took place in 2006-2007. It sought to understand women's experience, perception, knowledge and practices before, during and following their pregnancy. The survey found that during the three months prior to pregnancy or realizing that they were pregnant, 62.4% of women consumed alcohol, and 11% reported binge drinking before they knew they were pregnant. 14.5% of women drank once a week, 8.8% drank two to three times per week, and 1.3% drank every day. A total of 10.5% of all women reported drinking alcohol during their pregnancy. When looking at respondents from Alberta, 59% of women reported drinking in the three months prior to pregnancy, and 3.4% reported drinking during pregnancy.

In the 2004 Canadian Addiction Survey (AADAC), 76.8 percent of Canadian women and 76.7% of Alberta women reported drinking in the past year. Ten percent of Canadian women between the ages of 15 to 24 engaged in heavy weekly drinking, high-income women were most likely to be light frequent drinkers, and lowest income women were most likely to be heavy frequent drinkers. Women with a university degree were more likely to drink than women who had not completed high school. The sample of Alberta women was too small to provide statistically significant results on heavy weekly drinking and drinking patterns.

In the Alberta Reproductive Health, Pregnancies and Birth Surveillance Report 2009 (Reproductive Health Working Group, 2009), the authors state that in Alberta 50% of first-time mothers consumed alcohol before their pregnancies were recognized, including 11%

of women who reported binge drinking (5 or more drinks during a 24 hour period). After their pregnancies were recognized, 18% of the women continued to consume alcohol.

3.2. Alcohol Use and Pregnancy Consensus Clinical Guidelines

In August 2010, the Public Health Agency of Canada and the Society of Obstetricians and Gynaecologists of Canada sponsored the release of the *Canadian Alcohol Use and Pregnancy Consensus Guidelines* (Carson, 2010). The guidelines are endorsed by 10 national organizations, including the Canadian Association of Midwives, the College of Family Physicians of Canada, the Society of Rural Physicians of Canada and Motherisk. The guidelines can be accessed at the following website: http://sogc.org/guidelines/alcohol-use-and-pregnancy-consensus-clinical-guidelines/.

The guidelines were published following an extensive review of the published and grey literature and include: definitions; information on the incidence and prevalence of drinking; why alcohol use is a problem and why guidelines are required; intended or unintended pregnancy; recognition, screening and documentation; selected factors associated with alcohol use among pregnant women and women of child bearing age; counseling and communication with women about alcohol use; and pregnancy scenarios.

The guidelines have 8 recommendations that should be taken into account while developing the Alberta Initiative.

Canada Alcohol Use and Pregnancy Consensus Clinical Guidelines:

Recommendations

1. Universal screening for alcohol consumption should be done periodically for all pregnant women and women of childbearing age. Ideally, at-risk drinking should be identified before pregnancy, allowing for change.

2. Health care providers should create a safe environment for women to report alcohol consumption.

3. The public should be informed that alcohol screening and support for women at risk are part of routine women's health care.

4. Health care providers should be aware of the risk factors associated with alcohol use in women of reproductive age.

5. Brief interventions are effective and should be provided by health care providers for women with at-risk drinking.

6. If a woman continues to use alcohol during pregnancy, harm reduction / treatment strategies should be encouraged.

7. Pregnant women should be given priority access to withdrawal management and treatment.

8. Health care providers should advise women that low-level consumption of alcohol in early pregnancy is not an indication for termination of pregnancy.

3.3. Prevention Recommendations from a Health Determinants' Perspective

3.3.1 Double Exposure: A Better Practices Review on Alcohol Interventions During Pregnancy

In 2008, the British Columbia Centre of Excellence for Women's Health produced a report called: *Double Exposure: A Better Practices Review on Alcohol Interventions During Pregnancy* (Parkes, Salmon, & Greaves, 2008). The review of evidence from peer-reviewed literature on interventions aimed at helping women reduce their use of alcohol in childbearing age addressed the effects of alcohol on both the women and the fetus. Based on their review, the authors identified four approaches, linked to the wider field of women's health care and gender-specific treatment for substance abuse that remain important to consider when developing interventions for pregnant women: women-centered care; acknowledgement of the interconnections between women's substance use and other health, financial and social concerns; addressing diversity and the specific needs of different sub-groups of women; and applying a harm-reduction philosophy.

The authors stressed the importance of bringing the focus to the woman, rather than her child, empowering her to change for her own health as well as the health of her child. Research shows that women's alcohol use is strongly interconnected to other social, environmental, structural, economic and relational stressors, such as alcohol use in their families as children, a partner using alcohol, present or past experience of trauma, abuse and violence, poverty and other hardships. The authors remarked that: "if interventions do not attend to … the women's circumstances, they are at risk of failing to help the women making sustainable changes and placing further shame and stigma on them for failing to create the changes expected."

Research shows that there is no clear profile of women who drink during pregnancy. Stereotyped assumptions about risk factors (Aboriginal heritage, low socio-economic status or educational attainment) are not supported by current research, which indicates that some of the women at highest risk for drinking during pregnancy are older, white, have a higher education, and moderate or high incomes.

By using a harm reduction lens, substance use is seen as a continuum, and services are provided in a non-judgmental way, respecting the pace and extent women are willing and able to change.

The authors concluded with 16 recommendations for practice, 3 recommendations for research and 5 recommendations for knowledge translation. The recommendations for practice and for knowledge translations are relevant to the Alberta project, and have been copied here.

"Recommendations for Practice

When discussing alcohol use, health care providers should:

1. *Ask women about their use of alcohol throughout their childbearing years rather than just during pregnancy. Discussing drinking should be part of a "well woman" approach to care that includes a pre-conception and postpartum focus.*
2. *Discuss alcohol use with all women to avoid under- or over-identifying certain women as using alcohol in pregnancy and to avoid stereotyping based on race/ ethnicity, age, or socio-economic status.*
3. *Establish safety and trust in conversations, regardless of the woman's circumstances or problems. Brief discussions between women and providers based on respect and unconditional regard for the woman can serve to effectively link identification and*

intervention. Providing choices and respecting readiness for change are important considerations in these conversations.

4. *Give consideration to ways to build in safety, trust, and respect, if a formal screening tool is utilized. Ensure that staff using screening tools have received training and can access ongoing support and advice from those with expertise in the area of substance use and addictions, especially with regard to referrals to support and treatment for women who want it.*
5. *Include discussions about drink size as well as number of drinks when having conversations with women. There are visual tools that can help with this work. Educational resources in general can be utilized effectively to dispel myths and promote discussion of risks and options.*
6. *Consider ways to increase confidentiality for women to disclose their use of alcohol safely. This may mean finding ways, such as agency policy information sheets, to assure women that their information is being protected.*
7. *Tailor education and interventions for subpopulations of women and specifically what works for women with low, moderate, and higher alcohol use.*

When contextualizing alcohol use, it's important to:

1. *Acknowledge the role of multiple stressors and the impact of these stressors on alcohol use. When working with all women, consider the entire context of social and economic factors pertaining to health, attending to the "whole woman" and to their lived circumstances.*
2. *Address women's multiple substance use, including tobacco use, as well as alcohol. Emphasize how learning from change in one substance can be applied to others.*
3. *Provide support to reduce harms related directly and indirectly to substance use. Work with her to identify her own goals for change.*
4. *Acknowledge women's family roles as mothers and partners and how this affects their ability to focus on their own needs and desires and on getting support and treatment for their problems.*
5. *Appreciate how common violence against women in relationships is. Make the connections between women's experiences of current/historic violence, abuse, and trauma and use of alcohol and other substances, and consequently their ability and power to make changes in many areas of their lives, including their substance use.*

In providing, and helping women access, a continuum of services:

1. *Clearly link the process of identifying women who use alcohol during pregnancy to supportive action. Ensure that identification is not separated from discussions with women about what interventions they would find helpful and, where needed, from referral to brief and intensive interventions, support, and treatment.*
2. *Use evidence-based approaches such as Motivational Interviewing that help service providers guide women to articulate for themselves the changes and type(s) of services they are interested in accessing.*
3. *Increase accessibility of care for pregnant women with alcohol problems through such efforts as: an expanded role for prenatal providers to integrate discussion of alcohol in their work, ensuring good communication between specialist staff and services and regular prenatal staff and services, expanded delivery of prenatal and postpartum outreach services, provision of outpatient addictions services in primary care settings, provision of one-stop community-based services, as well as expanded access to residential treatment that takes women's needs as mothers into account.*
4. *Recognize common barriers to treatment and support, and actively assist women with overcoming the barriers that are relevant to them.*

Recommendations for knowledge translation, policy and structural change:

1. *Develop ongoing, specific training for health care staff that enables them to address substance use during regular prenatal visits. Training should:*
    a. *be comprehensive (including theories of addiction and recovery, sex and gender differences in the experience of alcohol use, and interviewing and intervention techniques);*
    b. *involve experiential training methods (such as role-play, and strategies for incorporating the use of identification and educational tools into standard practice); and*
    c. *connect with training on other social and health issues affecting pregnant women (e.g., violence towards women, child protection, and mental health problems).*
2. *Identify a range of mechanisms for ongoing learning and discussion of promising practices, including virtual methods such as communities of practice.*
3. *Enhance opportunities for collaboration on the part of child welfare, prenatal, and addictions systems to address the very significant barrier to access created by apprehension-focused approaches.*
4. *Undertake broad-based public and professional education designed to reduce stigma and promote compassionate understanding of women's substance use on the part of the public, service providers, policy-makers, health system planners, the legal system, and others in a position to assist women with substance-use problems.*
5. *Allocate more resources to address the structural factors that influence women's substance use.*

3.3.2 FASD Prevention from a Women's Health Determinants Perspective

The Network Action Team on FASD Prevention from a Women's Health Determinants Perspective of the Canada FASD Research Network (http://www.canfasd.ca/research-teams/prevention/prevention-from-a-womens-health-determinants-perspective/) believe that understanding and acting on the factors that increase and or reduce women's risks for developing substance use issues and having a child with FASD is a more promising approach than focusing on women's substance use only. The working group was involved in several initiatives:

Brightening our Home Fires (Badry, A., A., Q., & A., 2013) research project was undertaken from 2010 to 2012 in the Northwest Territories of Canada. The project was designed to explore individual and community awareness and understanding of concerns that possibly lead to the consumption of alcohol during pregnancy. It used Photovoice methods and community engagement to explore health and healing in the lives of women. The main finding for the research project was that successful FASD interventions must involve community members in developing health and wellness strategies, must be culturally appropriate and must address related issues, such as violence, poverty and homelessness.

Consensus on 10 Fundamental Components: During a working session of the Network Action Team on FASD Prevention held in Victoria in March 2009 (CanFASD Northwest, 2010), members agreed on ten fundamental components of FASP prevention from a women's health determinants perspective, based on a range of sources, such as women's experiences, peer-

10 Fundamental components of FASD Prevention from a women's health determinants perspective:

1. Respectful
2. Relational
3. Self-Determining
4. Women-Centered
5. Harm Reduction Oriented
6. Trauma Informed
7. Health Promoting
8. Culturally Safe
9. Supportive of Mothering
10. Uses a Disability Lens

reviewed research, published articles, as well as expert evidence.

Gendering the National Framework: The British Columbia Centre of Excellence for Women's Health, in partnership with the Canadian Centre of Substance Abuse, the Universities of Saskatchewan and South Australia sponsored a series of consultations in 2009 for "gendering" the National Framework for Action to Reduce the Harms Associated with Alcohol and other Drugs and Substances in Canada (BC Centre of Excellence for Women's Health, 2007). One of the discussion guides arising from this project addresses Mothering and Substance Use: Approaches to Prevention, Harm Reduction and Treatment. Findings from discussions about pregnancy and mothering and substance use as well as three other related topics can be found at http://www.coalescing-vc.org, the website dedicated to the project. The documents highlight the stigma surrounding women who are pregnant or mothering and using substances, and the systemic, program and personal social barriers they face. They recommend that any intervention be mother/women-centered rather than child-centered, are harm-reduction oriented, and collaborative.

3.3.3 Mapping evaluation of FASD Prevention Programs

Based on an extensive review of evaluation frameworks, methods and indicators used in FASD programs, researchers from the BC Centre of Excellence for Women's Health and Note Bene Consultants in Victoria BC developed three conceptual maps (one for FASD prevention programs, one for FASD support programs and one for FASD programs in Aboriginal communities) which outline the connections between program philosophy and program activities, formative outcomes, and client, community, and systemic outcomes (Rutman, Hubberstey, Poole, Hume S, & Van Bibber, 2011). The prevention map that can be accessed at: http://www.interprofessional.ubc.ca/FASD/Presentations/C6.pdf, identifies 9 elements as part of a FASD prevention program philosophy / theoretical framework:

1. Harm Reduction
2. Relational / Respectful
3. Holistic and Multi-Disciplinary
4. Women Centered and Health Promoting
5. Culturally Safe
6. Violence and Trauma-Informed
7. FASD Lens
8. Mothering and Developmental Lens
9. Self-determination

3.3.4 FASD Prevention in Aboriginal Communities and Diverse Cultural Groups

In some Aboriginal communities, alcohol use prior and during pregnancy may be linked to community concerns, such as poverty and despair. Many Aboriginal communities believe that effective programs are based on holistic care, reflected in cultural and spiritual traditions (Saskatchewan Prevention Institute, 2007).

Cultural beliefs regarding women's roles and alcohol use are linked to ethnicity and culture. It is important for any FASD prevention messaging to be sensitive and non-judgmental to the range of cultural values and beliefs. (Saskatchewan Prevention Institute, 2007)

The framework developed by the BC Centre of Excellence for Women's Health and Note Bene Consultants in Victoria BC or FASD Programs in Aboriginal communities is similar to the other two frameworks, but identifies unique elements to FASD programming in Aboriginal communities, such as community-based and family-directed programming,

emphasizing respect and belonging, supporting traditional roles and responsibilities and building circles of support. (Van Bibber, Hubberstey, Poole, N. Hume, & Rutman, 2011)

3.4. FASD Prevention Practices – Levels 1 and 2

3.4.1 Level 1 Prevention Practices

Building awareness about the risks of drinking in pregnancy, and providing information about available supports for managing drinking, is an important component of FASD prevention . The tools used may include pamphlets, fact sheets, posters, prevention campaigns, warning signs in bars, information lines, web resources, and public education. This Level 1 work reaches a large number of people, creates awareness about the danger of alcohol use, and may reduce the stigma and blame attached to FASD. Level 1 prevention is broad-based or universal, focusing on a population that has not been identified on the basis of risk (Institute of Health Economics, 2013). At the same time these Level 1 messages may need to be tailored for specific groups, based on age, income, ethnicity, and other differences.

Community prevention strategies may connect people and help them work together on community and systems level change. Most studies focus on adult women. There are very few studies specific to women 18 years old or younger, to partners and other supports, or to non-Caucasian groups. There is very limited evidence on the effect of prevention strategies directed at young women (under the age of 18) or at women's social networks (Institute of Health Economics, 2013).

The expected deliverables of level 1 prevention are the provision of good information to the general public and the facilitation of community-level initiatives supporting the health of women and children. Expected immediate outcomes are changes in: knowledge about alcohol use during pregnancy; attitudes towards alcohol use during pregnancy; awareness of risk of alcohol use during pregnancy; and perception about alcohol use during pregnancy. Medium term outcomes have to do with behavioral changes that reduce the risk of alcohol use during pregnancy: alcohol intake; alcohol abstinence; and binge drinking.

Ultimate outcomes affecting maternal and neonatal health would be: maternal outcomes; infant outcomes: and FASD outcomes.

Level 1 information should be found in many community settings, such as public venues, clinics, social services agencies, and other points of access for women. . Suzanne Tough (Tough, 2010) suggests that the potential danger of alcohol consumption during pregnancy could also be included with marriage licenses, new home warranties and at mortgage offices.

Prenatal alcohol exposure is always a factor for FASD. Other individual, social and environmental factors contribute (amount and timing of alcohol consumption, mother's ability to metabolize ethanol, genetic predisposition of fetus, access to prenatal care and services, stress, experience of abuse and neglect…). FASD is a public health, social, political and economical problem (Institute of Health Economics, 2013).

The best available scientific evidence of the effectiveness of universal FASD prevention intervention is for multimedia education programs aimed at youth and at the general public. There was evidence that the effects of the intervention lasted for up to 6-month following the intervention. The scientific evidence of the effectiveness of other interventions, such as health education activities, warning labels about alcohol, alcohol bans, and awareness

campaigns is weak, mostly because of poor methodological quality of the research associated with the interventions (Institute of Health Economics, 2013).

3.4.2 Level 2 Prevention Practices

The second level of prevention involves a collaborative discussion of alcohol use and related risks with all women of childbearing age and their support networks and discussions on how to cope with alcohol use, prenatal supports available and pregnancy planning (Poole, 2008).

Level 2 is not only the responsibility of physicians, but also of the many other service providers who come in contact with girls and women in various settings, and are in a good position to provide information and brief support. Research shows that while physicians and midwives know about FASD, only a small percentage consistently discuss smoking, alcohol use, and addictions with women of childbearing age. There is evidence that brief collaborative, motivational interviewing approaches for reducing the risk of women having an alcohol-exposed pregnancy are effective (Poole, 2008).

Alcohol dependence is most often linked with other risk factors. Therefore strategies to address alcohol consumption behaviors need to take into consideration the complex links between the substance dependence, mental and physical health, and the related environmental and social issues (Tough, 2010). Even though health care providers are well positioned to identify women at risk of alcohol use, and related issues, many of them do not systematically ask questions about addictions, abuse and mental health. Insufficient training, a lack of time, and insufficient referral resources, once a risk is identified are some of the reasons explaining why health professionals don't systematically talk with women about alcohol. Any messages about the risks of alcohol consumption should be universal, non-discriminatory, and should be provided in conjunction with resources on how to get help if needed. FASD-prevention messages should be consistent across sectors (Tough, 2010).

Resources used in level 2 prevention interventions include training modules for professionals on FASD and motivational interviewing, information and support lines for women. Outcomes of level 2 prevention activities are: enhancement of women's decision-making ability about alcohol use, and access to supports when needed. Level 2 prevention should be available to all women of childbearing age, and be offered by primary health care and other community service providers.

3.5. Pre-conception interventions

Most women do not realize they are pregnant until well into the first trimester, and many drink alcohol during this time. To reach girls and women who drink alcohol and those who may be drinking before they know they are pregnant, it is important to provide discussions about alcohol with all girls and women of childbearing years, and to provide brief intervention and referral as necessary. ,

Brief interventions that have a contraceptive counseling component reaching non-pregnant women are effective in reducing risk drinking and increasing effective use of contraception (Kusi-Achampon, 2011).

There is evidence supporting the use of motivational interviewing in brief interventions on alcohol in the pre-conception period. A research project conducted by the University of Virginia showed that both one-session and multi-session motivational interviewing-based

interventions among women at risk for alcohol-exposed pregnancy were associated with decreased drinks per drinking day, a reduction in ineffective contraception rates and lower alcohol-exposed pregnancy risks at 3 and 6 months post intervention. (Ingersoll KS, 2013). This approach has been replicated in multiple settings over time (see Project Choices below). This is important in that it allows women choice as to the changes they wish to make, and the motivational interviewing stance supports their agency and empowerment in the intervention.

3.5.1 Project CHOICES

Project CHOICES started as a behavioral research intervention for prevention of prenatal alcohol exposure in women at high risk for alcohol-exposed pregnancies (AEP) (Velasquez, 2010). It was developed by the Centers for Disease Control and Prevention (CDC) in 1997 and uses a motivational interviewing approach. It targets both the adoption of effective contraception and the reduction of alcohol use as two effective ways of preventing FASD. *CHOICES* stands for ***C****hanging* ***H****igh-Risk Alc****o****hol Use and* ***I****ncreasing* ***C****ontraception* ***E****ffectiveness* ***S****tudy*.

The intervention is based on four sessions delivered by mental health clinicians and one contraceptive counseling session delivered by a family planning professional. To be eligible, women need to be of child-bearing age, fertile, have been sexually active in the past 3 months, used ineffective or no contraception, not pregnant or planning to be pregnant, and at high-risk for alcohol-exposed pregnancy (AEP) based on their current drinking level. The project has been tested in different settings, targeting different groups of women, such as women enrolled in Colleges, American Indian women, women seen in primary care settings, in jail, in substance-abuse treatment centers, and media-recruited women. (Centers for Disease Control and Prevention, 2013) Sixty nine percent of the women who participated in the intervention were at a reduced risk of an AEP at 9 months post-intervention; nearly half the women had both reduced their drinking and were using effective contraception at 9 months. When asked which aspects of *CHOICES* the women found most important, women most often said that therapists had a caring attitude, were compassionate and encouraging. *Project CHOICES* has developed standardized resources, such as a resource manual for therapists (available at: http://www.cdc.gov/ncbddd/fasd/documents/counselormanual.pdf) and work sheets for women (http://www.cdc.gov/ncbddd/fasd/documents/clientworkbook.pdf).

In Canada, Manitoba has adapted the *Project CHOICES* intervention to the Canadian context. (http://www.projectchoices.ca). It has been redesigned from a research project to a program. It is offered to young women who are not currently pregnant, drink alcohol and are sexually active and live in Winnipeg. The program has two fixed sites and several mobile sites. It provides information on how to keep healthy and safe. Women, who drink alcohol, are sexually active and not currently pregnant are eligible for a short intervention, consisting of up to four one-on-one sessions to talk about how drinking and sex fit into their lives. Women receive a workbook as part of the intervention that help them in their reflections during each session, and record information about alcohol consumption and the use of contraception between sessions. If women desire, they can access a referral to a nurse who will talk about birth control options. The program also offers 30-60 minute

introductory workshops to community organizations for teens and women who access their services. The project has an evaluation component[1].

3.5.2 The Healthy Choices Study

The University of Wisconsin Department of Family Medicine and the Population Health Institute are in the process of completing "*The Healthy Choices Study*". They conducted a randomized trial to test the efficacy of a brief intervention in reducing the risk of alcohol-exposed pregnancy. They offered 2 to 4 sessions, with a combination of motivational interviewing and cognitive behavior therapy. Preliminary results of their research were presented at the Western Region FASD Conference in Reno, NV in May 2013 (http://casat.unr.edu/fasd.html). They found brief interventions were equally effective, whether offered over the phone or in person. The outcomes had a significant reduction in the risk of alcohol-exposed pregnancy and a significant increase in effective use of contraception.

3.6. Alcohol Screening and Identification

Several US studies confirm that the use of screening tools is effective in identifying potential alcohol use during pregnancy (Institute of Health Economics, 2013). The two screening tools considered the most effective in detecting low levels of alcohol consumption are the *TWEAK* and the *T-ACE* screening tools (Institute of Health Economics, 2013) (Sarkar, 2010).

The screening tools can be used as a way to start a conversation about alcohol use with women of childbearing age, and can be an integral part of brief interventions.

It is important to recognize that these tools require that women know what is a standard drink. It is also important to recognize that women may not feel able to tell about their alcohol use when such tools are used, given the stigma associated with alcohol use and fears of having their children removed. Providers will need to decide whether they wish to use a formal screening tool or more informal discussion when helping women identify their level of risky alcohol use and goals for reducing or quitting.

3.6.1 TWEAK

TWEAK is a screening tool based on five questions (WK, EA, JW, & M, 1993). If a woman scores a total of 2 or more points, she is likely to be an at-risk drinker.

- T- Tolerance: "How many drinks does it take to feel the first effect?" (3 or more = 2 points)
- W- Worried: Have close friends of relatives worried or complained about your drinking in the past year?" (Yes = 2 points)
- E-Eye openers: "Do you sometimes take a drink in the morning when you first get up?" (Yes = 1 point)
- A-Amnesia (blackouts): "Has a friend or family member ever told you about things you said or did while you were drinking that you could not remember? (Yes = 1 point)
- K(C)-Cut down: "Do you sometimes feel the need to cut down on your drinking?" (Yes = 1 point)

[1] Evaluation findings and tools will be available by the end of August 2013 from Holly Gammon, Manager FASD Programs, Healthy Child Manitoba.

3.6.2 T-ACE

The *T-ACE* tool (RJ., SS., & Jw., 1989) is a four-item screening tool that excludes the W-Worried and A-Amnesia questions, and adds a question about A-Annoyance. A total score of 2 or more out of five indicates a risk of a drinking problem and a referral for further assessment.

- A-Annoyance: "Have people ever annoyed you by criticizing you about your drinking" (Yes = 1 point).

3.6.3 Single-question alcohol screening test

Some research shows that even a single-question alcohol-screening test can accurately identify unhealthy alcohol use. Peter Smith (Smith, 2009). The single screening question was: "How many times in the past year have you had X or more drinks in a day? where X is 5 for men and 4 for women, and a response of more than 1 is considered positive. Of the 394 eligible primary care patients, 73% responded, and the single question screen was 71.8% sensitive and 79.3% specific for the detection of unhealthy alcohol use.

In studies of Motivational Interviewing, open-ended questions have been found effective in eliciting people's perceptions of health behaviors (Miller, 2002). An example of an open-ended question is "Can you tell me a bit about your drinking patterns before you knew you were pregnant?" (Carson, Croteau, Graves, & Kluka, 2010). Such questions allow women to indicate their drinking status or concerns without offering a specific number of drinks. Other open-ended questions might be: "What do you know about the effects of drinking in pregnancy?" Such a question helps practitioners avoid going over information women already have, and can help move the conversation on to their confidence about stopping drinking while pregnant.

3.7. Brief interventions

There is some evidence supporting brief interventions, such as clinical advice and counseling activities for pregnant women and women at risk of alcohol exposed pregnancy. Brief interventions for alcohol problems are more effective than no intervention and often as effective as more intensive interventions. (Institute of Health Economics, 2013).

Brief Interventions that employ a Motivational Interviewing approach are is recognized as a best practice to prevent alcohol-exposed pregnancies during pre-conception period and during pregnancy.

3.7.1 Screening, Brief Intervention and Referral (SBIR)

Alcohol screening, brief intervention and Referral (SBIR) is an evidence-based approach to minimizing alcohol-related harm. The Institute for Health and Recovery in Massachusetts is a leader in the use of SBIR with women and pregnant women. (The Institute for Health and Recovery). The project uses an algorithm based on the 5 Ps: Parents, Peers, Partners, Past, Pregnancy to help women have a conversation about their alcohol consumption. The use of tobacco is also incorporated. The tool has been successfully used in Substance Use and Mental Health Services and Health Services with increases screening rates, and successful referrals to further interventions for women who screened in.

Despite evidence that SBIR is an effective intervention in reducing alcohol use, several barriers have been identified in improving the prevention and management of problem

drinking in primary care: limited physician resources, lack of time to incorporate alcohol SBIR into daily practice, competing priorities, and cultural/societal issues.

More resources on SBIR, as well as a Drinking and Reproduction health kit, can be found at: http://www.womenandalcohol.org/clinicians.html

In Canada, the College of Family Physicians and Canadian Centre on Substance Abuse have developed a web-based alcohol-screening, brief intervention and referral tool for physicians and other health care professionals, based on the Canadian Low Risk Drinking Guidelines. The tools are presented in section 4.5.9 and 4.5.10 of this report.

3.7.2 Motivational Interviewing

Motivational Interviewing is defined as defined as, "a collaborative, person-centered, form of guiding to elicit and strengthen motivation for change". According to Miller (Motivational Interviewing , 2012), "Motivational Interviewing focuses on exploring and resolving ambivalence and centers on motivational processes within the individual that facilitate change". It is supported by over 200 clinical trials and over 1,000 publications and has had positive results and/or was identified as a best practice as a counseling method in various health and social concerns. When used in brief interventions, motivational interviewing stance supports reduction in resistance and increased readiness for change. It has been recognized as a best practice to help women reduce or stop alcohol consumption during their pregnancy. Specific resources on motivational interviewing are presented in section 4.5 – examples.

3.7.3 Barriers to implementing brief interventions

The Nova Scotia government funded an environmental scan in 2008 (Nova Scotia Deparment of Health Promotion and Protection, 2008) (http://www.gov.ns.ca/ohp/publications/Systemic_Barriers_to_Brief_Intervention.pdf) to explore the systemic barriers for screening and brief interventions for primary health care providers. The report identifies 10 barriers: lack of time; lack of remuneration; lack of training to address addictions; paucity of information and use of tools; lack of comfort in addressing additions; lack of patient disclosure; conflicting interests of media and government around substance use and gambling; and lack of interest or role. The authors noted that many of the barriers were systemic, and difficult to overcome. In BC the barrier related to remuneration has been addressed by creating a billing code for alcohol counseling.

3.8. Contraceptive Counseling and Preventing Unplanned Pregnancies

In 2005, the Public Health Agency of Canada published a document called: *Alcohol Use and Pregnancy: an Important Canadian Public Health and Social Issue.* (Dell, 2005). The authors recommend that all women of childbearing age should be routinely screened for alcohol problems. They should also be informed that" "being sexually active, being even a moderate alcohol use, and not using effective contraception, places a woman at risk for having an alcohol-exposed pregnancy, which, in extreme circumstances, can result in fetal brain damage and other birth defects. Despite the recognition that the lack of effective contraception is a risk factor for FASD, very few FASD prevention interventions focus on lessening the number of unplanned pregnancies.

Many interventions designed with the outcome of preventing unintended pregnancies were designed with the aim of reducing teenage pregnancies. For example, the United States has

a national campaign to prevent teen and unplanned pregnancies, especially among single young adults (www.thenationalcampgain.org).

The University of Michigan School of Public Health did a study in 2012, examining contraceptive counseling received by 898 adult women of childbearing age (Weissman CS, 2002). They found that 60.5% of the women were at risk of unintended pregnancy. Receiving personalized counseling, as opposed to no counseling or only informational counseling) significantly increased the odds of satisfaction with counseling, current contraceptive use, and intent to use contraception. Other studies, such as the one conducted by the University of Pittsburg School of Medicine (Lee JK, 2011), have similar findings. In that research, half of the women visiting primary care clinics were in need of contraceptive counseling at the time of their visit. Having received contraceptive counseling was associated with an increased use of contraceptive methods.

In 2007, a study on contraception use in Canada (Fisher & Black, 2007) discussed the complicated process of using contraception. In order for a person to initiate and maintain contraction, she/he will have to acquire information, acknowledge the probability of engaging into a sexual activity; communicate with her/his partner; use the method consistently; and make accurate judgments about practicing safe sex. The authors state that environmental and personal factors affect whether the person will successfully navigate those steps. For example, close to 10% of Canadians of childbearing age who have no desire to conceive don't use any contraction. Over 60% of Canadians identifying as current oral contraceptive users report having missed at list one pill in a six-month period, and 30% of condom users state that they do not always use a condom. Almost one third (28%) of female respondents report having experienced an unplanned pregnancy. One of the recommendations was that contraceptive counseling needs to include information on contraceptive methods, as well as a discussion on increasing adherence to the chosen method.

Family planning is identified as one of the FASD prevention strategies and as an outcome in the PCAP program. However, the PCAP training resources have almost no information on family planning but one of the training videos has a section on talking about birth control with a reluctant PCAP client.[2]

3.9. Alberta Resources Related to FASD Prevention

The Alberta government is committed to reducing the incidence of FASD and ensuring individuals living with FASD and their caregivers get the critical support they need. FASD prevention is mentioned on the websites of several ministries and departments, including Alberta Health Services, Alberta Justice, and others. This section focuses specifically on FASD prevention initiatives.

3.9.1 The 2005-06 Prevention Project: Toward Optimized Practice

In 2005, Alberta Health and Wellness funded a prevention project for Alberta primary care physicians, called *Toward Optimized Practice* (Toward Optimized Practice, 2007). The

[2] Family Planning Counseling can be found at about 37-42 minutes from the start, and again at 55-57 minutes. It can be found at: http://www.youtube.com/watch?v=G_R5zOJiQZw&feature=youtu.be

guidelines can be viewed at: www.topalbertadoctors.org/download/.../FASD_diagnosis_guideline.pdf and the final report at www.health.alberta.ca/documents/Fetal-Alcohol-report-2007.pdf. The similarities between the current FASD Prevention Project and the 2005-06 project are striking. Many of the proposed strategies (alcohol screening for all women of childbearing age using the T-ACE model, motivational interviewing… are still considered best practices today.) In the appendices of the report, there are copies of the brochure and other supporting tools developed for the project. The project was never fully implemented because the proposed intervention was not well received by physicians. It is worth looking at the lessons learned from this project.

3.9.2 The FASD Learning Series Videos and the FASD Learning Tool Kit

The FASD Cross-Ministry Committee has provided live video sessions since 2008 on a number of topics related to FASD. The videos (more than 60) are available for viewing on the FASD-CMC website: http://fasd.alberta.ca/learning-resources.aspx, and provide opportunities for on-going training to FASD stakeholders, such as individuals affected by FASD, families, caregivers, and professionals.

Recently, a selection of videos has been assembled in the *FASD Learning Tool Kit* that was piloted in 2011. Each of the video is accompanied by a four-page outline of the presentation, and resources for discussion, role-play or additional resources supplement several of them.

Four of the videos on the website are relevant to the FASD Prevention project:

1. *FASD Prevention: Women and Pregnancy* (2009-06-16), presented by Dr. Gail Andrew with input from Dr. Suzanne Tough
2. Approaches to Treatment – Motivational Interviewing (2009-11-25), presented by Kevin Fisher
3. *Talking with Women about Alcohol and Pregnancy* (2011-09-28), presented by Cristine Urquhart
4. *FASD 101 – 2nd Edition* (2011-11-30), presented by Dr. Gail Andrew

The first and the last videos, with Dr. Gail Andrew, provide good basic information on FASD and overall FASD prevention strategies for women. The second and third videos have a particular focus on motivational interviewing (MI). Both presenters are motivational interviewing trainers. Kevin Fisher focuses on how MI can be used to work with persons with an FASD. Cristine has a more global approach to FASD prevention among women of childbearing age and pregnant women at risk of AEP.

3.9.3 Engaging Alberta Pharmacists in FASD Awareness and Prevention Efforts

In 2008, the Alberta Centre for Child Family and Community Research received a grant from the Alberta Government to examine the potential role of pharmacists in FASD prevention and awareness (Hanson, Andrew, & Michell, 2012) (http://www.industrymailout.com/Industry/LandingPage.aspx?id=1072983&p=1)

The needs assessment showed that 70% of Alberta pharmacists were willing to serve as a community resource for FASD prevention, but 75% felt they had little or no knowledge about FASD and FASD prevention. Based on the findings, the Ministry of Health provided a grant to support the development and delivery of a multidisciplinary three-hour educational program for practicing pharmacists and 3rd year pharmacy students. The presentation takes place once a year, through an on-line learning series. The course is

accredited, and is evaluated through a pre- and post-survey. A pamphlet: "*Healthy Baby Healthy You*" is available for pharmacists to distribute to women as part of the FASD education. The brochure is available at: http://fasd.alberta.ca/documents/Healthy-You-Healthy-Baby.pdf

The presentation addresses the following topics:

- FASD is a preventable disability;
- The effects of prenatal exposure to alcohol on the fetus;
- The effects of FASD across the lifespan;
- The challenges associated with the FASD diagnoses;
- The use of medication in the treatment of secondary illnesses associated with FASD;
- Lifelong supports needed across the systems, especially during transitions;
- Primary, secondary and tertiary FASD prevention;
- How to engage in a conversation with women; and
- The life story of a young woman with an FASD.

Evaluation of the program showed significant gains in knowledge, awareness and comfort in educating clients about FASD. Pharmacists also stated that they were more involved in counseling clients about FASD as a result of the intervention.

University of Alberta Health Care volunteer students and preceptors adapted the pharmacy curriculum to develop a 6-hour interdisciplinary curriculum that was used to educate volunteers of a youth clinic managed and staff.

3.9.4 The FASD Wheel Video Series (Proposed)

The Alberta Centre for Child, Family and Community Research, in partnership with Dr. Gail Andrew, has developed a draft educational resource for professionals and services providers of 12 videos called*: The FASD Wheel*. The videos address the cycle of FASD. At this point, only the raw footage is available. More work is required to complete the project.

3.9.5 Help a Pregnant Friend Avoid Alcohol – CFAN Campaign

The Calgary Fetal Alcohol Network has an on-going FASD awareness campaign since 2002. The FASD "*Circle of Friend*" social marketing campaign raises awareness among 16-24 year olds that no alcohol is best while pregnant, and encourages them to offer peer-support to their pregnant friends. Resources developed for the project (an information booklet, a 2-page summary of the campaign and a 2-page tip sheet) are found at: http://humanservices.alberta.ca/disability-services/16025.html

3.9.6 Women and Substance Use – Information Series

In 2010, Alberta Health Service prepared a series of documents about women and substance use as part of their information series (http://www.albertahealthservices.ca/2668.asp). The one titled "*Prevention of FASD and FAS – Working with pregnant women who use substances* (Alberta Health Services, 2010) *(http://fasd.alberta.ca/documents/hi-asa-women-info-prevent-fasd.pdf)* first lists the reasons some women may use substances during pregnancy: women may not be aware that they are pregnant; may not have adequate information about the effects of alcohol on the fetus; and women may not be able to stop on their own. It then names other factors (violence, abuse, poverty, discrimination…) that may negatively affect the pregnancy, and barriers to seek treatment (stigma, child care and custody issues…). Recommended strategies to work with pregnant women who use substances include: a harm reduction

approach; non-judgmental professional support; a multi-faceted approach; integrated services; collaboration among agencies; outreach; and fostering the mother-child relationship. The report concludes that service health ad social service providers already have the skills used to help clients with other problems, and that they should be encouraged to inquire about substance abuse even if when they have no specific expertise in additions. "*Asking substance use screening questions opens the door for educating women about the effects of alcohol and other drugs; helps women identify problem and discuss the need to change; and provides opportunities for women to begin considering the need for treatment*."

3.9.7 Family Planning Resources

In Alberta, there is no specific intervention focusing on preventing unplanned pregnancies. Family planning counseling is offered by physicians and at various Sexual Health Centres across the province. Some contraceptive methods can be purchased over the counter. Alberta has information about contraception on the following websites:

My Health Alberta Website – Birth Control Pages. The section has 8 pages, as well as additional information through pop-ups. (https://myhealth.alberta.ca/health/pages/conditions.aspx?hwId=hw237864)

www.TeachingSexualHealth.ca: This website provides resources to teachers and parents on how to talk about sexual issues with children.

Calgary Sexual Health Centre: The Calgary Sexual Health Centre has a comprehensive website that includes detailed information about contraceptive methods. (http://www.cbca.ab.ca/)

3.10. The Alberta FASD Basic Training Framework

In February 2013, the Alberta FASD Cross-Ministry Committee hosted a two-day FASD Training and Education Conference in Edmonton. One of the intended outcomes was to create a common training framework that should form the basis of all FASD training in Alberta. The conference findings and recommendations were summarized in a report: "*What We Have Heard Report*"[3]. The resources to be developed as part of this project are broader than a prevention curriculum, but many of the recommendations are relevant.

3.10.1 Language:

- Someone does not *have* FASD; they are affected by a disorder along a spectrum. They have *an* FASD.
- The language should be non-judgmental, compassionate, and centered on the individuals affected. It should be shame and blame-free.
- The approach to training should stress "progress, optimism and hope".
- Training needs to be culturally sensitive.

3.10.2 Basic principles:

- Training needs to address the economic and social complexities of FASD / determinants of health.
- Education and training need to be rigorous, current and relevant.

[3] As of June 24, the report was still in a draft form.

- Training needs to include medical and social science, as well as narratives of those affected by FASD.
- Training needs to be inclusive and empowering: training needs to involve individuals with an FASD, their families and caregivers.
- Training approaches need to be flexible.
- Training contents needs to be updated and current.

3.10.3 Training approach:

- Each session should provide expectations around what the session will cover and the intended outcomes.
- The philosophy of the approach should be described (positive, empathetic).
- The language used during presentation needs to be understood by, and be respectful of, the audience.

3.10.4 FASD Basics:

Each training session needs to include the fundamentals of FASD:

- A definition of FASD, that FASD is a whole-body spectrum disorder, there is no uniform presentation, no uniform approach to treatment and mitigation, no cure;
- A short history of FASD;
- An overview of the science behind the cause of FASD, alcohol as a teratogen, and how it impacts fetal development;
- Current facts about the scale and prevalence of FASD; and
- Contributing factors to FASD.

The basic training should also include information about:

- How FASD is identified and determined, and that a multi-disciplinary assessment and diagnosis is vital to identify and provide the right supports;
- Common myths about FASD;
- The impact of FASD, on individuals and families;
- Best practices for prevention and supports; and
- Inclusion of the affected individuals, their families and caregivers in the course of developing services and supports for them.

3.10.5 Additional resources

Each training session needs to include FASD resources:

- The local, provincial and national FASD services and supports;
- The local community champions and “go to” contacts; and
- Discipline-specific resources and follow-up training choices to improve competencies.

3.10.6 Evaluation

Each training session should be evaluated with standardized pre- and post-session evaluations.

- Both the content being presented and the presenter need to be evaluated;
- Specialized expertise needs to develop the evaluation systems; and
- A need for a plan on how evaluation results are going to be used.

3.10.7 The Basics of Fetal Alcohol Spectrum Disorder in Alberta

As a result of the conference, a working group worked at developing a basic 1-hour presentation on FASD for the general public: The Basics of Fetal Alcohol Spectrum Disorder in Alberta, which includes power point slides and teaching notes. The material will be ready in the fall of 2013 and will be available on the Alberta FASD website.

4. Examples of Prevention Resources

The web-based environmental scan was limited to North American, UK, Australia and New Zealand, and to web-based articles / sites. Search words included: FASD, Prevention, Alcohol, Pre-conception, Perinatal Care, determinants of health.

Most often, resources include links to relevant literature findings, but very few of the resources reviewed provided any information about whether the programs and/or resources developed as part of the program were evaluated.

4.1. Messaging

Numerous FASD Prevention Messages were found. Here are some examples:

- Alcohol consumption during pregnancy could lead to FASD for a child. (Tough, 2010)
- No safe level of alcohol consumption during pregnancy has been determined. (Tough, 2010)
- Zero is the limit when you are pregnant or planning to become pregnant, or about to breastfeed. (Canadian Drinking guidelines)
- The safest choice is no alcohol. (CanFASD)
- Alcohol - Nobody knows exactly how much alcohol it takes to harm a fetus, but we do know that drinking alcohol can harm your developing baby at any time during your pregnancy. It's safest not to drink at all when pregnant. (AB Health Services Website: http://www.albertahealthservices.ca/2671.asp)
- For pregnant women, there is no known safe level of alcohol consumption. During pregnancy, no alcohol is best. (AB Health Services: http://www.albertahealthservices.ca/2670.asp#)
- It's never too late to quit or cut down. Every step taken to stop drinking or using other drugs is a step toward better health for both mother and child. (AB Health Services: http://www.albertahealthservices.ca/2670.asp#)
- Drinking during pregnancy is the only way for a baby to develop FASD. (Primary Care Network http://www.albertahealthservices.ca/hp/if-hp-hmhc-desk-reference-third-edition.pdf)
- Alcohol should be avoided completely during pregnancy. There is no safe amount or safe time to drink during pregnancy. (Alberta Health Services Nutrition Guidelines – Pregnancy 2013) http://www.albertahealthservices.ca/hp/if-hp-ed-cdm-ns-4-1-1-pregnancy.pdf
- In pregnancy, there is no safe time to drink alcohol, no safe kind of alcohol, no safe amount of alcohol. (Ontario Best Start Program) http://www.alcoholfreepregnancy.ca/eng/pregnant.html)

4.2. General FASD Awareness and Prevention Campaigns

The Prevention Working Group of FASD Stakeholders for Ontario had an awareness campaign in 2008 called: *Pregnancy Test Concept*. The target group was women who drank alcohol before they knew they were pregnant (http://www.beststart.org/alcohol_fasd/FASD_poster43.pdf). The key message was: "Just found out you were pregnant? It is never too late to get the facts about alcohol and pregnancy."

In 2012, Ontario had another awareness campaign called: *Be Safe, Have an Alcohol-Free Pregnancy*. As part of the campaign, they developed a website: http://www.alcoholfreepregnancy.ca/eng/index.html that includes:

- Information on alcohol and pregnancy
- Fact sheets for women of child-bearing age, professionals and the media

In Saskatchewan, the FASD prevention *Kangaroos Ad Campaigns* took place over several years. The campaign was evaluated. (FASD Support Network of Saskatchewan, 2012) (http://www.preventioninstitute.sk.ca/blog/kangaroos-ad-campaigns-and-fasd-prevention

The findings were used to design a new campaign: "*No Thanks, I am Pregnant*". The campaign is going on right now, and preliminary evaluation findings from the new campaign will be available by the end of 2013.

4.3. Low Risk Drinking Guidelines

The Canadian Guidelines for Low Risk Drinking were developed in 2011 (Canadian Centre on Substance Abuse) and have received the support of many national and regional organizations. The guidelines were developed based on extensive research summarized in a report (Butt, 2011).

The guidelines are supplemented by several documents that can be found at: http://www.ccsa.ca/eng/priorities/alcohol/canada-low-risk-alcohol-drinking-guidelines/Pages/default.aspx

- A four-page brochure: Guidelines for Healthcare Provides to Promote Low-Risk Drinking Among Patients;
- A pamphlet: Canada's Low-Risk Alcohol Drinking Guidelines;
- A 3-page summary document for professionals on: *Communicating Alcohol-Related Health Risks*. This document focuses on the conditions associated with various levels of alcohol consumption.
- A 5-page document on; and Frequently Asked Questions about Canada's Low-Risk Alcohol Drinking Guidelines
- A poster on the guidelines that can be customized with an organization's logo

The College of Family Physicians of Canada has created a training curriculum for health care professionals and additional resources based on Canada's Low Risk Drinking Guidelines. The curriculum is presented in section 4.5: Resources for Professionals

4.4. Alcohol Use and Pregnancy Consensus Clinical Guidelines

The Canadian Alcohol Use and Pregnancy Consensus Clinical Guidelines (Society of Obstetricians and Gynaecologist of Canada, 2010) were developed in 2009-10 and have

been approved by the Executive and Council of the Society of Obstetricians and Gynaecologists of Canada, the Canadian Association of Midwives, the Canadian Association of Perinatal, Women's Health and Neonatal Nurses, the College of Family Physicians of Canada, the Federations of Medical Women of Canada; the Society of Rural Physicians of Canada; and Motherisk.

The 30-page document is available on line at: http://sogc.org/guidelines/alcohol-use-and-pregnancy-consensus-clinical-guidelines/. It provides an overview of alcohol use and FASD prevention practices, with practical recommendations on recognition, screening, documentation, counseling and communication with women about alcohol use.

4.5. Resources for Professionals and their clients

The resources presented in this section were developed to teach students and professionals about FASD and FASD prevention.

4.5.1 Alcohol Risk Assessment Modules – Saskatchewan Prevention Institute

Created for: post-secondary students / future professionals.

Type of resources: on-line modules, power point presentations

Focus: FASD in general; some resources on FASD Prevention

The Saskatchewan Prevention Institute has developed a teaching package on Fetal Alcohol Spectrum Disorder that targets post-secondary students / future professionals. The 12 modules are available online at: http://www.preventioninstitute.sk.ca/alcohol-tobacco-and-other-drugs/alcohol-risk-assessment

The modules address the culture of alcohol, the messaging about alcohol and FASD prevention, and provide an overview of FASD, and preventions:

1. Values, attitudes and stereotypes
2. What is FASD
3. Alcohol, women and pregnancy
4. Youth and alcohol use
5. Supporting women during pregnancy
6. Impact of alcohol on fetal development
7. Referral and Diagnosis
8. Primary disabilities and secondary disabilities
9. Prevention of FASD
10. FASD and the Media
11. Services in Saskatchewan
12. Reference

The Prevention Institute offers a power point presentation: *Learning about FASD* and additional resources such as a quick screening tool for alcohol use, a training manual for physicians, a brochure for women, a teaching package for professionals*: Learning about FASD modules for professionals*… Most resources are downloadable from their website. Some have to be purchased for a nominal price, such as the booklet, called: *Enhancing Patient Care – Clinical Approaches to Addressing Alcohol Use During Pregnancy*[4]

[4] The booklet, as well as a CD with other resources developed as part of this project were purchased, and are available upon request.

(Saskatchewan Prevention Institute, 2007). The booklet provides good background information on alcohol use, prevention and brief interventions, for all women of childbearing age and pregnant women. There is very little information on family planning as an option for preventing FASD.

The FASD Prevention Team Lead at the Saskatchewan Prevention Institute indicated in a conversation with the author of this report that they are looking at integrating more resources on contraception in future resources.

Another resource that may be useful is the power point presentation about Motivational Interview from the Saskatchewan Prevention Institute that is found at: http://www.skfasnetwork.ca/main/wp-content/uploads/2012/09/B5-Using-Motivatinal-Interviewing-to-Prevent-FASD-Bev-Drew.pdf

4.5.2 Library of FASD Resources – Mehary Medical College

Created for: Health Professionals, Train the Trainers

Type of Resources: Power Point presentations

Focus: FASD in general, some resources on FASD Prevention

The Mehary Medical College in Nashville has a library of FASD resources, included power point presentations, and booklets for train the trainers and for presentations. They are available at http://www.fasdsoutheast.org/presentations.html

The train the trainer resources are in the form of power point presentations and cover the following topics:

- Strategies for success with health provider audiences
- Reaching your target audience
- FASD 101
- CD update
- FASD: co-morbid psychiatric conditions and psycho-pharmacology
- FASD: introduction to diagnosis and prevention
- FASD: initial evaluation, diagnosis and counseling
- Listening to families: needs, supports and stories
- Prevention tools and techniques: alcohol screening and brief interventions
- Sensory challenges

4.5.3 FASD Training Modules, Frontier Regional FASD Training Center, CDC

Created for: Social Work and Nursing (North-West United States)

Type of Resources: Fact Sheets, Quizzes, Videos (some resources are available only as part of scheduled training sessions)

Focus: Prevention, Identification and Interventions on FASD

The *Center for the Applications of Substance Abuse Technology* (CASAT) of the University of Nevada offers on-line FASD training modules developed by the Frontier Regional FASD Training Centre (Centre for Disease Control and Prevention). It is the first of several training modules. Others are offered based on a training calendar.

The module provides an overview of FASD, with only a small section on FASD prevention (Frontier Regional FASD Training Centre) and can be found at: http://imedia.unr.edu/CASAT/FASD/module1/mod_1/mod_1.htm.

The on-line presentation includes links to additional resources (research documents, videos…). It has good information about alcohol and gender, has the voices of women who drank during pregnancy, had a slide explaining the FASD terminology (FASD, pFAS, ARBD, ARNB…). The module could be adapted for Canadian context.

Questions found in the alcohol use quiz (http://www.cdc.gov/ncbddd/fasd/quiz.html) could be incorporated in a pre- and post-test survey

The Frontier Regional FASD Training Centre developed a 2-minute video about the TWEAK screening tool (Frontier Regional FASD Training Centre). It can be found at: http://www.frfasd.org/videos.html.

4.5.4 FASD Prevention Tool Kit – Center for Disease Control and Prevention

Created for: Women's Health Care Providers

Type of Resources: Tips for working with women, brochure for women

Focus: FASD prevention

The Centre for Disease Control and Prevention has created a FASD Prevention Tool Kit for Women's Health Care Providers (Centre for Disease Control and Prevention, 2013), which is available at: http://www.cdc.gov/ncbddd/fasd/acog_toolkit.html

The tool kit includes

- Tips on working with women who drink,
- A 2-page summary pocket card found at: http://www.womenandalcohol.org/pdf/Pocket%20card%20draft%2012-29-11.pdf. The document provides summary information on:
  - Definition of which women are at risk of alcohol use
  - Screening (with T-ACE questions)
  - Key messages
  - Medical coding information
  - Summary of motivational interviewing
  - Referral options
  - Resources
- Other resources, such as a brochure for women: http://www.cdc.gov/ncbddd/fasd/documents/thinkbeforeyoudrinkbrochure.pdf about the risks of drinking alcohol during pregnancy and options.

4.5.5 British Columbia Resources

Created for: healthcare and social service practitioners

Type of Resources: Training modules, video clips (not available on line anymore), guide for women

Focus: FASD prevention

In 2005, the BC government launched *ActNowBC*, a inter-sectoral initiative that integrated activities across government with civil society initiatives to achieve five health promotion targets by 2010 (Poole & Greaves, 2013). Among its several components and streams, ActNow had a focus on the reduction of alcohol (and tobacco) use during pregnancy called *Healthy Choices in Pregnancy* (Poole & Greaves, 2013)

The program focused on helping healthcare and social service practitioners change the ways in which they engaged with women, by offering services that are welcoming and helpful to women, rather than stigmatizing them for drinking and smoking while pregnant.

Many of the The *Healthy Choices in Pregnancy* resources are no longer available on-line, however the BC government is currently planning to update and repost them. In the course of the HCIP project The BC Centre of Excellence for Women's Health led the development of has a12-page publication called: *Women and Alcohol: a Women's Health Resource*,. It can be downloaded at: http://www.health.gov.bc.ca/women-and-children/pdf/women-and-alcohol-brochure.pdf . The booklet includes information about alcohol before, during and after pregnancy. It examines the impact of alcohol on groups of women who may be missed by screening, education and treatment. This document has been updated and published by Healthy Child Manitoba as Girls, Women and Alcohol: Making Informed Choices available for download at *www.gov.mb.ca/healthychild/fasd/alcohol_women.pdf*

The BC Best Chance Program has an on-line FASD Quiz that can be found at: http://www.bestchance.gov.bc.ca/tools-and-resources/interactive-tools/fasd-awareness-quiz.htm

4.5.6 Pregnancy and Alcohol Cessation Toolkit, Alcohol Healthwatch, New Zealand

Created for: Health Care Professionals

Type of Resources: On-line modules

Focus: FASD prevention

In 2012, Alcohol Healthwatch in New Zealand, in association with the University of Otego, Wellington, launched an online resource called: *Pregnancy and Alcohol Cessation Toolkit*, targeted at healthcare professionals. The kit includes four online modules (http://akoaotearoa.ac.nz/projects/pact) that are downloadable, scenario videos that can be viewed at: http://akoaotearoa.ac.nz/project/pact/resources/all-videos, appendices about stages of change (http://akoaotearoa.ac.nz/project/pregnancy-alcohol-cessation-toolkit-pact/resources/pages/pregnancy-and-alcolhol-cessation-toolkit-appendix-1), and cultural considerations (http://akoaotearoa.ac.nz/project/pregnancy-alcohol-cessation-toolkit-pact/resources/pages/pregnancy-and-alcolhol-cessation-toolkit-appendix-2), a printed manual: *Alcohol and Pregnancy – A practical Guide for Health Professionals* (available on the Ministry of Health Website as a pdf document http://www.moh. govt.nz). Each module includes links and references, self-evaluation and module evaluation tools.

- Module 1 is an introduction to alcohol use in pregnancy and prevalence of drinking during pregnancy.
- Module 2 provides an introduction to FASD.
- Module 3 focuses on assessment and screening tools, with a focus on the Audit-C tool.
- Module 4 introduces motivational interviewing. Several videos can be used for case study.

Even though the resource states that alcohol screening should be offered to all women of childbearing age, there is a focus on pregnant women. Family Planning as a way to prevent FASD is not addressed in the material.

4.5.7 Maternal Drinking History Guide and Power Point, MotherRisk Program, Ontario

The MotherRisk Program, Hospital for Sick Children in Ontario developed a Maternal Drinking History Guide with a power point presentation that can be used to educate health professionals (Koren, 2013). The PowerPoint presentation is available at the following link: http://www.jptcp.com/files/FAR013003_Screening_webinar.pptx. The screening tool presented is TWEAK. The presentation stresses the need to integrate screening questions into standardized health questionnaires.

The PowerPoint is based on the Canada *National FASD Screening Tool Development Project - Maternal Drinking Guide*, which is part of the Canadian Guidelines for the diagnosis of Fetal Alcohol Spectrum Disorder. The Screening guidelines are found at: http://ken.caphc.org/xwiki/bin/download/FASDScreeningToolkit/National+Screening+Tool+Kit+for+Children+and+Youth+Identified+and+Potentially+Affected+by+FASD/MaternalDrinkingGuideToolEN.pdf

The proposed screening tool is TWEAK.

4.5.8 FASD Training Modules, Online Professional Development Tool, Canadian Medical Colleges

Created for: Physicians and Medical Students

Type of Resources: On-line modules

Focus: FASD prevention, assessment and diagnosis, treatment and supports

MDcme.ca (MDcme.ca, 2013) is the online professional development and conferencing services of all 17 medical colleges in Canada. (https://www.mdcme.ca/default.asp) One of the most recent on-line courses developed in 2012 is a series of 3 modules on FASD. They are the following: Prevention, Diagnosis, Recognition, Treatment & Supports. Dr. Nancy Poole, Dr. Christine Look, and Jan Lutke are the three subject matter experts. The modules include readings, short videos, pre- and post-tests and links to additional resources. The modules were developed for medical students and physicians, but anyone can register for the course, and it is free of charge. The focus is on drinking alcohol during pregnancy. There is little mention about drinking alcohol when planning to be pregnant, and using family planning / birth control is not mentioned as another harm reduction approach to preventing FASD.

4.5.9 Alcohol Screening and Brief Interventions for Professionals, Canadian Centre on Substance Abuse

Created for: Professionals

Type of Resources: Printed resources for professionals and women

Focus: Alcohol screening and brief intervention

The Canadian Centre on Substance Abuse (CCSA) has many resources on alcohol screening and brief interventions for professionals (Canadian Centre on Substance Abuse, 2013). The site can be accessed at: http://www.ccsa.ca/Eng/Priorities/Alcohol/Alcohol-Screening-Brief-Intervention-and-Referral/Pages/default.aspx. It includes resources, such as:

- A four-page brochure: Guidelines for Healthcare Provides to Promote Low-Risk Drinking Among Patients;
- A pamphlet: Canada's Low-Risk Alcohol Drinking Guidelines;

- A 3-page summary document for professionals on: *Communicating Alcohol-*Related Health Risks*. This document focuses on the conditions associated with various* levels of alcohol consumption;
- A 5-page document on Frequently Asked Questions about Canada's Low-Risk Alcohol Drinking Guidelines; and
- A poster on the guidelines that can be customized with an organization's logo

The information about alcohol screening is broad, but also offers specific information on how alcohol affects specific groups, such as women, pregnant women, youth…

4.5.10 Screening, Brief Intervention and Referral (SBIR) – A Clinical Guide, The College of Family Physicians of Canada

Created for: Canadian family physicians, nurse practitioners and other healthcare professionals.

Type of Resources: Web-based curriculum, printed resources, videos with case studies

Focus: Alcohol screening and brief interventions, not limited to women

The College of Family Physicians in Canada has developed training resources for physicians to support the implementation of Canada's Low Risk Alcohol Drinking Guidelines. The resources are found on their website at: http://www.sbir-diba.ca and include:

- Several web pages describing the steps in screening and brief interventions ;
- Provider resources (http://www.sbir-diba.ca/resources/provider-resources):
  - A 2-page clinical guide /algorithm to help health professionals incorporate the guidelines into routing alcohol screening;
  - Links to the CCSA site;
- Patient resources:
  - *Drinking Smart: your Health and Alcohol Consumption* – Patient Workbook for Creating a Healthier Lifestyle;
  - Links to CCSA site; and
- Videos that provide case studies (http://www.sbir-diba.ca/resources/provider-resources/videos).

4.5.11 Alcohol and Pregnancy – Ontario Best Star and Health Nexus

Created for: Professionals and Families

Type of Resources: Handouts, Video clips

Focus: Alcohol and Pregnancy

Best Start provides a variety of resources, most of them available for reprint for women and their partners, such as:

- A handout and tear-off pad: Have an Alcohol-free Pregnancy;
- A brochure: Aboriginal Pregnancy and Alcohol;
- Bilingual Recipe Cards and a booklet: *Mocktails for Mom;*
- Resources on alcohol and breastfeeding;
- Reports for professionals, such as: *Implications for Ontario – Awareness of FASD in 2009*, summarizing the results of the 2009 survey of the general public;

- *Supporting Change: Effective Practices in Screening* found at http://www.youtube.com/watch?v=XvLJxYxUF6Y. A 14-minute video that teaches about screening, using case scenarios; and
- Several engagement tools available on line for women of childbearing age. In the *Health Before Pregnancy Handbook* (Ontario's Maternal, Newborn and Early Child Development Resource Centre, 2011) (http://www.beststart.org/resources/rep_health/Health_Before_pregnancy_2011_FULL.pdf), alcohol is one of the first items of discussion. The 2 page chapter provides information on why and how alcohol can harm a future pregnancy, a self assessment on one's drinking personality and on whether the current drinking pattern is a problem, ideas on activities to do instead of drinking alcohol, and where to get help. The handbook covers many other perinatal health areas, such as smoking, medication, healthy eating, folic acid, being active, stress, and sexually transmitted infections.

4.5.12 Tool Kit for General Practitioners – NOFAS - UK

Created for: Physicians and the clients they serve

Type of Resources: You Tube Videos and transcripts, for GPs, pregnant women and families.

Focus: FASD prevention

The UK National Organization for Foetal Alcohol Syndrome (NOFAS-UK) developed a tool kit for GPs that is posted on the Mencap, a UK site focusing on learning disabilities (MENCAP, 2013). The tool kit provides general information about FASD. It includes the following:

- An accredited course for physicians on FASD. Module 5 focuses on FASD prevention. Each course has a pre- and post-quiz. The course can be found at http://nofasaa1.miniserver.com/~martin/OnlineCourse/USING/using_the_course_frame.php.htm
- Three short YouTube videos, aimed at GPs, pregnant women, and families. The transcripts of the videos are found on the website. The videos have all common elements – the messages are very similar; the same persons (doctors, families, community workers) are presenting the messages in every video, and each video features some children / youth with FASD and family members.

The overall message is the following: "It is difficult to estimate safe levels of alcohol in pregnancy. The effect of alcohol on the fetus may be different for each woman. What we know however from medical studies is that if a woman drinks at high levels during pregnancy, there is a high risk of damage to the child. Alcohol consumed at low levels in pregnancy might cause cognitive damage to the child and how it processes information. The safest advice for pregnant women is to abstain from alcohol throughout the pregnancy. It is never too late to stop drinking in pregnancy. If a woman drank alcohol before she found out she was pregnant, the safest option is to stop now."

4.6. Other Engagement Tools with Women of Child-Bearing Age and their Partners

Brochure for Women: *Be with child without alcohol* (Manitoba Liquor and Lotteries): http://www.withchildwithoutalcohol.com/media/WCWA_Information_Booklet_English.pdf

Liquor distribution agencies in other provinces have also created brochures and additional materials as part of their social responsibility mandates. In BC the BCLDB partnered with BC Women's Hospital as well as federal and provincial ministries to create posters and pamphlets with evidence-based messaging. See http://www.bcldb.com/corporate-social-responsibility/responsible-use/fasd-awareness

Evolution Health Systems Inc. produced the *Check your drinking* survey, to self-check drinking habits. It is aimed at individuals with a risk of drinking. http://www.checkyourdrinking.net/CYD/CYDScreenerP1_0.aspx

A Canadian website introducing contraceptive methods.: *Sexuality and You* Website: http://www.sexualityandu.ca/birth-control (site of the Society of Gynecologist and Obstetricians of Canada)

4.7. Other Engagement Tools with Youth

The Saskatchewan Prevention Institute: http://www.preventioninstitute.sk.ca/alcohol-tobacco-and-other-drugs/alcohol-risk-assessment has FASD interventions specific to a person, under the umbrella of "Youth Action for Prevention". It encourages young people to think about ways to raise awareness of FASD and other harms caused by alcohol among their peers.

One of their recent projects was a project using Photovoice methods. They have also developed a You-Tube Video called: Thank *you Mom that* communicates the importance of avoiding alcohol during pregnancy. This issue is addressed in a sensitive and relevant way by having young people thank their own mothers for not drinking alcohol during pregnancy. The writing, acting, directing, filming, and musical composition were all completed by Saskatchewan youth through the Saskatchewan Prevention Institute's Youth Action for Prevention project. See the video at the following link: http://www.youtube.com/user/PreventionInstitute1

4.8. Motivational Interviewing

Several of the professional resources include an orientation on Motivational Interviewing (MI). There are also specific sites dedicated to MI. It will be important to include information about how to receive additional training and supports on MI.

4.9. Other Social Media

www.Text4baby.org: is a USA-based free weekly message on cell phones about pregnancy. There are 250 messages, coming from a number of institutions. Topics are broad and address prenatal care, safe sleep, immunization, breastfeeding, nutrition, oral health, immunization, family violence, physical activity, safety, injury prevention, mental health, substance abuse, developmental milestones, labor & delivery, car seat safety and exercise.

The Center for Disease Control and Prevention has created an app called CDC FASDs for ipads and iPhones. (https://itunes.apple.com/us/app/fetal-alcohol-spectrum-disorders/id517058288?mt=8&ls=1) The application is meant to provide information for the general public, pregnant women and professionals on FASD basics, diagnosis, and treatment, and links to research. The app has a lot of information, but is not very interactive at this point.

5. Recommendations

5.1. Overall Recommendations

The resources to be developed need to be in line with the recommendations of the Canada Alcohol Use and Pregnancy Consensus guidelines (see section 3.1):

- Universal screening for alcohol consumption should provided for all pregnant women and women of childbearing age on a regular basis.
- The FASD Prevention Conversations should occur in a safe environment for all women.
- Professionals engaging in the FASD Prevention Conversations should be aware of risk factors associated with alcohol use in women of reproductive care, including but not limited to FASD.
- Professionals should be equipped to offer brief interventions, such as motivational interviewing following alcohol screening.
- If a woman chooses to continue drinking during her pregnancy, harm reduction strategies should be encouraged.
- Professionals should know about community resources available to women who need additional supports.
- Professionals should advise women that low- level consumption of alcohol in early pregnancy is not an indication for termination of pregnancy.

The resources developed for the project should align with the Alberta basic training framework (see section 3.10).

The resources developed for the Alberta Prevention Conversation should encourage professionals to have the FASD Prevention Conversation with all women of childbearing age, not just pregnant women. While the resources to be developed as part of the FASD Prevention Conversation project target women aged 18 to 45 years old, there is a recognition that all women and girls of childbearing age need to be aware of the FASD Prevention Message. Other Alberta interventions may focus on younger women and girls, but prevention messages need to be consistent.

The resources developed should be developed based on a health determinants perspective, as outlined in section 3.3: they should be respectful, relational, self-determining, women-centered, harm reduction oriented, trauma informed, health promoting, culturally safe and sensitive, supportive of mothering, and using a disability lens.

The resources developed for the Alberta Prevention Conversation should include messages about the reduction of alcohol use and the adoption of effective contraception and as two effective ways of preventing FASD.

- Contraception is one of the strategies used in Level 3 prevention (PCAP model)
- Project CHOICES (section 3.4) is a well-documented, evaluated and researched prevention intervention that intentionally includes contraception as a FASD-prevention strategy in the pre-conception period as a Level 2 FASD prevention project and follows specific protocols.
- It will be important to carefully create and evaluate the outcomes of the contraception messages, as part of the intervention.

- The training resources need to include information on the frequent occurrence of unplanned pregnancies, why drinking increases the risk of unsafe sex, and where to get additional resources / counseling on contraception.

The resources could be provided in the form of several modules that include at least the following:

- Project goals and outcomes;
- Overall principles: women-centered, harm reduction oriented, and collaborative
- FASD: general information;
- Alcohol information; alcohol and women's health, low risk drinking guidelines
- Ways of starting a conversation about alcohol; creating safety, making decisions about the use of formal screening tools.
- Effective approaches to brief intervention, using motivational Interviewing;
- Resources available to women; and
- Links to other resources.

The resources need to be sensitive to all cultures, including Aboriginal and Métis communities, and new Canadians.

5.2. Resources for Service Network Prevention Facilitators

Resources for trainers should at least be provided in the form of a training curriculum, which could include standard power point presentations for each section of the training, training handouts, and guidelines that can be used for all presentations.

Considering the fact that most people look for resources on websites, it will be important to have some of the resources on line, using the Government of Alberta FASD Website (http://fasd.alberta.ca), with similar messages than what will be offered in presentations. Some of the resources could be geared at unique groups of individuals (women in pre-conception, professionals, youth, First Nations, Inuit & Métis, New Canadians…). Resources could take the form of the following:

- Power point presentations
- Videos / video clips of experts speaking about a specific topic, or video clips that can be used for case studies
- Fact Sheets / Brochures
- Electronic FASD training modules
- Website with – information, self-screening tools, quizzes, video clips, links…
- Face book page
- Twitter
- Manuals / Guidelines (in print or electronic form)
- Resources for alcohol screening
- Scenarios for role-plays (motivational interview, group facilitation…)
- Evaluation resources and protocols

The following table provides a list of essential training components to be developed for the Service Network Prevention Facilitators / FASD Trainers and examples of resources that should be reviewed while developing the resources.

Essential Training Components	Examples of Resources
Project Goals and Outcomes • **Overview of the FASD-CMC and the Alberta FASD Strategy** • **Overview of the project and the resources developed for the project** • **A common understanding on who should be trained; training priorities, various training needs** • **Information on how the project will be evaluated and their role in the evaluation process.** • **All resources developed for the project**	"FASD – The Prevention Conversation" terms of reference Alberta FASD 10-Year Strategic Plan (http://fasd.alberta.ca/documents/FASD-10-year-plan.pdf) Alberta FASD-CMC Website (http://fasd.alberta.ca)
Overview of the Alberta FASD Basic Training Framework and general principles • **Social and cultural determinants of health, and how they affect alcohol consumption and FASD (genetics, alcohol use, other substance use, poverty, stigma and racial discrimination, violence and abuse, history of child welfare, mother with FASD…)** • **Harm Reduction Principles** • **FASD lens / Cultural lens / Disability lens**	Alberta Basic Training Framework -section 3.10 The Basics of Fetal Alcohol Spectrum Disorder in Alberta power point and teaching notes. Resources for professionals and their clients – section 4.5: • on-line modules 1 & 2 developed by Saskatchewan Prevention Institute – section 4.5.1 • module 1 of Library of FASD Resources, Mehary Medical College – section 4.5.2
Narratives • **Include stories / the voices of persons affected by an FASD: persons with an FASD; mothers; caregivers…**	Sources for narratives include: • Donna Debolt, • Sharon Mitchell (it may be possible to make use of the video clip developed for the pharmacy project) • Nancy Poole (clips developed in BC) • Anne Guarasci's book: Empowering Front-Line Staff and Families Through a Collection of Lived Experiences: Supporting Women Who Have Fetal Alcohol Spectrum Disorder (FASD)

Essential Training Components	Examples of Resources
	Behaviours and Characteristics and/or Other Related Disabilities (Guarasci, 2011).
FASD – General Information • **The presentation needs to include information on: FASD definition, the economic and social complexity of FASD, the medical and social science of FASD, narratives of people affected by FASD, a history of FASD, diagnosis, assessment and supports.** • **Could be in the form of a power point presentation** • **Could include short video clips (of FASD experts on a specific topic, or with case studies)**	Alberta Basic Training Framework -section 3.10 Alberta FASD Learning Series Videos - section 3.9.2 The Alberta FASD Pharmacists project - section 3.9.3 Resources for professionals and their clients – section 4.5: • on-line module 2 and Learning about FASD power point presentation developed by Saskatchewan Prevention Institute – section 4.5.1 • module 3 of Mehary Medical College – section 4.5.2 • video developed by the Frontier Regional Training Centre – section 4.5.3 • module 2 of New Zealand toolkit – section 4.5.6 • module 1 of MCcme.ca – section 4.5.8
FASD Prevention Messages • **A review and discussion of the common messages that have been adopted as part of the FASD Prevention Conversation Project**	Messaging - Section 4.1 Minutes of FASD Awareness and Prevention Council
Alcohol Use in Canada and its effects • **Alcohol use and abuse** • **Prevalence of alcohol use (all Canadians, Canadian women)** • **Sex bias in understanding women's use due to not using lower cut offs for risky drinking** • **Binge drinking -sex specific criteria** • **Impact of alcohol on women's health** • **Canadian Alcohol low risk guidelines and resources**	Alcohol use and pregnancy consensus clinical guidelines - section 3.2 Alcohol low risk guidelines – section 4.3 Alcohol use and pregnancy consensus clinical guidelines – section 4.4 Resources for professionals and their clients – section 4.5: • on-line modules 3, 4 & 6 developed by Saskatchewan Prevention Institute – section 4.5.1 • module 2 of New Zealand toolkit – section 4.5.6 • module 1 of MCcme.ca – section 4.5.8
Identification of Alcohol Use:	Alcohol use and pregnancy consensus clinical

Essential Training Components	Examples of Resources
• **Informal approaches – starting the conversation; creating a relationship with the client;** • **Creating safety;** • **Offering education on standard drink size;** • **Sharing low risk drinking guidelines;** • **Formal Screening tools.**	guidelines - section 3.2 Alcohol screening tools – section 3.6 Alcohol low risk guidelines – section 4.3 Alcohol use and pregnancy consensus clinical guidelines – section 4.4 Resources for professionals and their clients – section 4.5: • on-line module 9 developed by Saskatchewan Prevention Institute – section 4.5.1 • modules 6 of & 9 of Mehary Medical College – section 4.5.2 • module 3 of New Zealand toolkit – section 4.5.6 • Maternal Drinking History guide and power point – MotherRisk Ontario – section 4.5.7 • material developed by the Canadian Centre on Substance Abuse – section 4.5.9 • clinical guide of the College of Family Physicians of Canada – section 4.5.10 • Module 5 of the UK tool kit for general practitioners – Section 4.5.11
Brief Interventions and Referrals • **Introduction to Motivational Interviewing** • **Case scenarios** • **How to support women and their partners who drink / have been drinking during pregnancy** • **Community supports for persons with FASD** • **Suggestions on how to be trained professionally**	Brief Interventions – section 3.7 Resources for professionals and their clients: • Power point presentation on motivational interviewing – section 4.5.1 • module 9 of Library of FASD Resources – Mehary Medical College – section 4.5.2 • module 4 of Pregnancy and Alcohol Cessation Tool kit of New Zealand – section 4.5.6 • FASD Training module 1 MDcme.ca – section 4.5.8
Contraception / family planning for FASD prevention	Sexuality and You Website – section 4.6 Alberta Websites with information on contraception – section 3.8
Other resources developed for the project (to be determined) • **Video clips** • **Hand-outs for women**	(See other elements table)

Essential Training Components	Examples of Resources
• **Web-based information** • **Discussion guidelines, case studies, suggested scenarios for role-plays**	
Links to other resources • **FASD General Resources (PHAC, CanFASD Research Network, Alberta FASD-CMC website) and FASD Resources specific to each region / FADS Network** • **General and regional resources on alcohol use**	*The Alcohol Use and Pregnancy Consensus Guidelines* has links to essential national FASD resources – section 3.2 Check Alberta FASD-CMC website (http://fasd.alberta.ca) for links to other sites Check with FASD Network Coordinators for list of resources in their region
Evaluation Tools • **Formative and Narrative** • **Pre- and post tests and/or evaluation surveys**	To be developed in conjunction with the Project Evaluators.

Other Training Components	Example of Resources
Video about the use of TWEAK Screening Tool	Video about the use of the *TWEAK* Screening tool developed by the Frontier Regional FASD Training Centre – Section 4.5.3 Teaching videos about alcohol screening developed by the Ontario Best Start Program – section 4.5.11
Video about alcohol screening	
Motivational Interviewing	Video on Motivational Interviewing developed by the Saskatchewan Prevention Institute – Section 4. 5.1
Quiz on alcohol use	On-line quiz developed by the Frontier Regional FASD Training Centre – Section 4.5.3
Summary fact sheets / tips	Working with women who drink – FASD Prevention Tool kit, CDC– Section 4.5 Summary pocket card on women and alcohol, T-ACE tool, and key messages developed by CDC, section 4.5
I-phone App	The CDC FASD App for I Pads and I Phones created for professionals on Alcohol Prevention by the Centre for Disease Control and Prevention – section 4.9

5.3. Resources for Women and their Partners

Women and their partners who participate in the FASD Conversation should have access to resources that match the style of the presentations.

The Alberta resources for women and their partners should include a resource specific to the pre-conception period, targeting women who are not yet pregnant, or not planning to be pregnant. Such a resource should include information on the high rates of unplanned pregnancies, and how effective contraception is one strategy of preventing FASD.

A good example of how professional resources and client resources have been used in a coordinated way is provided in section 4.5.11 where similar video clips provide messages for doctors, families and community workers.

Essential Resources for Women and their Partners	Examples of Resources
Resources on Alcohol and Women	Women and Alcohol – a women's health resource, developed in BC –section 4.5.5 Health before pregnancy handbook – Ontario Best Start Program – section 4.5.11 Hand-out and tear-off pads for women about alcohol and pregnancy developed by Ontario Best Start Program – section 4.5.11 *Be with child without alcohol* brochure developed by the Manitoba Liquor and Lotteries – section 4.6 Brochure developed by the Alberta FASD Pharmacy project – section 3.9.3
Basic facts about FASD (should include links to AB FASD website and networks) and other relevant sites	One link could be: http://www.knowfasd.ca

Other Resources for Women and their Partners	Example of Resources
FASD Quiz	Quiz developed by the *Best Chance* program – Section 4.5.5
Workbook for women	A workbook developed by the College of Family Physicians of Canada to help women who drink create a healthier lifestyle – section 4.5.10
Self-administered drinking survey	A survey developed by evolution health systems – section 4.6

Other Resources for Women and their Partners	Example of Resources
Examples of engagement tools with youth	The Saskatchewan "youth action for prevention", section 4.7 The Calgary "Help a Pregnant Friend Avoid Alcohol" – section 3.9.5
Cell phone messaging system	www.Text4baby.org, a USA-based free weekly messaging system about pregnancies

6. Conclusion

Fetal Alcohol Spectrum Disorder is a preventable, lifelong disability resulting from prenatal exposure to alcohol. Alcohol consumption is a common activity in our society, and there is no known safe time or amount to drink during pregnancy. The prevention of FASD is critical to the success and achievement of Alberta's FASD 10-Year Strategic Plan's goals and targets.

The literature review and environmental scan focused on the first and second levels of FASD prevention: "broad awareness building & health promotion efforts", and "discussion of alcohol use and related-risks with all women of childbearing years and their support networks.

Even though there have been many FASD prevention campaigns and programs over the past twenty years, only a few of them have been formally evaluated, and are accepted as best practices. Brief interventions, especially motivational interviewing, have been recognized as a best practice to help women reduce or stop alcohol consumption during their pregnancy. Despite the acknowledgement that the lack of effective contraception is a risk factor for FASD, only a few interventions intentionally include contraception messages and interventions in FASD prevention strategies.

The report includes a literature review, as well as the description of interventions and resources that will inform the development of an Alberta training curriculum to support primary care providers as they engage in non-judgmental, empathetic conversations about alcohol use and related risks with all women of childbearing age.

7. Works Cited

AADAC. *Canadian Addiction Survey, Alberta Report.* 2006, AADAC, Health Canada.

Alberta Health Services. (2010). *Preventing FASD and FAS - Working with pregnant women who use substances*. Retrieved 7 25, 2013, from Women and Subtance Use Information Series: http://fasd.alberta.ca/documents/hi-asa-women-info-prevent-fasd.pdf

Badry, D., A., S., A., H., Q., L., & A., W. F. (2013, 2 7). *NAT on FASD Prevention from a Women's Health Determinants Perspective*. Retrieved 7 11, 2013, from The Canada FASD Research Network: http://www.canfasd.ca/wp-contents/uploades/2013/02/BOHF__Handout_Feb7_2013.pdf

BC Centre of Excellence for Women's Health. (2007). *Coalescing on Women and Substance Use - Linking Research, Practice and Policy*. Retrieved 6 25, 2013, from http://www.coalescing-vc.org

Butt, P. e. (2011). *Alcohol and Health in Canada: a summry of evidence and guidelines for low risk drinking.* Canadian Centre on Substance Abuse.

Canadian Centre on Substance Abuse. (2013). *Alcohol Screening, Brief Interventions and Resources*. Retrieved 6 21, 2013, from Canadian Centre on Substance Abuse: http://www.ccsa.ca/Eng/Priorities/Alcohol

Canadian Centre on Substance Abuse. (n.d.). *Canada's Low Risk Alcohol Drinking Guidelines.* Retrieved 5 20, 2013, from Canadian Centre on Subtance Abuse: www.ccsa.ca

CanFASD Northwest. (2010). *Consensus on 10 fundamental components of FADS prevention from a women's health determinants perspective*. Retrieved 7 11, 2013, from The Canada FASD Research Network: http://www.canfasd.ca/wp-content/uploads/2013/02/ConsensusStatement.pdf

Carson, G. C., Croteau, P., Graves, L., & Kluka, S. W. (2010). Alcohol use and pregnancy: consensus clinical guidelines. *Journal of Obstetrics and Gyanecology, Canada , 32* (8 Supplement 3), S1-S32.

Carson, G. e. (2010). Alcohol Use and Pregnancy Consensus Clinical Guidelines. *Journal of Obstetrics and Gynaecology Canada , 32* (8).

Centers for Disease Control and Prevention. (2013, 4 25). *Prevention alcohol use during pregnancy: Project Choice.* Retrieved 5 20, 2013, from Fetal Alcohol Spectrum Disorder: http://:www.cdc.gov/ncbddd/fasd/research-prevention.html

Centre for Disease Control and Prevention. (2013). *FASD Tool Kit for Women's Health Care Providers*. Retrieved 6 19, 2013, from http://www.cdc.gov/ncbddd/fasd/acog_toolkit.html

Dell, C. a. (2005). *Alcohol Use and pRegnancy: an important Canadian Public Health and Social Issue - Research Update.* Retrieved 7 11, 2013, from Public Health Agency of Canada: http://www.phac-aspc.gc.ca/fasd-etcaf/index.html

FASD Support Network of Saskatchewan. (2012, 12 13). *Kangaroos, Ad Campaigns, and FASD Prevention*. Retrieved 6 25, 2013, from Saskatchewan Prevention Institute: http://www.preventioninstitute.sk.ca/blog/kangaroos-ad-campaigns-and-fasd-prevention

Fisher, W., & Black, A. (2007). Contraception in Canada: a review of method choices, characteristics, adherence and approaches to counseling. *CMJA , 176* (7).

Frontier Regional FASD Training Centre . (n.d.). Retrieved 6 18, 2013, from http://www.frfasd.org/education.html.

Frontier Regional FASD Training Centre. (n.d.). *FASD Training Videos*. Retrieved 6 18, 2013, from http://www.frfasd.org/videos.html

Guarasci, A. (2011). *Empowering Front Line Staff and Families Through a Collection of Life Experiences: supporting Women Who Have Fetal Alcohol Spectrum Disorder Behaviours and Characteristices and/or Related Disabilities.* CNC Press Publication.

Hanson, T., Andrew, G., & Michell, S. (2012, 12 20). *Engaging Alberta Pharmacists in FASD Awareness and Prevention*. (A. A. Program, Producer) Retrieved 6 25, 2013, from On the Horizon: Addiction and Mental Health - Linking Research and Practice: http://www.industrymailout.com/Industry/LandingPage.aspx?id=1072983&p=1

Health Canada. (2012, 7). *Canadian Alcohol and Durgs Use Monitoring Survey*. Retrieved 6 21, 2013, from Health Concerns: http://www.hc-sc.gc.ca/hc-ps/drugs-drogues/stat/_2011/summary-sommaire-eng.php

Ingersoll KS, e. a. (2013). Preconceptional motivational interviewing interventions to reduce alcohol-exposed pregnancy risk. *J Subst Abuse Treat. , 44* (4), 407-16.

Institute of Health Economics. (2013). *Prevention of Fetal Alcohol Spectrum Disorder - Findings from systematic literature reviews and an environmental scan.* Institute of Health Economics, Alberta, Canada. Edmonton: Institute of Health Economics.

Johnston, A. D. (2012, 6 7). *Women & Alcohol - To your health?* Retrieved 7 25, 2013, from The network online - Canadian Women's Health Network: www.cwhn.ca

Koren, G. e. (2013). The Maternal Drinking History Guide: Development of a National Educational Tool. *J Popul Ther Clin Pharmacol , 20(1)*.

Kusi-Achampon, M. e. (2011). *Effective interventions to prevent alcoho-exposed pregnancies: a rapid reiew of the literature.* Region of Peel Public Health. Region of Peel.

Lee JK, P. S. (2011). The impact of contraceptive counseling in primary care on contraceptive use. *j Gen Intern Med , 26* (7), 822.

MDcme.ca. (2013). *MDcme.ca*. Retrieved 6 20, 2013, from FASD Fetal Alcohol Spectrum Disorder Series: http://www.mdcme.ca

MENCAP. (2013, 6). *The Fetal Alcohol Spectrum Disorder Tool Kit for GPs*. Retrieved 6 17, 2013, from www.mencap.org.uk/FASD

Miller, W. &. (2002). *Motivational Interviewing: Preparing People for Change (2nd ed.).* New York, NY: The Guilford Press.

Motivational Interviewing . (2012). *Motivational Interviewing* . Retrieved 6 25, 2013, from http://www/motivaionalinterview.org

Nova Scotia Deparment of Health Promotion and Protection. (2008). *Environmental Scan exploring systemic barriers for screening & brief interventions for primary health care providers.* Halifax: NS: Research Power Incorporated.

Ontario's Maternal, Newborn and Early Child Development Resource Centre. (2011). *Health Before Pregnancy Handbook.* Health Nexux.

Parkes, T. P., Salmon, A., & Greaves, L. &. (2008). *Double Exposure: A Better Practice Review on Alcohol Interventions during Pregnancy.* British Columbia Centre of Excellence for Women's Health. Vancouver, BC: BC Centre of Excellence for Women's Health.

Poole, N. A. (2008). *Fetal Alcohol Spectrum Disorder (FASD) Prevention: Canadian Perspectives.* Public Health Agency of Canada.

Poole, N., & Greaves, L. (2013). Alcohol Use in Canada: How Policy Moments Can Create Opportunities for Promoting Women's HealthWomen. *Canadian Journal of Public Health , 104* (2), e-170-e-172.

Public Health Agency of Canada. (2011, 8 26). *The Canadian Maternity Experience Survey - Reports and Reference Material*. Retrieved 6 21, 2013, from Public Health Agency of Canada.

Reproductive Health Working Group. (2009). *Alberta Reproductive Health: Pregnancies and Births 2009.* Alberta Health and Wellness, Edmonton.

RJ., S., SS., M., & Jw., A. (1989). The T-ACE questions: Practical prenatal detection of risk drinking. *American Journal of Obstetrics and Gynecology* , 863-870.

Rutman, D., Hubberstey, C., Poole, N., Hume S, & Van Bibber, M. (2011). *MappingEvaluation of FASD Prevention Programs* . Retrieved 7 11, 2013, from Interprofessional UBC: http://www.interprofessional.ubc.ca/FASD/presentations/C6.pdf

Sarkar, M. e. (2010). Comparing the effectiveness of TWEAK and T-ACE in determining problem drinkers in pregnancy. *Alcohol Alcohol* (45), 356-360.

Saskatchewan Prevention Institute. (2007). *Enhancing Patient Care - Clinical Approaches to Addressing Alcohol Use During Pregnancy.* Saskatchewan Prevention Institute.

Smith, P. C. (2009, 7 24). Primary care Validation of a Single-Question Alcohol Screening Test. *J Gen Intern Med* , 783-788.

Society of Obstetricians and Gynaecologist of Canada. (2010). Alcohol use and pregnancy consensus clinical guidelines. *Journal of Obstetrics and Gynaecology Canada , 32* (8).

The Institute for Health and Recovery. (n.d.). *SBIRT (Screening, Brief Intervention & Referral to Treatmetn)*. Retrieved 5 20, 2013, from The Institute for Health and Recovery: www.healthrecovery.org/projects/screning_and_early_identification/SBIRT.asp

Tough, S. (2010, September). Dispelling myths and developing a framework for reducing the risk of alcohol-exposed pregnancies. *Journal of the Oxford Round Table - Forum on Public Policy Online* .

Toward Optimized Practice. (2007). *Physicians for Fetal Alcohol Spectrum Disorder Prevention - Project Report.*

Van Bibber, M., Hubberstey, C., Poole, N. Hume, S., & Rutman, D. (2011). Draft - Mapping Evaluation of FASD Programs in Aboriginal Communities.

Velasquez, M. e. (2010, 5 1). A dual-focused motivational intervention to reduce the risk of alcohol-exposed pregnancy. *Cogn Behav pract. , 17* (2), pp. 203-12.

Weissman CS, M. D. (2002). Contraceptive counseling in managed care: preventing unintended pregnancy in adults. *Women's Health Issues , 12* (279-95).

WK, C. A., EA, P., JW, W., & M, R. (1993). Use of the TWEAK test in screening for alcoholism / heavy drinking in three populations. *Alcoholism: clinical and experimental research* , 1188-1192.