

Recommendations

PREVENTION OF FETAL ALCOHOL SYNDROME (FAS)

This guideline was developed by a working group based on best available evidence and from a province-wide survey of physicians. The development of this guideline was funded as part of the Alberta FAS Initiative and in cooperation with the Prairie Province FAS Initiative.

For the purpose of this guideline, the term FAS (FAE, ARBD) is used to describe the full continuum of abnormalities attributed to prenatal exposure to alcohol. (see preface)

GOALS

This guideline is intended for use by physicians, midwives and other health care professionals to reduce the incidence and disability from FAS by increasing:

- knowledge about screening for alcohol consumption in pregnancy;
- awareness about common attitudes regarding alcohol use and FAS; and by
- promoting productive dialogue and action between healthcare professionals and their patients (and when possible, their partners).

RECOMMENDATIONS

- A consistent message must be given to all women of childbearing years and their partners that:
 - a prudent choice for women who are pregnant or who are considering pregnancy is to abstain from alcohol;
 - inform women who consumed small amounts of alcohol occasionally during pregnancy that the risk to the fetus in most situations is minimal; and
 - reducing or stopping alcohol use at any time during pregnancy will increase their chance of having a healthy baby.
- Physicians/midwives engage with other health care professionals in basic strategies to prevent FAS in their practices.
- Given the risk of recurrence is high for women (couples) who have had an FAS child, that they are counselled in recognizing and changing their alcohol use patterns in order to reduce impairments and disabilities in future children and are provided contraceptive counselling.

PREVENTION STRATEGIES

Primary Prevention

- Engage in education regarding FAS and the adverse effects of alcohol on the fetus with all women and their partners
- Ask all female patients, of childbearing age, the basic question about their use of alcohol
- Be aware of and use promotional materials in offices and as handouts for patients
- Be aware of and access community resources
- Discuss and enhance access to contraceptive strategies with all women and their partners

Secondary Prevention

- Identify women who are using alcohol during pregnancy and assess level of risk (refer to Algorithm and Screening Details)
- Counsel pregnant women who are using alcohol about the effects on the fetus and their own health
- Counsel pregnant women regarding the benefits of stopping or reducing the use of alcohol at any time during pregnancy
- Ask the woman why she drinks?
- Refer women who are using alcohol for appropriate treatment
- Provide contraceptive counselling

Tertiary Prevention

- Identify those women at high risk in future pregnancies
- Ask the woman why she drinks?
- Refer women at risk, especially pregnant women, for appropriate treatment
- Counsel women about the benefits of stopping or reducing alcohol consumption at any time during pregnancy
- Provide contraceptive counselling

Practice Tip:

Alcohol use in pregnancy should be discussed as part of risk reduction counselling.

BACKGROUND ON PREVENTION

Prevention Strategies

The goal of a comprehensive prevention program is to provide overlapping levels of reinforcement (education and persuasion), incentives and interventions to prevent FAS.¹

Primary Prevention

Primary prevention involves the elimination of the root causes of a problem by broad-based efforts to promote the health and well-being of a community. These strategies can be applied to the entire population.

In the case of FAS, the goal of primary prevention is to have no fetuses exposed to alcohol, thus eliminating the problems of FAS before they ever develop. Because no safe level of drinking has been identified, ideally all females would cease drinking before conception and

during pregnancy.² This abstinence would guarantee the primary prevention of all FAS.

Knowledge and Understanding

To carry out effective prevention strategies, health professionals need knowledge and understanding of the probable etiologic mechanisms of FAS and the factors contributing to the use of alcohol.

Evidence³⁻⁵ shows that information provided by physicians and others in office and prenatal clinic settings is seen as credible and effective in relaying the message.

Clarren⁶ suggests that physicians and other health care providers should discuss the notion, prior to conception, that alcohol consumption is potentially harmful to a developing fetus.

Education

One of the most basic techniques used in primary prevention is public education at all levels.

Information should be directed slightly differently for women and men. It is important to emphasize to women abstinence from alcohol and drugs during pregnancy.⁷ For partners and families, the emphasis should be placed on the supportive role that they play in a healthy pregnancy.

FAS is preventable

A prudent choice for women who are pregnant or who are considering pregnancy is to abstain from alcohol

Secondary Prevention

Secondary prevention seeks to reduce the duration and severity of maternal drinking by identification of the person at risk. Thus, strategies would include screening, early intervention programs, and services for pregnant women and women of childbearing potential who may be at risk for having a child with FAS.

Professional Education

Many physicians are reluctant to inquire about alcohol use. One explanation is that they wouldn't know what to do if they found problems.⁸ This attitude may be overcome when physicians learn that patients often appreciate professional concern and when they know how to refer problem patients to community resources for treatment.

Studies^{9, 10} indicate that a supportive counselling and/or case management program can result in 60 to 80 percent of pregnant women reducing their alcohol intake before the third trimester and 35 to 50 percent stopping "heavy" drinking

Screening

The pregnant woman who consumes alcohol cannot be identified by appearance or by socioeconomic characteristics therefore a systematic drinking history is essential and should be obtained from all patients during the initial history and in subsequent prenatal care.

In response to this clinical need several screening tools have been developed such as the T-ACE screening questionnaire.¹¹ Although it is understood that many physicians currently use the CAGE screening tool, this committee finds the T-ACE to have higher sensitivity and specificity when used to assess periconceptual heavy drinking. (Refer to the [Screening Algorithm](#))

Intervention

Pregnancy is an ideal time for the physician to identify drinking problems and to intervene. It is reported that alcohol consumption often decreases spontaneously during pregnancy.¹²

Once alcohol consumption has been identified, physicians should discuss the fetal risks with the woman and her family in the same way that other risks are discussed. Everything possible should be done to discourage drinking during the pregnancy to prevent harm to the fetus

In several clinical trials, intervention as a part of prenatal care has been successful in reducing alcohol consumption. Approximately 50 percent of heavy drinkers were able to reduce their drinking to the moderate or rare category and these women had infants with higher birth weights and fewer characteristics of FAS.¹³

Practice Tip:

- Disulfiram should not be used during pregnancy. ^{14,15}
- Special care in detoxification procedures during pregnancy are needed.

Tertiary Prevention

Tertiary prevention is aimed at reducing the complications, impairments, and disabilities caused by FAS, and includes activities that prevent recurrence of the condition in subsequent children. Strategies should be designed and reserved specifically for children with FAS and their caregivers.

Treatment/Therapy

It is important to assist the mother (couple) to recognize and change their alcohol consumption pattern. Specific education and advice for voluntary referral to therapy for alcohol and drug misuse should be pursued with the couple who have an FAS child. This advice should be offered empathically but firmly. A more direct approach is needed if change is not evident over a reasonably short period of time.¹⁶

AADAC has available resources in the Alberta communities that are easily accessible.

Future Pregnancies

Once a diagnosis of FAS has been made, aggressive measures are needed to reduce the injury to future children. This is best accomplished by helping the mother (and partner) in changing their alcohol abuse pattern.¹⁷ Studies indicate that women who have had one definite FAS child and continue to drink will have equally or progressively more severely damaged children in subsequent pregnancies.¹⁸ Both parity and age are contributing factors. In such cases, isolating the experience of pregnancy from alcohol and substance abuse is the logical and safe course of prevention.

Intensive case management of women who have borne one or more FAS children has been shown to help protect against future FAS children, allow for the care of the specific social and medical needs of the woman and her family, and improve the future health of the mother.¹⁶

REFERRAL SOURCES

Contact your Regional Health Authority, AADAC, or the College of Physicians and Surgeons of Alberta for a list of current resources.

REFERENCES

1. May P. A multiple-level, comprehensive approach to the prevention of fetal alcohol syndrome (FAS) and other alcohol related birth defects (ARBD). *The International Journal of Addictions*, 1995; 30(12): 1549-1602.
2. Health Canada. *Joint Statement: Prevention of fetal alcohol syndrome (FAS) fetal alcohol effects (FAE) in Canada*. October 1996.
3. May P. Concepts and programs for the prevention of FAS. Concurrent Session BC Conference, 1998.
4. Kinzie M, Scorling J, Siegel M. Prenatal alcohol education for low income women with interactive multimedia. *Patient Education Counselling*, 1993; 21: 51-60.
5. Davis A, Frost W. Fetal alcohol syndrome: a challenge for the community health

- nurse. *Community Health Nursing*, 1984; 1(2): 99-110.
6. Clarren S. Recognition of fetal alcohol syndrome. *JAMA*, June 19, 1981; 245(23): 2436-2424.
 7. Koop C. Warning on alcohol and pregnancy. *FDA Bulletin*, 1981.
 8. Rossett, Weiner, Edelin. Strategies for the prevention of FAE.
 9. Little R, Young A, Streissguth A. Preventing fetal alcohol effects: effectiveness of a demonstration project. In *Mechanisms of Alcohol Damage in Utero*. London, Pittman. Pp.254-274.
 10. Smith T, Lancaster J, Moss-Wells, et al. Identifying high risk pregnant drinkers; biological and behavioural correlates of continuous drinking during pregnancy. *J. Stud Alcohol*, 1987; 48: 304-309.
 11. Sokol R, Martier S, Ager J. The T-ACE questions: practical prenatal detection of risk drinking. *American Journal of Obstetrics and Gynecology*, 1989; 160: 863-871.
 12. Little R, Pytkowicz, Streissguth A. Drinking during pregnancy in alcoholic women. *Alcoholism: Clinical and Experimental Research*, Apr 1978; 2(2): 179-182.
 13. Rosett, Weiner, Edelin, et al. Naturalistic observations of newborns: effects of maternal alcohol intake. *Alcoholism: Clinical and Experimental Research*, 1978; 2: 171.
 14. Nora A, Nora J, Blu J. Limb reduction anomalies in infants born to disulfiram treated alcoholic mothers. *Lancet*, 1977; 2: 664.
 15. Walpole I, Hockey A. Fetal alcohol syndrome: implications to family and society in Australia. *Australian Pediatric Journal*, 1980; 16: 101-105.
 16. May P. The challenges and beauty of a comprehensive approach to the prevention of FAS, 1998.
 17. Masis K, May P. A comprehensive local program for the prevention of fetal alcohol syndrome. *Public Health Reports*, 1991; 106(5): 484-489.
 18. Abel E. Fetal alcohol syndrome in families. *Neurotoxicol Teratol*, 1988; 10(1): 1-2.

THE ALBERTA CLINICAL PRACTICE GUIDELINES PROGRAM

The Alberta Clinical Practice Guidelines Program promotes appropriate, effective and quality medical care in Alberta by supporting the use of clinical practice guidelines. The program is administered by the Alberta Medical Association under the direction of a multi-stakeholder steering committee.

TO PROVIDE FEEDBACK

The Working Group for FAS is a multidisciplinary team composed of family physicians, obstetricians, pediatricians, geneticists, Community Medicine specialists, midwives, representatives from AADAC, Alberta Family and Social Services, Health Canada, the Alberta CPG Program, the Reproductive Care Committee, the NECHI Institute, and the public.

The Working Group encourages your feedback. If you need further information or if you have difficulty applying this guideline, please contact:

The Alberta Clinical Practice Guidelines Program
12230 - 106 Avenue NW
EDMONTON, AB T5N 3Z1
(780) 482-2626
or toll free 1-800-272-9680
Fax: (780) 482-5445
E-mail: ama_cpg@amda.ab.ca

Preface: [Preface to the Prevention & Diagnosis of Fetal Alcohol Syndrome \(FAS\)](#)

Guideline: [Guideline for the Diagnosis of Fetal Alcohol Syndrome \(FAS\)](#)

The above recommendations are systematically developed statements to assist practitioner and patient decisions about appropriate health care for specific clinical circumstances. They should be used as an adjunct to sound clinical decision making.

[Download](#)
[Download - Algorithm](#)

June 1999

[Back to Index](#)