



**JOINT STATEMENT:**  
Prevention of Fetal Alcohol Syndrome (FAS)  
Fetal Alcohol Effects (FAE) in Canada

October 1996

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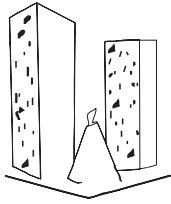
Health Canada wishes to thank the **Canadian  
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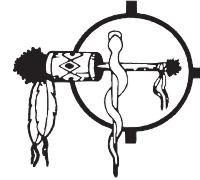
# C o-signatories



National Association of Friendship Centres



Canadian Paediatric Society



Native Physicians Association in Canada



Canadian Institute of Child Health



Saskatchewan Institute on Prevention of Handicaps



BC FAS Resource Society



Canadian Confederation of Midwives



Canadian College of Medical Geneticists



Canadian Council on Multicultural Health



Canadian Medical Association



Canadian Public Health Association



Assembly of First Nations Health Commission



Newborn Follow Up Program Health Sciences Centre (Manitoba)



Inuit Women's Association



Aboriginal Nurses Association of Canada



College of Family Physicians of Canada



Canadian Nurses Association

## Introduction

Fetal Alcohol Syndrome has been recognized in Canada as one of the leading causes of preventable birth defects and developmental delay in children.

In response to this significant public health concern, national associations representing medical, nursing and midwifery disciplines, aboriginal and multicultural groups, and other organizations known for their extensive work in the area of FAS/FAE, developed and support this *Joint Statement on Prevention of Fetal Alcohol Syndrome and Fetal Alcohol Effects in Canada* (a list of co-signatories is attached).

The purpose of this statement is to provide relevant and factual information to guide health care professionals in the treatment or counselling of women, their partners and families with respect to alcohol intake during pregnancy.

No single group, organization, community, ministry, or level of government can deal effectively with the problem on its own. Broad-based efforts are required, given that everyone has a stake in addressing this complex issue.

## Definitions

Fetal Alcohol Syndrome, or FAS, is a medical diagnosis that refers to a set of alcohol-related disabilities associated with the use of alcohol during pregnancy. The minimum criteria for diagnosing a child with FAS are:

- prenatal and/or postnatal growth restriction;
- central nervous system involvement, such as neurological abnormalities, developmental delays, behavioural dysfunction, learning disabilities or other intellectual impairments, and skull and brain malformations;
- characteristic facial features: short eye slits (palpebral fissures), a thin upper lip, flattened cheek bones, and an indistinct groove between

the upper lip and nose (such characteristics are not

to be confused with facial features that occur normally in different racial groups).

“Possible fetal alcohol effects” (FAE) indicates that alcohol is being considered as one of the possible causes of a child’s birth defects.<sup>1</sup> This term is used to describe children with prenatal exposure to alcohol, but only some FAS characteristics. These may include reduced or delayed growth of the baby, single birth defects or developmental learning and behavioural disorders that may not be noticed until months or years after the child’s birth.

Exposure to alcohol before birth can lead to long-term developmental disabilities in the form of either FAS or possible FAE. Although there are no statistics regarding the extent of FAS/FAE in Canada, it is estimated that one to three children in every 1000 in industrialized countries will be born with FAS (Coles 1993; Quinby and Graham 1993). The rate may be several times higher for children born with possible FAE. These figures may be conservative, given how difficult it is to establish the frequency of a birth defect that (1) is hard to identify at birth; (2) may be confused with other health problems, and; (3) must be diagnosed by physical examination and consideration of a person’s medical history, rather than a laboratory test.

Alcohol is a known teratogen which can cause birth defects by affecting the growth and proper formation of the fetus’s body and brain (Olson, 1992). Alcohol can damage the fetus throughout pregnancy, not just in the first trimester. When a pregnant woman drinks alcohol, it rapidly crosses the barrier of the placenta, producing equivalent concentrations in fetal circulation. The brain and central nervous system of the unborn child are especially sensitive to prenatal alcohol exposure.

FAS is more likely to occur following continuous or heavy intake of alcohol during pregnancy (Streissguth, 1989; Olsen, 1992).<sup>2</sup> Effects have

1. The term FAE is often incorrectly used to indicate a birth defect judged milder than FAS, while “possible” is added to indicate uncertainty as to the attribution of the observed abnormality to alcohol, thereby limiting the use of this potentially ambiguous term (Sokol and Clarren, 1989).

been observed also after intermittent or binge drinking. Other studies (Streissguth, 1990; Day, 1994; Jacobson, 1994) have shown that children born to mothers who have on average one to two drinks per day or may occasionally have up to five or more drinks at a time, are at increased risk for learning disabilities and other cognitive and behavioural problems.<sup>3</sup>

Still, there is no definitive information that can be conveyed to women regarding a safe quantity of alcohol use during pregnancy. Consequently, *the prudent choice for women who are or may become pregnant is to abstain from alcohol.*

## Prevention Efforts

Prevention is clearly the first line of defense against the effects of alcohol in pregnancy, and should include the following:

- **Primary prevention** – actions that avert a health problem before it occurs. In the case of FAS/FAE, this would include informing the public, particularly young people, about the dangers of drinking during pregnancy and on a broader level, addressing determinants of health.
- **Secondary prevention** – actions that identify persons at risk. Strategies should include screening and early intervention programs and services for pregnant women and women of childbearing potential who may be at risk for having a child with FAS/FAE.

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2. The U.S. National Institute on Alcohol Abuse and Alcoholism (NIAAA) defines heavy drinking as two or more drinks per day ( $\geq 2$  drinks/day), and moderate drinking as between one and two drinks per day (1-2 drinks/day). These values are based on an average of weekly consumption and consequently may reflect the impact of binge drinking rather than daily consumption (Jacobson, 1994).

3. A drink is defined as the volume of an average beverage which contains 13.6 g or 17 mL of absolute alcohol (AA). This amount is contained in a 12-oz (341 mL) bottle of beer, five ounces (142 mL) of wine, or 1.5 ounces (43 mL) of 80-proof liquor.

- **Tertiary prevention** – actions that prevent recurrence of the condition through treatment and attempts to lessen the cognitive, behavioral, and social impact of FAS/FAE. Strategies should include diagnosis and programs designed specifically for children with FAS/FAE and their caregivers, as well as treatment for women and their partners who already have one FAS/FAE child and plan to have more children.

Because pregnant women generally are receptive to suggestions about controlling their alcohol consumption during pregnancy, the health care professional is presented with an excellent opportunity to encourage behavioural change. Early recognition of women who drink alcohol during pregnancy and appropriate counselling are the cornerstones of treatment. Health professionals can play a key role in reducing the risks associated with alcohol use during pregnancy.

## Recommendations

FAS/FAE are preventable. To that end, it is recommended that:

1. Prevention efforts should target women before and during their childbearing years, as well as those who influence such women, including their partners, families, and the community. All efforts should be: **family-centred and culturally sensitive**, to address the pregnant woman as well as her partner and family in the context of their community; and **comprehensive**, to draw on all services appropriate to the often complex social, economic and emotional needs of these women.
2. Information should be provided to all health professionals regarding the risks of alcohol use during pregnancy to facilitate early recognition of at-risk drinking and early intervention.

3. Continuing education programs for health professionals designed to enhance counselling skills that motivate and support lifestyle change for at-risk drinkers, should be widely disseminated and evaluated. Furthermore, health professionals should acquaint themselves with resources available in their community to provide support and motivation for change for at-risk drinkers.
4. Health professionals working with members and leaders of communities must provide consistent information to women and their partners that the prudent choice would be to not drink alcohol during pregnancy.
5. Health professionals play an essential role in identifying women who drink at levels that pose a risk to the fetus and themselves. Screening methods<sup>4</sup> should be applied to identify women at high risk for heavy alcohol consumption before and during pregnancy. Similarly, health professionals have a responsibility to inform women at risk, and to initiate appropriate referrals and supportive interventions.
6. Alcohol and drug addiction treatment services should incorporate the needs of women, including transportation and daycare, into their program design. Pregnant women seeking help should be given high priority at alcohol and drug addiction treatment centres.
7. Health professionals should inform women who consumed small amounts of alcohol occasionally during pregnancy, that the risk to the fetus in most situations is likely minimal. They should also explain that the risk is relative to the amount of alcohol consumed, body type, nutritional health and other life-style characteristics specific to the expectant mother. If exposure has occurred, health professionals should inform mothers that stopping at anytime will have benefits for both fetus and mother.
8. Health professionals, including family physicians, paediatricians and others to whom children are referred, should increase their awareness of maternal alcohol use in pregnancy to identify the possible causes of birth defects and other developmental disorders and to identify and prevent adverse risks for subsequent pregnancies.
9. Communication between researchers and health-care providers must be an ongoing process to determine and evaluate the most effective means of primary, secondary, and tertiary prevention of FAS/FAE.

## Conclusion

Alcohol use during pregnancy is a national health concern. Health professionals across Canada are committed to identifying and implementing prevention strategies that will reduce the incidence of FAS/FAE.

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4. Some examples of screening methods currently in use include CAGE, T-ACE and TWEAK (Offord and Craig, 1994; Russell, 1994). These methods employ a brief questionnaire format designed to identify at-risk drinkers.

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## List of Co-signatories

Aboriginal Nurses of Canada / Association des infirmières et infirmiers autochtones du Canada

Assembly of First Nations Health Commission / Commission de la santé de l'Assemblée des Premières Nations

BC FAS Resource Society

Canadian Centre on Substance Abuse / Centre canadien de lutte contre l'alcoolisme et les toxicomanies

Canadian College of Medical Geneticists / Collège canadien de généticiens médicaux

Canadian Confederation of Midwives / Confédération canadienne des sages-femmes

Canadian Council on Multicultural Health / Conseil canadien de la santé multiculturelle

Canadian Institute of Child Health / Institut canadien de la santé infantile

Canadian Medical Association / Association médicale canadienne

Canadian Nurses Association / Association des infirmières et infirmiers du Canada

Canadian Paediatric Society / Société canadienne de pédiatrie

Canadian Public Health Association / Association canadienne de santé publique

College of Family Physicians of Canada / Collège des médecins de famille du Canada

National Association of Friendship Centres / Association nationale des centres d'amitié

Native Physicians Association in Canada

Newborn Follow Up Program, Health Sciences Centre (Manitoba)

Pauktuutit, Inuit Women's Association

Saskatchewan Institute on Prevention of Handicaps