

SCR

16



STATE OF ALASKA  
OFFICE OF THE GOVERNOR

**BILL ANALYSIS**

DEPARTMENT Health & Social Services	DIVISION Public Health	BILL NUMBER SCR 16	SPONSOR Binkely, Coghill, Josephson, Szymanski & Faiks
DEPARTMENT POSITION Supporting			
PREPARED BY Elizabeth Ward, M.N.	DATE 2/26/87	COMMISSIONER'S SIGNATURE <i>Mary K. Munson</i>	DATE 3/5/87

**SUMMARY**

OTHER AGENCIES AFFECTED BY BILL	CONSTITUENT GROUP(S) AFFECTED BY BILL
ORGANIZATIONAL SUPPORT FOR BILL	ORGANIZATIONAL OPPOSITION TO BILL

FISCAL IMPACT:  NONE  FISCAL NOTE ATTACHED

BACKGROUND/LEGISLATIVE INTENT

ANALYSIS OF BILL/PROGRAM EFFECTS

The Division of Public Health, Department of Health and Social Services, endorses and supports Senate Concurrent Resolution No. 16, Relating to Fetal Alcohol Syndrome Awareness Week. The bill is consistent with the educational and program objectives of the Division of Public Health; signature and enactment of the bill is recommended.

AMENDMENTS PROPOSED

PLEASE ATTACH A SEPARATE SHEET FOR ADDITIONAL COMMENTS OR ANALYSIS.

STEVE COWPER, GOVERNOR

**DEPT. OF HEALTH AND SOCIAL SERVICES**

POUCH HOUSE  
JUNEAU, ALASKA 99811  
PHONE: 586-6201

OFFICE OF ALCOHOLISM AND DRUG ABUSE

1987

Dear Pediatrician:

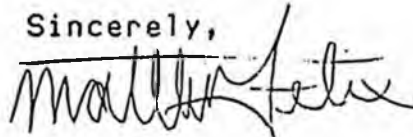
Nationwide, the rise in Alcohol-Related Birth Defects, Fetal Alcohol Syndrome (FAS) in particular, has spurred the development of both prevention and intervention programs to combat this totally preventable birth defect.

The incidence of FAS for all populations in Alaska is not completely known, but it is expected to be high. Recent research clinics examined suspected cases in 12 locations throughout Alaska. The results confirmed our worst suspicions. We knew our FAS incidence had to be high because of our high per-capita consumption of alcohol. As one of the leading consuming states, we drink almost four gallons of absolute (pure) alcohol per person. In Alaska, the birth incidence rate of 4.2/1000 live births is the highest reported rate for any population thus far studied. For comparison, the rate in Seattle is 1.7/1000, in France 1.6/1000, in Sweden 1.7/1000, and 2.0/1000 on the Navajo Reservation.

The Alaska FAS incidence makes FAS the most common etiologically identifiable congenital cause of mental retardation in this population. The incidence of Down Syndrome, usually regarded as the most common cause of mental retardation, is 1.8/1000 in Alaska Natives.

I have taken the liberty of enclosing articles on FAS that I thought you might find interesting. If you would like more information, please feel free to contact me.

Sincerely,



Matthew C. Felix  
Coordinator

Enclosures

# FACT SHEET: FETAL ALCOHOL SYNDROME (FAS)

compiled by Marcia Michel

## FACTS

Twelve years of research have conclusively established that alcohol use during pregnancy poses a threat to the health of the child.

**Fetal Alcohol Syndrome** is a pattern of mental, physical and behavioral defects that may develop in the unborn child when its mother drinks alcohol during pregnancy. FAS is characterized by a cluster of congenital birth defects that include the following:

- Prenatal and postnatal growth deficiency, meaning low birth weight and failure to catch up
- A pattern of facial malformations, including small head size, misshapen eyes and midportion of the face
- Central nervous system dysfunction which can include mental retardation; brain damage resulting in difficulty with balance, coordination, learning or memory; alcohol withdrawal symptoms at birth; a poor sucking response and sleep disturbances during early infancy, restlessness and irritability; developmental delays; hyperactivity, short attention span and/or behavioral problems
- Varying degrees of malformations, particularly of the heart, joints, kidneys and genitalia.

**Fetal Alcohol Effects (FAE)**—less severe alcohol-related birth defects—have shown up in babies whose mothers drank smaller amounts.

According to current research, there is no safe drinking level for pregnant women.

In many cases, high levels of consumption will produce the full expression of FAS; but in some cases, moderate consumption is enough to produce FAS.

Researchers estimate that nationally FAS occurs in about 1 to 3 per 1,000 live births.

In Alaska, preliminary results indicate that FAS occurs in at least 3 per 1,000 live births among the Native population.

FAS has been found in virtually every ethnic and cultural group and in every social class.

For every child with FAS, as many as 10 other children may be born with FAE.

The severity of FAS seems to rise with each succeeding affected child born to a woman drinking alcohol.

FAS is the third leading cause of birth defects with accompanying mental retardation, and is the only preventable one among the top three.

Research shows there is no safe time to drink during pregnancy. The first trimester appears to be the interval when developing organs are vulnerable to damage.

Evidence supports an association between alcohol consumption and an increased incidence of spontaneous abortions found during the second trimester.

Alcohol exposure during the third trimester may interfere with the rapid growth that occurs during this time, including the growth of the brain.

The major effects of alcohol on developing tissues are slowing of growth and interference with cell migration.

Alcohol itself is the toxic agent, but other factors (nutrition, smoking, use of other drugs and other "unknowns") may enhance the effect of alcohol and influence the actual risk for FAS.

Cost of institutionalization for an FAS child in Alaska averages \$90,000 per year. Travel and surgery on birth defects would be additional costs depending on amount and severity.

While all of the defects caused by drinking have not yet been identified, we do know:

- alcohol interferes with normal pregnancy
- effects on the fetus are permanent
- whether they occur or not is a matter of the basic metabolism of both the pregnant woman and the fetus

There is no treatment for FAS.

It is totally preventable.

In the absence of research establishing a safe drinking level, the U.S. Surgeon General advises women who are pregnant (or nursing or considering pregnancy) to refrain from drinking alcohol during pregnancy.

---

This information was compiled from several sources. For a complete listing of these sources, please contact Marcia at the Alaska Council.



ALASKA COUNCIL ON PREVENTION  
OF ALCOHOL AND DRUG ABUSE, INC

7521 OLD SEWARD HWY, SUITE A • ANCHORAGE ALASKA 99518

NATIONAL FETAL ALCOHOL  
SYNDROME AWARENESS WEEK

The joint resolution (S.J. Res. 373) designating the week beginning May 19, 1987, as "National Fetal Alcohol Syndrome Awareness Week," was considered, ordered to be engrossed for a third reading, read the third time and passed.

The preamble was agreed to.

The joint resolution, and the preamble, are as follows:

S.J. Res. 373

Whereas fetal alcohol syndrome is one of the three major known causes of birth defects with accompanying mental retardation in the United States, and the only preventable one;

Whereas fetal alcohol syndrome can result in such serious health problems as: deficiencies in prenatal and postnatal growth that are associated with mental retardation; developmental disabilities that may cause an infant to experience delays in learning to walk and speak; and heart defects, including defects in the wall between the pumping chambers of the heart;

Whereas in cases in which fetal alcohol syndrome is avoided, infants may still experience alcohol-related birth effects, known as fetal alcohol effects, which are a series of health problems that include increased irritability during the newborn period and hyperactivity;

Whereas the discovery of fetal alcohol syndrome as a major health problem is a recent occurrence, and many questions regarding the illness remain unanswered;

Whereas there has never been an infant born with fetal alcohol syndrome whose mother did not consume alcohol during pregnancy;

Whereas fetal alcohol syndrome can be prevented if pregnant women and women considering pregnancy abstain from alcohol consumption; and

Whereas the Surgeon General of the Public Health Service has issued an advisory stating that pregnant women and women considering pregnancy should not consume alcohol: Now, therefore, be it

*Resolved by the Senate and House of Representatives of the United States of America in Congress assembled,* That the week beginning May 10, 1987, hereby is designated "National Fetal Alcohol Syndrome Awareness Week", and the President of the United States is authorized and requested to issue a proclamation calling upon the people of the United States to observe such week with appropriate activities.

Mr. DOLE, Mr. President, I move to reconsider the vote by which the joint resolution was passed.

Mr. BYRD, I move to lay that motion on the table.

The motion to lay on the table was agreed to.

Reprinted from:

# Alcohol Health & Research World

Fall 1985  
Volume 10  
Number 1

National Institute on  
Alcohol Abuse and  
Alcoholism



“My Baby . . .  
Strong and Healthy”

U.S. Department of  
Health and Human  
Services

Public Health  
Service

Alcohol, Drug Abuse,  
and Mental Health  
Administration



National Clearinghouse  
for Alcohol Information

PO Box 2345  
Rockville MD 20852  
301 468 2600

RPO 557

Reprint from:  
Alcohol Health & Research World

# State Strategies for Prevention of Alcohol-Related Birth Defects

Laura Ronan, M.P.H.

Since the late 1970s, many States have sponsored prevention programs geared specifically to preventing problems associated with drinking alcohol during pregnancy. Evidence that heavy drinking may result in substantial fetal damage and that moderate drinking may also be associated with elevated risk has provided the impetus for such efforts. Many researchers investigating this risk factor suggest that it receive the highest priority possible in the formulation and implementation of information programs, preventive counseling, and followup. They also urge that preventive counseling be initiated before conception and directed toward the adolescent female before alcohol becomes a problem (Elliott and Johnson 1983).

Intensive prevention efforts are vital because there is no known way to reverse or reduce many of the effects of alcohol on the fetus once they have occurred. The New York State Division of Health estimates that infants born with alcohol-related birth defects in a single year cost the State's economy \$155 million in lifetime care (Rey 1985). (For additional information on the economic cost of alcohol-related birth defects see article, page 38.)

Many programs implemented at the State level have drawn on the findings of programs previously supported by NIAAA and others. For example, the Fetal Alcohol Demonstration Program that was funded by NIAAA in 1978 and conducted at the University of Washington combined a mass media campaign aimed at the general public with telephone messages, distribution of brochures to populations of women who were pregnant or contemplating pregnancy, counseling sessions for

pregnant women, and a training program on drinking and pregnancy for appropriate professionals. Referral services were also provided for pregnant women and mothers with alcohol problems (see article, page 44). A forerunner to the Washington program was a secondary prevention program conducted at the prenatal clinic of Boston City Hospital between 1974 and 1979 (see article, page 32).

In addition, the 1982 NIAAA nationwide public education campaign included a component on alcohol-related birth defects that generated considerable public information activity at State and community levels. Some related campaigns were the direct responsibility of States or of organizations under contract to the State. They undertook public education activities statewide, regionally, and at the local level. In other States, the campaigns were led by either a group of volunteers or a combination of volunteers and contract staff. Many States continue to make available campaign materials such as brochures, public service announcements, and posters.

## A Comprehensive Approach

Prevention efforts aimed at reducing alcohol consumption by pregnant women have increased significantly in recent years, but additional efforts are needed to increase awareness and to change attitudes and practices. It is generally agreed that comprehensive programs implemented at the community level are the most successful for educating prospective mothers. The experience of several States demonstrates that such programs may be effectively developed and sponsored by State agencies. Furthermore, State involvement may as-

sure program visibility and the integration of programs delivering maternal and child health services.

Based on the experiences of several States, this article describes the major components of a FAS/FAE prevention program. It is intended to stimulate new programs and innovative ideas, not to prescribe one course of action. The ultimate aim of an FAS/FAE prevention program should be to reduce the number of new cases. In order to do this, it must enhance awareness and foster acceptance of the evidence that consumption of alcohol during pregnancy can have deleterious effects on the fetus. Becky Beardsley, Program Coordinator of the Lincoln Council on Alcoholism & Drugs (LCAD), Fetal Alcohol Syndrome Prevention Program in Lincoln, NE, underscores the importance of bringing assistance to the alcohol-abusing woman rather than concentrating narrowly on the severe consequences to the fetus. In fact, some observers attribute the relative proliferation of programs focused on this particular period in a woman's life—pregnancy—to the view that maternal drinking is a public health program (Little and Ervin 1984).

A prevention program with a comprehensive approach to reducing the incidence of alcohol-related birth defects considers all females of childbearing age or younger, the general public, and helping professionals. The goals of the Pennsylvania Project for Prevention of Fetal Alcohol and Drug Effects, which operated from 1982 to 1983 as an outgrowth of a local two-county project conducted by the Washington-Greene Prevention Corporation from 1980-1982, involved all of these groups. The commitments of this



*This infant is a low birth weight baby. State programs aim to increase awareness that maternal alcohol use can result in low birth weight and deleterious fetal effects.*

project were to encourage women of childbearing age to avoid alcohol and unnecessary drugs during pregnancy; to urge women with drinking problems to seek and accept treatment; to influence health, social service, and education professionals to provide education on alcohol and drug effects to all patients, clients, and students prior to and during pregnancy; and to intervene with high-risk women (Yancosek 1982).

#### Target Groups

The education of women is vital regardless of the intensity of their drinking, to permit them the opportunity to make informed decisions about alcohol consumption during pregnancy. Becky Beardsley of the Nebraska LCAD Fetal Alcohol Syndrome Prevention Project has distinguished three subgroups of women as target audiences for information and inter-

vention: high-risk, moderate, and low-risk (Table 1). Each of the cells in Table 1 describes a level of risk based on the drinking and/or pregnancy status of the individual. The low-risk cell, for example, describes the person neither currently drinking nor pregnant. Reinforcing the decision not to consume alcohol if pregnant is the thrust of prevention for the low-risk group. Public information efforts, school health education, and health professions curricula are also strategies for reaching women considered at low risk (Beardsley et al. 1985).

#### Program Structure

The Nebraska LCAD Fetal Alcohol Syndrome Prevention Project utilizes a program framework based on primary, secondary, and tertiary prevention modalities for each stage of the maternal-child health continuum (i.e., preconception, prenatal, intrapartum, and postnatal) (Table 2). Primary prevention encompasses activities that target low- and moderate-risk women. These efforts can include teacher training for junior and senior high school teachers, public information and education, and professional education for health and human service workers. Pri-

mary prevention may also entail curriculum development and consultation with curriculum developers associated with educational institutions.

Secondary prevention consists of professional training and consultation with health and human service workers. Training includes information and individual consultation on the identification of high-risk (alcohol- and drug-abusing) women, especially pregnant women, and intervention counseling techniques. Trained personnel may directly assist physicians and other health professionals in directing intervention efforts. Tertiary prevention consists of providing referral information and guidance for alcohol-abusing women and affected children. It might also include a support group for women with FAS/FAE children as well as legislative activities (Beardsley et al. 1985). The program components just identified will be discussed further in the article.

Caregivers in the intrapartum and postnatal periods may need to be reminded of secondary and tertiary prevention. Even a woman who has been drinking during pregnancy should stop doing so to protect her baby from further alcohol-related birth risk during the remainder of the pregnancy

Table 1. Maternal Child Health Care Continuum

	Preconception	Prenatal	Intrapartum	Postnatal
Primary	1) General Public Information efforts 2) Jr. & Sr. High (curriculum) 3) Medical/nursing schools curriculum maternal alcoholism & FAS/FAE 4) Education geared to young girls	1) Public Information media directed toward pregnant women 2) Professional education for health professionals re: alcohol effects on fetus 3) Prenatal literature focusing on alcohol's role in pregnancy	1) Professional education for health professionals re: alcohol effects on fetus	1) Data collection of possible affected child 2) Public Information for women in childbearing ages 3) Professional education for postnatal health providers
Secondary	1) Identification & intervention of problem drinking women in childbearing years (esp. adolescent girls)	1) Prof. education to identify & intervene with problem drinking women 2) Physicians to utilize data collection on drinking patterns 3) Documentation of possible alcohol problem for intrapartum & postnatal health care providers' awareness	1) Prof. education to identify & intervene with problem drinking woman 2) Utilization of drinking history to identify possible complications of newborns and problem-drinking woman	1) Prof. education to identify & intervene with problem-drinking woman 2) Utilization of drinking history to identify affected child and problem-drinking woman
Tertiary	1) Referral of women in childbearing years to appropriate alcohol & drug treatment services	1) Referral of problem-drinking woman to alcohol/drug services	1) Referral of problem-drinking woman to alcohol/drug services 2) Prof. education re: referrals for affected child	1) Referral of problem-drinking woman to alcohol/drug services to prevent further affected children of identified mother 2) Referral of affected child to appropriate service 3) Development of support groups for affected families

Source: Beardley, B., Gillespie, T. and Williams, M.J. Prevention of Fetal Alcohol Syndrome/Fetal Alcohol Effects: A Comprehensive Approach. Paper presented at National Council on Alcoholism Conference, Washington, DC, 1985.

(Rosett and Sander 1979).

In some States, the alcohol and drug abuse division, a governor's commission, a local affiliate of the National Council on Alcoholism, or a categorically funded program has sponsored an FAS prevention program. In Vermont, the program was incorporated from its inception into the department of health's health education-risk reduction program as part of a conscious effort to use existing resources and service delivery systems that would be ongoing (Nystrom 1983). In Nebraska, Maine, and North Carolina, the State councils of developmental disabilities funded countywide pilot projects. It is anticipated that these States will expand their efforts statewide and establish FAS/FAE as a permanent component of their prevention programing.

Local FAS/FAE prevention projects should develop comprehensive programs tailored to the specific needs of the locality. In some States, programs have been implemented at the local level by organizations (e.g., prevention resource centers) under contract to the State. In others, county councils on alcoholism or alcohol services of mental health departments

have taken responsibility for implementing programs. Volunteer groups and volunteers working with employed staff have successfully run some program components, such as media efforts and speakers' bureaus. Women with FAS/FAE children have been extremely valuable volunteers.

#### Advisory Committees

Advisory committees have served as catalysts in some States. In others, they have provided guidance once a prevention program was funded. Networking with other organizations is essential for any prevention program and can be facilitated by an advisory committee with a broad range of representatives. Members can be involved as a group or as individuals in needs assessment, planning, fundraising, program presentation, public relations, and other functions. In addition, the committee can serve the project by providing credibility among the members' specific constituencies. Membership should include representatives from the following groups:

- Health professionals—obstetricians, pediatricians, drug and alcohol treatment

specialists, nurses, obstetrics clinic coordinators, nurses, school nurses, community education specialists, inservice coordinators, hospital and outpatient administrators, and social workers;

- Community groups—women's organizations, March of Dimes, Association for Retarded Citizens, Mental Health Association, PTA, community drug/alcohol prevention task force, Lamaze and other childbirth groups, LaLeche League, self-help groups;
- Schools—junior and senior high schools, colleges, nursing, medical, technical;
- Media—newspapers, radio, TV;
- Political and government leaders; and
- Volunteers—other interested groups.

#### Needs Assessment

In order to define the program's specific objectives and to enable evaluation of the program's efforts, the existing level of knowledge, attitudes, and practices should be measured. Vermont, for example, surveyed a small percentage of prenatal care providers, including the most sophisticated obstetrics practice in the largest city. The Vermont Department of

Table 2. Target Groups of Women in Childbearing Years

		PREGNANT	
		Yes	No
Drinking	Yes	<b>High Risk</b> <i>Secondary prevention</i> (intervention aimed at alcohol/drug abstinence during course of pregnancy). <i>Tertiary prevention</i> (referral and support group) to minimize adjustment difficulty.	Appropriate referral would be made to existing agency.
	No	<b>Moderate Risk</b> Since these women are currently pregnant, not using alcohol/drugs, <i>primary prevention</i> efforts aimed at reinforcing that as well as skill to maintain.	<b>Low Risk</b> <i>Primary prevention</i> efforts at reinforcing a choice of alcohol/drug-free lifestyle while pregnant if woman chooses to become pregnant

Health also conducted a statewide telephone survey of 300 randomly selected women of childbearing age. Only minimal costs, for computer time, were incurred (Nystrom 1983). The Pennsylvania Project for Prevention of Fetal Alcohol and Drug Effects used questionnaires mailed or directly administered to randomly selected women (Yancosek 1982).

In order to determine the extent and the nature of the problem and to obtain a base of information upon which a prevention program could be developed, Maine commissioned a study. The four objectives of the study were:

- To determine the state-of-the-art of the State and national level;
- To identify effective education and prevention strategies and activities;
- To develop a proposal for a long-term prevention model program; and
- To identify constituencies with the duties, responsibilities, or interest in prevention strategies (Mullen and Anderson 1985).

Existing statistics may also be useful in estimating the extent of the problem, although data about the incidence and prevalence of FAS/FAE are often flawed because of misdiagnoses. Information on demographic factors, births, infant deaths, fetal deaths, rate of alcoholism, number of women admitted for treatment, and other data is generally available through the State's division of statistics or a health planning agency. Such information should assist in understanding the effectiveness of current educational efforts and in identifying sources of information and advice related to the effects of drinking alcohol during pregnancy.

#### Professional Education

Many State FAS/FAE prevention programs have strongly emphasized professional education of physicians and other health care providers. Education of professionals is most effective when directed at both medical and nonmedical personnel concerned with the health and welfare of women and children. The overall goals of such education efforts are to increase knowledge of alcohol-related birth defects, to stimulate awareness and interest in the problem and prevention efforts, and to activate preventive and therapeutic behaviors such as:

- Patient or client education;
- History taking concerning alcohol and drug use;
- Diagnosis of maternal drinking and other drug problems;
- Intervention and referral for alcoholism and drug treatment; and
- Diagnosis of FAS and other prenatal drug effects in children.

Many State programs have "kicked off" their professional education for physicians and other health professionals with a symposium, a workshop, or a conference. A forum that includes a local pediatrician, an alcohol/drug women's counselor, a family therapist with expertise in the areas of women's alcoholism and FAS/FAE prevention and, if possible, nationally recognized researchers in the field offers a valuable opportunity for introducing the many dimensions of this problem. Typically, physicians prefer to receive information from other physicians in the same specialty.

More extensive training sessions might be held at local hospitals, nursing schools,

medical assistant training programs, and conferences sponsored by related organizations. Inservice sessions can be provided to Women, Infant, and Children (WIC) nutritionists, public school nurses, public school teachers, drug/alcohol counselors, Head Start staff, welfare case-workers, and others concerned with maternal and child health.

As part of the New York State Division of Alcoholism and Alcohol Abuse (NYSDAAA) campaign in 1980, FAS information packets were mailed to 1,000 obstetricians and gynecologists. The packets contained a reprint from a prestigious medical journal describing FAS, an outline of the criteria for the diagnosis of alcoholism, photographs of FAS cases, patient brochures, posters in English and Spanish on drinking while pregnant, a patient alcohol and health self-test, a referral list for problem drinkers, a referral list for affected children, and patient pamphlets on alcohol abuse. In addition to mailing out the information packets, NYSDAAA-sponsored medical conferences and grand rounds around the State on FAS and alcohol-related birth defects. Over three-fourths of the physicians who reported receiving and reading the NYSDAAA FAS information packet considered the items useful. However, data on physicians' intervention efforts suggest that additional efforts are needed to motivate and assist many obstetricians and gynecologists with implementing a system for screening their patients routinely for problem drinking and to identify and refer those who are in need of special treatment for alcohol abuse (Russell et al. 1983).

#### Referral and Support Services

Once health and other professionals have received training about the problem of alcohol-related birth defects, they may need assistance in counseling, referring, and treating women and children. The Nebraska LCAD Fetal Alcohol Syndrome Prevention Program, for example, has responded to requests for assistance with designing screening and risk assessment tools. The services of qualified program staff have also been made available to assist with intervention and with counseling alcohol-abusing pregnant women. Referral information is provided to professionals who have identified either a woman abusing alcohol/drugs or affected children. A resource center providing up-to-date materials and information (e.g., audiovisuals, books) is also a service of inestimable value to persons in the field.

## National Coalition Combats Infant Mortality

The principal threats to infant health are birth defects that can lead to life-long handicapping conditions and problems associated with low birth weight. Birth defects are responsible for one-sixth of all infant deaths. Each year approximately 240,000 American babies are born with birth defects. In about one-fourth of these cases, the cause is currently thought to be purely genetic; in one-tenth, purely environmental. In the remaining one-third, the cause is unknown (U.S. Department of Health and Human Services 1979). Although many birth defects cannot be prevented, many more might be avoided by providing prenatal information and care to women at higher risk.

Infants with low birth weights are in particular danger: two-thirds of infants who die weigh less than 5 pounds 7 ounces (2,500 grams) at birth. Today, approximately 7 percent of all babies are of low birth weight (U.S. Department of Health and Human Services 1984). Underweight babies are more vulnerable than normal-weight babies to mental retardation, developmental difficulties such as slowness in walking or talking, growth problems, and central nervous system disorders. Again, many preventable maternal factors are associated with low birth weight: lack of adequate prenatal care, poor nutrition, smoking, alcohol and/or drug abuse, age of the mother (especially immaturity), and social and economic background. In addition, women least likely to receive adequate prenatal care are often those most likely to have other risk factors working against a healthy pregnancy.

In the Fall of 1981, seven national agencies and organizations, including the U.S. Public Health Service, founded the Healthy Mothers, Healthy Babies Coalition to improve the health of pregnant women and the health of their unborn and newborn babies. Today, more than 70 voluntary, professional, and government health agencies

and organizations belong to this national coalition.

In addition, most States have started their own coalitions to expand the effort on the local level. Achievement of the goals of the network depend largely on provision of high-quality prenatal, obstetrical, and neonatal care; preventive services during the first year of life; professional education; and broad public information activities aimed at pregnant women and their families. Some of the specific goals of the Healthy Mothers, Healthy Babies Coalition are the following:

- To supply information that encourages healthy habits for pregnant women and women planning pregnancy;
- To motivate pregnant women to protect their health through regular prenatal care and good nutrition;
- To increase women's understanding of specific health risks and the importance of taking responsibility for healthy childbearing; and
- To increase understanding among men of the supportive role they play in pregnancy and infant care.

Since 1981, the coalition has encouraged low-income women to obtain consistent prenatal care and adopt good health behaviors while pregnant. A series of posters and information materials describing healthy behavior during pregnancy and designed especially to reach low-income women were distributed to clinics nationwide. Low-income and other women have been reached through recorded public service announcements narrated by the Surgeon General, produced by the Public Health Service, and distributed to radio stations across the country by local March of Dimes chapters. Other materials include a curriculum guide on education for responsible childbearing, a directory of educational materials on prenatal and infant care, and a handbook on how to start a community coalition similar to Healthy Mothers, Healthy Babies.

The members of the Healthy Mothers, Healthy Babies Coalition make valuable contributions as participants on committees that address such issues as breastfeeding, substance use, genetics, and motivation of low-income women. The substance use

subcommittee (membership includes representatives of the National Council on Alcoholism and the National Institute on Alcohol Abuse and Alcoholism) has recently been formed to help reduce the number of alcohol-related birth defects and the proportion of women of childbearing age who smoke during pregnancy. Another of their objectives is to increase awareness of the hazards of pharmaceutical products and other drugs during pregnancy and lactation.

This subcommittee's first project is the development of a resource package that includes both professional and client education material in the area of substance use during pregnancy. Contents of the package include policy statements from major health-related organizations; synopses of landmark research papers; an annotated guide to patient education materials; sample exemplary brochures and posters; and a counseling and referral guide for use by providers. The package is directed to influential health professionals and organizational representatives working in the maternal and child health area and is designed to increase information and counseling for patients as well as to improve recognition and referral of substance abuse problems to appropriate treatment centers. The format of this package is similar to an earlier one developed by the coalition to encourage health professionals to promote breastfeeding among their patients.

During the Spring of 1985, the Coalition's subcommittee on low-income women conducted a survey of 20,000 health care providers and others working with pregnant low-income women to determine effective ways to reach the target population and to encourage women to improve their health and that of their babies. The results of the survey will be compiled to provide a compendium of program descriptions and contact persons.

*For further information about the Healthy Mothers, Healthy Babies Coalition and its publications, contact: Executive Secretariat, Healthy Mothers, Healthy Babies, 600 Maryland Ave., S.W., Suite 300-E, Washington, D.C. 20024*

Offering consultation services to health professions educators interested in updating their curricula to include FAS/FAE prevention information is another support service provided by the Nebraska project. Some schools may want to include presentations by project staff as well (Beardsley et al. 1985). Nursing schools appear especially receptive and play a key role in disseminating current FAS/FAE information to health professionals.

To ensure that information is accessible, the North Carolina project operates a 24-hour telephone information service available to anyone with a question about FAS or about alcohol consumption during pregnancy. An answering machine records messages received when staff is not available to answer the hotline.

### Community Education

Reaching the general public, especially women of childbearing age, with information about alcohol-related birth defects is a major thrust of most FAS/FAE prevention programs. Such public education campaigns should not be limited to women of childbearing age; informed mothers, friends, spouses may also serve as informal educators. Print materials, community education programs, and mass media are complementary and reinforcing modes of communication that reach a broad cross-section of the community.

Posters and pamphlets are the most common print materials developed and distributed by FAS/FAE prevention programs. Many States have received permission from existing programs to adapt materials and messages that have proved effective. The article in this issue on disseminating information (see page 54) suggests appropriate messages for women and physicians. Some excellent locations for placing such materials are doctors' offices, pharmacies, laboratories where pregnancy tests and premarital and pregnancy blood tests are taken, marriage license bureaus, social service agencies, church bulletins, maternity clothing stores, children's clothing stores, shopping mall displays, State liquor stores, supermarkets, family planning services, health clubs, WIC nutrition programs, laundromats, prepared childbirth classes, YWCAs, other women's clubs, beauty shops, and many other places frequented by women (Yancosek 1982).

Presentations that provide more detailed information through the use of speakers and audiovisuals are effective mechanisms for increasing awareness. Such programs

can be offered to the membership of existing organizations, clubs, and groups such as childbirth education classes, LaLeche, PTAs, and YWCAs. All presentations should emphasize the positive aspects of healthy pregnancies rather than the negative aspects of birth defects. (Information about films, pamphlets, and other materials may be obtained from the National Clearinghouse for Alcohol Information.) Some communities have established a speaker's bureau composed of experts on various aspects of FAS/FAE who have indicated an interest in making presentations on the subject.

Newspapers, radio, television, and magazines are also useful channels for communicating information about alcohol-related birth defects. In 1982, the National Institute on Alcohol Abuse and Alcoholism (NIAAA) developed radio and TV public service announcements and distributed them nationwide to county drug and alcohol programs and radio and television stations. Newspaper sample articles and detailed talk show interview scripts were also distributed. Some of these materials are still available for distribution by contacting NIAAA. These and similar locally developed materials are the ingredients for a mass media campaign that might be conducted over a 3-month period every year or every other year. The Christmas-Hanukkah season and Mother's Day are particularly appropriate times for such campaigns.

### School Programs

Drinking frequency and amount remains at alarmingly high rates among high school women as does the incidence of teenage pregnancy. To ensure that information on alcohol-related birth defects reaches teenagers before alcohol is a problem, it should be incorporated at all levels of education under the heading of preventing developmental disabilities. The Nebraska alcohol-and-drug school curriculum, as well as others in the Nation, includes junior and senior high school units on alcohol, drugs, and pregnancy. Most States, however, do not include such information in the elementary school curriculum. In school systems where alcohol-related birth defects are not addressed, the department of education to develop such a component.

The Maine prevention program worked with four area institutions for higher learning. Activities included 10 FAS/FAE presentations; public service announcements through college radio stations and

newspapers; and visual and narrative materials placed in health centers, dormitories, sororities, and fraternities. All human service programs sponsored by these colleges agreed to integrate information about FAS/FAE into their course materials (Mullen and Anderson 1985).

During the 1985-86 fiscal year, Pennsylvania will implement a comprehensive program aimed at increasing awareness among youth about the harmful effects of alcohol consumption during pregnancy. This initiative will include regional workshops for relevant school personnel, the development of a five-unit curriculum for grades 9-12, and a video training tape on screening and interviewing techniques for obstetricians, gynecologists, and nurses.

### Conclusion

This discussion has provided an overview of the core activities of an FAS/FAE prevention program. As mentioned earlier, once training and inservices have been provided, a prevention program should continue to provide ongoing services as an information and referral source. Periodic training is, of course, necessary to reach newly identified providers. Those projects that emphasize the health of the mother as well as the fetus will have a full agenda.

Here is a sampling of activities for those interested in pursuing additional prevention strategies:

- Provision of technical assistance to the State Department of Education curriculum development task force and membership on the Department's task force on chemical dependency and special education;
- Recruitment, training, and deployment of a core group of physicians interested in the prevention and treatment of FAS/FAE to provide training to their colleagues through hospital departmental staff meetings, regional and State medical association meetings, etc.;
- Collaboration with the Developmental Disabilities Council to identify groups/agencies with the capacity to support effectively families who are experiencing the trauma of having a disabled child;
- Establishment of a diagnosis registry for FAS/FAE.

---

Turn to page 76 for references.

---

Laura Ronan, M.P.H., is the Coordinator of New Products for the National Clearinghouse for Alcohol Information.

### State Strategies for Prevention of Alcohol-Related Birth Defects

- BEARDSLEY, B.; GILLESPIE, T.; and WILLIAMS, M.J. Prevention of Fetal Alcohol Syndrome/Fetal Alcohol Effects: A Comprehensive Approach. Paper presented at National Council on Alcoholism Conference, Washington, DC, 1985.
- ELLIOTT, D.J., and JOHNSON, N. Fetal alcohol syndrome: Implications and counseling considerations. *The Personnel and Guidance Journal* 62:67-69, 1983.
- LITTLE, R.E., and ERVIN, C.H. Alcohol use and reproduction. In: Wilsnack, S.C., and Beckman, L.J., eds. *Alcohol Problems in Women*. New York: The Guilford Press, 1984. pp. 155-189.
- NYSTROM, K.M. Fetal alcohol prevention program-Vermont. In: *Report of the Health Education-Risk Reduction Conference*. Atlanta, GA. Center for Disease Control, 1983. pp. 87-89.
- MULLEN, L.M., and ANDERSON, A. An FAE/FAS Information/Education Project. Paper presented at National Council on Alcoholism Conference, Washington, DC, 1985.
- REY, K.H. Strategies for a Statewide Public/Professional Educational Campaign on Fetal Alcohol Syndrome (FAS). Paper presented at National Council on Alcoholism Conference, Washington, DC, 1985.
- RUSSELL, M.; KANG, G.E.; and UHTEG, L. Evaluation of an educational program on the fetal alcohol syndrome for health professionals. *Journal of Alcohol and Drug Education* 29:48-61, 1983.
- YANCOSSEK, K.B. *Better Beginnings for Babies*. Program manual for Pennsylvania Project for Prevention of Fetal Alcohol and Drug Effects. Washington, PA: Washington-Greene Prevention Corporation, 1982.

### National Coalition Combats Infant Mortality

- U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES, OFFICE OF THE ASSISTANT SECRETARY FOR HEALTH AND SURGEON GENERAL. *Healthy People: The Surgeon General's Report on Health Promotion and Disease Prevention*. DHHS Pub. No. 79-55071. Washington, DC: Supt. of Docs., U.S. Govt. Print. Off., 1979. 177 pp.
- U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES, NATIONAL CENTER FOR HEALTH STATISTICS. *Health United States-1984*. DHHS Pub. No. (PHS) 85-1232. Washington, DC: Supt. of Docs., U.S. Govt. Print. Off., 1984.

# Alaska Native Health Board

1135 W. 8th AVENUE, SUITE 2, ANCHORAGE, ALASKA 99501

PHONE 907 278 6062

October 13, 1986

RECEIVED  
OFFICE OF FETAL ABUSE PREVENTION  
AND CHILD ABUSE INVESTIGATION

OCT 16 1986

Vicki A. Hild  
Alaska Area Native  
Health Service  
A-CHSB  
P.O. Box 7-741  
Anchorage, Alaska 99510

Dear FAS Networking Members:

Just a brief update. On September 29th I assumed the position of statewide FAS Coordinator with the Alaska Native Health Board and the Alaska Area Native Health Service. I feel it will be an exciting and challenging position that will enhance our FAS prevention efforts. I will be in contact with most members on specifics. My mailing address will remain the same. The new telephone number is 257-1709.

The North Pacific Rim's FAS Program, which started as a pilot project, will continue with emphasis on prenatal clinics at the Alaska Native Medical Center and on community education in their villages. Also, the Copper River Native Association has submitted a proposal for a FAS prevention program.

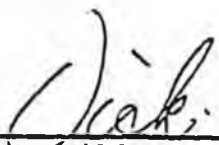
Results from the FAS diagnostic clinics held this past year throughout Alaska revealed a FAS rate for Alaskan Natives of 4.1/1000 live births. This is a conservative rate as some FAS children were unable to attend these clinics.

How does this rate compare? The rate of FAS in France and Sweden is 1.4/1000 live births, in the contiguous 48 states the rate is 1.7/1000 live births, and in Navajo the rate is 2.0/1000 live births.

For those who may not have heard about the case in California on Fetal Abuse, I have enclosed a copy of a newspaper article. Another interesting update is regarding the case in Canada where a woman who had given birth to a FAS infant was charged with child abuse -- she was found guilty.

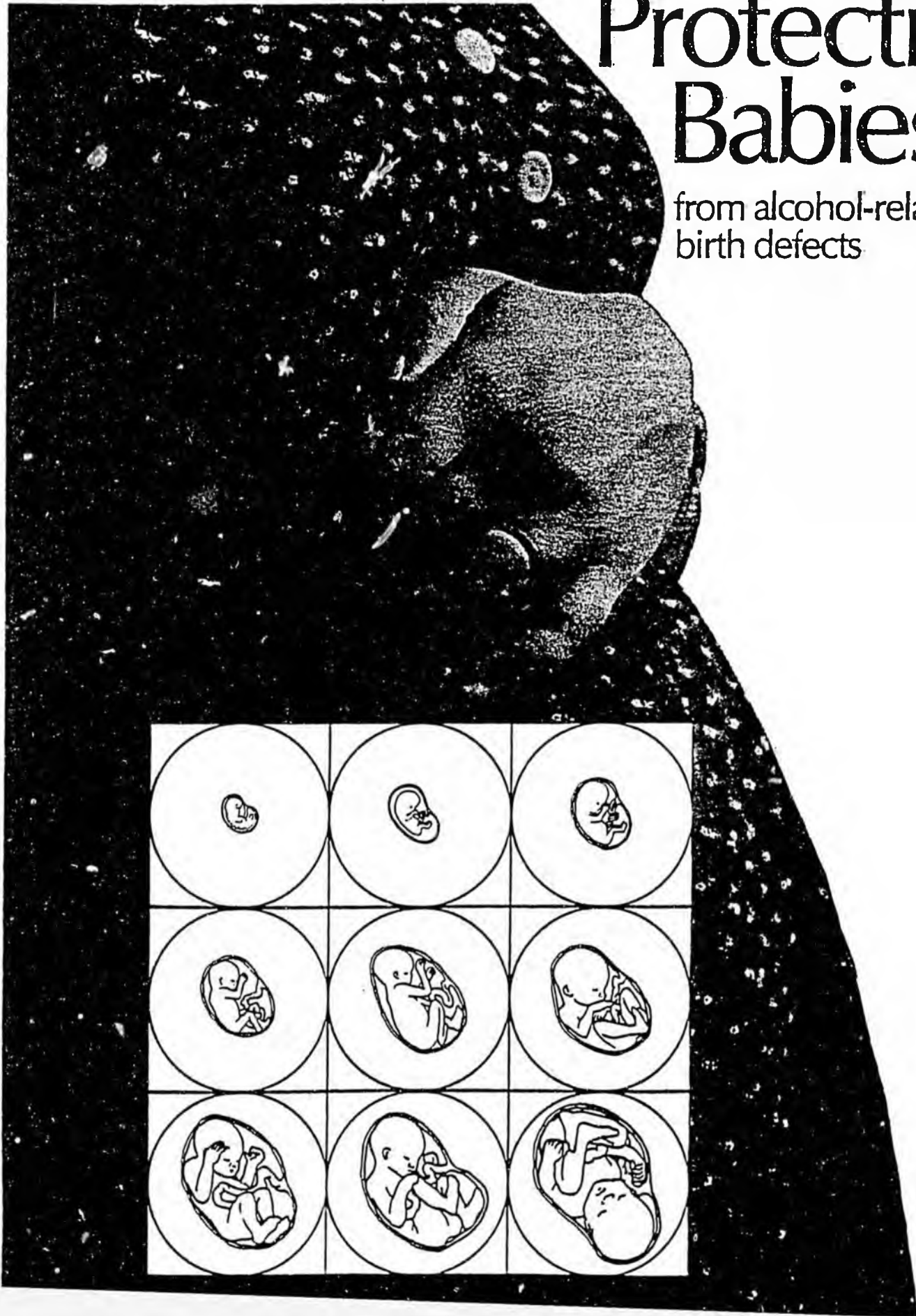
Until the next update.

Sincerely,

  
Vicki A. Hild, M.S.P.H.  
FAS Coordinator

# Protecting Babies

from alcohol-related  
birth defects



Expectant mothers who drink during their pregnancy may cause irreparable harm to their frail, delicate unborn babies. A major effort to reduce alcohol-related birth defects is under way in California.

Individuals and organizations concerned with the problem are active on a variety of fronts. Among their strategies

- Urging city and county governments to require that birth defect warning posters be displayed wherever alcoholic beverages are sold.

- Supporting state and federal legislation mandating that birth defect warnings be included on the labels of alcoholic beverages.

- Training medical practitioners to recognize symptoms of alcohol and drug abuse in women of child-bearing age so they can be referred to appropriate treatment.

- Making FAS an element in pre-natal counseling, with emphasis on educating fathers as well as mothers about the risks of alcohol and drug use during pregnancy.

- Creating new school curriculum materials for early education about the risks of using drugs or alcohol during pregnancy. As yet, barely five percent of California school districts include prevention of birth defects in their health classes.

- Improving programs for diagnosis of alcohol-related birth defects so that children with this disability may receive treatment that will help them develop to their full potential.

- Expanding research to determine exactly how a developing fetus is affected by the mother's alcohol and drug use, and to develop better modes of care for victims of alcohol and drug related birth defects.

Preventing birth defects associated with alcohol use was the subject of a national conference held in San Diego in 1986, sponsored by the Program on Alcohol Issues of the UCSD Extension. Research and treatment specialists from 15 states and Canada attended the conference, adopting a series of recommendations for new measures aimed at increasing public awareness of the danger of drinking during pregnancy.

Dr. Gladden Elliott, president of the California Medical Association, told the conference that new knowledge is dispelling the notion that Fetal Alcohol Syndrome is relatively rare.

"We now know that the syndrome affects from one to 11 of every 1,000 births," he said. "For those women who have a drinking problem, it may strike as many as 29 infants per 1,000 births. This means that every year physicians are treating between 3,600 and 6,000 babies with fetal alcohol syndrome. And an additional 36,000 newborns each year show some signs of less severe alcohol-related birth defects."

More research is needed to determine what proportion of the 10,000 to 12,000 infants born each year with birth defects or developmental disorders are the victims of Fetal Alcohol Syndrome (FAS) or Fetal Alcohol Effects (FAE).

Fetal Alcohol Syndrome is the most severe of these conditions and is associated with alcohol abuse or dependence by the mother, especially in the early weeks of pregnancy. FAS babies have decreased weight and head size, various degrees of mental retardation, and physical abnormalities most evident in facial features. The less severe Fetal Alcohol Effects are associated with drinking at any stage of pregnancy and include low birth weight, spontaneous abortion and some partial aspects of the Fetal Alcohol Syndrome.

The costs associated with Fetal Alcohol Syndrome are staggering. The direct costs of caring for affected children in the United States are estimated to be at least \$2 billion a year. Institutional care for a severely retarded FAS child may run to \$65,000 a year, or \$2.5 million over its potential lifetime. In terms of human suffering, of course, the cost is incalculable.

A new study reported late last year in the British medical journal *Lancet* identifies Fetal Alcohol Syndrome as the leading cause of mental retardation in infants — ranking ahead of Down syndrome and spinal bifida. Alcohol use is the one cause of birth defects that is completely preventable.

Research has yet to establish exactly what mechanism is involved in causing harm to a developing fetus when the

mother drinks. There is no known "safe" amount of alcohol that an expectant mother can drink, nor a period in her pregnancy that might be considered safe for drinking. Therefore pregnant women are urged to abstain altogether from alcohol when they are trying to conceive and throughout their pregnancy.

Programs to combat alcohol-related birth defects are being waged by public health agencies and medical organizations along with such private organizations as the March of Dimes Birth Defects Foundation and Healthy Mothers, Healthy Babies.

A special effort is being made to reach teen-agers with information about FAS and FAE. Dr. Mary Lu Hickman, a medical consultant to the state Department of Developmental Services, points out that one out of 10 girls will give birth before the age of 18.

"Teen-age mothers often don't realize they are pregnant until maybe the second or third month," says Hickman. "By that time, if they have had drinking episodes, the damage of FAS probably has already occurred. Major brain and organ systems are laid down by the eighth or ninth week."

Dr. Hickman chairs the California Prevention Task Force on developmental disabilities which is developing a plan called "Prevention 1990." The plan, she told the UCSD conference, will have a strong component dealing with both the prevention and treatment of alcohol related birth defects.

"The most important element of the plan is to get birth defects into the educational curricula," she said. "We want all students to have awareness and knowledge of the lifestyle necessary to prevent birth defects, including FAS and FAE."

She said the key to effective education about the risks of drinking and smoking during pregnancy must begin at an early age. "We feel very strongly that the knowledge needed to make a decision whether to drink or smoke should be given at least by grades three and four if it is going to be effective."

Future mothers and fathers are not the only target of education programs aimed at reducing alcohol-related birth defects. The California Medical Association recently inaugurated a

Chemical Dependency Education Program for physicians which hopes to improve their ability to detect drug and alcohol abuse in their patients and refer them to appropriate treatment.

Recognition of chemical dependency symptoms is especially important for obstetricians, who are in a position to help expectant mothers obtain counselling and treatment for alcoholism and other drug abuse which could jeopardize their unborn babies.

The CMA is also an ally of other organizations which are lobbying in Sacramento and Washington on behalf of legislation that would help inform the public about the link between alcohol and birth defects. Lawmakers at both the state and federal level are being urged to pass bills that would require warning labels on alcoholic beverage containers, and warning messages in advertising for the beverages.

State Sen. Gary Hart of Santa Barbara is sponsoring a 1987 version of a labeling bill that was effectively blocked in 1986 by heavy lobbying by the beverage industry. A coalition of organizations concerned about public health and child welfare is working on behalf of the legislation under the leadership of Consumers Union.

In Washington, the Center for Science in the Public Interest has been campaigning on behalf of federal legislation that would require a health warning label on alcoholic beverages.

The most successful battles on behalf of health warnings have been fought in local communities. More and more city and county governments are requiring that posters warning of the risk of birth defects from drinking alcohol be posted in all establishments where alcoholic beverages are sold.

Both the Los Angeles City Council and the Los Angeles County Board of Supervisors have adopted ordinances requiring such warning posters. (See accompanying article about how concerned individuals and groups in Los Angeles worked on behalf of the new regulations.)

In San Diego County, the Board of Supervisors voted favorably on a warning poster ordinance in October, 1986, and planned to lay down a procedure for implementing it in unincorporated areas of the county early in 1987.

"There is very little doubt at all that drinking alcohol in any form during pregnancy can cause birth defects," said Supervisor Susan Golding, who sponsored the San Diego County ordinance. Another supervisor, Brian Bilbray, said he



Photo by March of Dimes Birth Defects Foundation

*Birth defects associated with alcohol use during pregnancy may affect as many as 6,000 babies born in the United States every year. A new study ranks alcohol abuse by the mother as the leading cause of mental retardation in America.*

was not impressed by the argument of opponents that it was up to doctors, not sellers of beverages, to warn women about alcohol and birth defects. Representatives of the restaurant and grocery industries opposed the ordinance.

"Maybe in your neighborhood you have pregnant ladies going to their physicians," Bilbray told the opponents. "A lot of my constituents never see a physician until they're ready to deliver."

The San Diego ordinance was supported by the March of Dimes Birth Defects Foundation, the National Council on Alcoholism and other public and private agencies concerned with maternal care, child welfare and prevention and treatment of alcohol and drug problems.

As proposed by Supervisor Golding, the San Diego posters would carry this message: "Warning. Pregnancy and alcohol do not mix. Drinking beer, wine or liquor while you are a pregnant or nursing mother—even in moderate quantities—can be harmful to your baby."

Georgia and South Dakota are now requiring warning signs statewide. Other cities which require the warnings include New York; Philadelphia; Washington, D.C.; Jacksonville and Leesburg, Florida;

and Columbus and Lakewood, Ohio.

The Oklahoma Health Department has been circulating posters to liquor-serving establishment and asking that they be displayed voluntarily. A proposal still under consideration in Wisconsin would require that a pamphlet about Fetal Alcohol Syndrome be handed to all persons applying for marriage licenses in that state.

In most cases where posters are required, the warning deals only with the risk of birth defects. One community goes further, however. In Leesburg, Florida, the posters carry this message:

"Warning: Alcohol in Beer, Wine, and Liquor can cause intoxication, addiction, birth defects. Reduce your risks: do not drink before driving or operating machinery; do not mix alcohol with other drugs (it can be fatal); do not drink during pregnancy."

In Los Angeles, the California Restaurant Association filed a lawsuit challenging the constitutionality of the city's warning poster ordinance. However, a Superior Court judge rejected the argument that the ordinance infringes on the state's powers to regulate the sale of alcoholic beverages.

# Warning Posters

---

## -Persistence Pays Off in Los Angeles

Adoption of warning poster ordinances by the Los Angeles City Council and the Los Angeles County Board of Supervisors is a textbook example of how community concern about an alcohol problem can be translated into action by local governing bodies.

The successful campaign was guided by a Task Force organized by the Alcohol and Drug Dependency Council of Los Angeles County, which is the local affiliate of the National Council on Alcoholism.

The choice of leaders for the campaign showed an awareness of political realities. Co-chairing the Task Force were Mary Louise Frawley, who has the credentials of a conservative Republican, and Elizabeth Snyder, a prominent Democrat.

"Between the two of us, we had things pretty well covered," says Frawley. "There's a Democratic majority on the City Council, and a Republican majority on the Board of Supervisors."

The two chairpersons assembled a Task Force representing a dozen health and welfare organizations with a special interest in protecting mothers and children from the risk of alcohol-related birth defects. Members of the Task Force in turn reached out to other organizations that might be persuaded to join in the campaign. Eventually more than 35 public and private agencies were lending their names and influence to the effort. Frawley says the Task Force found valuable tips in a booklet on how to get local alcohol warning legislation passed, available from the Center for Science in the Public Interest, 1501 16th St. NW, Washington, D.C. 20036.

The Task Force lined up medical experts on the Fetal Alcohol Syndrome and Fetal Alcohol Effects to testify before the City Council's Health Committee about the importance of informing the public about the risks of drinking during pregnancy. By strategic timing, the Health Committee hearing was held during an observance of "Alcohol Awareness Week" in Los Angeles.

A favorable report by the Health Committee was followed by adoption of the warning poster ordinance by the full 15-member City Council. "We were surprised at the lack of opposition," says Frawley. "I think the beverage industry people were caught off guard."

This was not the case when the Task Force took the issue to the Board of Supervisors, seeking a similar ordinance to apply to the unincorporated areas of Los Angeles County. This time,

representatives of the beverage and service industries were on hand to argue against the ordinance. The FAS Task Force made sure that its side was well represented, too.

"We had a fine turnout of our people for the county hearing," Frawley says. "We wanted to make sure the supervisors knew how many of us were in the audience, so we all wore 'Fight Birth Defects' ribbons."

The main argument made against the proposed ordinance was that it was unconstitutional — that only the state government was empowered to make regulations affecting the sale of alcoholic beverages. Legal scholars at the Prevention Research Center in Berkeley helped provide ammunition for an effective counter-argument in the presentation to the supervisors.

The supervisors adopted the ordinance. Warning posters now are required in 7,500 establishments selling alcoholic beverages in the city of Los Angeles, and in another 1,500 similar businesses in unincorporated areas of the county. Volunteers from the Task Force have been assisting city and county authorities in distributing posters to the affected businesses. Members of the Task force also hope to persuade other municipalities in the Los Angeles area to adopt similar ordinances.

In drafting a proposed text for the warning signs, the Los Angeles Task Force profited by the experience of others. In New York, similar warning posters refer only to the risk of birth defects from drinking "alcoholic beverages" during pregnancy. Surveys have indicated that some people believe the message refers to distilled spirits, but not to beer and wine. The Los Angeles posters state specifically that the risk lies in drinking "beer, wine and other alcoholic beverages."

What's the secret of a successful community effort to pass a warning sign ordinance? "Persistence," says Mary Louise Frawley.

"Liz and I spent a lot of time on the telephone, keeping after people to remind them of what we were doing and getting them to follow through on their promises to write letters or call a councilman or supervisor."

She had another tip for organizers of such campaigns. "We kept it as informal as possible. We tried not to have too many meetings. People shy away from commitments that mean sitting through a lot of dull meetings. Whenever you can, use the phone."

National Institute on Alcohol Abuse and Alcoholism

*My Baby...  
Strong and Healthy*



U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES  
Public Health Service  
Alcohol, Drug Abuse, and Mental Health Administration

*The safest choice is not to  
drink at all during pregnancy  
or if you are planning  
pregnancy. —  
U.S. Surgeon General*

*Special thanks to the  
following companies  
for their assistance  
with this publication.*

*Eastman Kodak Company  
Gerber Products Company  
Johnson and Johnson Baby Products Company*

---

For sale by the Superintendent of Documents  
U.S. Government Printing Office  
Washington, DC 20402

*My Baby...*  
*Strong and Healthy*

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES  
Public Health Service  
Alcohol, Drug Abuse, and Mental Health Administration  
National Institute on Alcohol Abuse and Alcoholism  
5600 Fishers Lane  
Rockville MD 20857



## *My Baby...Strong and Healthy*

---

**F**or most women, pregnancy is a time of intense, often mixed, feelings. The good feelings can be very good: anticipation, pride, excitement, a sense of fulfillment. But because having a baby is such an important event in one's life, it is also natural to experience some doubts and fears along with the "highs." Even in the most wanted of pregnancies, many women wonder, Can I handle the responsibility of another person for the next 18 years? Can I afford this baby? Will it be a difficult birth? And perhaps most worrisome of all, will I have a healthy, normal child?

## *You Can Make a Difference*

---

**M**ost women worry about the health of their child at some point during their pregnancy. But what many women don't know is that there are a number of things they can do during pregnancy to increase the chances of delivering a healthy baby. Regular prenatal check-ups and a nutritious diet are important. But an expectant mother also should be extremely careful about the kinds and amounts of drugs she takes. In addition to many illegal drugs, several legal drugs are known to cause birth defects when taken during pregnancy. Over the past 12 years, clinical reports and studies have confirmed that alcohol exposure poses a threat to the health of the unborn child.



## *Alcohol: A Powerful Drug*

---



lcohol is so taken for granted in our society that most of us don't even think of it as a drug. Yet whenever we have wine with a meal, a gin and tonic at a party, or a beer with the late movie, we are consuming a central nervous system depressant that affects nearly every organ in our bodies. Alcohol abuse over a period of time can contribute to a number of serious disorders, including muscle and heart disease, malnutrition, digestive problems, and liver cirrhosis. It should not be surprising that this powerful, addictive drug, when used during pregnancy, also can affect the delicate and developing system of the unborn baby.

During the last decade, researchers have conducted a number of studies of infants born to women who drank heavily during pregnancy. The results are disturbing. A significant number of the infants studied were born with a definite pattern of physical, mental, and behavioral abnormalities that researchers named the "fetal alcohol syndrome." Babies with this syndrome were shorter and lighter in weight than normal, and they didn't "catch up," even after special postnatal care was provided. They also had abnormally small heads, several facial irregularities, joint and limb abnormalities, heart defects, and poor coordination. Most also were mentally retarded and showed a number of behavioral problems, including hyperactivity, extreme nervousness, and poor attention span. And for every infant born with fetal alcohol syndrome, there are several more born with only some of the features of the syndrome. When only some of the characteristics are present, they are called "alcohol-related birth defects."



## *How Alcohol Affects the Fetus*

---

**J**t may be hard to believe that alcohol can cause such devastating effects in the unborn baby. An understanding of how alcohol interacts with the fetus may help. When a pregnant woman takes a drink, the alcohol readily crosses the placenta to the fetus. It then travels through the baby's bloodstream in the same concentration as in the mother. So if the expectant mother drinks at a party, her unborn baby drinks as well. But, the tiny, developing system of the fetus is not equipped to handle alcohol, so the unborn baby must depend on its adult mother to burn up the alcohol. Unfortunately, the fetus can't say "no."

## *How Much Drinking Is Harmful?*

---

**U**ntil it is very clear which women — if any — can drink alcohol safely during pregnancy, its use — even on infrequent occasions — should be avoided. Research has shown that alcohol affects all the organ systems of the developing baby. While high levels of consumption are necessary to produce *all* the features of fetal alcohol syndrome, alcohol-related birth defects have appeared in babies whose mothers drank smaller amounts. In fact, the more a mother drinks, the greater are the chances of health problems for her newborn baby. However, if an expectant mother avoids alcohol altogether, there is *no* possibility of having a child with fetal alcohol syndrome or alcohol-related birth defects.



## Risk Factors

---



What risks are there for the woman who drinks only occasionally, but perhaps heavily each time? We still don't know the answer to this question. But we do know that the fetus gets a potent dose of alcohol each time the mother takes a drink. Since any exposure to alcohol is known to put the fetus at risk, it stands to reason that even occasional heavy drinking should be avoided.

It is well known that many people who abuse alcohol also tend to smoke a lot of cigarettes, use other drugs, pay little attention to nutrition, and generally suffer a great deal of emotional stress. All these factors are related to reproductive risk. How do we know, then, that alcohol is the real culprit in the development of birth abnormalities? Could any of these other behaviors, alone or in combination, be partially or even totally responsible for what we call the fetal alcohol syndrome or for other problems associated with alcohol use in pregnancy?

Other factors may well play a role in the development of the syndrome, and indeed they are known to be contributors to such problems as low birth weight. However, alcohol itself appears to be the only agent common to all fetal alcohol syndrome cases. Moreover, animal studies have shown that the presence of other factors—like caffeine, other drugs, tobacco, or malnutrition—are not necessary for alcohol to cause damage to the fetus. In these studies, pregnant animals that consumed alcohol gave birth to offspring with defects similar to those seen in the human fetal alcohol syndrome.



# Thoughts on Drinking During Pregnancy

---

**A**t this point, you may feel uncertain about how to approach drinking during pregnancy. There is much we have yet to learn about this problem, including the risks of small amounts of alcohol; whether the fetus is most susceptible to alcohol at a particular time during pregnancy; and the degree to which risk is compounded by other factors, such as nicotine use and poor nutrition. Until all the facts are in, however, it makes sense to exercise extreme caution. In fact, the U.S. Surgeon General says that *the safest choice is not to drink at all during pregnancy or if you are planning or anticipating pregnancy*. In addition, women who breast-feed should continue abstaining from alcohol until their babies are weaned.

**Know the Risks** We really don't know at what level alcohol begins to harm the fetus. At the lowest doses, the risks from alcohol are probably very small, but as consumption increases, so do the risks. The more alcohol an expectant mother drinks, the greater are the risks she takes with the health of her unborn baby.

Studies also show that the sooner an expectant mother stops drinking, the better are the chances that her baby will be born strong and healthy. And remember, there is *no* possibility of having a child with fetal alcohol syndrome or alcohol-related birth defects if an expectant mother avoids alcohol during her pregnancy. Until all the facts are in, this seems the safest and wisest course to follow to ensure the best possible outcome of pregnancy.



---

If you're accustomed to coping with tension or depression by having a few drinks, don't fill the void by using other mood-altering drugs, such as tranquilizers or antidepressants. Some of these drugs also may be harmful to the baby when taken during pregnancy. In fact, since most drugs cross the placental barrier to your baby, it is a good idea to take only those that are absolutely necessary during your pregnancy. *Check with your doctor before taking any drugs, including simple over-the-counter medicines such as aspirin and sleeping preparations.*

#### **Alternatives to Alcohol**

Pregnancy changes your life in some important ways, and you're bound to feel some stress during this period. For various reasons, some women experience more anxiety and depression than usual during pregnancy. In any case, there may be times when a few friendly drinks will seem like a good antidote to whatever is troubling you. *At those times, stop and try to think of other ways you might handle your feelings.*

First, make sure you are clear about just what is bothering you. Is there any specific action you could take to improve the situation? Or would simply talking about your feelings with someone close to you help? Sometimes a long walk, some relaxing music, or some kind of creative outlet can do a lot to relieve stress. Have you ever tried meditation? Pounding a pillow to vent frustration? Writing out your feelings? You may be surprised at how effective some of these alternatives to alcohol can be.



---

**Getting Help** If you think you may have an alcohol problem, discuss it with your doctor. You can find help through your local affiliate of the National Council on Alcoholism, mental health agency, Alcoholics Anonymous chapter, Women for Sobriety group, or another self-help group. Most of these referral sources can be found in your telephone directory. If you find yourself seriously depressed or anxious and can't seem to shake it off, consider getting some help. Your local women's center may run a counseling program as well as a number of special support groups for women. Women's centers, area mental health agencies, and your own doctor are possible sources for counseling referrals.

---

## *You Can Make a Difference*

---

T

here are a lot of "do's" and "don'ts" associated with pregnancy, and sometimes you may feel a bit overwhelmed by them. It often seems there is so much to suspect, reject, and avoid! But underlying all the advice and recommendations you receive is the important message that *what you do makes a difference.*

For further information write:

National Clearinghouse for Alcohol Information  
P.O. Box 2345  
Rockville, Maryland 20852

or call:

(301) 468-2600

---

Prepared by the NIAAA  
National Clearinghouse for  
Alcohol Information  
P.O. Box 2345  
Rockville MD 20852  
(301) 468-2600

All material appearing in this volume, except the photographs, is in the public domain and may be reproduced or copied without permission from the Institute. Citation of the source is appreciated.

DHHS Publication No. ADM 86-1436  
Printed 1986