

[CDC Home](#)[Search](#)[Health Topics A-Z](#)**MMWR****Weekly****May 07, 1993 / 42(17);339-341**

## Fetal Alcohol Syndrome -- United States, 1979-1992

Fetal alcohol syndrome (FAS) is characterized by a variety of physical and behavioral traits that result from maternal alcohol consumption during pregnancy. Features of FAS include prenatal or postnatal growth deficiency, abnormal facial features, and central nervous system deficits (1). CDC's Birth Defects Monitoring Program (BDMP) -- a national program to monitor congenital malformations -- has collected data on the incidence of FAS among newborn infants since 1979. This report presents a rate for FAS in the United States using BDMP data from 1979 through 1992.

The BDMP uses hospital discharge data on newborns gathered by the Commission on Professional and Hospital Activities (CPHA). Data from this system include both live and stillborn infants born in participating hospitals since 1970. Since 1979, discharge diagnosis data have been reported to CDC by CPHA using the International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM). Before 1979, the CPHA used ICD-8, which did not include a code used for FAS. During 1992, the BDMP monitored data on approximately 10% of all births, compared with approximately 30% in 1979.

From 1979 through 1992, a total of 1782 FAS cases were reported among 9,057,624 births, a rate of 2.0 per 10,000 births (Figure 1). During 1992, the BDMP identified 67 infants born with FAS, representing a rate of 3.7 per 10,000 births. This rate is an increase of more than threefold that for 1979 (1.0 per 10,000 births).

Reported by: Birth Defects and Genetic Diseases Br, and Developmental Disabilities Br, Div of Birth Defects and Developmental Disabilities, National Center for Environmental Health, CDC.

### Editorial Note

Editorial Note: FAS is a leading preventable cause of birth defects and mental retardation in the United States. FAS represents some of the most serious effects of alcohol to the developing fetus. Because FAS has not been reported in the absence of excessive maternal alcohol consumption during pregnancy, this problem can be prevented by the avoidance of alcohol use by women who are pregnant. A national health objective for the year 2000 is to reduce the rate of FAS to no more than 0.12 per 1000 live births (i.e., 1.2 per 10,000 live births)

(objective 14.4) (2).

FAS is difficult to recognize in newborns for three reasons: 1) facial stigmata of FAS are often subtle; 2) some types of central nervous system deficit in infants are difficult to detect; and 3) the birthweight of some affected infants is normal. Although the BDMP data are derived from diagnoses made by physicians during the neonatal period, and the sensitivity and specificity of the data are unknown, rates derived from BDMP data are likely to underestimate the true incidence of FAS. Incidence rates for FAS based on the BDMP are substantially lower than those based on other studies (3). Because neither the sensitivity nor the specificity of the BDMP data are known, it is difficult to interpret the increase in the incidence of FAS reported to the BDMP. The increase may reflect an increase in the recognition and reporting by physicians and/or a true increase in incidence. Studies are under way to evaluate the sensitivity and specificity of the BDMP data.

CDC, in collaboration with private, voluntary organizations, is promoting Alcohol and Other Drug Related Birth Defects Awareness Week, May 9-15, 1993. These organizations are making available information packets for state, federal, and voluntary organizations; these packets contain articles, fact sheets, and sample press releases regarding awareness, intervention, and prevention of FAS and other drug-related birth defects. Information packets are available from The Arc (formerly the Association for Retarded Citizens), P.O. Box 6109, Arlington, TX 76005; The March of Dimes Birth Defects Foundation, Education and Health Promotion, 1275 Mamaroneck Avenue, White Plains, NY 10605; and the National Council on Alcoholism and Drug Dependence, Inc., 1511 K Street, NW, Suite 926, Washington, DC 20005.

## References

1. Sokol RJ, Clarren SK. Guidelines for use of terminology describing the impact of prenatal alcohol on the offspring. *Alcoholism: Clinical and Experimental Research* 1989;13:597-8.
2. Public Health Service. *Healthy people 2000: national health promotion and disease prevention objectives -- full report, with commentary*. Washington, DC: US Department of Health and Human Services, Public Health Service, 1991; DHHS publication no. (PHS)91-50212.
3. Abel E, Sokol RJ. Incidence of fetal alcohol syndrome and economic impact of FAS-related anomalies. *Drug Alcohol Depend* 1987;19:51-70.

**Disclaimer** All *MMWR* HTML versions of articles are electronic conversions from ASCII text into HTML. This conversion may have resulted in character translation or format errors in the HTML version. Users should not rely on this HTML document, but are referred to the electronic PDF version and/or the original *MMWR* paper copy for the official text, figures, and tables. An original paper copy of this issue can be obtained from the Superintendent of Documents, U.S. Government Printing Office (GPO), Washington, DC 20402-9371; telephone: (202) 512-1800. Contact GPO for current prices.

\*\*Questions or messages regarding errors in formatting should be addressed to [mmwrq@cdc.gov](mailto:mmwrq@cdc.gov).

Page converted: 09/19/98

[HOME](#) | [ABOUT MMWR](#) | [MMWR SEARCH](#) | [DOWNLOADS](#) | [RSS](#) | [CONTACT](#)  
[POLICY](#) | [DISCLAIMER](#) | [ACCESSIBILITY](#)

**SAFER • HEALTHIER • PEOPLE™**

**Morbidity and Mortality Weekly Report**  
Centers for Disease Control and Prevention  
1600 Clifton Rd, MailStop E-90, Atlanta, GA 30333, U.S.A



Department of Health  
and Human Services

This page last reviewed 5/2/01