
Children and Family Health Services

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Focus on Hamilton County Women and Children

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Maternal Smoking in Hamilton County 1997-1998

This issue of the Maternal and Child Health report examines the incidence of maternal smoking in Hamilton County.

According to the National Center for Health Statistics (NCHS), smoking while pregnant is related to increased risk of miscarriage, growth retardation, low birthweight, infant mortality, and poor child health and development.¹

Incidence of Smoking

Table 1 shows the percentage of births in Hamilton County to mothers who reported smoking while pregnant.

Table 1 Maternal Smoking

	1997	1998
Hamilton County births	15.7	15.8

Source: WCHOP Analysis of Birth Certificates

As Table 1 shows, the percentage of births to mothers who smoked was quite similar in 1997 and 1998, just under 16 percent of births. The percentage of Hamilton County mothers who smoked while pregnant has decreased compared to previous years. In 1995 slightly over 17 percent of births were to mothers who smoked, and just under 17 percent in 1996.

Nationally, the percentage of births to mothers who smoke has fallen since 1989 and in 1998, 12.9 percent of births

were to mothers who reported smoking.

As Table 1 shows, Hamilton County maternal smoking is somewhat greater than the national average.

An important consideration in a discussion of maternal smoking is the potential for measurement error, since the data are self-reported on the birth certificate. The NCHS reports that smoking may be underreported on the birth certificate for several reasons including the wording of the question, and the growing stigma attached to smoking (Ventura et al. 2000). However, the NCHS also reports that studies using other data also support a general decrease in smoking over time.

Prevalence of Smoking

In 1997, the average number of cigarettes per day for those 1831 births to women who smoked cigarettes was 12.2. The average age of mothers who smoked was 25.7, and white mothers were disproportionately likely to smoke.

The average number of cigarettes a day was 10.7 in 1998. Again, white mothers were slightly more likely to smoke.

In terms of race, most (71 percent) of the births to smokers were to white mothers. Women who smoked while pregnant had lower educational levels compared to the county average. Smokers educational level was 11.7 years - nearly two years less than the county average.

Birth outcomes

12.9 percent of births to smokers were low birth weight, this is greater than the county average of around 8.6 percent. 2.6 percent of births with maternal smoking were VLBW compared to the county average of about 1.9 percent.

19.1 percent of births to mothers who smoked were classified as inadequate prenatal care. The county average is just under 10 percent. Similarly, 6.6 percent of births to mothers who smoked received no prenatal care. This is approximately double the county average for the same time period (1997-1998).

Additionally, the percentage of premature births was somewhat higher for births where the mother smoked. Around 10 percent of county births are born less than 37 weeks, just over 13 percent of births to women who smoked were born premature.

¹ Ventura, S.J, Martin, J.A., Curtin, S.C., Matthews, T. J., and Park, M.M. (2000) "Births: Final Data for 1998 : National Vital Statistics Reports." 48(3). Hyattsville, MD: National Center for Health Statistics.

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