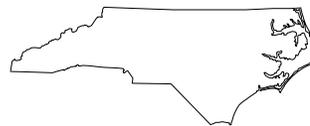

Statistical Brief



State Center for Health Statistics

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Prenatal HIV Counseling and Testing in North Carolina – Recent Survey Results

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About 74 percent of the state's pregnant women are being counseled or advised of the benefits of HIV testing during pregnancy. About 70 percent of all the state's pregnant women are being tested for the virus during pregnancy. These estimates are based upon the results of the 1996-97 Prenatal HIV Survey.

This survey is the first to provide statewide information on the response of the medical community to the NC Health Services Commission Rule (Title 15A NCAC 19A.0202(14); 1995). The rule requires health care providers to counsel all women on the benefits of HIV testing during pregnancy. The rule was adopted because of significant advances in the prevention of perinatal HIV infection to infants' whose mothers are HIV positive.

In 1994, the AIDS Clinical Trials Group Protocol 076 demonstrated that the use of zidovudine therapy (AZT) for HIV-infected women and their newborns reduced the likelihood of transmission (mother to infant) by approximately two-thirds¹.

Findings from the 076 Trials have changed the approach and treatment of AIDS in pregnancy. The US Public Health Service has since recommended that routine HIV counseling and voluntary testing be made available to all pregnant women in the US².

To gauge compliance with the new rule, the Prenatal HIV Survey was initiated by the HIV/STD Prevention and Care Section of the Division of Epidemiology and administered to a random sample of mothers delivering liveborn infants between December 1, 1996, and January 25, 1997. Mothers were contacted for the survey approximately two weeks after delivery.

A total 1,944 mothers with newborns were eligible to participate in the survey. Completed questionnaires were available on 1,652 (or 85%) of these mothers: 37.5 percent by mail, 49.5 percent by phone, and 13 percent by personal interview. Data for this Brief are from that sample.

The results below were tabulated for respondents who reported either "yes" or "no" with regard to whether the health care provider counseled or tested the mother for HIV during pregnancy. Those who responded "not sure/don't remember" were dropped from the analyses. About 4 percent of mothers in the survey did not remember if they were counseled and slightly more 7 percent of mothers did not remember if they were tested for HIV during pregnancy.

Prenatal HIV Counseling and Testing by Medical Provider Groups

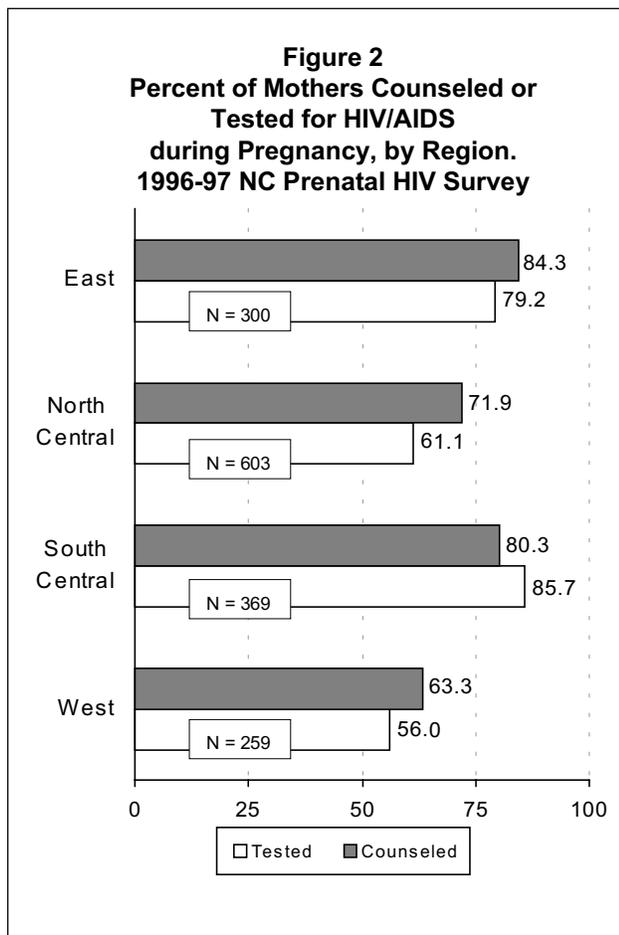
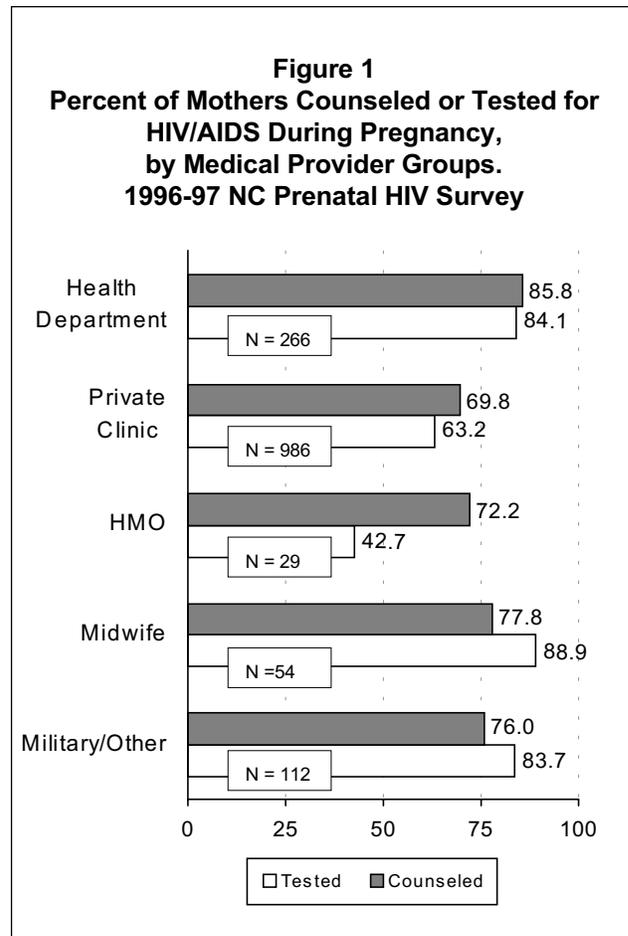
The results shown in Figure 1 for HIV counseling/testing by provider groups are restricted to mothers who indicated one provider source for the duration of their prenatal care (approximately 92 percent of the sample). The highest



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percentage (85.8%) of those counseled for HIV was found among women who reported using health departments for their prenatal care. By contrast, the lowest counseling rate (69.8%) was found among women who utilized private clinics for their prenatal care; in addition, this group also comprised more than half of the sample.

With regard to testing, a similar trend occurs. Based on the mother’s self-report, the HIV testing rate associated with health department prenatal care (84.1%) was about 21 percentage points higher than the comparable rate (63.2%) obtained for those in private sector prenatal care. Moreover, fewer than half of the survey mothers in HMOs (42.7%) reported that they were tested for the HIV virus during pregnancy. The latter result, however, may be unreliable due to the small sample size (N=29).



Regional Characteristics of Prenatal HIV Counseling and Testing

Pronounced differences in the proportion of women counseled or tested for HIV during pregnancy appear at the regional level (Figure 2). It’s estimated that during the survey period more than 80 percent of new mothers from the East and South Central regions of the state received HIV prenatal counseling. A similarly high proportion of these mothers were tested: 79.2 percent from the East and 85.7 percent from the South Central region. By contrast, about two-thirds of the population of pregnant women in the western region of the state received HIV counseling during pregnancy and a little more than half of those women were tested for the virus.

Demographic Correlates of HIV Testing

Mothers in demographic groups with historically high rates of reported incidence of HIV/AIDS were more likely to be tested for the disease than those from demographic groups with low reported incidence (Table 1). Single women were more than twice as likely as married women to report that they were tested during pregnancy; this effect also remained significant when controlling for regional variation. Black women and younger women (18 years of age or less) were also about twice as likely as their respective counterparts to report that they had HIV testing during pregnancy.

Table 1
The Odds of Being Tested for HIV During Pregnancy, by Maternal Demographic Characteristics. 1996-97 NC Prenatal HIV Survey

Demographic Characteristic	Crude Odds ratio 95% CI	Referent Group
Single/never married	2.35 (1.33, 2.83)	Married/divorced
Black	2.00 (1.37, 2.95)	All other races
Young (<19 yrs.)	1.85 (1.06, 3.23)	Women 19 yrs. and older

Comment

- The results from the Prenatal HIV Survey indicate that women who receive their prenatal care in the public sector are more likely to be counseled and tested for HIV during pregnancy than their counterparts in the private sector.

- Across regions, the observed high/low rates of HIV counseling during pregnancy were correlated with similarly high/low regional use of public sector prenatal care. Health departments provided prenatal care to about 38 percent of mothers in the East and about 27 percent of mothers in the South Central region; these rates compare to 15 percent from the North Central region and 20 percent from the West.
- The estimate obtained for HIV testing (70.1%) during pregnancy may be inflated by the high percentage of survey mothers (7.2%) who did not remember if they were tested for the virus (and who were dropped from these results). Researchers at Duke University Medical Center found that only about 60 percent of pregnant mothers accepted HIV testing during the prenatal period³.

References

¹ Connor EM, Sperling RS, Gelber R, et. al. Reduction of maternal-infant transmission of human immunodeficiency virus type 1 with zidovudine treatment. Pediatric AIDS Clinical Trials Group Protocol 076 Study Group. N Eng J Med. 1994;331(18):1173-1180.

² Centers for Disease Control and Prevention. US Public Health Service recommendations for human immunodeficiency virus counseling and voluntary testing for pregnant women. Morb Mortal Wkly Rep. 1995;44(RR-7):1-15.

³ Walter EB, Elliott AJ, Druker RP, et. al. Maternal acceptance of voluntary human immunodeficiency virus antibody testing during the newborn period with the Guthrie card. Pediatr Infect Dis J. 1995;14(5):376-381.

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