



Focus on
HIV Counseling and Testing During Pregnancy
 Among Maryland Women Giving Birth 2001-2006

June 2008

“HIV screening should be a routine part of preconception care, maximizing opportunities for all women to know their HIV status before conception. In addition, screening early in pregnancy enables HIV-infected women and their infants to benefit from appropriate and timely interventions (e.g. antiretroviral medications, scheduled cesarean delivery, and avoidance of breastfeeding.”

Centers for Disease Control and Prevention (CDC) 2006

MARYLAND FACTS

Maryland ranked 3rd in the U.S. for annual AIDS cases in 2006.

Nearly 40% of new HIV cases are women.

Over 200 HIV positive women give birth each year.

Nearly all cases of HIV infection in children are due to perinatal transmission, that is, HIV transmission from mother to child during pregnancy, labor, delivery or breastfeeding. Pregnant HIV-infected women can dramatically reduce their risk of passing the infection on to their child from 28% to <2% if antiretroviral (ARV) therapy is begun prenatally. HIV testing of pregnant women and treatment of those that are HIV-positive is therefore essential in the prevention of a child born HIV-positive.

Prevalence of HIV Counseling

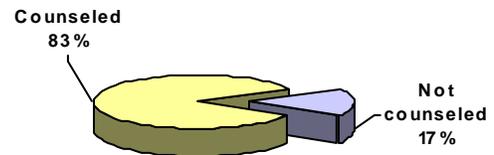
Counseling pregnant women about HIV testing is required by law in Maryland.

The 2001-2006 PRAMS survey included the following question:

During any of your prenatal care visits, did a doctor, nurse, or other health care worker talk with you about getting tested for HIV (the virus that causes AIDS)?

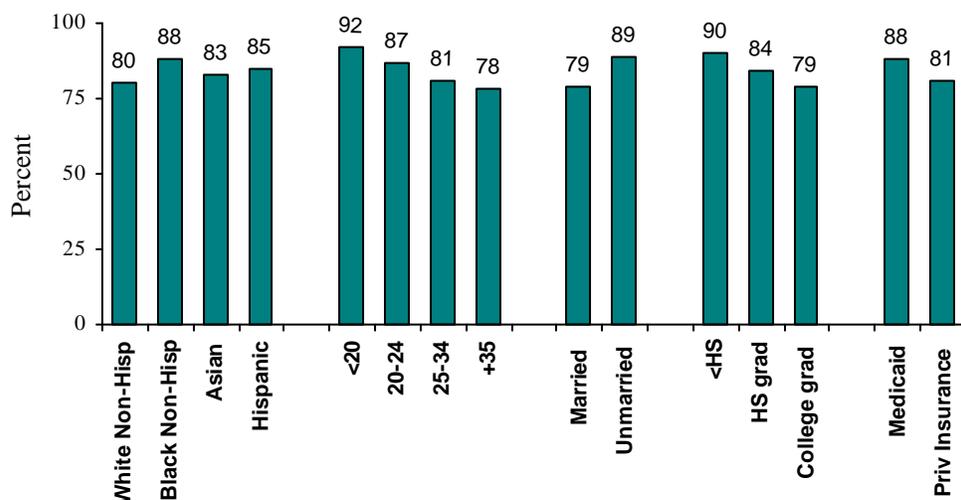
In Maryland, 83% of women reported that a health care provider had spoken to them about getting tested for HIV (Figure 1).

Figure 1. Prenatal HIV Counseling Rates Maryland 2001-2006



Levels of counseling were highest among mothers who were teens, non-high school graduates, unmarried, black, or Medicaid recipients. Levels of counseling were lowest among mothers who were 35 years of age or older, married, college graduates, and non-Hispanic white (Figure 2).

Figure 2. Percentage of Mothers Who Reported Prenatal HIV Counseling 2001-2006



HIV Testing During Pregnancy

For the 2004-2006 PRAMS survey, Maryland added two more questions about HIV testing during pregnancy:

“At any time during your most recent pregnancy or delivery, did you have a test for HIV (the virus that causes AIDS)?”

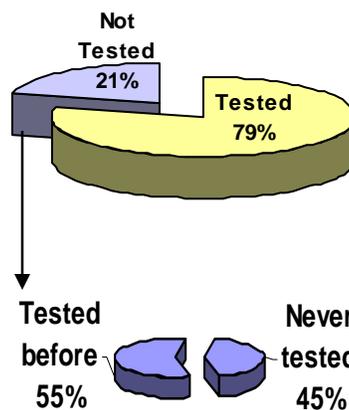
- Yes.....skip next question
- No.....answer next question

“Had you been tested for HIV before this pregnancy?”

- Yes
- No

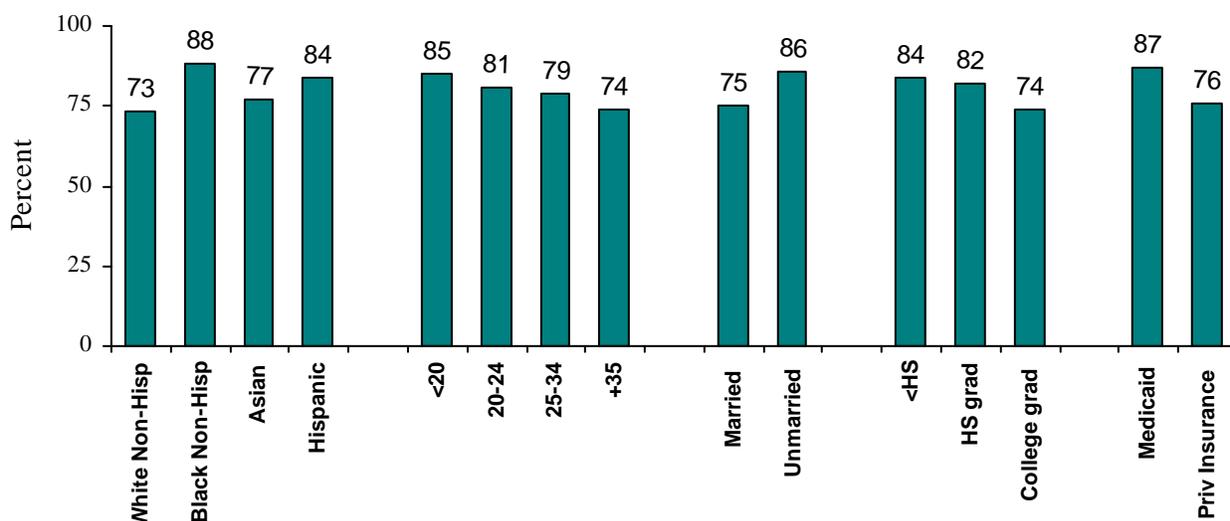
In Maryland, 79% of women reported that they were tested for HIV during their pregnancy or delivery. Of those women who were not tested for HIV during this pregnancy, 55% had been tested before and 45% had never been tested before (figure 3).

Figure 3. Perinatal HIV Testing Rates Maryland 2004-2006



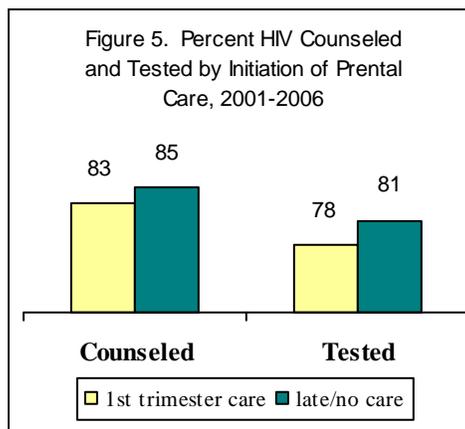
Levels of HIV testing were highest among women who were black, Medicaid recipients, unmarried, under 20 years of age, non-high school graduates and Hispanic. Levels of HIV testing were lowest among women who were white, 35 years of age or older, college graduates, married, and had private insurance (Figure 4). These characteristics are similar to the ones observed for HIV counseling.

Figure 4. Percentage of Mothers Who Reported Prenatal HIV Testing, 2004-2006



Association with Initiation of Prenatal Care

There was no statistically significant difference in counseling or testing rates between mothers who initiated prenatal care during the first trimester and those who started care late (after the first trimester or no prenatal care). Even among mothers who had late or no prenatal care, 85% reported they were counseled about HIV testing and 81% were tested for HIV during a prenatal visit or during delivery (figure 5).



This is my 7th child...so I didn't need another HIV test. (Being HIV positive)...I had difficulty finding a provider who would take me."

PRAMS mother

Discussion

Although the vast majority (83%) of mothers reported that a health care provider had discussed HIV testing during the pregnancy, mothers who are non-Hispanic white, married, privately insured, and college graduates, were counseled at significantly lower rates than their counterparts. The same disparity hold true for HIV testing. Even though the populations most at risk for HIV appear to be targeted for counseling and testing by prenatal providers, HIV seropositivity occurs in women of all cultural and social backgrounds and universal testing is the goal. Overall, HIV testing rates were slightly lower than counseling rates (79% vs 83%). Of the 21% of mothers who were not tested during the pregnancy, nearly half had never been tested before.

According to the Centers for Disease Control and Prevention (CDC), American Medical Association (AMA), American College of Obstetricians and Gynecologists (ACOG), American Academy of Pediatrics (AAP), Institute of Medicine, (IOM), and the American College of Nurse Midwives (ACNM), all

pregnant women should obtain a prenatal HIV test. As of July 1, 2008, a new Maryland law will take effect to facilitate HIV testing. For pregnant women, signed consent forms are no longer necessary for prenatal HIV testing. Instead, after HIV test counseling, women will be informed that an HIV test will be part of a standard group of prenatal tests. They may decline the HIV test without penalty and this will be noted in the medical record. HIV testing should also be offered in the 3rd trimester to women who live in areas of high HIV incidence or who are at high risk for contracting HIV. Women who present to labor and delivery with undocumented HIV status should have a rapid test.

HIV counseling and testing rates in Maryland are high, however a significant proportion of women with unknown HIV status reported that they were not tested during pregnancy. The common goal of getting women into prenatal care and having all pregnant women tested for HIV—regardless of cultural background, race, ethnicity, and insurance coverage—is necessary in the ultimate prevention of mother to infant transmission of HIV.



"I felt left out and excluded because of my high risk status and I felt bias and discrimination because of my HIV status."

PRAMS mother



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PRAMS Methodology

Data included in this report were collected through the Pregnancy Risk Assessment Monitoring System (PRAMS), a surveillance system established by the Centers for Disease Control and Prevention (CDC) to obtain information about maternal behaviors and experiences that may be associated with adverse pregnancy outcomes.

In Maryland, the collection of PRAMS data is a collaborative effort of the Department of Health and Mental Hygiene and the CDC. Each month, a sample of 200 Maryland women who have recently delivered live

born infants are surveyed two to six months after delivery by mail or by telephone, and responses are weighted to make the results representative of all Maryland births.

The HIV counseling results are based on the responses of 8,949 mothers who delivered between 1/30/2001 and 12/31/2006; the HIV testing results are based on the responses of 4,275 mothers who delivered between January 1, 2004 to December 31, 2006. Response rates were over 70% for each of these time periods.

Limitations of Report

The Maryland PRAMS data is retrospective and therefore subject to recall bias. It is also based on the mother's perception of events and may not be completely accurate. For example, a mother may have been tested for HIV and not remember or be aware of it. Similarly, a mother may have assumed that an HIV test was done when in fact it wasn't. Also, the survey only asks whether a

discussion about HIV testing had occurred and does not assess the quality of that discussion.

This report presents only basic associations between risk factors and pregnancy intention. Interrelationships among variables are not described, and could explain some of the findings of the study.

Resources

The Baltimore Regional Perinatal Advisory Group (RPAG) developed, "Preventing Perinatal HIV Transmission: A Clinician's Toolkit for Testing, Counseling and Referral (2007)" accessible at www.baltimorecountymd.gov/go/perinatal. For more information, email Elisabeth Liebow at: eliebow@baltimorecountymaryland.gov or call 410-887-3134.

Centers for Disease Control and Prevention (CDC), www.cdc.gov/hiv/topics/perinatal/index.htm/

Maryland Department of Health and Mental Hygiene, AIDS Administration, www.dhmh.state.md.us/AIDS



Maryland Department of Health and Mental Hygiene
Center for Maternal and Child Health • Vital Statistics Administration

Martin O'Malley, Governor; Anthony G. Brown, Lieutenant Governor; John M. Colmers, Secretary

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