In the United States, women account for an estimated 30% of all new HIV infections (1). This epidemic disproportionately affects African American and Hispanic women, who comprise less than 25% of the US female population but account for 82% of all AIDS cases in women (2). Approximately 2/3 of the AIDS cases reported in women are among those aged 30 to 49 years, while women 13-19 account for 57% of new HIV infections each year. Women with HIV/AIDS are more likely to be low income (64%) and earn less than $10,000 annually (1).

The estimated prevalence of HIV in Michigan women is 72 cases/100,000 women (3). Furthermore, in Michigan, women account for 75% of all people who get HIV through heterosexual contact (4).

According to the US Public Health Service, all pregnant women have to be tested for HIV (5) in order to identify potential cases and reduce transmission of HIV in utero.

**Prevention Strategies**

Michigan law requires that healthcare professionals advise their patients about the risks associated with HIV/AIDS and have them tested at the initial examination which may be their first prenatal care (PNC) visit. Michigan PRAMS survey is one of the few sources of data related to HIV counseling during pregnancy. The following yes/no questions were asked between 1996-1999: During any of your prenatal care visits, did a doctor, nurse, or other healthcare worker talk to you about: (i) How to keep from getting HIV (the virus that causes AIDS) and (ii) getting your blood tested for HIV (the virus that causes AIDS).

Among the women surveyed, 51.9% reported discussing HIV prevention and 84.4% reported discussing HIV testing with their healthcare providers.

Also, between 1996-1999, there appears to be no change in the percentage of women who reported that their personal healthcare provider advised them about HIV prevention and testing (Figure 1).

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**Figure 1:** Trends in HIV by Year; MI PRAMS 1996-1999 Survey
**Vertical Transmission**

In the mid-1990’s, a highly active anti-retroviral therapy (HAART) was introduced, which has decreased AIDS mortality and led to an increase in prevalence of people living with HIV. In addition, women have become the fastest growing HIV population in the world, due to the increase in heterosexual transmission. Most of these women are of reproductive age and a major concern is vertical transmission of the virus from mother to child.

Without any treatment, about 25.5% of infants become perinatally infected with HIV with most occurring at the time of birth. Use of combination antiretroviral therapies or AZT during pregnancy can decrease the risk of transmission to infants in approximately 2% of the cases. Elective caesarean section has also been shown to interrupt and reduce the transmission of HIV (6).

During the postpartum period, the risk of transmission is approximately 14% for breastfeeding mothers with an established infection. However, if a breastfeeding mother acquires the infection after giving birth, the risk of transmission increases to 29% due to HIV viral loads being at a peak during and just after seroconversion (6).

**Maternal Demographics**

Overall, 71.9% of African Americans reported that healthcare professionals discussed HIV prevention with them as opposed to 47.4% of white women. In addition, African American women were more likely to report discussion of HIV testing (89.2%) when compared to white (83.4%) women.

When stratified by maternal age, women younger than 20 years were most likely to report discussion of HIV prevention (68.6%) while women older than 35 years were the least likely to report it (38.4%). Also, 89.5% of women less than 20 years of age report a healthcare professional discussing HIV testing as compared to 78.9% of women older than 35 (Figure 2).

Women with less than a high school education were the most likely to report a conversation about prevention (68.3%) and HIV testing (88.2%) during PNC. However, women with a college degree were the least likely to report being informed about HIV prevention (35.2%) and testing (80.8%).

Lastly, fewer married women reported having HIV prevention (44.5%) and testing (68.9%) discussed with them when compared to unmarried women (68.9%, 89.4%, respectively).

Thus, white, older, more educated, and married women were more likely to report not receiving HIV counseling during PNC.

**HIV Counseling By Age**

![HIV Counseling By Age](image)

**Figure 2: HIV by Age, 1996-1999 PRAMS Survey**

**HIV & Health Insurance**

The likelihood a woman receives HIV counseling appears to be correlated to the type of health insurance a mother has during PNC. Women who had either received free prenatal care (70.3%) or PNC paid by Medicaid (70.6%) were the most likely to report healthcare professionals discussing HIV prevention with them, while women whose PNC was paid for by personal income or private insurance were the least likely (Figure 3). Further, more women with Medicaid (89.3%) reported having healthcare professionals discuss HIV testing with them, when compared to women who had received free PNC (77.8%).

We can conclude that among Michigan PRAMS respondents between 1996-1999, 84% had HIV testing discussed with them and about 52% received counseling concerning HIV prevention. Information about HIV transmission and testing during prenatal care provided by all healthcare professionals is essential in reducing the transmission of HIV.
Michigan Policies and HIV

According to a recent article, data reviewed by the Institute of Medicine suggests that perinatal transmission of HIV persists for two reasons:

1. Women are not enrolled in PNC
2. Women are enrolled in PNC but their healthcare professional does not offer the test (7).

In Michigan, newborns continue to be exposed and infected with HIV perinatally. Michigan’s Public Health Code Section 333.5123 and 333.5133 require that at the initial examination all healthcare professionals test women for HIV or during the immediate postpartum period (24 hours) if the women’s HIV status is unknown or not documented. In Michigan, counseling and informed consent for HIV testing is required as directed in Section 333.5133. Exceptions to testing include when the test is deemed medically inadvisable or the women refuses consent (8).

If a woman reports engaging in behavior that places her at risk for contracting the disease during pregnancy she should be retested at 36 weeks gestation (5). A woman might be at risk for HIV infection and not know it, even if she has had only one sex partner. In addition, Michigan Department of Community Health recommends rapid testing in labor and delivery for a woman of unknown HIV status. If the patient has not received PNC prior to admission for labor or her HIV status is not documented, then the test must be performed at delivery or immediately postpartum if delivered at a different facility.

In Michigan, services are available to help women reduce their risk for HIV and to provide medical care and other assistance to those who are infected. Those women who decline testing will not be denied care for themselves or their infants.

Recommendations

- Educate and train healthcare professionals in client centered counseling
- Assure that the PNC guidelines are followed and pregnant women are counseled and tested for HIV
- Treat all HIV+ women with antiretrovirals to reduce perinatal transmission
- Increase the number of women who receive PNC

CDC Guidelines for Opt-Out Strategy for Healthcare Providers*

- Tell all pregnant women an HIV test will be performed as part of standard procedure
- Explain that they may decline testing
- Provide information about how to prevent HIV transmission during pregnancy and about treatment for HIV positive pregnant women (9).

Figure 3: HIV by Prenatal Care, 1996-1999 PRAMS Survey

<table>
<thead>
<tr>
<th>Percent of Women</th>
<th>Income</th>
<th>Insurance</th>
<th>Medicaid</th>
<th>Free PNC</th>
<th>MichCare</th>
<th>Other</th>
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<td>100</td>
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</tbody>
</table>

*Please Note: MI still requires informed consent

Resources for women with HIV

Babes Network
888.292.1912
http://www.babesnetwork.org

Michigan AIDS Hotline
MDCH Division of HIV/AIDS-STD
Phone: 800.872.2437

The National Women’s Health Information Center
http://www.4woman.gov/
HIV/index.htm

CDC National AIDS Helpline
English: 800.342.AIDS
Spanish: 800.344.7432
http://www.ashastd.org/nah/index.html


*Please Note: MI still requires informed consent
About Michigan’s PRAMS

The Pregnancy Risk Assessment Monitoring System (PRAMS), a population-based survey, is a CDC initiative to reduce infant mortality and low birth weight. It is a combination mail/telephone survey designed to monitor selected self-reported maternal behaviors and experiences that occur before and during pregnancy, and early-postpartum periods of women who delivered a live infant in Michigan. Information regarding the health of the infant is also collected for analysis. Annually, over 2,000 mothers are selected at random to participate from a frame of eligible birth certificates. Women who delivered a low-birth weight infant were oversampled in order to ensure adequate representation. The results are weighted to represent the entire cohort of women who delivered during that time frame.

HIV/AIDS Drug Assistance Program (DAP)

The Michigan DAP program covers prescription costs for certain FDA-approved drugs to qualifying persons with HIV/AIDS. In order to participate in the DAP program, certain eligibility requirements must be met such as having HIV, being a Michigan resident and earning less than a certain income. For more information about the program, please call DAP at 888.826.6565.

Suggested Citation