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The State of Adolescent Sexual Health in Michigan

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Division of Health, Wellness, and Disease Control
Division of Family and Community Health
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With a special acknowledgment to the
Michigan Organization on Adolescent Sexual Health (MOASH)
A private non-profit organization providing statewide leadership on adolescent sexual health
Adolescent Sexual Health in Michigan

This document is a product of an interagency effort between the Michigan Departments of Community Health and Education, assisted by the Michigan Organization on Adolescent Sexual Health. Its primary goal is to educate and inspire future action from policy makers, state departments, and key stakeholders on critical sexual health issues affecting adolescents in our state.

This report provides a snapshot of adolescent sexual health and risk in Michigan today, through a brief summary of the most recent and relevant statistics, and by noting important trends and inequities. General recommendations for improving the status of adolescent sexual health are listed at the end of this document. For additional data or an electronic version of this document, go to www.michigan.gov/hivstd.

The current state of adolescent sexual health in Michigan is in critical need of examination and reflection.

Adolescent pregnancy and sexually transmitted infection (STI) rates have significant impacts on the physical, mental, and emotional health of our young people, as well as on their ability to grow to their full potential. Additionally, the consequences of adolescent sexual risks have detrimental effects on state and local economies.

Repairs are needed. Data shows that the health of many adolescents has been compromised by risky behaviors. But we must also be proactive about our approach to adolescent sexuality. We need to nurture partnerships that involve and empower parents, youth, communities, lawmakers and state departments as we build a network of support in which our youth can thrive. Health is not only about illness, but about wellness.

The Centers for Disease Control and Prevention (CDC) cites the World Health Organization’s (WHO) definition of sexual health, supporting this concept (see below). It also notes that sexual contact “should be free of coercion, discrimination and violence.”

Sexual health is “a state of physical, emotional, mental and social wellbeing in relation to sexuality; it is not merely the absence of disease, dysfunction or infirmity.”

Understanding Disparities in Health Risks

As with many health risks, sexual health risks are not evenly distributed across populations of young people. Geography, race, ethnicity, family income, gender identity, sexual orientation, and age all influence sexual health outcomes. Identifying inequities in adolescent health is the first step towards eliminating them. This report includes general data on youth, but also particular data to identify populations that are disproportionately affected by unhealthy outcomes.
Adolescent Sexual Risk Behaviors
A Snapshot

The best estimates of adolescent sexual behavior come from the Youth Risk Behavior Survey (YRBS), a nationwide surveying effort led by the CDC to monitor students’ health risks and behaviors. The Michigan YRBS was last conducted in 2009, and is a collaborative effort between the MDE and MDCH. The Michigan YRBS collects self-reported information from a representative sample of 9-12th grade students across the state.

The percentage of students who ever had sexual intercourse decreased between 1997 and 2007; however, that percentage increased between 2007 and 2009.

In Michigan in 2009:
- Forty-six percent of all Michigan high school students (9-12th grade) have had intercourse.
- Thirty-four percent of 9-12th graders have had intercourse in the past three months.
- Sixty-five percent of 12th graders report having had intercourse.
- Twenty-two percent of 12th graders report having had four or more sexual partners.
- Of students who had sexual intercourse during the past three months, 61% used a condom during last sexual intercourse.
- Of students who had ever had sexual intercourse, 25% drank alcohol or used drugs before their last sexual intercourse.

Disparities in Risk Behaviors

- Black students were more likely to have had intercourse than Hispanic and White students (66%, 49%, and 41%, respectively).
- Black students were more likely to report having four or more partners than White students (28% and 10%, respectively).

At Special Risk: Youth in Juvenile Justice

In 2002, Michigan was one of the first states to conduct a YRBS in the juvenile justice population (ages 12-21). This Bureau of Juvenile Justice YRBS data showed that 89% of all respondents reported ever having sex and 42% had sex for the first time at 11 years of age or younger. Sixty-two percent of these youth started having sex before age 13, compared with 5% of mainstream youths. Fifty-four percent reported using no form of birth control at their last sexual encounter, compared with 5% of mainstream youths the same age. Finally, 23% of these youth fit under the umbrella category of sexual minority youth (Smy) due to self-identifying as gay, lesbian, or bisexual, or participating in same-sex behavior. Smy were at higher risk for HIV than their mainstream counterparts due to higher risk-taking behavior; 21% had used injection drugs, 73% had sex before age 13, and 86% had four or more sexual partners in their lifetime.
Bacterial Sexually Transmitted Infections (STIs)

Chlamydia and gonorrhea infections disproportionately affect youth, with about 75% of cases of chlamydia and 64% of cases of gonorrhea reported among youth ages 15-24 (MDCH 2008).

Chlamydia and gonorrhea rates among youth have steadily increased, both in Michigan and nationally.

▫ Nationally, between 2006 and 2007, the chlamydia rate increased by 7.7% and the gonorrhea rate increased by 2.1% (CDC).

▫ In Michigan during this same time, the chlamydia rate increased by 8.3%, and the gonorrhea rate increased by 4.4%. From 2007-2008, chlamydia rates in Michigan increased by 12.7%, and gonorrhea rates increased by 3.3%. These increases are mostly due to highly targeted screening in venues that serve high risk adolescents.

Chlamydia and gonorrhea are bacterial STIs which, if not diagnosed and treated, can lead to the further spread of infection among sexually active youth and negative health outcomes, including infertility.

Infertility Prevention Project (IPP) Screening Program

The largest risk factor for acquiring chlamydia and gonorrhea is being 15 - 24 years of age. In 2008, as part of a statewide screening project, 12,476 chlamydia and gonorrhea tests were performed for adolescents in juvenile detention facilities, school-based clinics, and teen health centers. These venues were selected because, in areas of high prevalence, they serve the highest risk adolescents. Positivity in these sites exceeded the statewide average for all tests conducted in publicly funded sites (10.3%). On average, 1 in 33 of these teens had gonorrhea and 1 in 7 had chlamydia. Very few of these adolescents had symptoms of an STI.

<table>
<thead>
<tr>
<th>Venue</th>
<th>Number Tested</th>
<th>% Positive for Gonorrhea</th>
<th>% Positive for Chlamydia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Juvenile detention</td>
<td>6,704</td>
<td>2.1%</td>
<td>11%</td>
</tr>
<tr>
<td>School-based clinics</td>
<td>2,532</td>
<td>3.1%</td>
<td>13.1%</td>
</tr>
<tr>
<td>Teen health centers</td>
<td>3,240</td>
<td>2.9%</td>
<td>14%</td>
</tr>
<tr>
<td>Overall IPP</td>
<td>104,621</td>
<td>4.2%</td>
<td>10.3%</td>
</tr>
</tbody>
</table>

Disparities in STIs

▫ For Black youth ages 15-19, the chlamydia rate was over 12 times higher than for White youth ages 15-19. The rate for Hispanic youth ages 15-19 was over two times that for White youth ages 15-19.

▫ For gonorrhea, Black youth ages 15-19 had a rate over 30 times that of White youth of the same age. The rate for Hispanic youth ages 15-19 was nearly three times that of the rate for White youth.

▫ The locales with the highest rates for chlamydia and gonorrhea among youth were the City of Detroit and the counties of Genesee, Muskegon, Berrien, Jackson, and Kalamazoo.
HIV/AIDS

Unlike with gonorrhea and chlamydia, adolescents do not make up the largest proportion of people infected with HIV; 16% of people living with HIV/AIDS in Michigan were youth ages 13-24 years at diagnosis.

Of particular concern is that Michigan youth ages 13-19 are becoming a significantly larger proportion of those newly diagnosed with HIV. Between 2003 and 2007, the rate of new diagnoses increased significantly in this age group, with an average increase in rate of 24% per year.

The 2009 Annual Review of HIV Trends in Michigan indicates that this is the fourth consecutive trend report showing significant increases in new diagnoses among 13-19 year olds. It is also important to note that this is the first report in the last four years not to show significant increases among 20-24 year olds. The 2008 Epidemiological Profile of HIV/AIDS in Michigan report suggests we are seeing a true increase in new diagnoses among 13-19 year olds, as the increase is not simply attributable to greater HIV testing efforts among this age group.

According to the 2008 Epidemiologic Profile of HIV/AIDS in Michigan, it is estimated that there are currently 2,980 people living with HIV or AIDS in Michigan who were between the ages of 13 - 24 when initially diagnosed.

Disparities in HIV/AIDS

The face of HIV/AIDS among Michigan youth has been largely and disproportionately urban, male, and Black, with the primary risk being male-to-male sex.

- Of all teens diagnosed in the last five years, 85% are Black, compared to 59% of persons diagnosed at older ages. Furthermore, teens are much more likely to be Black men who have sex with men (MSM), compared to adults 20 years and older (62% vs. 22%).

- Sixty-eight percent of those diagnosed with HIV at 13-19 years of age are male, and 74% of those males had male-to-male sex as a risk.

- Females make up only 32% of persons diagnosed with HIV at 13-19 years of age; however, this percentage is higher than that of persons diagnosed at older ages (23% of those diagnosed at 20+ years are female).

- Among young females with HIV/AIDS (13-19 years old at diagnosis), 76% were reported as having heterosexual sex as their primary risk.

- Among persons currently living with HIV and diagnosed at 13-19 years of age, 64% reside in the Detroit metropolitan area.

Human papillomavirus (HPV)

While bacterial STIs like chlamydia and gonorrhea are both curable if diagnosed, non-reportable viral STIs such as herpes and HPV, though treatable, are not curable. HPV can lead to serious and lifelong consequences: certain strains of HPV are known to cause cervical cancer in women and penile cancer in men. According to national estimates done by Child Trends, among 15-24 year olds with new STI cases, only 21% were diagnosed with chlamydia or gonorrhea while over half (51%) were diagnosed with HPV. HPV and Hepatitis B are the only STIs for which a vaccine exists.
Teen Pregnancy
For the first time in fourteen years, an increase in the teen birth rate was measured at an increase of 5% between 2005-2007, both nationwide and in Michigan, among women ages 15-19. During this same time, among young women ages 15-17, the birth rate increased at a slightly lower rate of 3.6%.

The consequences of teen pregnancy — in terms of health outcomes for both mother and child and in terms of economic costs — are much greater for younger teens ages 15-17.

In Michigan:
- The overall trend over the past two decades has been positive: the pregnancy rate for women ages 15-17 declined 55% between the years 1990 and 2007, from a rate of 62 per 1,000 in 1990 to 28 in 2007.
- In 2007, 20,094 teens (10-19) became pregnant, accounting for 11.4% of all pregnancies to women 10-44 years of age.
- Fifty-eight percent of teen mothers under age 18 enter into prenatal care after the first trimester or not at all, placing both mother and infant at increased risk for negative health consequences. (PRAMS Annual Report 2006)
- Infants born to teen mothers are more likely to have been the result of an unintended pregnancy. Nearly 85% of births to mothers under age 18 were unintended.
- Additionally, these infants are also significantly more likely to have a low birth weight, which can cause long term negative health consequences for the infant.
- Women under the age of 18 account for 7% of all abortions in Michigan.

Disparities in Pregnancy Rates
- Among 15-17 year olds in 2007, White females overall had a pregnancy rate of 19 per 1,000 and Black females had a pregnancy rate of 61 per 1,000.
- For White females, the counties with the highest pregnancy rates for 15-17 year olds were largely rural. The five counties with the highest rates for this group are Newaygo, Clare, Missaukee, Branch, and Gladwin.
- For Black females, the counties with the highest pregnancy rates for 15-17 year olds were largely counties with urban centers. The five counties with the highest rates for this group are Jackson, Kalamazoo, Genesee, Muskegon, and Berrien.

The total cost to Michigan taxpayers associated with teen childbearing, in Federal and state funds, was conservatively estimated at $302 million for 2004. These public costs include lost tax revenue, health care, and child welfare costs. The public costs of childbearing are greatest for births to teen mothers age 17 or younger. (The National Campaign)
Hundreds of factors influence the behaviors which put youth at risk. Programs and policies that seek to improve the health and well-being of young people help minimize those risk factors and increase the protective factors that reduce risk. Research shows that youth with strong protective factors are more equipped to resist behaviors that can put their health in jeopardy.

**Protective Factors**

It should be noted that all youth, whether or not they are participating in high risk behavior, have protective factors which can be identified and increased to help eliminate or reduce risk behavior. Protective factors include high quality family interactions, parent/child communications about expectations and values regarding sex, a supportive learning environment for all students, and access to prevention information and comprehensive medical care.

**See the References page for recommended resources on protective and risk factors.**

As with other high risk behaviors, academic performance is associated with sexual risk taking. Michigan youth who reported getting Ds and Fs on their report cards were more likely than youth who reported getting As and Bs to have had sexual intercourse, to have initiated sexual intercourse before age 16, to have had four or more sexual partners during their lifetime, and to have first sexual partners who were three or more years older than themselves. (2007 Michigan YRBS)

**Addressing Disparities among Sexual Minority Youth**

**Ensuring Safe Environments for All Youth**

Sexual Minority Youth (SMY), which in typical research includes teens who identify as Lesbian, Gay, or Bisexual, are at higher risk than their heterosexual peers for negative health outcomes. States such as Massachusetts have included SMY in their YRBS research, and found that SMY were:

- 3.8 times more likely to have had sex against their will (36% vs. 9%).
- 3.7 times more likely to have been or gotten someone else pregnant (16% vs. 4%).

One of the most compelling reasons for this is that SMY often face hostile school and home environments, eroding some of the most important protective factors. According to a 2007 study done by The Gay, Lesbian and Straight Education Network (GLSEN):

- Nearly 9 out of 10 LGBT students (86.2%) experienced harassment at school in the past year.
- Three-fifths (60.8%) felt unsafe at school because of their sexual orientation.
- About a third (32.7%) skipped a day of school in the past month because of feeling unsafe.

A 2006 study by the National Gay and Lesbian Task Force Policy Institute and the National Coalition for the Homeless found that:

- 26% of gay teens were kicked out of the house when they came out. The same research estimates that 20 – 40% of homeless youth are LGBTQ (Lesbian, Gay, Bisexual, Transgender or Questioning).


“When citing this paper, please use the following citation:
Michigan Department of Community Health Vital Statistics

Much of the data in this white paper comes from vital statistics information gathered and reported by the State of Michigan through the MDCH. Current statistics on pregnancy, sexually transmitted infections, and HIV/AIDS are available on the MDCH website at www.michigan.gov/healthstatistics.

Vital Statistics data are developed from vital records collected by the MDCH, Bureau of Vital Statistics. Statistical data can be accessed through the MDCH website for the full range of vital events. Basic counts for the number of events and rates and detailed cross tabulations are provided. Statistical information for Michigan, with national comparisons, is included along with extensive data at the county and community levels. Pregnancy and birth rates are calculated per 1,000 of the population group being discussed. For example, a pregnancy rate of 100.0 for White females ages 15-17 would mean that for every 1,000 White females in that age group there have been 100 pregnancies.

Sexually Transmitted Infection (STI) data are generated from reports of cases of sexually transmitted infections submitted to the MDCH. Both private and public health care providers are required by law in Michigan to report cases of syphilis, gonorrhea, and chlamydia. STI rates are typically calculated per 100,000 of the population group being discussed.

HIV/AIDS Surveillance data are gathered from case reports submitted by health care providers and laboratories. Case reports include socio-demographic information, information about mode of exposure, laboratory and clinical information, referrals for treatment or services, and vital statistics (living/deceased). The estimates of people living with HIV may be somewhat underestimated because people who are infected, but who have not been tested, are not included in these statistics, nor are people who tested anonymously and have not sought medical treatment. Rates for HIV/AIDS are typically calculated per 100,000 of the population group being discussed. The Annual Review of HIV Trends (2003-2007) in Michigan and 2008 Epidemiologic Profile of HIV/AIDS in Michigan provide the most recent profiles of HIV/AIDS in the state and were used as data sources for this white paper.

The Pregnancy Risk Assessment Monitoring System (PRAMS) is a joint project of the Divisions of Epidemiology and Family and Community Health within the MDCH. The PRAMS is a “population-based survey of a random sample of women who have given birth to a live-born infant in Michigan.” Information about the PRAMS, the annual PRAMS reports, and newsletters can be found at www.michigan.gov/prams.

Youth Risk Behavior Survey

The YRBS is a nationwide surveying effort led by the CDC to monitor students' health risks and behaviors. The most recent Michigan YRBS was conducted in 2009, and is a collaborative effort between the Michigan Departments of Education and Community Health. The Michigan YRBS collects self-reported information from a representative sample of students across the state in grades 9-12. The statistics for the Michigan YRBS can be found at www.michigan.gov/yrbs.

Support

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Compliance with Title IX

It is the policy of the Michigan Department of Education that no person shall be subjected to discrimination on the basis of sex in any program, service or activity for which it is responsible, or for which it receives financial assistance from the U.S. Department of Education. For inquiries or complaints specific to Title IX contact:

Title IX Coordinator  Office of Career and Technical Education  P.O. Box 30712  Lansing, MI, 48909  (517) 241-2091

Compliance with Federal Law

The Michigan Departments of Education and Community Health comply with all federal laws and regulations prohibiting discrimination and with all requirements and regulations of the USDOE.
Summary and Recommendations for Michigan

As with most health issues, an ounce of prevention is worth a pound of cure. Money spent on preventing teen pregnancy and sexually transmitted infections, including HIV, is more cost effective than money spent on attempts to remedy the crippling personal, social and economic consequences. For example, programs in Michigan to reduce the teen birth rate are estimated to have saved $297 million in 2004 alone (The National Campaign, 2005). Additionally, in 2008, publicly supported screening for chlamydia in Michigan saved over $5 million in direct medical costs associated with avoided Pelvic Inflammatory Disease. The Departments of Community Health and Education recommend the following preventive measures to enhance existing efforts to improve the status of adolescent sexual health in Michigan:

**Support protective factors.**
- Base policies, programs, and practices on a healthy youth development framework that builds young people’s assets and connections with caring adults.
- Support delivery of programs for parents that encourage parent-child communication on teenage relationships, abstinence, and sexual decision-making.
- Examine and address underlying structural issues that lead to education and health disparities in HIV, STIs, and teen pregnancy.
- Integrate efforts that focus on HIV, STI, and teen pregnancy prevention.
- Build the power of individuals, families, organizations, and systems to stop first-time perpetration of intimate partner and sexual violence.

**Prioritize prevention through evidence-based education.**
- Document risk behaviors and needs in local communities through local surveys such as the Michigan Profile for Healthy Youth (MiPHY).
- Expand and strengthen effective, age-appropriate, medically accurate, abstinence-based comprehensive prevention programs for adolescents in school and community settings.

**Strengthen our health care resources.**
- Expand broad-based screening and treatment for chlamydia and gonorrhea.
- Support the universal access to the HPV vaccine for adolescent females and males.
- Increase access to sexual health care, including contraception, for young women and men.

**Focus special efforts on vulnerable populations.**
- Expand routine HIV testing in clinical and community settings for young Black populations, with a particular focus on young men who have sex with men.
- Support policies, programs, curricula, and practices that create safe and supportive environments for lesbian, bisexual, gay, transgender, and questioning (LGBTQ) youth in schools and communities.
- Enhance education, HIV testing, as well as programs that provide screening and treatment for and chlamydia and gonorrhea for high-risk youth (e.g., youth in juvenile justice facilities, homeless and runaway shelters, and substance abuse treatment programs, etc.).
Youth Risks Behaviors

From The National Campaign to Prevent Teen and Unplanned Pregnancy:
Young children born to teen mothers who are unmarried and who have not finished high school are nine times more likely to be living in poverty than children of mothers without these three risk factors.

The total cost associated with teen childbearing to Michigan taxpayers, in federal and state funds, was conservatively estimated at $302 million for 2004.

Teen Pregnancy

- In Michigan and nationally, for the first time in fourteen years, the teen birth rate for ages 15-19 increased for two consecutive years straight -- by 5% between 2005 and 2007.
- The Michigan pregnancy rate for women ages 15-17 declined 55% between 1990 and 2007, from a rate of 62 per 1,000 in 1990 to 28 in 2007.
- In 2007, 20,094 Michigan teens (10-19) became pregnant, accounting for 11.4% of all pregnancies to women 10-44 years of age.

Sexually Transmitted Infections (STIs) and HIV/AIDS

Chlamydia and gonorrhea are the most common reportable bacterial STIs. They often do not have symptoms, and, while curable, can cause infertility in women and men if they are left untreated.

Certain strains of human papillomavirus (HPV) can cause cervical cancer in women and penile cancer in men. According to national estimates, among 15-24 year olds with new STI cases, over half (51%) were diagnosed with HPV.

- Chlamydia and gonorrhea infections disproportionately affect youth, with about 75% of all cases of chlamydia and 64% of all cases of gonorrhea reported among youth ages 15-24.
- Between 2003 and 2007, the rate of new HIV diagnoses increased significantly among Michigan youth ages 13-19, with an average increase in rate of 24% per year.

Youth Risk Behaviors

The percentage of students who ever had sexual intercourse decreased between 1997 and 2007; however, that percentage increased between 2007 and 2009.

In Michigan in 2009:
- Forty-six percent of all high school students (9-12th grade) have had intercourse.
- Thirty-four percent of 9-12th graders have had intercourse in the past three months.

- Of students who had ever had sexual intercourse, 25% drank alcohol or used drugs before their last sexual intercourse.
- Sixty-five percent of all 12th graders report having had sexual intercourse.
- Twenty-two percent of 12th graders report having had four or more sexual partners.

The data included in this fact sheet is compiled from The State of Adolescent Sexual Health in Michigan, April, 2010. For an electronic copy or to see sources for this data, go to www.michigan.gov/hivstd.

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Youth Voices in Michigan

MY Voice, or Michigan Youth (MY) Voice for Sexual Health, is a youth advisory council comprised of young people representing the diversity of youth served by the various state programs focused on sexual health. MY Voice offers valuable input to statewide sexual health providers, ensuring programs and materials targeting youth are appropriate, culturally competent, and accessible.

MY Voice 2009-2010
Here are some of their thoughts about the importance of this issue...

**Adolescents are smarter than they are given credit for...** Most young teens and pre-teens are capable of handling information that is often cited as above their maturity level, which is a notion I think needs to be removed from debates over sexual education. - Jay Winkler

**We need accurate information in order to make informed decisions about our sexual health.** Whether we wait until marriage or choose to become sexually active before, this is vital information that can help make healthy decisions throughout our lifetime! - Lindsey Williams

**Sexual health is so important to have as an adolescent. If no one wants to talk about or teach sexual health then our generation will grow up blind to the subject.** Not knowing is never better when it comes to STIs and general health questions. In the end not knowing puts adolescents at a higher risk for infections or a pregnancy that could change their life forever. - Talore Sparks

**By not giving teens accurate information you put teens at risk of unplanned pregnancies and STDs.** - Kyndall McCoy

**In Michigan, and across this nation for that matter, I believe it is important to generate peer-to-peer dialogue regarding adolescent sexual health.** We [young people] don't need to hear what is “right and wrong” from the adults, we need to talk to one another about the choices we make, and how we can help each other make more positive choices. I think My V.O.I.C.E. is a great channel to facilitate the beginnings of this dialogue. - Bill Monroe