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MICHIGAN Department of Education
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PUBLIC INSTRUCTION

February 13, 2008

MEMORANDUM

TO: Local and ISD Superintendents
Public School Academy Directors
Michigan Citizens

FROM: Janet Olszewski, Director
Michigan Department of Community Health

Mike Flanagan, Superintendent of Public Instruction
Michigan Department of Education

SUBJECT: *State of Adolescent Sexual Health in Michigan* White Paper

The Michigan Department of Community Health (MDCH) and the Michigan Department of Education (MDE) are pleased to present a comprehensive white paper, the *State of Adolescent Sexual Health in Michigan.* This paper represents one of the first snapshots of integrated data pertaining to the serious consequences of sexual behavior among Michigan adolescents. The goal of this document is to inspire future action from policy makers, state and local health agencies, schools, parents, community-based organizations, the faith community, and other key stakeholders concerned about critical health issues affecting adolescents in our state.

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.

If Michigan is to continue to make progress addressing these serious health issues, policies and programs must be preventive, collaborative, and sustained. We look forward to ongoing dialogue and action at the state and local levels to promote the health and well-being of Michigan's adolescents.

The document will be available via the MDE website at http://www.michigan.gov/mde/0,1607,7-140-28753_38684_29233-19504--,00.html and the MDCH website at www.michigan.gov/cahc.

The State of Adolescent Sexual Health in Michigan

December 2007

State Advisors on Adolescent Sexual Health (SAASH)

Michigan Department of Community Health
Division of Health, Wellness, and Disease Control
Division of Family and Community Health

Michigan Department of Education
Office of Grants Coordination and School Support
Coordinated School Health and Safety Programs Unit

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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.

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Adolescent Sexual Health in Michigan

Introduction

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, and on their ability to grow to their full potential. Additionally, the consequences of adolescent sexual risks have detrimental effects on state and local economies.

This document is the first product of an interagency effort between the Michigan Departments of Community Health and Education, with the goal of inspiring future action from policy makers, state departments, and key stakeholders on critical sexual health issues affecting adolescents in our state. This effort began in January 2005, when Michigan participated in a national initiative to strengthen state health and education agency partnerships to improve HIV, sexually transmitted infection (STI), unintended pregnancy, and pregnancy prevention services for adolescents. The Michigan team, comprised of program managers from the Michigan Departments of Community Health and Education, formed an ongoing networking group called the "*State Advisors on Adolescent Sexual Health* (SAASH)" to collaborate, share information, determine priorities, and examine these critical sexual health issues among Michigan adolescents.

SAASH is pleased to present this white paper, which provides an overview of the most serious consequences, current scope of adolescent sexual risk behavior in Michigan, and recommendations for action to address these enduring issues.

Protective Factors

Adolescent sexual risk doesn't occur in a vacuum; many factors influence the behaviors which put youth at risk. Programs that seek to reduce adolescent risk can work on minimizing those risk factors that increase youth risk and supporting protective factors that reduce risk. The purpose of this paper is to provide a snapshot of current adolescent sexual health and risk in Michigan, but 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.** See the References page for recommended resources on protective factors and their relationship to risk.

This white paper was written using primarily 2004 data, the latest data available at the time of production; however, it should be noted that data tend not to change significantly from year-to-year.

For the most recent data available, you may visit any of the web sites included on the Reference page or contact any of the following individuals or offices for more information:

Division of Health, Wellness and Disease Control (HIV/STDs)
Michigan Department of Community Health
517-241-5900

Adolescent Health Coordinator
Michigan Department of Community Health
517-335-8906

HIV/STD Education Consultant
Michigan Department of Education
517-335-7252

Impact

Sexual risk prevention messages aimed at adolescents frequently point to the burdens borne by individual youth when faced with pregnancy and/or sexually transmitted infection, including HIV. Yet the social and economic costs of the consequences resulting from adolescent sexual risk behavior (teen pregnancy and sexually transmitted infection among them) to the larger community are well-documented, if not always widely publicized. Pregnancy, childbearing, and sexually transmitted infections among adolescents place huge burdens on our education, health, welfare, and social service systems. "Teen pregnancy is closely linked to a host of other critical social issues—welfare dependency and overall child well-being, out-of-wedlock births, responsible fatherhood and workforce development in particular." (National Campaign to Prevent Teen Pregnancy 2002)

Economic Impact

According to the National Campaign to Prevent Teen 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. 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.

Educational Impact

- The National Association of State Boards of Education (NASBE) reports that **70% of young mothers drop out of high school**, and only 30% of teen Mothers complete high school by age 30. (NASBE, 2000)
- As with other high risk behavior, poor 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. (2005 Michigan YRBS)

Social and Public Health Impact

- **Undetected and untreated chlamydia and gonorrhea**, two prevalent sexually transmitted infections among adolescents, **can lead to infertility** for both males and females.
- Infants born to teen mothers are more likely to have been the result of an unintended pregnancy. **Nearly 87% of births to mothers under age 18 were unintended.** (PRAMS Annual Report 2003)
- **An estimated half (95% C1= 35.5 – 65.5) of Michigan's 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 2003)
- In Michigan, the **infant death rate for mothers under age 20 was 10.9** per 1,000 in 2006, **versus infant death rates of 7.7 for mothers ages 20-29.** (MDCH)

Consequences

Teen Pregnancy

Perhaps the most easily recognizable consequence of adolescent sexual risk behavior is teen pregnancy. As noted previously, 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.

- Following the national trend, the Michigan **teen pregnancy rate for young women ages 15-17 declined 53%** between the years 1990 and 2004, from a rate of 62 per 1,000 in 1990 to 29 in 2004.
- Despite the significant decline over the past 15 years, **the pregnancy rate for some populations of teens in Michigan remains above the desired target** specified by the federal objectives in Healthy People 2010 of 43 per 1,000 females, ages 15-17.

Second Births to Teen Mothers

Second births to teen mothers are disproportionately distributed by race and ethnicity, with the highest second birth rate found among adolescent Hispanic mothers (25.1 per 1,000); Black, non-Hispanic teen mothers had a rate of 24.7 per 1,000, while White, non-Hispanic teen mothers had a rate of 16.2 per 1,000.

As with many health risks, **the risk of teen pregnancy is not evenly distributed across populations of young women.** Geography, race, and ethnicity are associated with disparities in teen pregnancy rates:

- Among 15-17 year olds in 2004, White females overall had a pregnancy rate of 21 per 1,000 and Black females had a pregnancy rate of 66 per 1,000.
- For White females, the counties with the highest pregnancy rates for 15-17 year olds were mostly rural. For White females ages 15-17, the top ten counties with the highest pregnancy rates were: Lake, Kalkaska, Ogemaw, Oceana, Van Buren, Montmorency, St. Joseph, Clare, Newaygo, and Ionia.
- White adolescent females in Lake and Kalkaska counties experienced significantly higher rates of pregnancy, with rates of 172 and 119 per 1,000, respectively.
- For Black females, the counties with the highest pregnancy rates for 15-17 year olds were mostly counties with urban centers. For Black females ages 15-17, the top ten counties with the highest teen pregnancy rates were: Jackson, Kalamazoo, Muskegon, Calhoun, Genesee, Kent, Van Buren, Saginaw, Wayne, and Ingham.

Consequences

Bacterial Sexually Transmitted Infections

Chlamydia and gonorrhea, both common among adolescents, are bacterial sexually transmitted infections which, if not diagnosed and treated, can lead to further spread of infection among sexually active youth and infertility in youth with untreated infections. Both infections disproportionately affect youth, with about **73% of cases of chlamydia and 60% of cases of gonorrhea reported in 2006, among youth ages 15-24.**

Recent surveillance data from the Michigan Department of Community Health (MDCH) further illustrate the burden of these two sexually transmitted infections on youth and the disparities among racial/ethnic groups:

- For Black youth ages 15-19, the chlamydia rate was over eight times higher than for White youth ages 15-19. The rate for Hispanic youth ages 15-19 was nearly three times that for White youth of the same age.
- Among 20-24 year olds, the chlamydia rate among Black youth was five times that for White youth of the same age and the chlamydia rate for Hispanic youth was similar to the rate for White youth.
- For gonorrhea, Black youth ages 15-19 had a rate over 20 times that of White youth of the same age. The rate for Hispanic youth ages 15-19 was four times that of the rate for White youth.
- Among youth 20-24 years old, Black youth had a gonorrhea rate 17 times that of White youth, and Hispanic youth ages 20-24 had a rate similar to White youth.
- The locales with the highest rates for chlamydia and gonorrhea among youth were the City of Detroit and the counties of Genesee, Ingham, Saginaw, Calhoun, Muskegon, and Berrien.

Human Papilloma Virus

Chlamydia and gonorrhea are both curable if diagnosed, while non-reportable viral infections such as herpes and human papilloma virus (HPV), though treatable, are not curable and sometimes 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.**

Pilot Screening Project

In a recent broad-based pilot screening project that screened 1,222 teen women and 563 teen men in various venues across Michigan, **16% of females and 17% of males tested positive for chlamydia** and 3% of teen females and 4% of teen males tested positive for gonorrhea.

Both chlamydia and gonorrhea infections are often asymptomatic in both genders, placing youth at risk for untreated infections. In the pilot screening project, trend data is showing that among those who tested positive for one of these two sexually transmitted infections, an alarmingly high number had no symptoms: **58% of females and 65% of males with chlamydia had no symptoms**; and 25% of males and 70% of females with gonorrhea reported no symptoms.

Consequences

HIV/AIDS

According to the 2006 Epidemiologic Profile of HIV/AIDS in Michigan, it is estimated that there are currently 2,460 people living with HIV or AIDS in Michigan who were between the ages of 13 and 24 when initially diagnosed. Unlike with other sexually transmitted infections, adolescents do ***not*** make up the largest proportion of people infected with HIV; 15% of people living with HIV/AIDS in Michigan were youth ages 13-24 years at diagnosis.

Of concern is that **Michigan youth ages 13-24 are becoming a significantly larger proportion of those newly diagnosed with HIV.** According to the Annual Review of HIV Trends in Michigan, "the proportion of persons diagnosed each year (from 2001-2005) with HIV infection increased significantly among those diagnosed at 13-19 years." Youth ages 13-19 grew from 2% to 4% of total cases diagnosed (17 to 44 cases) and youth ages 20-24 also increased significantly from 10% to 12% of total cases diagnosed (90 to 126 cases). In 2005, the proportion of Michigan residents diagnosed between the ages of 13 and 24 (17%) was higher than the proportion of young people diagnosed in the United States as a whole (14%).

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

- **Sixty-eight percent of 13-19 year olds with HIV/AIDS are Black**, as are 61% of the 20-24 year olds with HIV/AIDS–percentages that are disproportionate to the proportion of Blacks in the population as a whole. Blacks represent only 15% of youth ages 13-24 in Michigan, according to the 2000 Census.

- Among persons currently living with HIV and diagnosed at 13-24 years of age, **60% reside in the Detroit metropolitan area.**

- Among those diagnosed with HIV at 13-19 years of age, 64% are male, and 70% of those had male-to-male sex as a risk factor.

- While females make up only 36% of persons diagnosed with HIV at 13-19 years of age, this percentage is higher than that of persons diagnosed at older ages (22% of those diagnosed at 20+ years are female).

- Among young females with HIV/AIDS (13-19 years at diagnosis), **55% were reported as having heterosexual sex as their primary risk factor**.

Behavior

Adolescent Sexual Behavior

The best estimations of adolescent sexual behavior come from the Youth Risk Behavior Surveys (YRBS), a nationwide surveying effort led by the Centers for Disease Control and Prevention (CDC) to monitor students' health risks and behaviors. The Michigan YRBS was conducted in the spring of 2005, and is a collaborative effort between the MDE and the MDCH. The Michigan YRBS collects self-reported information from a representative sample of students across the state in Grades 9-12. The results related to sexual behavior closely mirror the results nationally:

- **Forty-two percent of all Michigan high school students have had intercourse.**
- Fifty-seven percent of 12th graders report having had intercourse.
- **Black and Hispanic students are more likely to have had intercourse** than American Indian or White students (67%, 56%, 46% and 37%, respectively).
- **Twelve percent of students report having had four or more sexual partners during their lives.**
- Nineteen percent of 12th graders report having had four or more sexual partners.
- **Black and Hispanic students are more likely to report having four or more partners** than American Indian or White students (28%, 24%, 13% and 9%, respectively).
- Of students who had sexual intercourse during the past three months, **62% used a condom** during last sexual intercourse.
- **White students were more likely than Black students to report having used alcohol or drugs** before the last time they had sexual intercourse (25% vs. 14%).

At Special Risk—Youth in Juvenile Justice

Michigan was one of the first states to conduct a YRBS with the juvenile justice population (ages 12-21). This Bureau of Juvenile Justice YRBS showed that **89% of all respondents had reported ever having sex and 42% had sex for the first time at 11 years of age or younger.** Sixty-two percent of these youths 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 ever used injection drugs, 73% had sex before age 13, and 86% had four or more sexual partners in their lifetime.

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 (NCTPTP, 2005). To this end, 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:

- Expand and strengthen effective, age-appropriate, abstinence-based comprehensive prevention programs for adolescents in school and community settings.

- Support delivery of programs for parents that encourage parent-child communication on teenage relationships, abstinence, and sexual decision making.

- Expand broad-based screening and treatment for chlamydia and gonorrhea.

- Enhance education, HIV testing, and chlamydia and gonorrhea screening and treatment programs for high-risk youth (e.g., youth in juvenile justice facilities, homeless and runaway shelters, substance abuse treatment programs, etc.).

- Expand routine HIV testing in clinical and community settings for young Black populations, with a particular focus on young men who have sex with other men.

- Support the universal administration of HPV vaccine for adolescent females.

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"What If: How Declines in Teen Births Have Improved Poverty and Well-Being in Michigan," National Campaign to Prevent Teen Pregnancy, April 2005. Accessed October 1, 2006 at www.teenpregnancy.org.

Protective Factors
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The Search Institute
The Search Institute, a nationally known and respected organization, has identified a number of "developmental assets" which are positive experiences and opportunities that children need in order to lead responsible and productive lives and help protect against engagement in high-risk behavior. Additional information on The Search Institute can be found at www.search-institute.org/assets/.

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/mdch.

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 (2001-2005) in Michigan and 2006 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/mdch.

The Chlamydia and Gonorrhea Broad-Based Screening Pilot Project is supported by the MDCH under the direction of Lynda K. Byer, MS, RN. Ms. Byer issues quarterly reports to the Department regarding project status and speaks nationally on the project.

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 the spring of 2005, 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.