

Health Outcomes - 9

Communicable Disease

MICHIGAN 2011
CRITICAL
HEALTH
INDICATORS

Indicator Definition: Annual rate of new HIV infections and Chlamydia. Incidence of Chlamydia by age group.

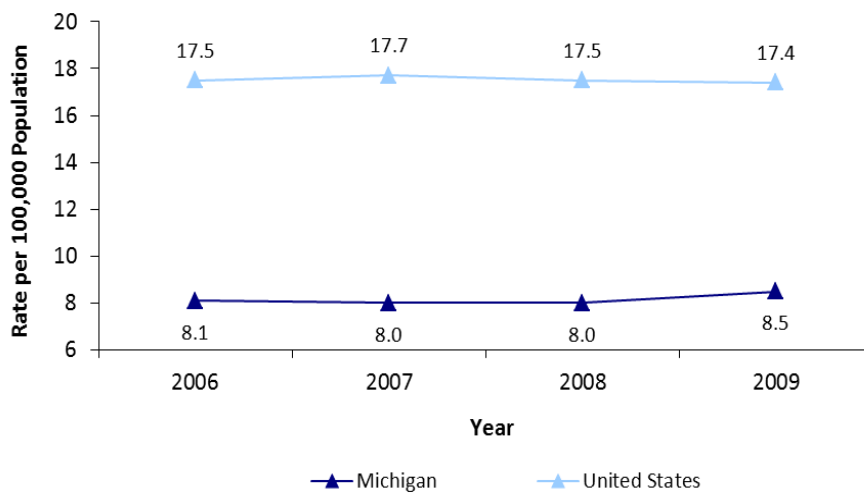
Indicator Overview:

- Infectious diseases are spread throughout populations as a result of contact with the infectious agent, for example, through blood exposure or unprotected sex. A subset of these cannot be prevented by vaccination. Rates of these types of diseases reflect a population’s knowledge and hygiene practices.

HIV/AIDS

Two strains of HIV infect humans: HIV-1 and HIV-2. HIV-1 is more virulent and more easily transmitted; it is the source of the majority of HIV infections throughout the world. HIV-2 is less easily transmitted and is largely confined to Africa. As of January 2012, MDCH phased out use of the term ‘AIDS’ to comply with CDC recommendations. All cases of HIV infection are now characterized by stage, with stage 3 being AIDS-defining. The risk group with the highest prevalence of new cases remains men who have sex with men (MSM).

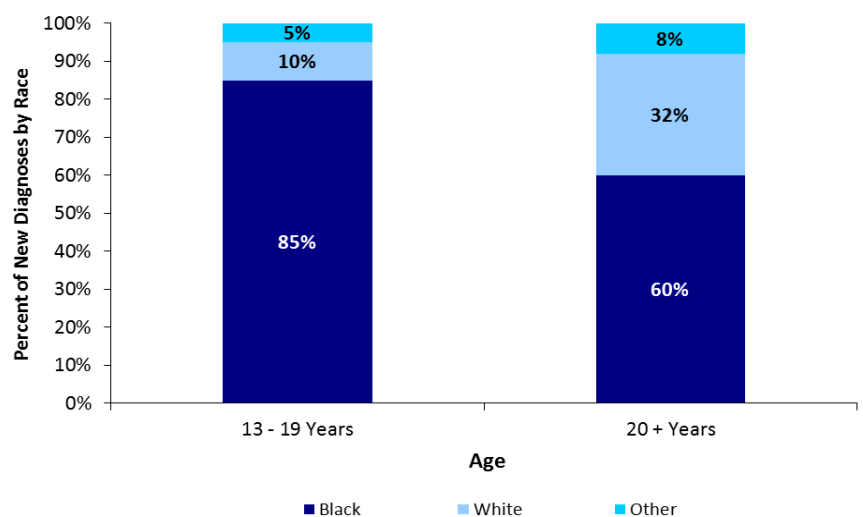
HIV Diagnosis Rates in Michigan and the United States, 2006-2009



← **Trends:** These numbers include persons diagnosed at all stages of HIV infection. Between 2006 and 2009, the rate of new HIV diagnoses in Michigan rose slightly (8.1 per 100,000 in 2006 and 8.5 per 100,000 in 2009), but this change was not significant. Overall, the diagnosis rate has remained stable. The national rate of new HIV diagnoses also remained stable, from 17.5 in 2006 to 17.4 in 2009. Michigan is considered to be a state of moderate morbidity for HIV and has remained consistently lower than the rate in the United States over the past decade.

→ **Health Disparities:** HIV diagnoses among 13-19 year olds in Michigan continue to increase. Of all Michigan teens diagnosed between 2005 and 2009, 85 percent are Black compared to 60 percent of persons diagnosed at older ages. Furthermore, teens are more likely to be Black MSM compared to adults 20 years and older (60% vs. 24%). This continues to underscore a need for prevention campaigns tailored to young Black MSM, as the differences in new diagnoses seen over the last several years in this young group will likely widen the already large racial gap among persons living with HIV.

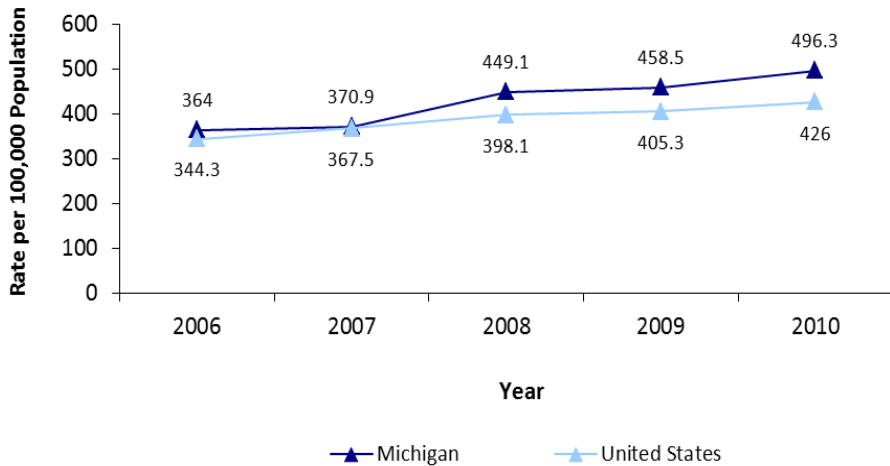
New HIV Diagnoses in Michigan by Race and Age, 2005-2009



Chlamydia

Chlamydia is one of the most common reportable diseases in Michigan. In 2009, Michigan screened at-risk individuals for chlamydia. The overall positivity for chlamydia was 10.1 percent. Positivity was highest at teen health clinics, school-based clinics, and adult correctional and juvenile detention facilities. Chlamydia infection disproportionately impacts young adults, females, and communities of color. In women, untreated chlamydia infections can spread into the uterus or fallopian tubes and cause pelvic inflammatory disease (PID). PID can cause permanent damage to the fallopian tubes, uterus, and surrounding tissues. The damage can lead to chronic pelvic pain, infertility, and ectopic pregnancy. These complications are the reason chlamydia screening resources are highly targeted to women.

Rate of Reported Chlamydia Cases, Michigan and United States, 2006-2010

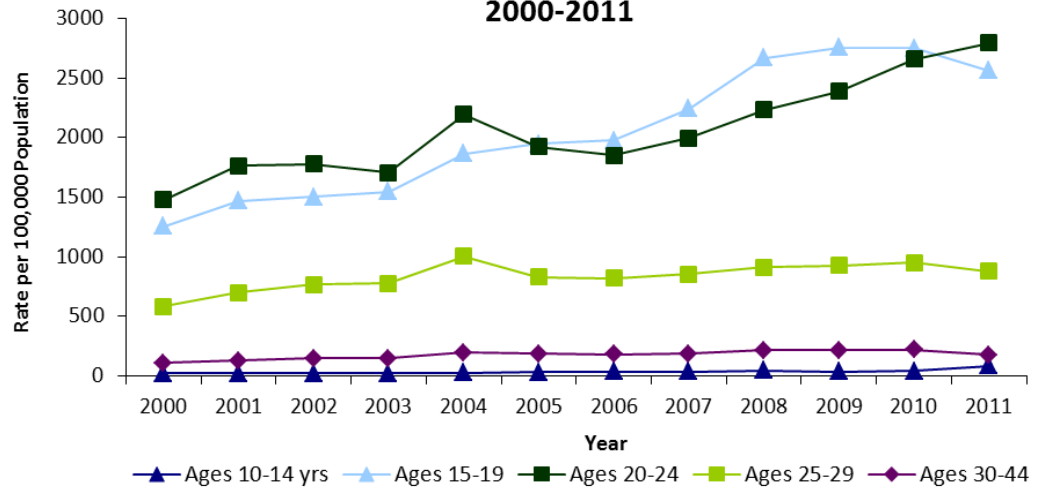


← **Trends:** Michigan's chlamydia rate has increased over time due to increases in screening and improved testing technology. The number continued to rise in 2010, placing the rate at 496.3 per 100,000 population. Assuming a population of 10 million individuals, this means that over 49,000 individuals in Michigan have been reported as having chlamydia. The rate dramatically increases when considering unreported cases.

→ **Health Disparities:** From 2000 – 2011, individuals aged 20-24 reported the highest rates of chlamydia in the state. The rate intersected nearly perfectly with that of 15-19 year olds in 2005 and 2010, with higher rates reported for 20-24 year olds in 2011. Individuals aged 10-14 consistently report the lowest rates of chlamydia, while ages 30-44 follow closely behind.

*2011 data are preliminary.

Michigan Chlamydia Incidence Rates by Age Group, 2000-2011



Links to Other Sources of Information

Annual Report on STDs and Fact Sheets on Disease: <http://www.cdc.gov/std/stats/-CDC>
 Sexually Transmitted Diseases then STD statistics for annual Michigan STD statistics by age, sex, and county: <http://www.michigan.gov/hivstd>

Links to Related Public Health Programs:

MDCH: HIV/STD/Hepatitis in Michigan: http://www.michigan.gov/mdch/0,1607,7-132-2940_2955_2982---,00.html
 CDC: STD Prevention: <http://www.cdc.gov/std/>