



Michigan Critical Health Indicators

2009

*Michigan Department
of Community Health*



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Introduction

What is the Critical Health Indicators report?

The Critical Health Indicators report describes Michigan's health and well-being and establishes a method for monitoring improvement. The report is organized by 17 specific health topics, and their 42 related measures or indicators. These indicators directly or indirectly measure the health and health behaviors of Michigan residents. The data reported in this document are based on numbers provided by state and federal sources. Links to state resources have been included to assist the reader interested in more detailed information.

This set of topics and indicators was developed through collaboration of various sections within the Michigan Department of Community Health. From the onset, there was interest in the relationship between health behavior and health outcomes in the forms of morbidity and mortality.

Focusing on morbidity/mortality data helps to identify opportunities for interventions to improve the health of Michigan's residents, particularly where deaths are premature or preventable. The report examines each indicator, providing 10 years of data when available. Data are represented as bar graphs to allow readers to view trend and compare Michigan and US data easily. By considering past trends, state and local health agencies can plan for the future.

What do Critical Health Indicators tell us about Michigan's health?

In general, the health of Michigan's population is improving. Most of the indicators, including Adult's and Adolescents' Use of Tobacco, Adolescent Alcohol and Drug Use, Heart Disease Deaths, Stroke Deaths, All Cancer Deaths, Breast Cancer Deaths, Cervical Cancer Deaths, Colorectal Cancer Deaths, Colonoscopy/Sigmoidoscopy, Prostate Cancer Deaths, Lung Cancer Deaths, Teen Pregnancy, Adequacy of Prenatal Care, Children's Blood Lead Levels, Childhood Immunizations, Syphilis, Childhood Injuries, and Uninsured Children show improvement over time.

Relatively few indicators reported showed movement in the wrong direction, including Adult Obesity, Diabetes Prevalence and Related Deaths, and Chlamydia.

A few indicators did not change over the past ten years; these include Physical Inactivity, Nutrition/Diet, Pediatric Obesity and Overweight, Adult Binge Drinking, Mammography, Kidney Disease and Related Deaths, Chronic Lower Respiratory Disease Deaths, Asthma Hospitalizations, Abortions, Infant Mortality, Older Adult Flu Shots, Suicide, HIV/AIDS New Cases, Gonorrhea, Hepatitis C, and Unintentional Injuries and Uninsured Adults

While the overall health of Michigan appears to be improving, there are noticeable racial and gender disparities within many of the indicators reported. Minority populations and males were shown to have an increased risk of death in many of the mortality indicators reported.

An increasing demand for public health services continues to exist within an uncertain financial environment. This document provides information on many state initiatives to support better health in local communities and statewide.

For more information regarding this report, please contact:

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2009 Michigan Critical Health Indicators Trend Direction

Right Direction

- Tobacco Use – Adults
- Tobacco Use – Adolescents
- Adolescent Alcohol Use
- Adolescent Drug Use
- Heart Disease Deaths
- Stroke Deaths
- All Cancer Deaths
- Breast Cancer Deaths
- Cervical Cancer Deaths
- Colorectal Cancer Deaths
- Colonoscopy/Sigmoidoscopy
- Prostate Cancer Deaths
- Teen Pregnancy
- Adequacy of Prenatal Care
- Children’s Blood Lead Levels
- Childhood Immunizations
- Syphilis
- Childhood Injuries
- Uninsured Children

Wrong Direction

- Adult Obesity
- Diabetes Prevalence and Related Deaths
- Chlamydia

No Change

- Physical Inactivity
- Nutrition/Diet
- Pediatric Obesity and Overweight
- Adult Binge Drinking
- Mammography
- Lung Cancer Deaths
- Kidney Disease and Related Deaths
- Chronic Lower Respiratory Disease Deaths
- Asthma Hospitalizations
- Abortions
- Infant Mortality
- Older Adult Flu Shots
- Suicide
- HIV/ AIDS New Cases
- Gonorrhea
- Hepatitis C
- Unintentional Injuries
- Uninsured Adults

Trend Not Analyzed

- Improving Oral Health Among Third Grade Children
- Depression
- Medicaid and MICHild Enrollment
- Public Health Preparedness



Comparison of Michigan to the United States

Michigan Is Better

- Physical Inactivity
- Tobacco Use – Adolescents
- Mammography
- Cervical Cancer Deaths
- Colonoscopy/Sigmoidoscopy
- Prostate Cancer Deaths
- Teen Pregnancy
- Abortions
- Adequacy of Prenatal Care
- Children’s Blood Lead Levels
- HIV/AIDS New Cases
- Syphilis
- Unintentional Injuries
- Childhood Injuries
- Uninsured Adults and Children

United States Is Better

- Adult Obesity
- Tobacco Use – Adults
- Adult Binge Drinking
- Heart Disease Deaths
- All Cancer Deaths
- Lung Cancer Deaths
- Diabetes Prevalence and Related Deaths
- Kidney Disease and Related Deaths
- Infant Mortality
- Chlamydia
- Gonorrhea
- Hepatitis C
- Depression

Michigan is the Same as United States

- Nutrition/Diet
- Pediatric Obesity and Overweight
- Adolescent Alcohol Use
- Adolescent Drug Use
- Stroke Deaths
- Breast Cancer Deaths
- Colorectal Cancer Deaths
- Chronic Lower Respiratory Disease Deaths
- Asthma Hospitalizations
- Suicide
- Older Adult Flu Shots
- Childhood Immunizations

Not Determined

- Improving Oral Health Among Third Grade Children
- Medicaid and MICHild Enrollment
- Public Health Preparedness

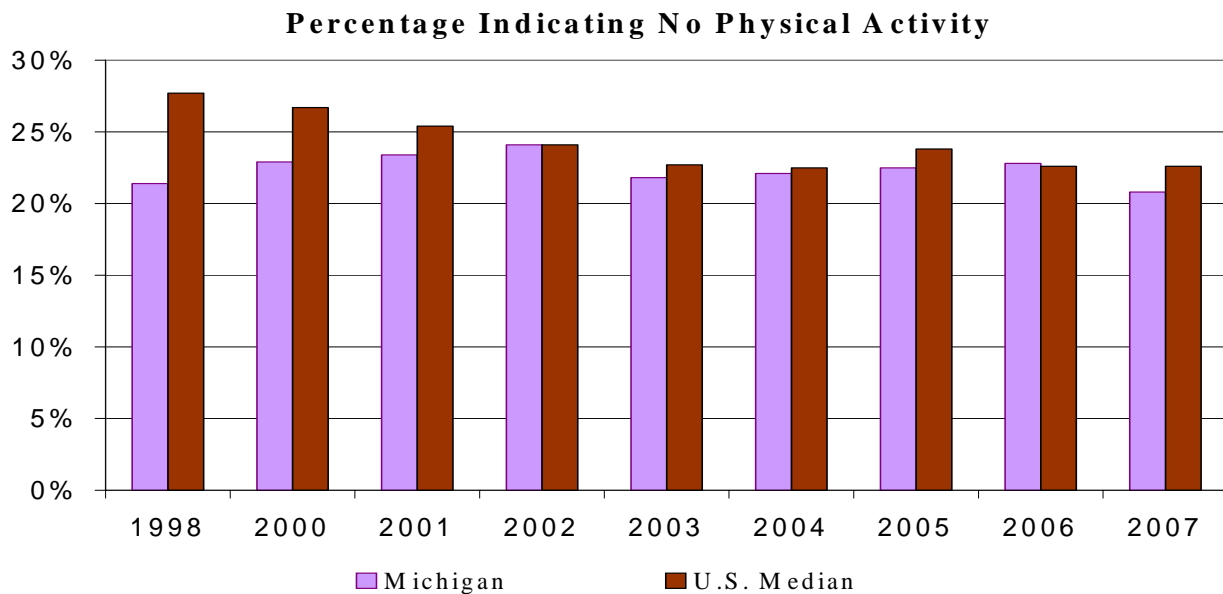


Topic: Risky Health Behaviors

1. Physical Inactivity

Physical inactivity is a major contributor to serious medical conditions such as osteoporosis, obesity and diabetes. Adult physical activity is monitored through the Behavioral Risk Factor Survey (BRFS) with the variables: (1) any leisure time physical activity, (2) moderate leisure time physical activity, (3) strenuous leisure time physical activity, and (4) physical activity at work. Inadequate physical activity trends have been influenced by changes in our society and culture, such as increased time driving due to urban sprawl; increases in time spent watching television, using a computer, and video games; neighborhoods where it is unsafe or infeasible to walk, due to crime, lack of sidewalks, etc. Public health interventions should target both the individual and the policies and environments that make it easier for the individual to engage in healthier behaviors while overturning restrictive policies.

How are we doing?



Over the past 10 years, physical inactivity in Michigan has remained stable from 1998 to 2007. In 2007, an estimated 20.8% of Michigan adults indicated no physical activity.

How does Michigan compare with the U.S.?

In 2007, an estimated 20.8% of Michigan adults indicated they had performed no leisure time physical activity in the past month compared to 23.0% of U.S. adults. At 49.3%, Michigan ranks as the 21st worst state in the U.S., including the District of Columbia, for inadequate physical activity. Inadequate physical activity is defined as not engaging in 30+ minutes of moderate physical activity five or more days per week, or vigorous physical activity for 20+ minutes three or more days per week.

How are different populations affected?

In 2007, Hispanics (33.4%) had the lowest prevalence of inadequate physical activity followed by Whites (48.1%) and Blacks (59.0%). There are also differences within education and household income. The



amount of inadequate physical activity increases with less education, from a college graduate (46.3%) to less than high school (51.1%), and lower household income, \$75,000+ (43.8%) to < \$20,000 (56.6%).

What is the Department of Community Health doing to improve this indicator?

The Michigan Department of Community Health (MDCH) works with communities and organizations to help them make it easier for people to be active. Michigan's state-wide campaign to promote healthy lifestyle messages to the general public, *Michigan Steps Up*, provides resources for evidence-based physical activity strategies and can be found at www.michiganstepsup.org.

Local health departments receive funds and technical assistance to enhance the physical environment and implement policies to make walking and biking more convenient and safe through the *Building Healthy Communities* project. Building Healthy Communities has increased the number of parks, trails, walking paths, non-motorized and complete streets plans; as well as, lighting, signage and other enhancements to parks and trails to increase the safety to support physical activity.

Through *Safe Routes to School*, MDCH works with local health departments and elementary schools specifically on increasing the accessibility and use of safe walking and biking routes for students to get to and from school. The Safe Routes to School changes the policies and physical environment, as well as, educates and promotes walking and biking to and from school and other population destinations to increase the physical activity levels of youth.

MDCH and the National Kidney Foundation of Michigan (NKFM) have partnered with Head Start programs in Detroit to pilot a project that facilitates change in the physical environment and policies of preschool centers to incorporate more physical activity in the lives of children ages two through five. NKFM also offer programs in African-American hair salons and barber shops by educating salon stylists and barbers to deliver health messages to clients on nutrition, physical activity and chronic disease prevention.

Through *Healthy Kids, Healthy Michigan*, executive-level decision-makers from government, public and private sectors, school districts, health care and non-profit organizations work together to support state-wide and local physical activity policies to reduce childhood obesity in Michigan. Specifically, Healthy Kids, Healthy Michigan is elevating the Complete Streets concept and number of community plans throughout Michigan. It is increasing the number of sidewalks, bike lanes and trails that assist in connecting the community so residents can walk and bike to work, school and their daily destinations.

MDCH also provides funding for churches to create church health teams that support active lifestyles in their congregations through a partnership with the Institute for Black Family Development, the Michigan Faith-based Health Association, and the Michigan Public Health Institute. Professional statewide conferences such as *Designing Healthy Livable Communities* and *Eat Smart + Play Hard = Smart Student Conferences* provide new tools, best practices and evidence-based strategies for implementation throughout Michigan. *Shaping Positive Lifestyles and Attitudes through School Health (SPLASH)* is a project that provides free health education and physical education curricula, training and resources to low-income Michigan schools. SPLASH is a collaboration between MDCH, MSU Extension, MDE and the Michigan Nutrition Network.

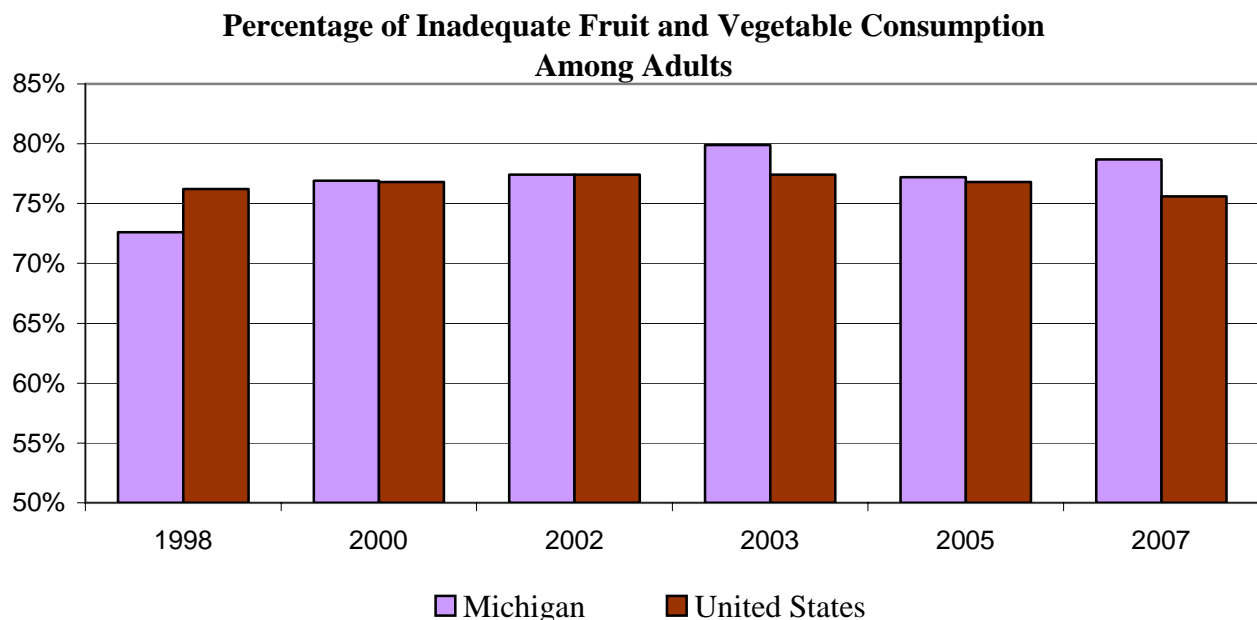


Topic: Risky Health Behaviors

2. Nutrition and Diet

Good nutrition is necessary for a healthy, long life. Dietary factors are associated with cardiovascular disease, stroke, cancer and diabetes, which are estimated to cost society billions of dollars each year in healthcare costs and lost productivity. Good nutrition is especially important in early childhood development. State-level monitoring of the nutrition status of Michigan residents includes program analysis, such as the Women, Infants and Children (WIC) Program, and evaluating statewide data in the Behavioral Health Risk Factor Survey (BRFS) for fruit and vegetable consumption.

How are we doing?



In 2007, 75.6% of Michigan adult residents ate less than the recommended five or more servings of fruits and vegetables a day, and therefore are considered to have inadequate consumption of fruit and vegetables. This trend has been relatively stable over the last ten years.

How does Michigan compare with the U.S.?

In 2007, the percentage of Michigan adults with inadequate fruit and vegetable consumption is about the same as it is for the United States. According to the 2005 National Immunization Survey, 69.1% of Michigan mothers initiated breastfeeding their infants as compared to 74.2% of mothers nationwide.



How are different populations affected?

Inadequate fruit and vegetable consumption is higher among Michigan adult males (83%), than adult females, 72%. Higher rates of inadequate fruit and vegetable consumption are also seen among Michigan high school graduates, 81%, than college graduates, 72%, but even this well-educated group has a relatively high rate.

What is the Department of Community Health doing to improve this indicator?

The MDCH is addressing the nutritional health of state residents through a variety of efforts, placing special emphasis on disparate populations including low-income children. Michigan's state-wide campaign to promote healthy lifestyle messages to the general public, *Michigan Steps Up*, provides resources for evidence-based physical activity and nutrition strategies and can be found at www.michiganstepsup.org.

MDCH works with local public health departments and communities across the state to help them make it easier for residents to be active and eat healthy. Local health departments receive funding, training and technical assistance to promote policy and environmental changes that support physical activity and healthy eating through the *Building Healthy Communities* project.

To address health disparities, MDCH is working with the National Kidney Foundation of Michigan (NKFM) to offer educational programs in African-American hair salons and barber shops to deliver health messages to clients on nutrition, physical activity and chronic disease prevention.

The Nutrition and Physical Activity Self-Assessment for Child Care program, a Head Start projects implemented by MDCH and NKFM, works in select Head Start Centers in Michigan to assist staff with assessing and strengthening their policies that are believed to affect childhood obesity.

MDCH also provides funding for faith-based organizations to create church health teams that support healthy lifestyles in their congregations as well as programs aimed at churches adopting policies to include more fruits and vegetables in church events.

To support training and technical assistance to state and local staff, MDCH sponsors professional statewide conferences such as *Designing Healthy Livable Communities* and *Eat Healthy + Play Hard = Smart Students* school conference to disseminate new tools, best practices and evidence-based strategies for implementation throughout Michigan. Assessment tools published on www.mihealthtools.org, such as the Nutrition Environment Assessment Tool (*NEAT*), provides a range of resources for community groups to evaluate their community, worksite, or church for health policies, environments and practices with a goal of planned action to improve the health of their members.

Michigan WIC has fostered the development of a state-wide breastfeeding coalition, the Michigan Breastfeeding Network (MIBFN). WIC has been working in concert with the Chronic Disease and Prevention Division to include breastfeeding promotion in Michigan's CDC Obesity Prevention Grant activities. This effort will create a healthier and more breastfeeding friendly population. WIC's Breastfeeding Basics Training provides a breastfeeding education and support for local agency staff, MSUE peer breastfeeding educators and other community sectors such as Head Start, the Maternal Infant Health Program and health care providers, day care providers and staff from the Intermediate School Districts (ISD).



Topic: Risky Health Behaviors

3. Pediatric Obesity and Overweight

Over the last forty years, the proportion of American children who are obese and overweight has increased dramatically. The Centers for Disease Control and Prevention (CDC) uses the term ‘Obese’ for children with a body mass index (BMI)-for-Age at or above the 95th percentile, and ‘Overweight’ for children between the 85th and 95th percentile, based on CDC BMI-for-Age growth charts.

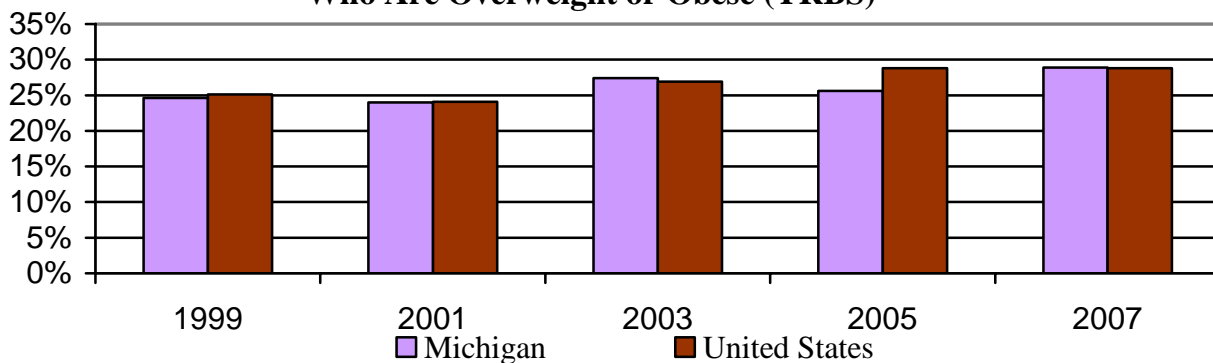
Breastfeeding is considered to be the best nutritional diet for infant feeding. Breastfeeding rates in Michigan have been steadily increasing. There has been a positive trend for breastfeeding rates in Michigan from 1991 (48.8%) to 2005 (69.1%). The six-month breastfeeding rate for 2005 is reported to be 35.5% for Michigan compared to 25.4% in 2000. Breastfeeding can contribute to healthy weights in infants, leading to healthier weights in childhood.

National Statistics provide the clearest picture of pediatric obesity and overweight. The National Health and Nutritional Examination Survey (NHANES) statistics are based on clinical measurements of height and weight to compute BMI, versus less reliable self-reports or parental reports which are available for Michigan. NHANES surveillance shows that nationally childhood overweight has increased dramatically. In the 1963-1970 era four percent of children ages 6 to 11, and five percent for ages 12 to 19 were classified as overweight. By the 1999-2002 survey the percentage of overweight children had tripled, 16% for ages 6 to 11, and 16% for ages 12 to 19. The percentages have steadily increased over the past three decades. Overweight children, especially adolescents, are more likely to become obese adults than children with a healthy weight. Serious health conditions – high blood pressure, high cholesterol, hypertension, early maturation, and orthopedic problems – occur with increased frequency in overweight youth. Type 2 diabetes, once regarded as an adult disease, has increased among children and adolescents.

How are we doing?

For ages 0 to 5, there is a limited amount of data available from surveillance systems such as Pediatric Nutrition Surveillance System (PedNSS) that tracks lower income children. In 2006, 13.3% of these low-income children, two to four-years-old, were at or above the 95th percentile or obese. There was another 16.2% that were overweight. Because childhood overweight often continues into adulthood, the long-term ramifications are significant.

**Percentage of 9th-12th Grade Population
Who Are Overweight or Obese (YRBS)**



The Michigan Youth Risk Behavior Survey (YRBS) is conducted every two years by the Michigan Department of Education. In 2007, 12.4% of youth reported a weight that is classified as obese and an



additional 16.5% reported a BMI as overweight. The prevalence of obese youth in Michigan has increased from 10.9% in 1999 to 12.4% in 2007; this however is not a statistically significant change.

Various other risk factors point to increasing numbers of youth at risk of weight gain such as the lack of physical activity and nutrition. In 2007, 66% of students in grades 9-12 reported that they did not meet the physical activity recommendations, active for at least 60 minutes a day on five or more days a week. The increase in television viewing (32.6%) and video or computer games (22.9%) for 3 or more hours a day on an average school day adds to the physical inactivity in Michigan youth. Only 17% of youth reported eating 5 or more servings of fruits and vegetables per day. However, 28.9% consume 12 ounces or more of non-diet soda per day.

How does Michigan compare with the U.S.?

Michigan statistics, where available, are not significantly different from national averages. The 2003 National Survey of Children's Health looked at the weight status of children ages 10 to 17, using BMI-for-age and found Michigan children were similar to national measures. Nationwide 14.8% were overweight, and in Michigan, 14.4%. In 2007 the YRBS, reported 12.4% of youth in grades 9 to 12 were obese in Michigan which was below the U.S. (13.0%).

How are different populations affected?

In 2006 among the low-income two to four-year-old population in Michigan, Hispanics (19.7%) and American Indian/Alaskan Natives (17.2%) had the highest percent of children that were obese and Black non-Hispanics (9.8%) had the lowest prevalence of obesity.

Among youth in grades 9-12 there are noticeable differences in populations by gender and race. In 2007, 9.8% of the females were obese, compared to 15.0% of the males. Blacks (18.5%) had the highest prevalence of obesity, higher than Hispanics (14.5%) and Whites (11.2%).

What is the Department of Community Health doing to improve this indicator?

MDCH has launched several new prevention initiatives to address pediatric overweight. *Healthy Kids, Healthy Michigan* Childhood Obesity Prevention has developed a five-year policy agenda to reduce childhood obesity in Michigan. *The Nutrition and Physical Activity Self-Assessment for Child Care* program works in select Head Start Centers to assist staff with assessing and strengthening their policies that are believed to affect childhood obesity. *Shaping Positive Lifestyles and Attitudes through School Health (SPLASH)* is a project that provides free health education and physical education curricula, training and resources to over 250 low-income Michigan schools reaching 94,000 students and their families. Ongoing initiatives include working with the Michigan Quality Improvement Consortium (MQIC) to update clinical guidelines for the prevention, identification and treatment of childhood overweight and obesity, offering statewide professional conferences, supporting online assessment tools for schools with mini-grants and technical assistance to stimulate organizational change for healthy practices.

The WIC Division online client education site, www.wichealth.org, includes modules that support healthy eating and physical activity for young children. The new WIC data system, MI-WIC, recommends behavior changes related to healthy weight and healthy eating in young children. Behavioral change plans may be printed and signed by WIC parents, encouraging their commitment to making positive diet and lifestyle changes. The new WIC Food Package to be available in 2009 includes reduced fat milk for children 2 years and older, decreases juice provided, and includes whole grain bread/cereals and fresh fruits/vegetables for women and children, and baby food fruits and vegetables for infants 6 months and older.



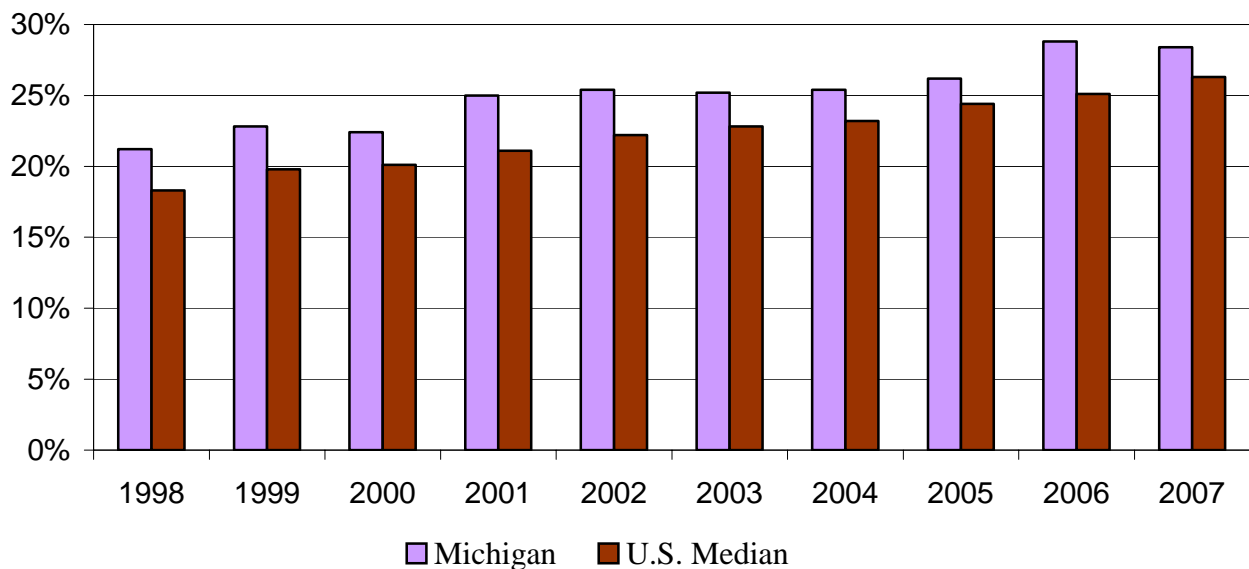
Topic: Risky Health Behaviors

4. Adult Obesity

Adult obesity is defined by a body mass index (BMI) of 30 or greater. Eighty percent of Michigan adults report that they are actively trying to either lose weight or maintain their weight. Higher weights are associated with chronic disease. Obesity increases the risks for long-term health problems such as osteoporosis, heart disease, stroke and cancer among people at all weights. Some conditions can be improved without weight loss if physical activity is increased and eating patterns are improved.

How are we doing?

Percentage of Adults Who Are Obese (BMI 30 or Greater)



An estimated 28.4% of Michigan adults were obese in 2007, according to the BRFSS survey. Obesity has steadily increased in Michigan over the past decade, from 21.2% in 1998 to 28.4% in 2007.

How does Michigan compare with the U.S.?

Michigan consistently has higher obesity rates than the U.S. median. In 2007, Michigan had the fifteenth highest obesity rate among all states.

How are different populations affected?

In Michigan, males (29.1%) were more likely than females (27.8%) to be obese. Black non-Hispanics (37.4%) and Hispanics (38.1%) have a higher prevalence than White non-Hispanics (26.8%). The proportion of adults who were obese in 2007 increased with age from 15.6% of those aged 18-24 years to 38.4% of those aged 55-64 years, and then decreased to 19.5% of those aged 75 years and older.



What is the Department of Community Health doing to improve this indicator?

The Michigan Department of Community Health (MDCH) works with communities and organizations to help them make it easier for residents to be active and eat healthy. Michigan's state-wide campaign to promote healthy lifestyle messages to the general public, *Michigan Steps Up*, provides resources for evidence-based physical activity and nutrition strategies and can be found at www.michiganstepsup.org.

Local health departments receive grant funding, training and technical assistance to promote policy and environmental changes that support physical activity and healthy eating through the *Building Healthy Communities* project.

MDCH is working with the National Kidney Foundation of Michigan (NKFM) to offer educational programs in African-American hair salons and barber shops via salon stylists and barbers who deliver health messages to clients on nutrition, physical activity and chronic disease prevention.

MDCH also works with faith-based organizations to create church health teams that support active lifestyles in their congregations as well as program aimed at churches adopting policies to include more fruits and vegetables in church events.

Professional statewide conferences such as *Designing Healthy Livable Communities* and schools conferences provides new tools, best practices and evidence-based strategies for implementation throughout Michigan.

MDCH collaborated with the *Michigan Quality Improvement Consortium (MQIC)* and drafted adult obesity guidelines based on a comprehensive review of literature, input of an experts and discussion with the Consortium. These guidelines are now published and disseminated to health care providers in Michigan. Assessment tools published on www.mihealthtools.org provide a range of resources for community groups to evaluate their community, worksite, or church for health policies, environments and practices with a goal of planned action to improve the health of their members.



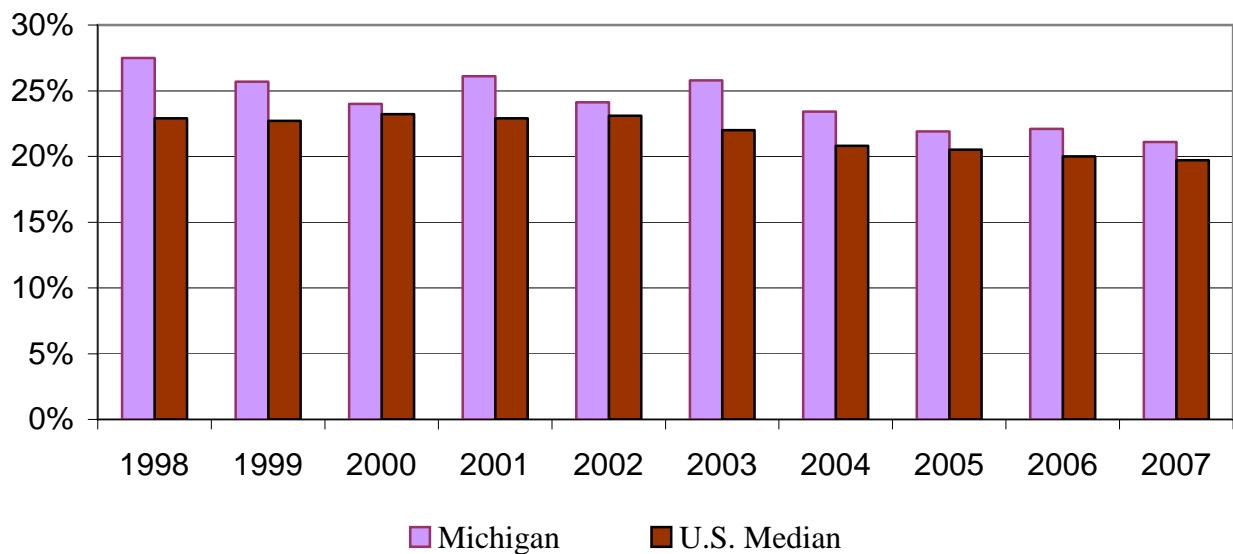
Topic: Risky Health Behaviors

5. Adult Tobacco Use

Cigarette smoking is the single most preventable cause of premature death. An estimated 14,500 Michigan adults die each year from tobacco-related illnesses related to their own smoking. On average, male smokers lose approximately 13.2 years of life, whereas female smokers lose approximately 14.5 years of life.

How are we doing?

Percentage of Currently Smoking Adults



Over the past 10 years, smoking prevalence among Michigan adults has declined over 23%. The largest decrease has been seen in the young adults, ages 18 – 24, whose smoking prevalence has declined 28.5% over the same time period. Currently, an estimated 21.1% of Michigan adults are current smokers.

How does Michigan compare with the U.S.?

Historically there has been a statistically significant difference between Michigan and the nation in the prevalence of adult smokers. The percentage of adults smoking in 2007 in Michigan was 21.1%, while the median among all the states was 19.8%.

How are different populations affected?

In 2007, the Michigan Behavioral Risk Factor Survey (BRFS) showed that respondents with less than a high school education were 3.7 times more likely to report being a current cigarette smoker than respondents who graduated from college. In addition, the proportion of current cigarette smokers tended to decrease with household income levels and age groups. The smoking prevalence among Michigan's young adults (aged 18-24) is currently at 29.1%, almost 40% higher than Michigan's overall prevalence. There is no significant difference between the prevalence of current smokers among African-Americans and Caucasians. Native Americans smoke cigarettes at a rate almost double that of Michigan adults in general (41.9% vs. 21.1%). The smoking rate among Asian American adults is approximately 52% lower



than Michigan adults in general (10.5% vs. 21.1%). The smoking rate among Hispanic adults has continued to decline but is still slightly higher than Michigan adults in general (24.5% vs. 21.1%).

What is the Department of Community Health doing to improve this indicator?

The Michigan Department of Community Health Tobacco Control & Prevention Program tobacco cessation initiative includes programs that promote strong public and voluntary smoke-free policies. These smoke-free policies work to increase the awareness of Michigan residents to the dangers of tobacco use and exposure to secondhand smoke, moving many to begin the cessation process.

The Department also includes programs to prevent the sale and promotion of tobacco to youth, and for youth who need assistance to quit smoking, the Michigan Tobacco Quitline is available to any tobacco user aged 13 and over.

The Department also supports a statewide media campaign with messages that focus on preventing non-smokers from becoming smokers, helping smokers identify resources available to help them quit, and also to educate Michigan residents on the danger of secondhand smoke exposure. The Tobacco Control and Prevention Program has a number of resources available often in English, Spanish and Arabic which can include; self-help cessation kits, expectant mother quit kits, secondhand smoke & asthma brochures and other tobacco-related information. Legal assistance through the Smoke-Free Environmental Law Project is available to businesses and individuals, in respect to smoke-free policy development and implementation, along with research and information on tobacco-related laws in Michigan.

The Michigan Tobacco Prevention and Control Program have a network of over 60 local tobacco reduction coalitions that work at the community level to; increase awareness of tobacco issues, mobilize communities to support tobacco-free policies and decrease the social acceptability of smoking.

A Michigan Tobacco Quitline, a statewide telephone counseling service available to all Michigan smokers who would like to quit smoking has received over 48,000 phone calls on its toll-free line: 1-800-480-7848.



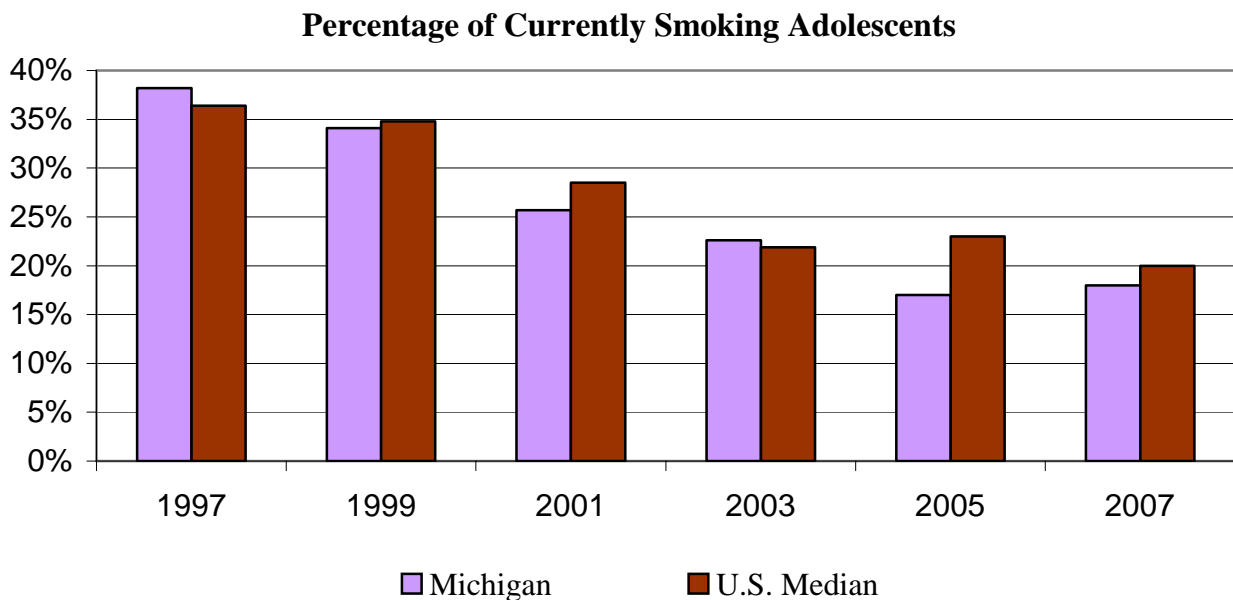
Topic: Risky Health Behaviors

6. Adolescent Tobacco Use

Tobacco use is fundamentally a pediatric disease because most addiction to tobacco begins among youth under the age of 18. Over 90% of Michigan adults who have smoked for a number of years, began while they were teenagers. Nicotine addiction begins when most tobacco users are under the age of 18, a person who hasn't started smoking by age 19 is unlikely to ever become a smoker.

Adolescent use of alcohol, tobacco, and other drugs is measured by the biennial Michigan Youth Risk Behavior Survey (YRBS).

How are we doing?



Over the past 10 years, the smoking prevalence among youth in Michigan has declined over 50%, from 38.2% in 1997 to the current smoking prevalence of 18.0% in 2007.

How Does Michigan compare with the U.S.?

Michigan's adolescent smoking rate has been below the national adolescent smoking rate for the past two reporting years, 2005 and 2007. Between 2003 and 2005, Michigan was one of only four states that experienced a decrease in adolescent smoking rates, declining over 24%, while the national adolescent smoking rate increased approximately 5%.

How are different populations affected?

In 2007, the Michigan Youth Risk Behavior Survey showed that African American students were least likely to report being a current smoker at 6.6%. White students were 3 times more likely to report being a current smoker at 20.6%, and Hispanic students were 4.4 times more likely to report being a current smoker at 29.3%. In addition the proportion of current smokers tended to increase with grade level and age. The smoking prevalence among 12th graders was twice that of 9th graders (27.0% vs. 13.8%) with



the sharpest increase in current smokers happening between the 11th grade and 12th grade. During this time, current smoking rates increase 35% from 17.4% in the 11th grade to 27.0% in the 12th grade.

What is the Department of Community Health doing to improve this indicator?

The MDCH provides support and assistance to local community agencies and tobacco reduction coalitions to increase youth involvement in tobacco-free policy activities, such as educating tobacco retailers on the Michigan Youth Tobacco Act (YTA) to prevent underage access to tobacco.

Youth access to tobacco has decreased through the enforcement of the YTA. This act prohibits the sale of tobacco by retailers to minors, prohibits youth from purchasing tobacco and adults from purchasing tobacco for youth, and also prohibits possession of tobacco among minors. Local prosecuting attorneys and other law enforcement agencies support the YTA. The MDCH conducts annual, random, unannounced inspections to ensure compliance with existing laws. Illegal sales of tobacco products to minors from tobacco retailers have decreased almost 70% since 1994.

The MDCH promotes, implements and enforces local smoke-free work site and public regulations, such as 24/7 tobacco-free campus policies for public and private schools in Michigan. These policies prohibit the use of tobacco in any form, at any time (including non-school hours) while on school grounds and during any school-sponsored functions held off campus.

Studies have shown that smoke-free policies help prevent kids from smoking, in that it helps in the de-normalization of tobacco use. The Department uses the Michigan Model for Comprehensive School Health Education to help improve students' health behaviors. In kindergarten through twelfth grades, over one million students in Michigan receive education concerning tobacco use and other substance abuse.

In 2004, the cigarette tax was increased from \$1.25 per pack to \$2.00 per pack, an increase of 60.0%. Studies have shown that every 10% increase in the price of cigarettes will reduce youth smoking by about seven percent and overall cigarette consumption by about four percent. Michigan's adolescent smoking rate has decreased approximately 24% since the tax increase and continues to decline, while in many states smoking rates among their youth have become stagnant.



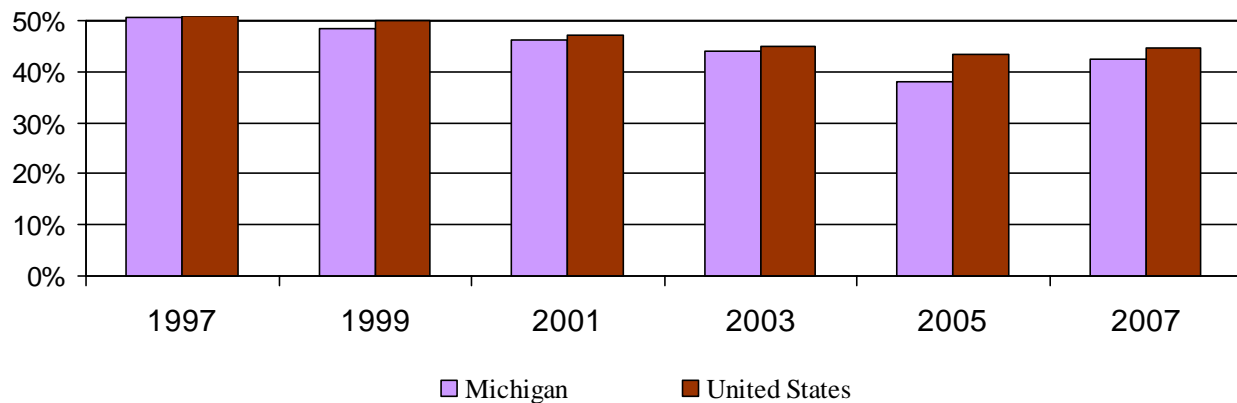
Topic: Risky Health Behaviors

7. Adolescent Alcohol and Drug Use

Substance abuse affects not only an individual and his/her family, but also the welfare of the community. As a major contributing factor to crime and the need for social services, the costs of substance abuse far outweigh the resources committed to its prevention and treatment. Adolescent use of alcohol, tobacco, and other drugs is measured by the biennial Michigan Youth Risk Behavior Survey (YRBS).

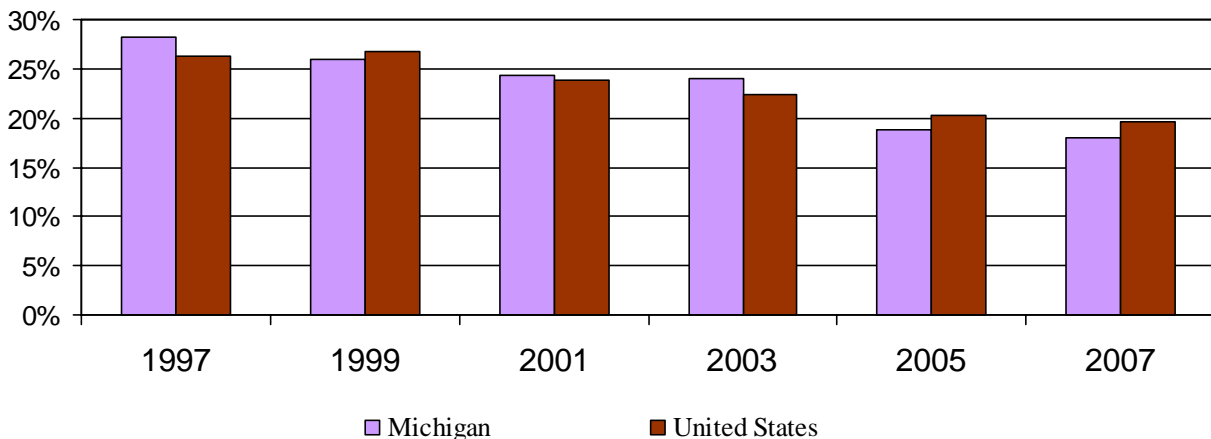
How are we doing?

**Percent of Current Alcohol Use Among Adolescents
Michigan and the United States**



The percent of adolescents that use alcohol in Michigan has dropped over the past 10 years to 42.5% in 2007.

**Percent of Current Marijuana Use Among Adolescents
Michigan and the United States**



Marijuana use in adolescents has dropped over the past 10 years, from 28.2% in 1997 to 18.0% in 2007.



How does Michigan compare with the U.S.?

According to the YRBS, the percent of adolescents who identified themselves as current alcohol and marijuana users are similar to the United States average.

How are different populations affected?

Twelfth grade students were more likely than ninth grade students to report ever drinking alcohol, and more likely than all other grades to drink recently and binge on alcohol. White and Hispanic students were more likely than African-American students to ever drink, be current alcohol drinkers, and engage in binge drinking. Illegal drug use among black and white students was equal for all substances, lifetime and recent use. Males and females were equally likely to have ever used various illicit drugs. Hispanic students were more likely than African-American and White students to report lifetime cocaine, barbiturate, and club drug use as well as recent heroin use.

What is the Department of Community Health doing to improve this indicator?

Twenty-one programs within the state offer specialized substance abuse assessment, outpatient, intensive outpatient, and residential services to adolescents. The Department also continues to offer leadership and advisory support to Child and Adolescent Health Centers. They provide primary healthcare services to adolescents, including an evaluation of alcohol, tobacco, and other drug use and support for secondary and tertiary services. Health promotion and education are also offered.

Departmental prevention initiatives include information dissemination through newsletters and presentations, education, problem identification and referral, support for coalitions that raise awareness and mobilize communities for change, and environmental activities such as point-of-sale reduction activities and promotion of healthy lifestyles. The Department supports peer counseling, mentoring, life skills development, information and help lines, and other prevention programs.

Approximately \$13 million in substance abuse prevention and treatment block grant funds support substance abuse prevention efforts to communities. Substance abuse prevention needs in each region of the state are prioritized and addressed by incorporating the needs of the general population and the needs of high-risk groups, including youth. In addition, local agencies provide specialized services to additional populations, including African-American youth, gay/lesbian youth and Arab/Chaldean youth.

To address substance abuse among Michigan's citizens, the MDCH contracts with 16 coordinating agencies to develop comprehensive plans for substance abuse treatment and rehabilitation, and prevention services. Coordinating agencies provide treatment services to substance abusers, including women of childbearing age, pregnant women and children. Coordinating agencies develop and evaluate a network of funded, licensed substance abuse treatment providers within the geographic area.

The Department works with local criminal justice agencies, education providers, grassroots organizations, and other state agencies to reduce and prevent adolescent substance abuse, to restore neighborhoods, and to educate the children of Michigan about the dangers of substance abuse. Programs such as the Michigan Coalition to Reduce Underage Drinking (MCRUD), a coalition of prevention partners, focus on underage drinking issues through grant awards and support of local coalitions.



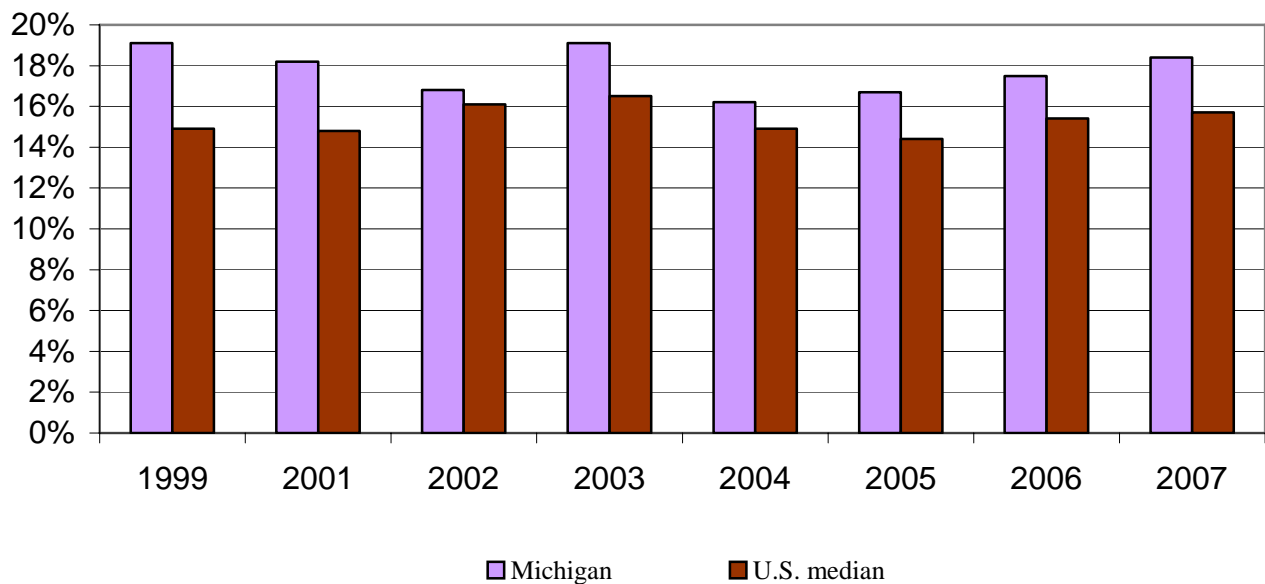
Topic: Risky Health Behaviors

8. Adult Binge Drinking

Drinking patterns associated with rapid intoxication, such as binge drinking, carry with them potential for social and physiological harm. One of the commonly used thresholds for binge drinking is five or more drinks on at least one occasion in the last 30 days.

How are we doing?

**Percentage of Binge Drinking Adults in Past Month
Michigan and the United States**



In 2007, 18.4% of Michigan adults were estimated to have engaged in binge drinking in the previous month. The prevalence of binge drinking has remained fairly consistent among Michigan adults over the past nine years, 19.1% in 1999 compared to 18.4% in 2007.

How does Michigan compare with the U.S.?

When compared to the United States, Michigan has consistently had a higher prevalence of binge drinking.

How are different populations affected?

The prevalence of binge drinking decreased with age, from 31.5% of those aged 18-24 years to 8.9% of those aged 65-74 years. Men were more likely than women (24.9% vs. 12.5%), and Whites were more likely than Blacks (19.5% vs. 13.5%) to have engaged in binge drinking.



What is the Department of Community Health doing to improve this indicator?

The MDCH began a Campus Alcohol Initiative in 1999 to address alcohol abuse on college campuses, which has continued. Programs exist at Eastern Michigan University, Ferris State University, Grand Valley State University, Michigan State University, and the University of Michigan.

Other activities to improve this indicator have included providing partial funding for a special environmental change project “Underage Drinking: Not a Minor Problem” in Bay County in 2007 and 2008. This program is being expanded in communities around the state, and the theme was also used as part of over 50 Town Hall Meetings held around the state in 2008. In addition, as part of the Department’s Strategic Prevention Framework State Incentive Grant, regions around the state have used a data guided process to identify key variables in their specific communities that contribute to binge drinking, and have been implementing programs and activities to address these issues. Key partnerships have also been developed at both the state and local level in Michigan to collaborate with others on this indicator, including the Departments of Education, Human Services, and Michigan State Police Office of Highway Safety Planning.



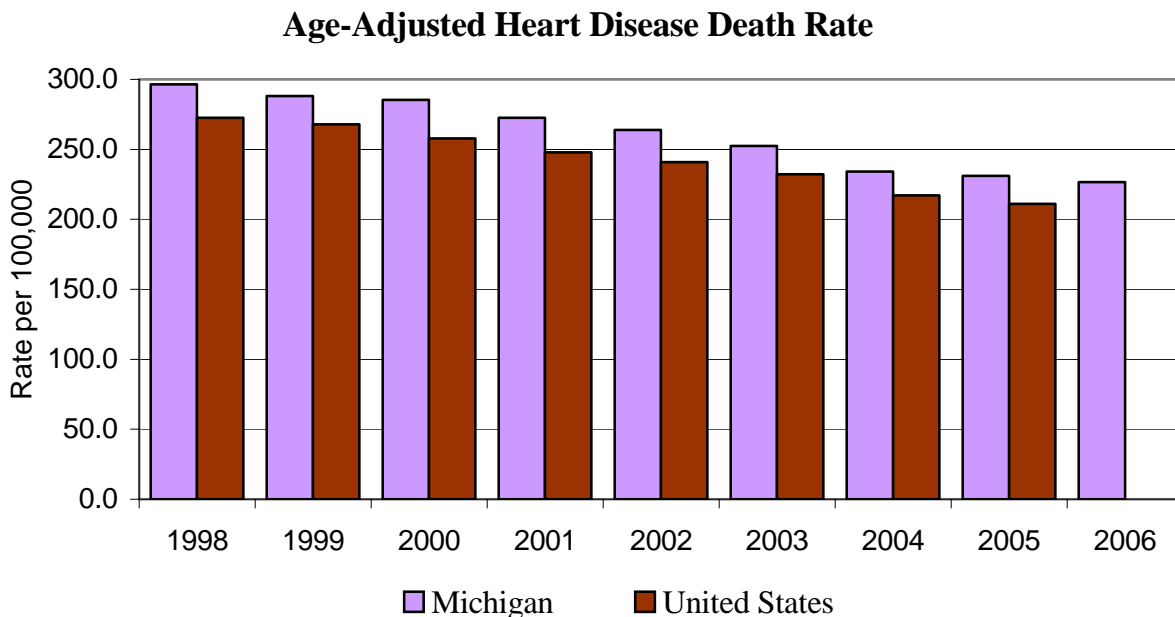
Topic: Cardiovascular Disease

Cardiovascular disease includes a wide range of blood vessel and circulatory conditions, such as coronary heart disease, congestive heart failure, rheumatic heart disease, hypertensive heart disease, stroke and other categories, but it is primarily monitored through heart disease and stroke. Coronary heart disease accounts for about half of all heart disease deaths and is the most common and preventable form of cardiovascular disease.

9. Heart Disease Deaths

Coronary heart disease results in a diminished blood supply to the heart as the coronary arteries that supply the heart are blocked, and if untreated, usually results in a heart attack. Congestive heart failure is another major form of heart disease, caused when the heart starts losing its ability to pump blood.

How are we doing?



In 2006, there were 24,223 deaths in Michigan due to heart disease, making it the number one cause of death in the state. Heart disease deaths have declined 23.5 percent over the past 10 years, from a rate of 296.5 per 100,000 residents in 1998 to 226.7 per 100,000 residents in 2006. Michigan is heading in the right direction and continued efforts will reduce death rates even more.

How Does Michigan compare with the U.S.?

Over the last two decades the age-adjusted heart disease death rate has been higher in Michigan than the national rate. National rankings in 2009 (using 2005 data) found Michigan ranked as the 8th worst state for coronary heart disease death rates.



How are different populations affected?

Death rates for males at 278.2 per 100,000 were higher than for females at 186.8 per 100,000. Rates for Blacks at 320.0 per 100,000 were higher than for Whites at 214.4 per 100,000, indicating that Blacks are 1.5 times more likely to die from heart disease than Whites.

When assessing cardiovascular health it is important to also look at the disparities that exist in the risk factors that lead to disease. High blood pressure is an important risk factor, and 37.2% of Blacks living in Michigan have been told at some point in their lifetime that they have high blood pressure, compared to 28.1% of Whites.

What is the Department of Community Health doing to improve this indicator?

The Department of Community Health has both prevention and disease control program initiatives to reduce the burden of heart disease. Promoting healthier lifestyles is one major initiative and programs focusing on creating policies and environments that support healthy behaviors in communities, schools, faith-based settings, healthcare systems and worksites are key. The Surgeon General's "Michigan Steps Up" campaign, (www.michigan.gov/surgeongeneral/) urges Michigan's citizens to "move more", "eat better", and "don't smoke" and provides a range of online assessments and materials supporting a healthy lifestyle.

Statewide disease control initiatives focus on improving the quality of care. Grants to hospitals provide incentives to improve heart failure care through *Get With the Guidelines*, an American Heart Association product. Special projects targeting African-Americans are being implemented in faith-based settings and other community settings. Fifteen hospital cardiac rehabilitation programs are working with MDCH to improve the care to patients after a heart attack. A blood pressure measurement quality improvement program has been promoted statewide and the Hypertension Expert Group is developing a core educational curriculum to implement in professional education programs. Grants to health plans stimulate aggressive control of their members' high blood pressure and high blood cholesterol. Collaboration with the Michigan Quality Improvement Consortium, updated guidelines for physicians are promoted for heart failure, hypertension, cholesterol, peripheral vascular disease and preventive services. MDCH is working with the EMS and Trauma System Section on assessing EMS heart attack and stroke care in Michigan resulting in the identification of strategies addressing gaps and barriers in care. MDCH is also collaborating on a national AHA initiative called Mission Lifeline that is targeting improvement in the care to heart attack patients.

Professional education programs are provided to increase awareness of evidence-based guidelines and clinical standards. A social marketing campaign is being launched to increase awareness of signs, symptoms, and appropriate emergency responses to heart attacks.



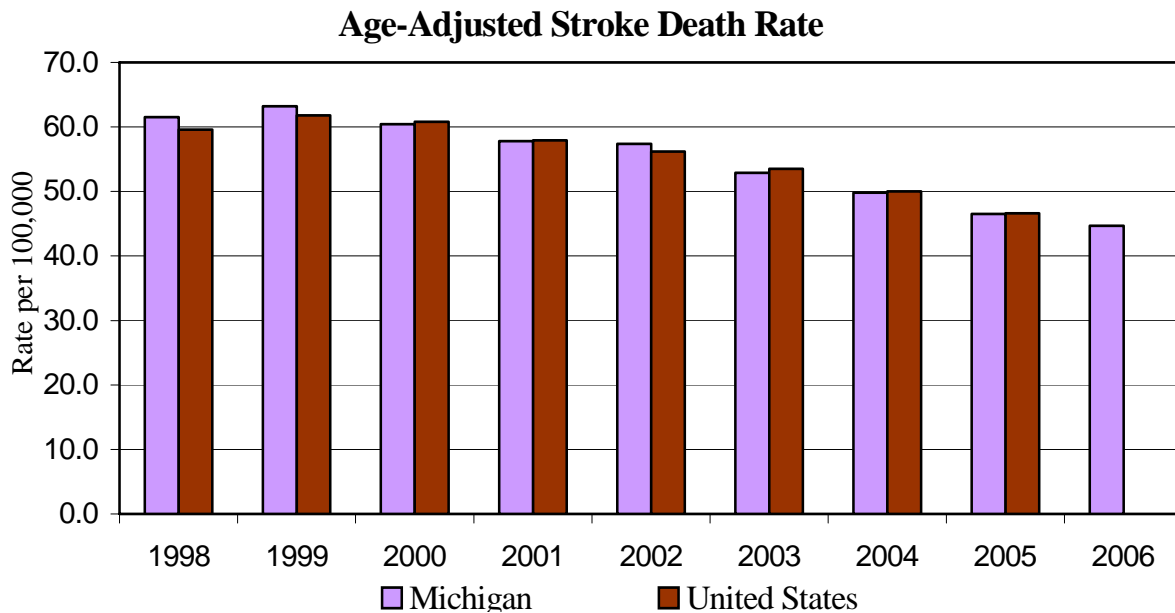
Topic: Cardiovascular Disease

10. Stroke Deaths

A blood vessel hemorrhage or blockage in the brain causes a stroke. High blood pressure is the most important risk factor for a stroke, with other risk factors being cigarette smoking, physical inactivity, high cholesterol, and obesity.

Stroke is not just a disease of the elderly. In 2006, stroke was the tenth leading cause of Years of Potential Life Lost (YPLL) for people below the age of 75 in Michigan. Beyond the death statistics, stroke is a major cause of disability in Michigan. Stroke-related disability can have very high financial costs and major physical and mental consequences. However, prompt recognition of the signs and symptoms of stroke, rapid and appropriate health care, can reduce the negative effects of stroke remarkably.

How are we doing?



In 2006 there were 4,746 deaths in Michigan due to stroke (the third leading cause of death). While high, this was the lowest number of deaths due to stroke in the last decade. The rate per 100,000 dropped from 61.5 in 1998 to 44.4 in 2006, a decrease of 27.8%. These lower death rates are associated with healthier behaviors, especially smoking cessation and high blood pressure control and with improvements in the care of stroke patients.

How does Michigan compare with the U.S.?

The stroke death rate in Michigan is similar to that of the United States. A national ranking of states in 2009 found Michigan ranked 22nd worst among states for stroke death rates using 2005 data.



How are different populations affected?

In 2006, rates for males were 45.6 per 100,000 and for females 43.2 per 100,000. Stroke rates also reflect the health status disparity for minorities. The death rate for Blacks is 58.9 per 100,000, compared to Whites who have a death rate of 42.3 per 100,000.

What is the Department of Community Health doing to improve this indicator?

The Michigan Department of Community Health convened a partnership of broad-based groups called the *Michigan Stroke Initiative (MSI)* whose mission is to describe and monitor the stroke burden, to provide guidelines for strategies to raise awareness, to prevent strokes, and to improve stroke care throughout Michigan. Since its inception, MSI has been instrumental in monitoring the burden of stroke, supporting stroke education, sharing best practices by networking with colleagues. MSI has collaborated on several projects, including the *Great Lakes Regional Stroke Network* whose mission is to “optimize collaboration and coordination among Great Lakes States to reduce the burden of stroke and disparities.” MDCH, MSI and 21 Michigan hospitals collaborate on a stroke registry and quality improvement program funded by CDC referred to as the “National Paul Coverdell Registry.” This project will expand to 40 hospitals in 2009 with continued focus on quality improvement in stroke care for patients.

MDCH is working with the EMS and Trauma System Section on assessing EMS heart attack and stroke care in Michigan. The assessment will identify gaps and barriers in care so improvement strategies can be developed. One strategy is to increase the understanding of EMS personnel. Educational tools are being distributed to 1,000 EMS providers, educational programs for EMS instructors are being offered, and a pilot project is being launched to test the effectiveness of new tools to improve EMS stroke care. Discussions are being held to identify a policy agenda for EMS regionalization.

A statewide survey of stroke rehabilitation centers was conducted to understand the range of services and therapies being offered to Michigan stroke patients. Results were compared with other states in the region and gaps in care are being addressed. A media campaign focusing on signs and symptoms of stroke and the need to call 9-1-1 was offered in collaboration with the American Heart Association. MDCH staff with partner organizations continue to promote print material such as “Taking on Stroke” to educate the public and patients on signs and symptoms of stroke and emergency action. For more information see the website www.michigan.gov/cvh or www.michiganstrokeinitiative.org.



Topic: Cancer and Cancer Screening

11. All Cancer Deaths

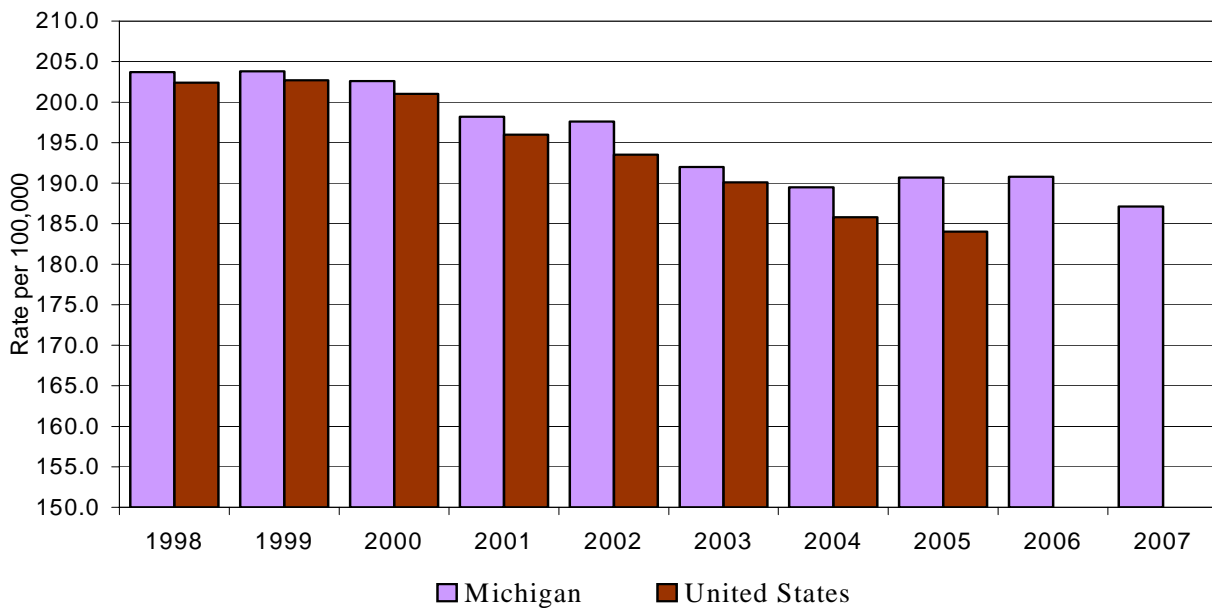
Cancer is the second leading cause of all deaths in Michigan and the leading cause of Years of Potential Life Lost (YPLL) for people below the age of 75. Cancer encompasses more than 100 different diseases, each characterized by the uncontrolled growth and spread of abnormal cells. The most common forms of the disease in Michigan are lung cancer, colorectal cancer, breast cancer, and prostate cancer.

How are we doing?

In 2007, there were 20,059 deaths due to cancer in Michigan, at an age-adjusted rate of 187.1 per 100,000 of the population. Cancer deaths have shown a decline from 1998, from a rate of 203.8 per 100,000 residents to 187.1 per 100,000 in 2007.

How Does Michigan compare with the U.S.?

Invasive Cancer Death Rates



In 2005, 20,077 deaths occurred from cancer in Michigan, ranking Michigan as 21st in the United States. As of 2005, Michigan's death rate, (191.2 per 100,000) for all types of cancer was higher than the U.S. rate of 184.0 per 100,000. Cancer death rates in Michigan are moving in the right direction, in general downward from year to year, thanks to advances in early detection and treatment

How are different populations affected?

In 2005, Blacks in Michigan had higher cancer death rates (226.9 per 100,000) than Whites (186.8 per 100,000). Among Black women, cancer death rates were higher (187.1 per 100,000) than White women (160.2 per 100,000). Cancer death rates are also higher among Black men (288.6 per 100,000) compared to White men (225.9 per 100,000). The incidence of all cancers among Black men is significantly higher than all-cancer incidence in white men, 671.7 vs. 529.5 per 100,000.



What is the Department of Community Health doing to improve this indicator?

Ongoing surveillance focuses on incidence and mortality of five cancers of public health significance: breast, cervical, colorectal, lung and prostate. The Michigan Cancer Consortium, a statewide public-private partnership of more than 110 organizations, is implementing strategies to address its cancer control priorities (<http://www.michigancancer.org>). Michigan's Comprehensive Cancer Control Plan is currently under revision, with the updated plan expected for release in 2009. The updated plan will address the continuum of cancer care, be responsive to scientific changes and focus on access to care and health disparities.

Five projects from the revised plan have been identified for special focus over the next three years. One project will expand public knowledge regarding the impact of genetics on breast, ovarian and colorectal cancers. A workgroup will develop the strategic plan addressing this area. Expert consultation will guide public education efforts which will address the importance of family history and its relationship to cancer.

A second project will increase awareness of and access to resources and services for cancer survivors in Michigan. Experts from across the state will identify resources currently available and determine the most effective ways to share relevant information with survivors, their families, and the general public.

Source: The Cancer Burden in MI: Selected Statistics 1990-2007; 2007 data from 2007 BRFSS.



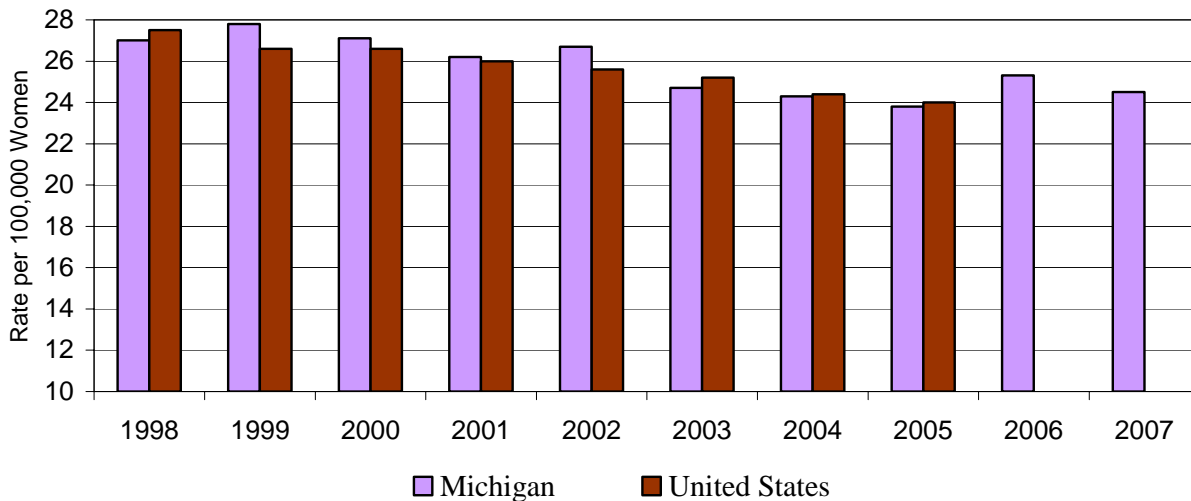
Topic: Cancer and Cancer Screening

12. Breast Cancer Deaths

Breast cancer is the second highest cause of cancer deaths among women in Michigan, as well as nationwide. During 2007, 1,417 Michigan women died from breast cancer. In 2008, the American Cancer Society estimated that 6,120 Michigan women would be diagnosed with breast cancer and approximately 1,310 women in the state would die from the disease.

How are we doing?

Age-adjusted Breast Cancer Death Rates



Michigan’s age-adjusted death rates for breast cancer have generally declined over the past 10 years. In 1998, 27 out of 100,000 women died of breast cancer; compared to 24.5 out of 100,000 in 2007.

How Does Michigan compare with the U.S.?

The death rates for breast cancer in Michigan are similar to the United States. In 2005, breast cancer Death rates for both Michigan and the United States were similar, 23.8 vs. 24.0 per 100,000.

How are different populations affected?

Although the incidence of breast cancer is highest among White women after the age of 40, African Americans have a higher incidence of breast cancer before the age of 40 and have higher death rates at all ages. In 2004, the incidence of breast cancer was 116.3 per 100,000 Black females versus 119.3 per 100,000 White females in Michigan. Based on 2005 death data, 33.5 per 100,000 Black women died from breast cancer compared to 24.4 per 100,000 White women. This is partly due to diagnosis at a later stage of the cancer. However, even within the same stage of diagnosis, Black women have lower survival rates. The incidence of breast cancer among Blacks is lower than among Whites.

What is the Department of Community Health doing to improve this indicator?



Critical Health Indicators

The Breast and Cervical Cancer Control Program (BCCCP) is the main delivery program by MDCH serving underserved women in all counties of Michigan. The Michigan Cancer Consortium (MCC) in partnership with the MDCH is implementing several interventions at the community level to address early detection and access to care for breast cancer control. More information is available at the MCC website. www.michigancancer.org

Free breast cancer screening and diagnostic services are available to uninsured and underinsured women in Michigan through BCCCP. This program provides screening and diagnostic services for breast cancer to women age 40-64 who meet the income eligibility requirement (income under 250% of poverty). Strenuous outreach efforts continue to be directed toward identifying these women and encouraging them to be screened for breast cancer.

All women seen through the BCCCP with abnormal mammogram or clinical breast exam results that require follow-up diagnostic testing receive Case Management. This assures they receive timely and appropriate follow-up services. If a woman is diagnosed with breast cancer, she may be eligible for enrollment into Medicaid for all treatment services. If she is ineligible for Medicaid, for example, due to immigration status, treatment access will be made available but may require some payment from the client. More information about the program can be found at: http://www.michigan.gov/mdch/0,1607,7-132-2940_2955_2975-13487--,00.html

Source: Invasive Breast Cancer Incidence and Mortality Trends Michigan Female Residents, 1985-2007. MDCH. Accessed online at: <http://www.mdch.state.mi.us/pha/osr/Cancer/stateinc.asp?CDxID=IncTrendsBreast>

Source: The Cancer Burden in Michigan: Selected Statistics 1990-2007.

Source: Breast Cancer Facts and Figures 2007-2008. ACS. Accessed online at: <http://www.cancer.org/downloads/STT/BCFF-Final.pdf>

Source: Age Adjusted U.S. Death Rates and Trends for the Top 15 Cancer Sites by Race/Ethnicity. SEER. Accessed online at: http://www.seer.cancer.gov/csr/1975_2005/results_merged/topic_mor_trends.pdf



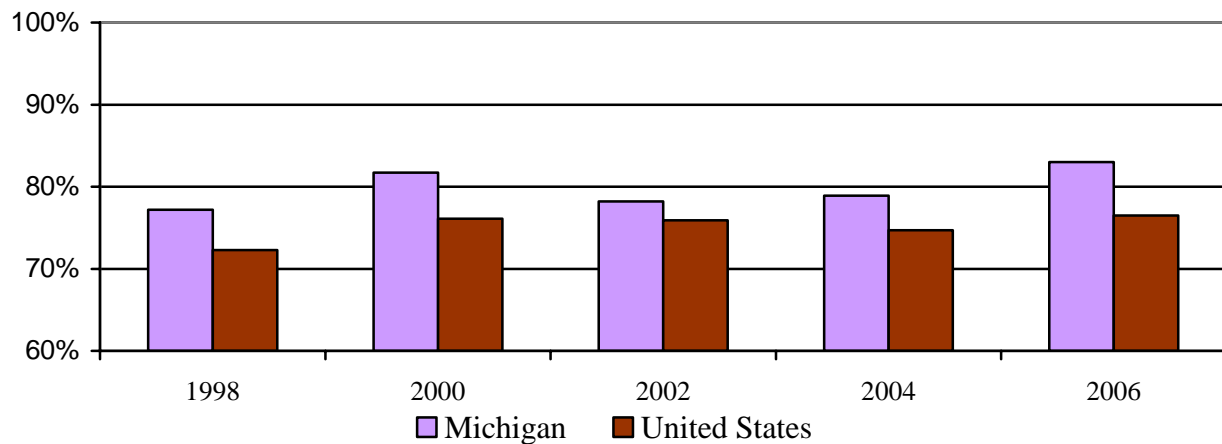
Topic: Cancer and Cancer Screening

13. Mammography

Clinical breast exam and mammography utilization in Michigan is monitored by the MDCH through the use of the Behavioral Risk Factor Survey System (BRFSS). One core section of this survey focuses on issues related to women’s health. Over the past several years, this section of the BRFSS has been implemented to gather information on the use of breast cancer screening procedures by Michigan women aged 40 years and older.

How are we doing?

Percentage of Women 40+ Who Have Had a Mammogram in Past Two Years



In 2006, 83.0% of Michigan women aged 40 years and older reported that they had received a mammogram in the past two years. This percentage has fluctuated in Michigan over the past ten years.

How Does Michigan compare with the U.S.?

From 1998-2006, Michigan consistently has had a higher percentage of women aged 40 years and older who received a mammogram within the past two years compared to the United States. In 2006, 76.5% of women in the United States had received a mammogram within the past two years; while in Michigan 83.0% of women had a mammogram within the past two years.

How are different populations affected?

Several trends are noted by looking at the use of appropriate breast cancer screening within the past two years by different Michigan subpopulations. In 2006, appropriate breast cancer screening (including mammography and clinical breast exam) within the past two years increased from 68.3% among women aged 40-49 to 73.0% of those aged 50-64 years, and 73.6% among women ages 65-74. Screening rates declined to 59.6% among women ages 75 years and older. Appropriate breast cancer screening tends to increase with education and income level. Small racial differences continue to be observed in screening rates. In 2006, 71.3% of White women compared to 69.8% of African American women reported having had appropriate breast cancer screening within the past two years.



What is the Department of Community Health doing to improve this indicator?

The BCCCP is the main delivery program administered by MDCH serving underserved women in all counties of Michigan. The Michigan Cancer Consortium (MCC) in partnership with the MDCH is implementing several interventions at the community level to address early detection and access to care for breast cancer control. More information is available at the MCC website. www.michigancancer.org

Free breast cancer screening and diagnostic services are available to uninsured and underinsured women in Michigan through the Department's Breast and Cervical Cancer Control Program (BCCCP). This program provides screening and diagnostic services for breast cancer to women age 40-64 who meet the income eligibility requirement (income under 250% of poverty). Strenuous outreach efforts continue to be directed toward identifying these women and encouraging them to be screened for breast cancer.

All women saw through the BCCCP with abnormal mammogram or clinical breast exam results that require follow-up diagnostic testing receive Case Management. This assures they receive timely and appropriate follow-up services. If a woman is diagnosed with breast cancer, she may be eligible for enrollment into Medicaid for all treatment services. If she is ineligible for Medicaid, for example, due to immigration status, treatment access will be made available but may require some payment from the client. More information about the program can be found at:

http://www.michigan.gov/mdch/0,1607,7-132-2940_2955_2975-13487--,00.html.

Source: 2006 Special Cancer BRFS

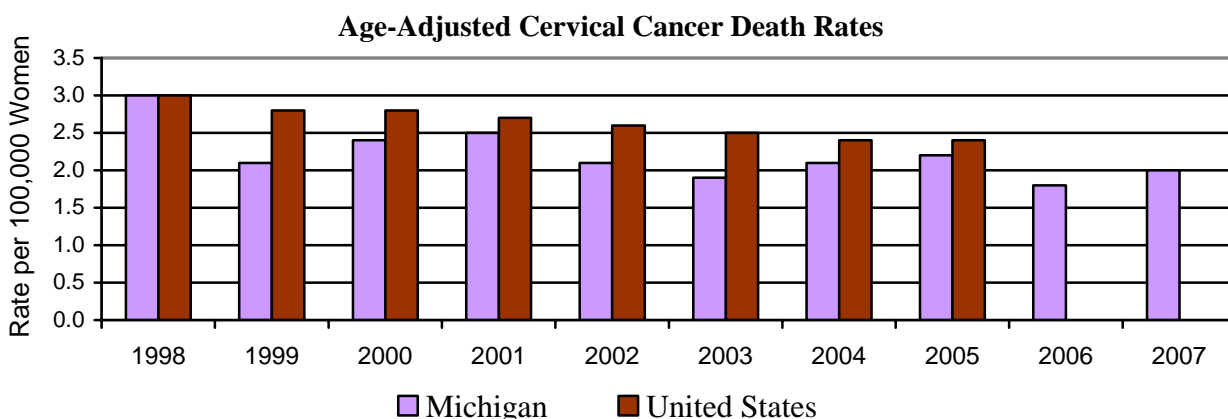


Topic: Cancer and Cancer Screening

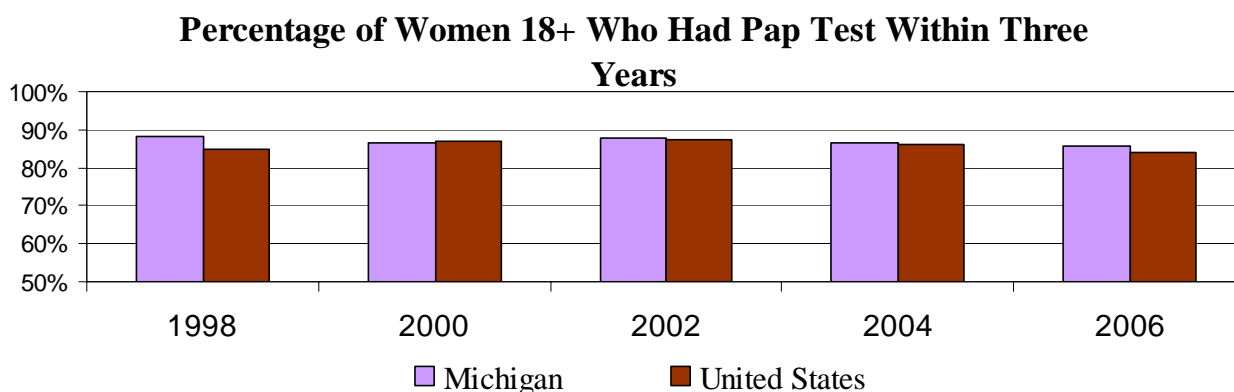
14. Cervical Cancer Deaths and Screening

In Michigan, most cases of cervical cancer are diagnosed at the in situ or localized stage (93.7% of cases diagnosed between years 2002 and 2004). However this percentage could easily be increased to 100% if all women received regular screening. With early detection and appropriate treatment virtually all deaths from this disease can be prevented. There are various risk factors for cervical cancer, the most important of which is infection with Human Papilloma Virus (HPV), a common sexually transmitted disease which also causes genital warts. Women who have had unprotected sex, especially at a young age, and women who have had many sexual partners are at an increased risk for HPV infection. Additional risk factors include smoking and HIV infection. A vaccine for HPV has been found to be effective in preventing cervical pre-cancers caused by common HPV types, however the vaccination is not a substitute for routine cervical cancer screening, and vaccinated females should have cervical cancer screening as recommended.

How are we doing?



In 2007, 399 new cases of cervical cancer were diagnosed in Michigan women and 118 women died unnecessarily from the disease. The death rate for cervical cancer was 2.0 deaths per 100,000 women. In 2005, cervical cancer accounted for an average of 25.9 Years of Potential Life Lost (YPLL) per person, which is the highest YPLL caused by any cancer site. There has been an overall declining trend in cervical cancer death rates during the past 10 years.





Cervical cancer screening rates among Michigan women have remained relatively high over the past 10 years. In 2006, 85.8% of women in Michigan reported having had a Pap test within the last three years, however there is still room for improvement.

How does Michigan compare with the U.S.?

In 2005, cervical cancer death rate in Michigan (2.2 per 100,000 women) was slightly lower than that of the general U.S. population (2.4 per 100,000 women).

In 2006, the percentage of women ages 18 years and older who have had a Pap test within the past three years was 85.8% for Michigan women, compared to 84.0% for women in the U.S. general population.

How are different populations affected?

Disparity exists in cervical cancer incidence and death rates among black and white women in Michigan. In 2004, the incidence rate among whites was 6.0 per 100,000 women compared to 10.7 per 100,000 women among blacks. In 2005, the death rate among whites was 1.7 deaths per 100,000 women compared to 5.5 deaths per 100,000 women among blacks. National data show that five-year relative survival rates for cervical cancer is lower in blacks compared to whites. This disparity in survival rate is sustained even when cervical cancer is detected at the same stage.

Nonetheless, black women in Michigan report receiving cervical cancer screening at a slightly higher rate than white women. According to the 2006 Michigan BRFSS, 87.7% of black women aged 18 years and older reported having had a Pap test within the past three years compared to 81.7% of white women for the same timeframe.

What is the Department of Community Health doing to improve this indicator?

The MDCH administers the Michigan Breast and Cervical Cancer Control Program (BCCCCP), which provides women age 40-64 screening and diagnostic services for cervical cancer. At least 20% of the women new to the BCCCCP come from a group of women known to be at high risk for cervical cancer, those who have either never had a Pap test or have not had one within the last five years. Strenuous outreach efforts continue to be directed toward identifying these women and encouraging them to be screened for cervical cancer.

In addition, the BCCCCP works with Title X/Family Planning agencies to provide indicated diagnostic testing to women under age 40 who have abnormal Pap tests indicating a possible cancer diagnosis. All women seen in the BCCCCP with abnormal Pap tests that require follow-up diagnostic testing receive Case Management. This assures they receive timely and appropriate follow-up services. If a woman is diagnosed with cervical cancer, she may be eligible for enrollment into Medicaid for all treatment services. If she is ineligible for Medicaid, for example, due to immigration status, treatment access will be made available but may require some payment from the client.

More information about the program can be found at: http://www.michigan.gov/mdch/0,1607,7-132-2940_2955_2975-13487--,00.html.

Source: The Cancer Burden in Michigan: Selected Statistics – 1990-2007; SEER Cancer Statistics Review 1975-2005.

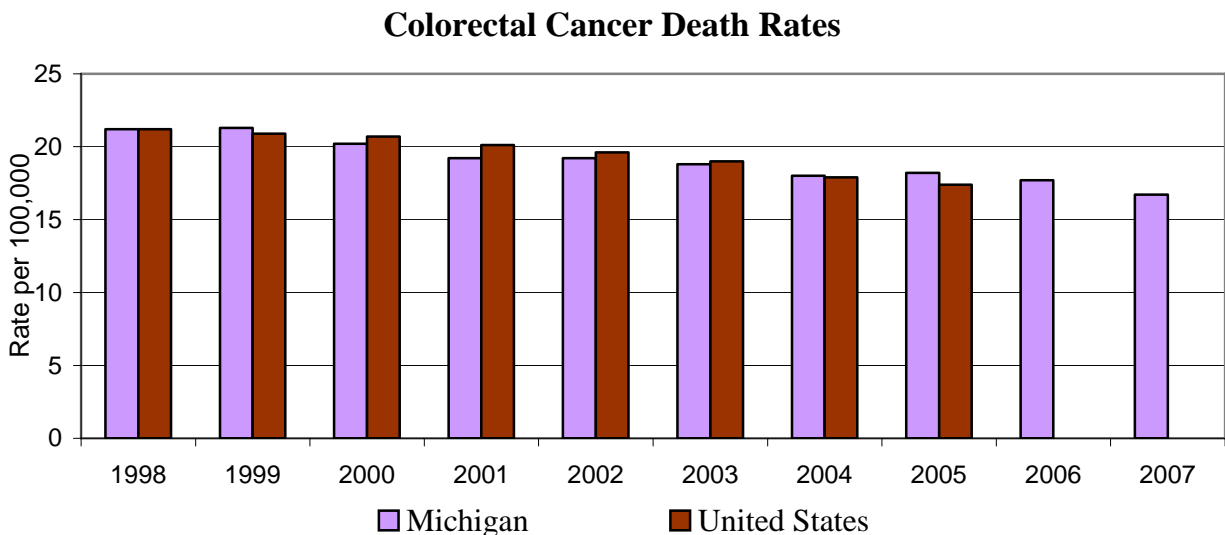


Topic: Cancer and Cancer Screening

15. Colorectal Cancer Deaths

Colorectal cancer remains the third leading cause of cancer-related deaths in Michigan for men and women combined, despite the recent decline in related death rates for Michigan men and women.

How are we doing?



In 2007, 1,872 Michigan men and women died from colorectal cancer. Death rates associated with colorectal cancer have decreased in Michigan, falling from 21.2 deaths per 100,000 men and women in 1998 to 16.7 deaths per 100,000 men and women in 2007.

In 2008, the American Cancer Society estimates that 5,150 Michigan men and women will be diagnosed with colorectal cancer and approximately 1,700 men and women within the state will die from the disease. Screening rates for colorectal cancer have increased and death rates have decreased over the past ten years.

How Does Michigan compare with the U.S.?

Michigan's colorectal cancer rates are comparable to rates in the United States overall. In 2005, Michigan had 18.2 deaths per 100,000 compared to 17.4 deaths per 100,000 in the United States.

How are different populations affected?

In Michigan, colorectal cancer death and incidence rates are higher among blacks than whites. In 2005, colorectal cancer black-to-white ratio for death was 1.5 and in 2004, the incidence rate ratio of blacks to whites was 1.3.

National data show that five-year relative survival rates in the U.S. are lower for black men and women compared to survival rates of white men and women even when colorectal cancer is detected at the same stage.

In Michigan, black men and women report getting screened at a slightly higher rate than white men and women. According to the 2006 Michigan BRFSS, 30.6% of black men and women aged 50 years and



Critical Health Indicators

older reported having had a blood stool test within the past 2 years compared to 27.6% of white men and women and 61.7% of black men and women age 50 years and older reported having had a sigmoidoscopy or colonoscopy in the past 5 years compared to 55.3% of white men and women.

What is the Department of Community Health doing to improve this indicator?

The Michigan Department of Community Health funds the Michigan Colorectal Cancer Screening Program (MCRCSPP). In its third year, the program continues to provide colorectal cancer screening and follow-up services to asymptomatic, low-income, uninsured/underinsured individuals at three Michigan public health departments serving fifteen counties.

In 2008, approximately 540 uninsured or underinsured men and women enrolled in the MCRCSPP and received risk assessment, education about screening and an invitation to be screened. A combined total of 451 screening and diagnostic tests were completed using fecal occult blood testing (FOBT) and/or colonoscopy. Through relationships developed with MCRCSPP community partners, two clients were treated after cancerous polyps were detected and removed.

Source: ACS Facts & Figures 2008. Accessed online at:
<http://www.cancer.org/downloads/STT/2008CAFFfinalsecured.pdf>

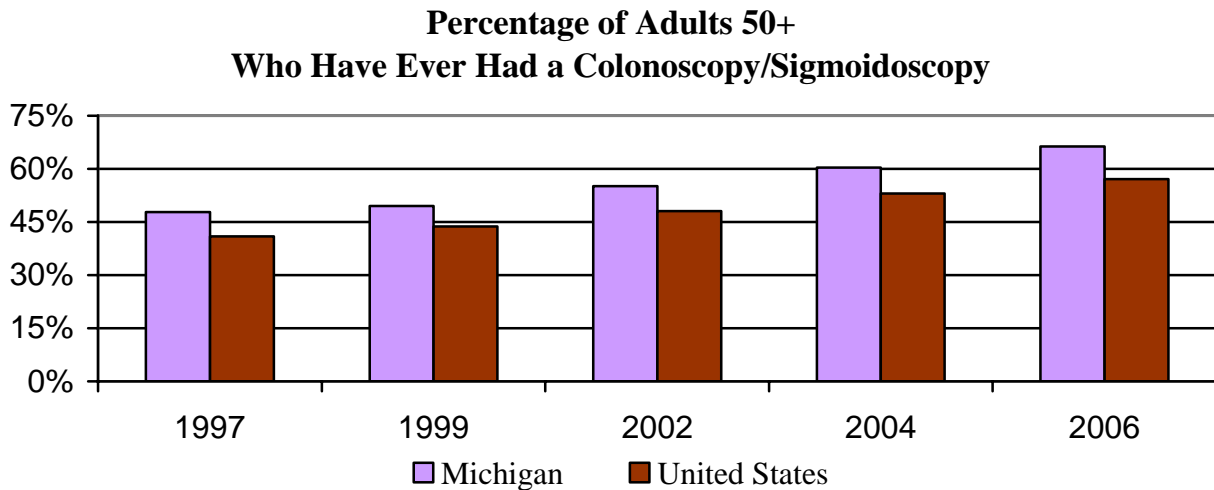


Topic: Cancer and Cancer Screening

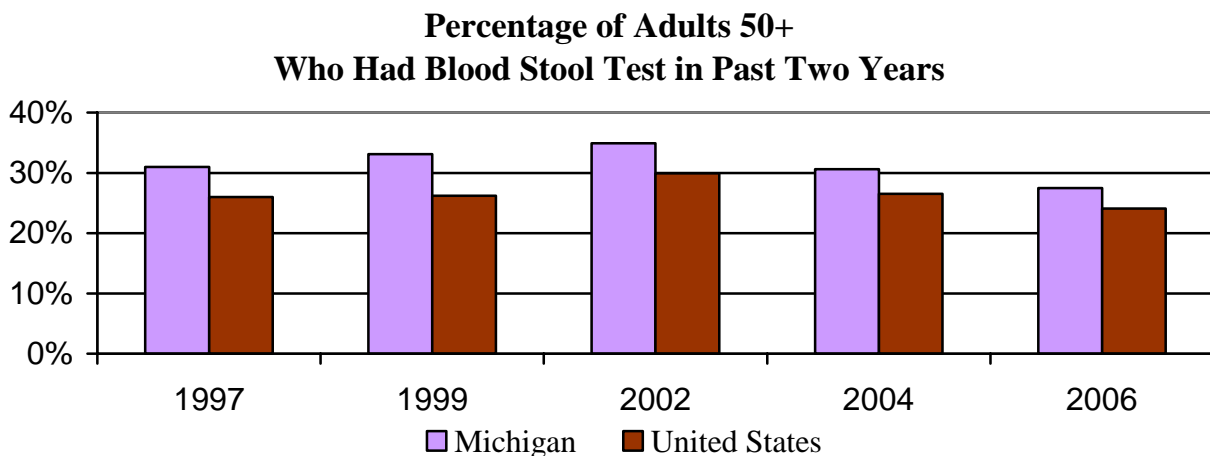
16. Colonoscopy and Sigmoidoscopy

The use of colorectal cancer early detection screening procedures in Michigan is monitored by MDCH through the Behavioral Risk Factor Surveillance System (BRFSS). Over the past several years, the colorectal cancer section of the BRFSS has provided information on the use of blood stool tests within the past two years and lower gastrointestinal endoscopies, such as sigmoidoscopy or colonoscopy, within the past five years for Michigan men and women aged 50 years and older.

How are we doing?



In 2006, 66.3% of Michigan adults 50 years and older reported ever having a sigmoidoscopy or colonoscopy. It is evident that the use of these procedures has increased over the last several years. This percentage has increased by 18.3% over the past 10 years, from 47.8% in 1997 to 66.3% in 2006.



In 2006, an estimated 27.5% of Michigan adults aged 50 years and older had a blood stool test within the past two years. The percentage increased between 1997 (31%) and 2002 (35%) but then decreased in recent years to 27.5%. A contributing factor to the initial increase is possibly the establishment of the Colorectal Action Network (CRAN), which was initiated by the Michigan Cancer Consortium (MCC)



and the American Cancer Society (ACS) and continues to be led by the ACS. The CRAN is a network of organizations concerting efforts in several Michigan counties to promote colorectal cancer screening. State BRFSS data show that lower GI endoscopies particularly screening colonoscopy is now the test of choice in Michigan, and as its utilization increased, the use of Fecal Occult Blood Test (FOBT) as an alternative screening modality naturally decreased.

How Does Michigan compare with the U.S.?

Michigan has consistently had more adults 50 years and older getting sigmoidoscopy or colonoscopy compared to the US. In 2006, Michigan had a rate of 66.1% while the United States median rate was 57.1%.

In 2006, the proportion of Michigan adults aged 50 years and older who received a blood stool test within the past two years (27.3%) was above that of the United States median percentage (24.1%).

How are different populations affected?

In 2006, the reported rates of blood stool tests completed within the past two years and alternatively sigmoidoscopy or colonoscopy completed within the past five years both increased with age. Sigmoidoscopy or colonoscopy within the past five years increased from 49.8% for those aged 50-59 years to 58.7% for those aged 70+ years. The completion of blood stool tests within the past two years also increased with age (50-59 years = 24.2% vs. 70+ years = 31.1%).

Men and women were equally likely to have had a blood stool test within the past two years (27.0% vs. 27.9%); however, men were more likely than women to have had a sigmoidoscopy or colonoscopy within the past five years (57.3% vs. 54.8%). Blacks were more likely than Whites to have a blood stool test within the past two years (30.6% vs. 27.6%), and were also more likely to have a sigmoidoscopy or colonoscopy within the past five years (61.7% vs. 55.3%).

What is the Department of Community Health doing to improve this indicator?

A contributing factor to the increase in blood stool tests in 1999 and 2002 is possibly the establishment of the Colorectal Action Network (CRAN), which was initiated by the Michigan Cancer Consortium (MCC) and the American Cancer Society (ACS) and continues to be led by the ACS. The CRAN is a network of organizations concerting efforts in several Michigan counties to promote colorectal cancer screening.

Most recently, the MDCH has issued a request for proposals for raising colorectal cancer screening awareness among special populations in Michigan. Recipients of these grants will promote universal awareness of colorectal cancer, its impact, and the importance of early detection. Results of this project will guide future interventions in similar population groups across the state designed to reduce colorectal cancer screening disparities and improve colorectal cancer mortality and morbidity outcomes.

Source: EM Garcia, SK Lyon-Callo, and AP Rafferty. 2007. Health Risk Behaviors in the State of Michigan: 2006 Behavioral Risk Factor Survey. Lansing, MI: Michigan Department of Community Health, Bureau of Epidemiology, Chronic Disease Epidemiology Section. Accessed online at:

http://www.michigan.gov/documents/mdch/75634_MSU_PS-BRFS_2006AnnualReport_FINAL_216699_7.pdf



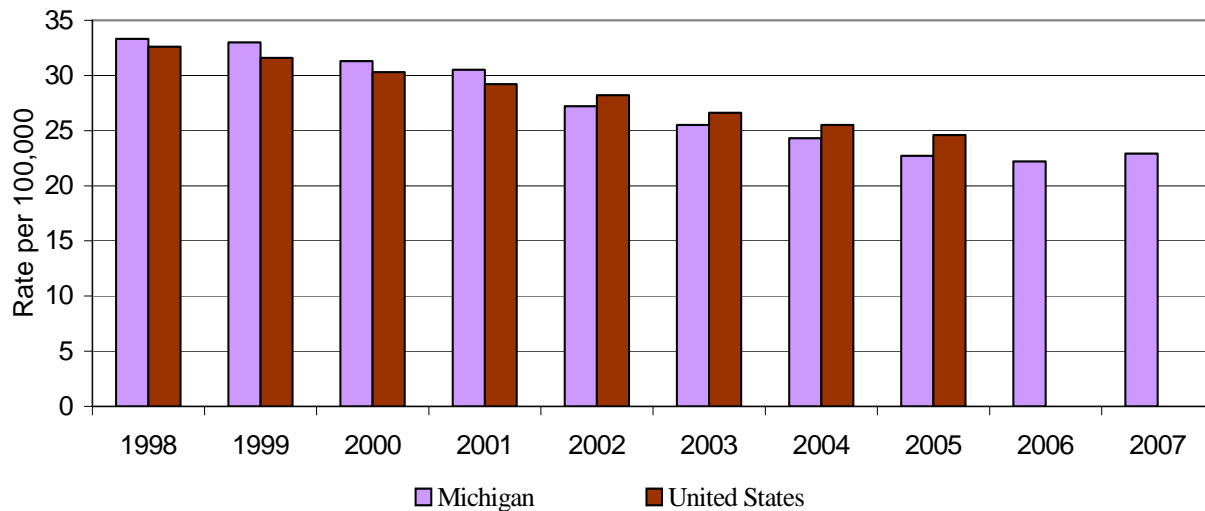
Topic: Cancer and Cancer Screening

17. Prostate Cancer Deaths

Unlike other cancers, many types of prostate cancers grow slowly, and do not cause problems or affect how long a man lives. However, some types of prostate cancers are a serious health threat, growing quickly and spreading beyond the prostate gland to other parts of the body, and at times are fatal. The Gleason Score, which is a measure, reported upon a prostate tumor biopsy, is a way of determining how fast the cancer might be growing. Research is ongoing to discover ways of distinguishing virulent from indolent forms of cancer and to address both short term and long term mortality outcomes.

How are we doing?

Invasive Prostate Cancer Death Rates



Coinciding with the development of the prostate specific antigen (PSA) test in the late 1980s, mortality associated with prostate cancer has declined fairly consistently. Even though prostate cancer death rates for Michigan men have decreased over the past few years, prostate cancer remains the second leading cause of cancer-related deaths in Michigan men.

In 2007, 967 Michigan men died from the disease. Death rates associated with prostate cancer have decreased in Michigan, falling from 33.3 deaths per 100,000 men in 1998 to 22.9 deaths per 100,000 men in 2007. In 2008, the American Cancer Society estimated that 7,180 Michigan men will be diagnosed with prostate cancer and approximately 850 men within the state will die from the disease.

How does Michigan compare with the U.S.?

In 2005, the Michigan age-adjusted death rate for prostate cancer was 22.7 per 100,000 compared to the slightly higher U.S. rate of 24.7 per 100,000.

How are different populations affected?

African-American men have a higher incidence of prostate cancer and are also more likely than Caucasian men to die of the disease. The prostate cancer incidence rate is 60% higher and the age-adjusted death rate for prostate cancer is 2.4 times greater among African-American men than Caucasian men.



What is the Department of Community Health doing to improve this indicator?

Although screening with the PSA and digital rectal exam can detect prostate cancer at an earlier stage, definitive evidence is lacking on whether screening and early treatment of prostate cancer decrease prostate cancer mortality. In addition to the lack of evidence that screening saves lives, each prostate cancer treatment may result in lingering and sometimes lifelong problems that impact a man's quality of life. The Centers for Disease Control and Prevention (CDC), the Michigan Department of Community Health and the United States Preventive Services Task Force for Clinical Preventive Services do not support population-based prostate cancer screening with PSA. The American Cancer Society and the American Urological Association recommend screening, and the MDCH and the Michigan Cancer Consortium recommend that each man weighs the pros and cons of screening for them.

Screening for prostate cancer must be the result of shared decision making between the man and his healthcare provider. Informed consent encourages the patient to actively participate in the decision, emphasizing the importance of the patient's values and preferences.

The MDCH and the Michigan Cancer Consortium have developed and offer high quality informational materials to empower men to more effectively decide whether to be tested and, in the event early prostate cancer is found, to decide among several treatment options, including 'watchful waiting'.

The MDCH and the Michigan Cancer Consortium have an initiative underway to address the needs of prostate cancer survivors and their families. In collaboration with the Michigan Cancer Registry, 7,019 surveys were mailed to a randomly selected sample of prostate cancer survivors statewide to assess survivors' needs. Results from the survey and advice from prostate cancer experts will be used to develop materials to assist men, their families, and their healthcare providers to manage the problems that develop after treatment, thereby enhancing their quality of life.

More information can be found at:

www.michigancancer.org/OurPriorities/Prostate_InformationForConsumers.cfm.

Source: ACS Facts & Figures 2008. Accessed online at:

<http://www.cancer.org/downloads/STT/2008CAFFfinalsecured.pdf>

Source: Cancer Facts and Figures 2007. American Cancer Society. Accessed online at:

<http://www.cancer.org/downloads/STT/CAFF2007PWSecured.pdf>



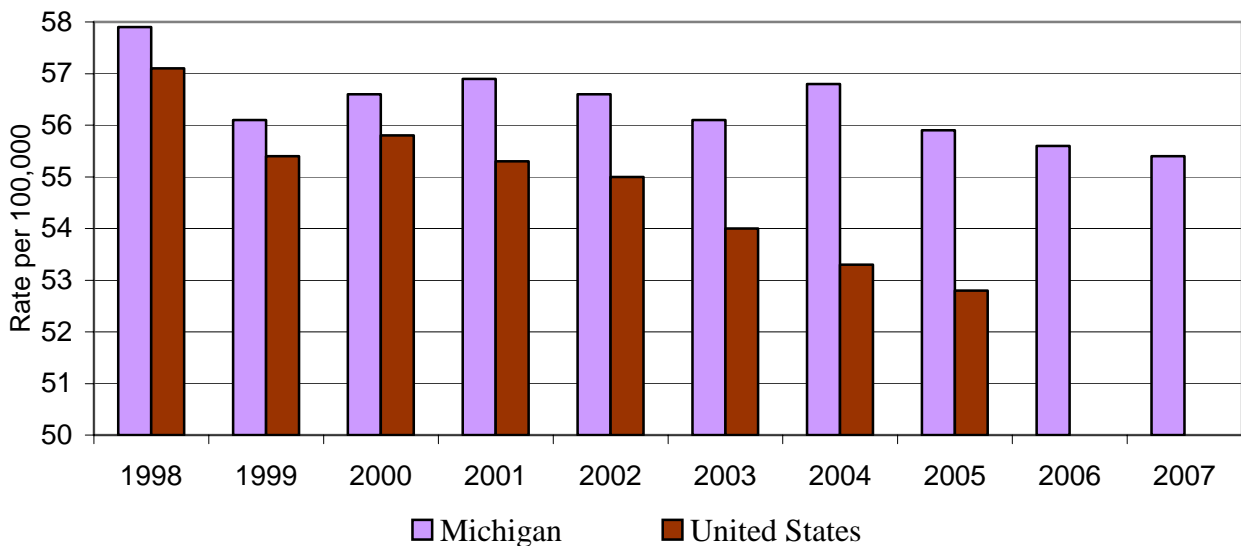
Topic: Cancer and Cancer Screening

18. Lung Cancer Deaths

Lung cancer is the leading cause of cancer-related deaths for both men and women in Michigan and in the United States. The primary prevention of lung cancer includes elimination of tobacco use and exposure to second-hand tobacco smoke.

How are we doing?

Age-Adjusted Lung Cancer Death Rates



In 2007, 5,822 Michigan men and women died from lung cancer. Death rates associated with lung cancer dropped slightly in Michigan over the past several years, from 57.9 deaths per 100,000 men and women in 1998 to 55.4 deaths per 100,000 men and women in 2007. Lung cancer death rates have not moved sufficiently or as much as desired over many years due to high case fatality rate of this cancer and lack of an effective screening test which would improve the odds of survival at the population level. An increase in lung cancer death rates among females has been observed as well.

In 2008, the American Cancer Society estimated that 8,020 Michigan men and women will be diagnosed with lung cancer and approximately 5,890 men and women within the state will die from the disease. Death rates for lung cancer have remained stable in recent years and more efforts will be required to improve outcomes of this cancer at the population level.

How does Michigan compare with the U.S.?

Michigan ranks 21st in the nation in lung cancer death rates. Michigan consistently has had higher death rates than the United States over the years. In 2005, the lung cancer death rate was 52.8 per 100,000 in the United States compared to 55.9 per 100,000 in Michigan.

How are different populations affected?

Incidence and death rates from lung cancer continue to decrease in men, and have leveled off in women between Years 2000 and 2005. The 2005 Michigan death rate for Black males (84.2 deaths per 100,000)



is significantly higher than the death rate for White males (72 deaths per 100,000). For Black females the death rate (45.4 deaths per 100,000) is only slightly higher than for White females (42.7 deaths per 100,000).

What is the Department of Community Health doing to improve this indicator?

The Michigan Department of Community Health (MDCH) Cancer Prevention and Control Section (CPCS) has staffed and supported a nationally recognized and award winning cancer control program that includes a statewide strategic plan for the prevention and reduction of the lung cancer burden in Michigan. This initiative has engaged public and private stakeholders who are experts in the prevention, control, and treatment of lung cancer. The Department collaborates with stakeholders throughout the state to implement evidence-based, measurable objectives and strategies to reduce the lung cancer burden. As a result, tobacco use and smoking prevalence have decreased for both adults and youth.

The MDCH cancer and tobacco section staff developed an integrated program for tobacco control that includes policy promotion, professional education, and public education. The MDCH intra-agency initiatives to reduce the state's lung cancer burden include development of the Michigan Providers Tobacco Cessation Toolkit, position statements for consumers and providers regarding new scientific publications and studies about lung cancer early detection, and a study to identify participation in lung cancer clinical trials throughout the state. More information about the department's activities can be found at: <http://www.michigancancer.org/OurPriorities/LungPriorityStrategicPlan.cfm> and at: http://www.michigan.gov/mdch/0,1607,7-132-2940_3182_22973---,00.html.

Source: Invasive Lung Cancer Incidence and Mortality Trends Michigan Residents, 1985-2006. MDCH. Accessed online at: <http://www.mdch.state.mi.us/pha/osr/Cancer/stateinc.asp?CDxID=IncTrendsLung>

Source: ACS Facts & Figures 2008. Accessed online at: <http://www.cancer.org/downloads/STT/2008CAFFfinalsecured.pdf>

Source: The Cancer Burden in Michigan: Selected Statistics 1990-2007.



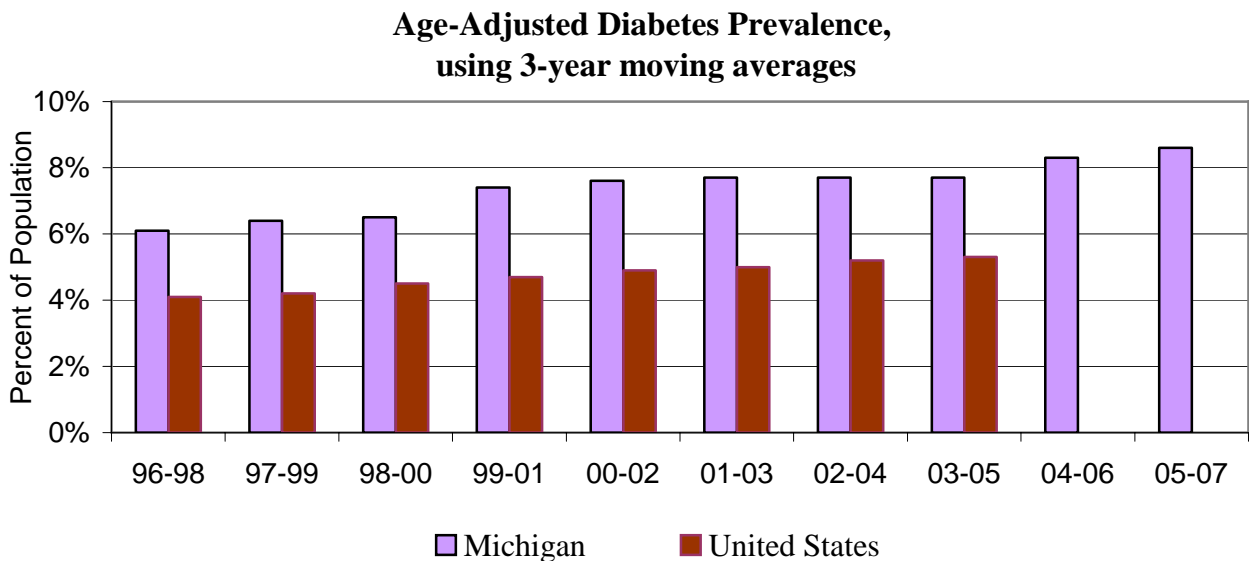
Topic: Diabetes and Kidney Disease

19. Diabetes Prevalence and Related Deaths

Common types of diabetes are: Type 1, Type 2, and gestational. In Type 1 diabetes, the body does not produce insulin and accounts for 5% - 10% of all people with diabetes (PWD). In Type 2 diabetes, either the body does not produce enough insulin or the cells ignore the insulin. Approximately 90% of PWD have Type 2. Gestational diabetes affects about 4% of pregnant women. It usually goes away after pregnancy, but there is a 67% chance that it will return in future pregnancies. Also, mothers who have had gestational diabetes have a 20% - 50% chance of developing Type 2 diabetes in the next 5 - 10 years.

Another related concern is pre-diabetes. Pre-diabetes is when blood sugar is high, but it is not yet high enough to be diagnosed as Type 2 diabetes. People with pre-diabetes are 5 - 15 times more likely to develop Type 2 diabetes in the next 5 years than persons with normal levels of blood sugar. Over 2 million adults in Michigan are thought to have pre-diabetes.

How are we doing?



There are approximately 648,100 adults in Michigan that have been diagnosed with diabetes. It is estimated that another 279,100 Michigan adults have undiagnosed diabetes. It is conservatively estimated that roughly 5,000 children in Michigan have either Type 1 or Type 2 diabetes.

The prevalence of diabetes in Michigan has been steadily increasing over the past 10 years. At the same time, the state and national prevalence of obesity, a risk factor for diabetes, has also been increasing. Michigan adults who were obese were more than twice as likely (17.6%) to have diabetes as those who were overweight (7.0%), and over five times as likely as those who were not overweight or obese (3.1%).

Diabetes is the sixth leading cause of death in Michigan, accounting for 3.3% of all deaths. However, 1 out of 2 people with diabetes will die of heart disease. Heart disease is the number one cause of death in Michigan (28.2% of all deaths), and it is estimated that 27% of all heart disease deaths are due to diabetes.

How does Michigan compare with the U.S.?

Diabetes prevalence is significantly higher in Michigan than in the rest of the nation. Michigan has the 13th highest diabetes prevalence rate in the nation.



Death rates from diabetes are similar for Michigan and the United States. Diabetes is also listed as the sixth leading cause of death in the United States, accounting for 3.1% of all deaths. However, people with diabetes often die from complications of the disease including: heart disease, stroke, cancer, and pneumonia or influenza. This means that diabetes is often underestimated as a leading cause of death.

How are different populations affected?

Type 1 diabetes is more common in Whites than in non-Whites and usually develops in childhood. Type 2 diabetes is more common in older people, especially in people who are overweight, and it occurs more often in African Americans, American Indians, some Asian Americans, Native Hawaiians and other Pacific Islander Americans, and Hispanics/Latinos.

In Michigan, an estimated 7.8% of non-Hispanic whites, 12.7% non-Hispanic black, 4.2% of Asians, 10.7% of American Indians, 11.1% of multi-racial non-Hispanics, and 8.7% of Hispanics have diagnosed diabetes. In a separate study of Southeast Michigan's Arab American population, it is estimated that 9.8% have diagnosed diabetes.

What is the Department of Community Health (MDCH) doing to improve this indicator?

The MDCH has several initiatives to prevent diabetes and its complications. In addition to statewide surveillance services, strategic programs and key statewide partnerships and collaborations with other state diabetes and chronic disease leaders and organizations are utilized:

Diabetes Outreach Networks (DONs): Six regional DONs seek to reduce the burden of diabetes on the individual, the family, the community and the health care system by: 1) developing community initiatives to improve health care access and quality; 2) providing professional education and public awareness activities; and 3) identifying and advocating for diabetes care, education and support resources.

Certified Diabetes Self-Management Education Programs: Michigan's Diabetes Prevention and Control Program (DPCP) certifies and supports 90 Diabetes Self-Management Education programs. These programs provide evidence-based diabetes education services, a necessary step toward successful management of the disease.

Diabetes Primary Prevention Initiative: Since Fall 2005, promising evidence-based programs to identify people with pre-diabetes and prevent the onset of diabetes include a statewide collaboration with the WISEWOMAN program (a national model program to improve community diabetes care and prevention), the Northern Michigan Diabetes Initiative, and other innovative programs involving community programs such as the YMCA and the WIC program.

Diabetes Partners in Action (DPAC): The DPCP provides leadership for DPAC, a statewide coalition of leaders and organizations working together to prevent and control diabetes. DPAC plans and implements strategies to improve access to diabetes education, supplies and health care.

National Kidney Foundation of Michigan (NKFM): A key funded partner, NKFM provides prevention programs for disparate populations through beauty salons and barber shop outreach programs ("Healthy Hair" and "Dodge the Punch") and a specialized Head Start prevention program ("Healthy Families"). NKFM also coordinates the state renal plan for prevention of kidney disease

African-American Initiative on Health Improvement Program (AIM-HI): AIM-HI seeks to improve the health of African-Americans in the Detroit metropolitan area, by providing community-based health screenings and health education.

Morris J. Hood Diabetes Center: The Morris J. Hood Diabetes Center at Wayne State University provides care for underserved Type 1 children and screening and follow-up for obese and overweight middle school students.



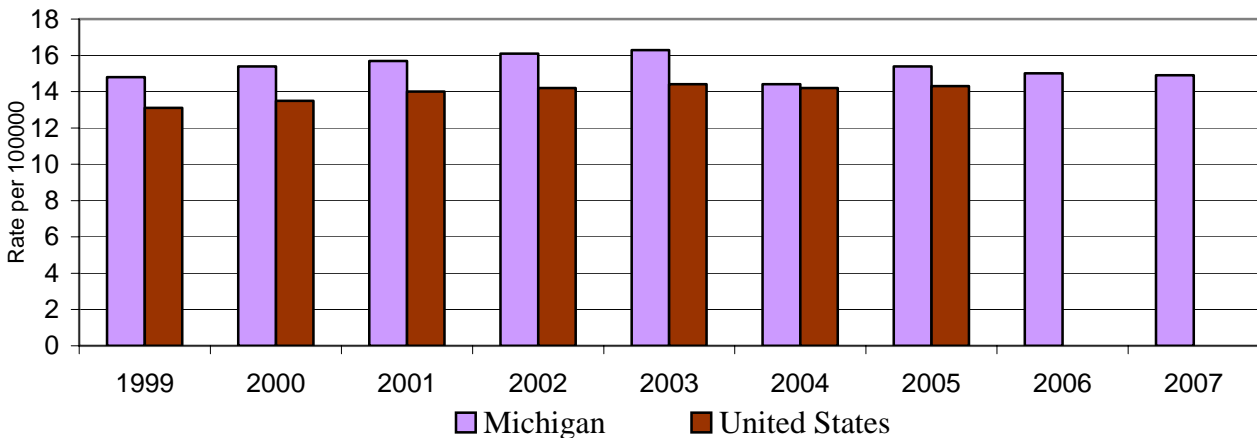
Topic: Diabetes and Kidney Disease

20. Kidney Disease and Related Deaths

Chronic kidney disease (CKD) is a progressive condition in which the kidneys are damaged and lose function slowly over a long period of time. Loss of kidney function means that wastes can build up in the body causing illness. Loss of kidney function also means loss of kidney hormones, which can lead to increased blood pressure, anemia (low blood count), and osteoporosis (weakened bones). The advanced stage of kidney disease, end-stage renal disease (ESRD), requires dialysis or a kidney transplant to maintain life. The two main causes of chronic kidney disease are diabetes and hypertension (high blood pressure), which are responsible for up to two-thirds of the cases. Early detection and treatment are critical in the prevention of the serious and costly complications of kidney disease.

How are we doing?

Age-Adjusted Kidney Disease-Related Death Rates



It is estimated that 940,000 of the adults living in Michigan age 20 years of age or older have CKD, and many do not know it. That means 1 in 8 Michigan adults have CKD.

Over 3,800 new cases of end-stage renal disease were diagnosed in Michigan last year. More than 18,000 people were receiving treatment for end-stage renal disease. Of those, two-thirds were on dialysis and one-third received a kidney transplant.

Once an individual reaches ESRD, the risk of death from other disease also increases. Individuals with ESRD are 20 times more likely to have a cardiovascular-related death than to die of kidney failure. A total of 2,790 Michigan residents died while undergoing dialysis treatment last year; 45% of those deaths were cardiovascular-related.

How does Michigan compare with the U.S.?

The rate of kidney disease has risen 30% over 10 years. Over 26 million Americans have CKD, half a million have ESRD and another 20 million more are at increased risk. Kidney disease is the 9th leading cause of death in the United States. The rate of death from kidney disease has been historically higher in Michigan.

In the United States, the number of cases of ESRD has doubled since 1990. The rate of kidney failure in Michigan is increasing faster than in the United States. The number of ESRD cases is expected to continue to grow with increasing prevalence of kidney disease risk factors such as diabetes.



How are different populations affected?

People at highest risk for CKD are those with diabetes and/or hypertension, family history of kidney disease, seniors, and minorities. African Americans, Native Americans, Hispanic Americans and Asian Americans are all at increased risk for both CKD and ESRD. African Americans are at 3.8 times greater risk for kidney failure compared to Caucasians. Native Americans are at 2 times greater risk and Asian Americans are at 1.3 times greater risk. The relative risk of Hispanics compared to non-Hispanics is about 1.5 times greater.

The burden of ESRD among African Americans is especially troubling. Nationally, African Americans make up about 12 percent of the population but account for 32 percent of people with kidney failure. Among new patients whose kidney failure was caused by high blood pressure, more than half (51.2 percent) are African-American. Among new patients whose kidney failure was caused by diabetes, almost one third (31.3 percent) are African-American.

What is the Department of Community Health (MDCH) doing to improve this indicator?

Since kidney disease can be prevented or significantly delayed, MDCH joined with the National Kidney Foundation of Michigan (NKFM) to develop a plan for intervention. In 1996, NKFM began receiving state funding to implement State Renal Plan programs.

School prevention programs: A recent study found that children and teens diagnosed with Type 2 diabetes are five times more likely to develop kidney disease later in life than those who develop diabetes as adults. By teaching children healthy diet and active lifestyle, we can prevent obesity, Type 2 diabetes and kidney disease.

Healthy Hair Starts with a Healthy Body / Dodge the Punch: Live Right: The goal of these programs is to help prevent kidney disease by raising awareness of its two primary causes – diabetes and high blood pressure – and encouraging people to make healthy lifestyle choices. Hair stylists and barbers in African American communities are trained to become lay health educators. These lay education programs are successful in creating positive short-term outcomes that prompt attention to healthy behaviors. The Agency for Healthcare Research and Quality (AHRQ) highlights these programs in their Innovations Exchange website profile and gives them an evidence rating of “moderate.”

Healthy Families Start with You: This Head Start preschool program promotes healthy lifestyle changes for preschool-aged children as well as their parents, grandparents, or other caregivers. Parents are encouraged to make healthy lifestyle changes for themselves and their families. Kids are taught about eating fruits and vegetables that are the colors of the rainbow. This lay education program is successful in creating positive short-term outcomes that emphasize healthy eating and increased activity.

Increase awareness for kidney disease testing: The increasing prevalence of diabetes is already leading to a measurable increase in the earlier stages of CKD. NKFM is working with primary care providers and insurance companies to increase early screening for kidney disease in high risk populations. In the first year, kidney disease testing for people with diabetes increased 22-47%.



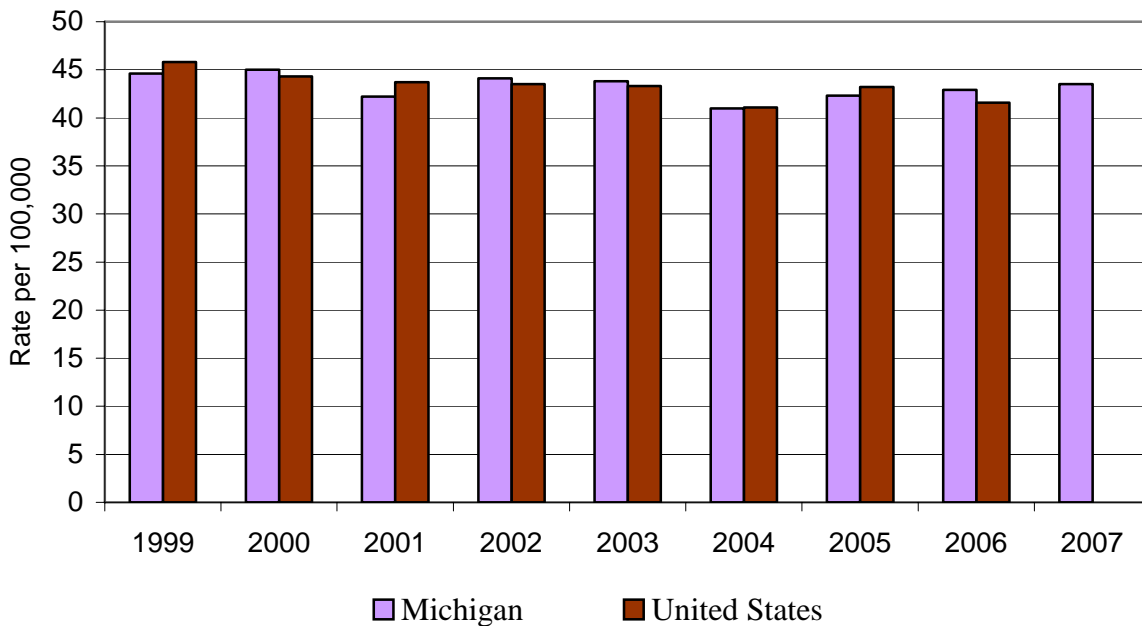
Topic: Respiratory Diseases

21. Chronic Lower Respiratory Disease Deaths

Chronic Lower Respiratory Disease (CLRD) is comprised of many conditions such as emphysema and chronic bronchitis. In emphysema, the small air sacs in the lung (called alveoli) are destroyed. With bronchitis, the lining of the airways that lead to the lungs becomes irritated, inflamed, and swollen. CLRD deaths can be reduced by changes in lifestyle, such as quitting smoking and avoiding exposure to second hand smoke.

How are we doing?

Chronic Lower Respiratory Disease Age-Adjusted Death Rates



Chronic lower respiratory disease is currently the fourth leading cause of all deaths in Michigan and the ninth leading cause of Years of Potential Life Lost (YPLL) for people below the age of 75. The age adjusted death rate for CLRD in Michigan was of 43.5 per 100,000 in 2007.

How does Michigan compare with the U.S.?

Michigan's 2006 age-adjusted death rate of 42.9 per 100,000 was higher than the U.S. rate of 40.4 per 100,000. CLRD was the fourth leading cause of all deaths in the U.S. and the tenth leading cause of YPLL in 1999. Starting in 1999, cause of death is coded using ICD-10, a different coding system than ICD-9. Thus, for certain causes of death, differences in numbers and rates of death in pre- and post-1999 data may be due to this change. For CLRD-related death, the new coding scheme identifies approximately five percent more deaths than the previous coding scheme. This may account for the increased rate of death caused by CLRD beginning in 1999.



How are different populations affected?

CLRD occurs most often in older people. In Michigan, 63% of CLRD deaths occurred to individuals aged 75 or older in 2006. Men are also more likely to die of CLRD than women.

In 2006, the age-adjusted rate was 51.1 per 100,000 for men and 38.1 per 100,000 for women. The difference between men and women is becoming less pronounced. This may be related to changing patterns of life style.

The age-adjusted rate of death from CLRD is generally higher for Whites than for Blacks. In 2006, the rate for Whites in Michigan was 44.7, while the rate for Blacks was 27.7 per 100,000.

What is the Department of Community Health doing to improve this indicator?

As smoking is a major cause of CLRD, the MDCH is implementing a comprehensive statewide tobacco control program to establish smoke-free policies and social norms to decrease tobacco use and second hand smoke exposure. Programs to increase awareness of the dangers of tobacco use and secondhand smoke exposure; preventing the initiation of tobacco use and limiting minors' access to tobacco products are given significant attention. In addition, a statewide media campaign that deliver strategic, culturally appropriate, and high- impact messages in campaigns integrated into the overall state program effort, including prevention, promoting cessation, and secondhand smoke messages.



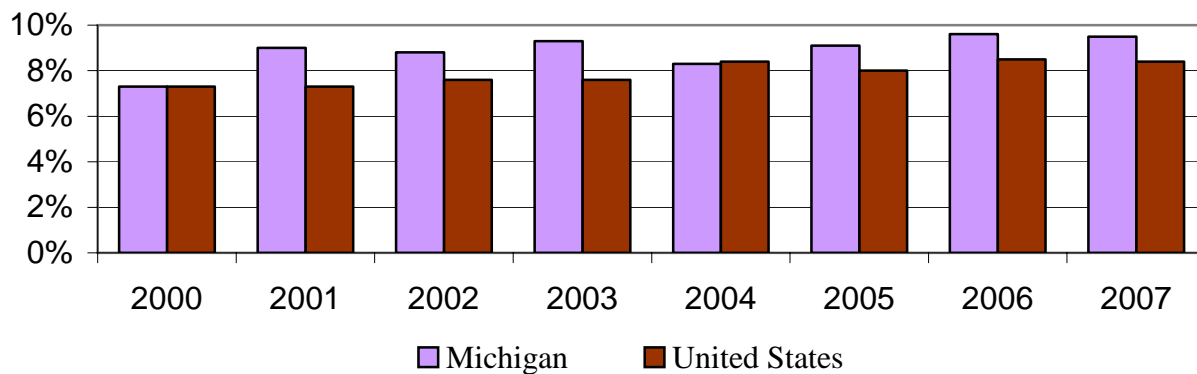
Topic: Respiratory Disease

22. Asthma Hospitalizations

Asthma is a chronic respiratory disease characterized by episodes or attacks of inflammation and narrowing of small airways which result in shortness of breath, wheeze, cough, and/or chest tightness in response to asthma triggers. Many factors can trigger an asthma attack, including allergens, infections, exercise, abrupt changes in the weather, or exposure to airway irritants, such as tobacco smoke. Although there is no cure, asthma can be controlled using long-term control medications and rescue medications, regular assessment of lung function, and avoidance of exposures that make asthma worse.

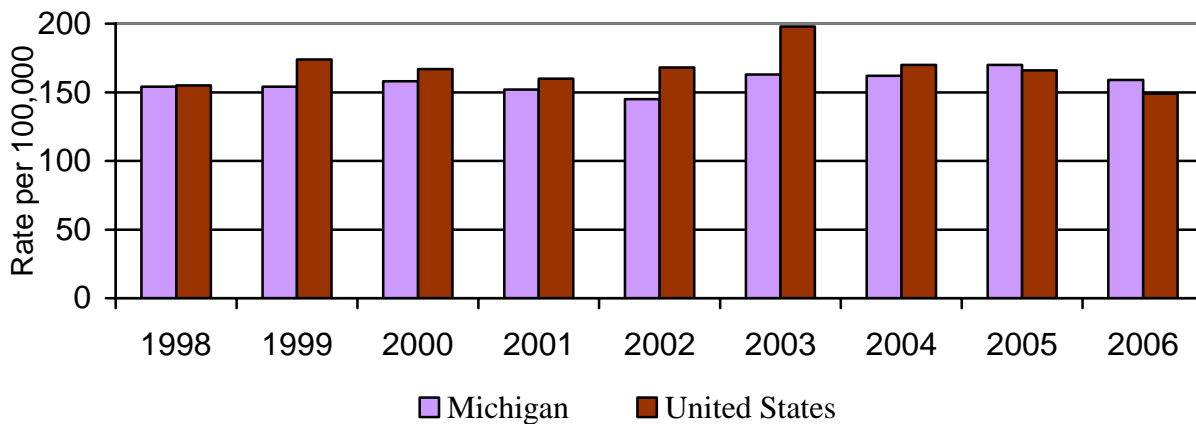
How are we doing?

Percentage of Adults with Asthma



The estimated proportion of Michigan adults ever told by a health care professional that they had asthma was 14.7% in 2007. Among those, 67.3% were estimated to still have asthma. The most recent Michigan data indicate that 233,000 children and 724,000 adults currently have asthma. Over one-half of adults with asthma have had an asthma attack in the past 12 months. Only 24.9% report that they have ever been given an asthma action plan and 38.5% of them did not see their health care professional for a routine check of their asthma in the last year.

Asthma Hospitalizations





In 2006, there were 16,067 hospitalizations due to asthma in Michigan. Asthma is the fourth leading cause of Ambulatory Care Sensitive (ACS) hospitalizations in Michigan, causing 6.1% of all these hospitalizations in the year 2006. ACS conditions refer to those conditions for which hospitalizations could have been avoided, or conditions that could have been less serious, if they had been treated early and appropriately. Since 2000, hospitalization rates among adults age 35 years and older have significantly increased, with no significant change observed for other age groups.

How does Michigan compare with the U.S.?

The prevalence of asthma in Michigan adults is very similar to that of the nation as a whole. Asthma hospitalization rates for children and adults in the Michigan are not significantly different than those for the US.

How are different populations affected?

A higher proportion of adult women (11.0%) than men (7.9%) reported they currently had asthma in Michigan during 2007. During childhood, rates are higher among males than females. After age 15 rates among females are higher than rates for males. Asthma hospitalization rates are highest in younger children (0-4 years of age); however, the largest numbers of hospitalizations occur in adults.

The proportion of Michigan adults with asthma was higher in low-income households and among adults with less than a college degree. Asthma hospitalization rates for people living in poor areas were four times higher than those for people living in highest income areas (top 20% of median household income) (2000-2002 data).

Asthma hospitalization rates in Michigan are three to five times higher in Blacks than in Whites, depending on age group, 2004-2006. The racial disparity in hospitalization rates persists across all income groups, with Black residents of high-income ZIP codes having rates 3.8 times higher than White residents of high-income ZIP codes.

What is the Department of Community Health doing to improve this indicator?

In 2000, the Asthma Initiative of Michigan (AIM) was formed to implement the Michigan Asthma Strategic Plan. AIM includes the Michigan Asthma Communication Network, eleven local asthma coalitions, health care providers, schools and workplaces across Michigan. A state-level advisory committee guides and monitors the strategic plan implementation. For further information, please visit: <http://www.getastmahelp.org/> or call the toll-free information line 1-866-EZLUNGS.

The Asthma Prevention and Control Program is currently working on replicating the asthma case management services, based on the effective and sustainable model used by the Asthma Network of West Michigan (ANWM), in high-burden areas. These high-burden areas include the counties of Genesee, Saginaw and Wayne. This program is reimbursed by contracting health plans and has shown to significantly reduce emergency department visits and hospital stays.

With federal and state funding, the MDCH Asthma Control Program is identifying and eliminating asthma disparities, assessing asthma burden and response, supporting partnerships to address asthma, partnering with health plans to promote the use of national guidelines for asthma diagnosis and management, improving systems of care, reducing barriers to self-management in people with asthma, and reducing exposures to environmental factors that cause and/or exacerbate asthma. The MDCH also reviews all asthma deaths in children and young adults to identify ways to prevent these deaths in the future. The MDCH Asthma Prevention and Control Program conducts evaluation of its partnerships, surveillance system and interventions.



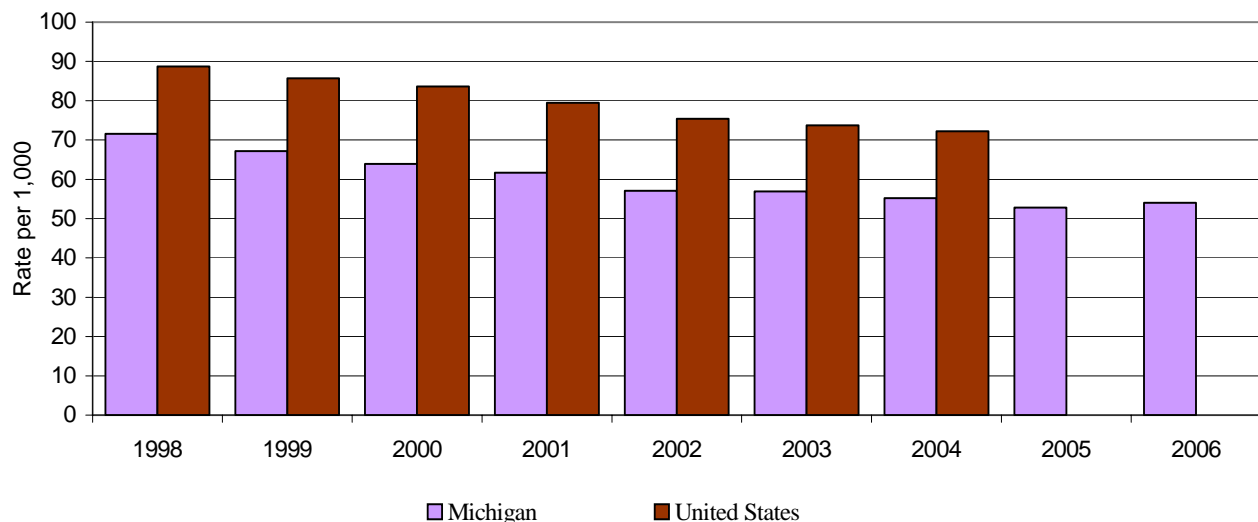
Topic: Maternal Health

23. Teen Pregnancy

The teen pregnancy rate is an estimate of the proportion of women aged 15-19 who had a live birth, induced abortion, or miscarriage during a given year. Teen mothers are more likely than adult mothers to have dropped out of high school, be unemployed, and lack parenting skills. In addition to increased lifetime risks of social and economic disadvantage to both the teens and their children, there are additional health risks for infants born to teen-aged mothers. These increased risks include low birth weight, pre-term delivery, fetal distress, and other adverse outcomes.

How are we doing?

Teenage (Age 15-19) Pregnancy Rate



In 2006, there were an estimated 19,669 pregnancies among Michigan teenagers, or a rate of 54.0 per 1,000 females, ages 15-19 years old. This rate has been decreasing over the past nine years slowly, dropping from 71.1 in 1998 to 54.0 per 1,000 females in 2006. Estimates from the 2004 Michigan Pregnancy Risk Assessment Monitoring System (PRAMS) survey indicate that about 79.3% of births to teens were unintended.

How does Michigan compare with the U.S.?

In 2004, the Michigan teen pregnancy rate of 55.2 per 1,000 was lower than the U.S. rate of 72.2 per 1,000. Michigan has been consistently lower than the United States in teen pregnancy rates in the past decade.

How are different populations affected?

In Michigan, pregnancy rates for ages 15-17 are lower than for those ages 18-19 and both rates have declined in recent years. Pregnancy rates for ages 15-17 decreased from 47.0 per 1,000 in 1996 to 28.2 per 1,000 in 2006. For those aged 18-19, pregnancy rates have decreased from 124.3 per 1,000 in 1996 to 94.6 per 1,000 in 2006.



What is the Department of Community Health doing to improve this indicator?

The MDCH works to prevent teen pregnancies through family planning services and efforts of the Michigan Abstinence Program (MAP), Teen Pregnancy Prevention Initiative (TPPI), Child and Adolescent Health Centers (CAHC) and the Talk Early & Talk Often Program (TETO).

Family Planning providers offer contraceptives and reproductive health services to encourage fertility control. The educational and counseling components of the programs help to reduce health risks and promote healthy behaviors. Services include encouraging abstinence and parental involvement as appropriate for sexually active teens. The Family Planning program maintains a teen advisory group on the provision of teen-friendly services. One-third of the populations served by the Family Planning program are teens. www.michigan.gov/familyplanning

The **Michigan Abstinence Program (MAP)** aims to positively impact adolescent health by promoting abstinence from sexual activity and related risky behaviors, such as the use of alcohol, tobacco and other drugs. An abstinence-only, health behavior change approach targeting 12-18 year old youth and their parents/adults/caregivers is used. Community agencies throughout Michigan are funded to provide youth with intense and direct programming which promotes personal respect and responsibility; builds skills for dealing with peer pressure and are age, gender and culturally relevant. MAP activities include: youth programming, community advisory councils, community awareness activities, parent/adult/caregiver education, media campaigns and educational/promotional items. (www.michigan.gov/abstinence)

The **Teen Pregnancy Prevention Initiative (TPPI)** aims to reduce the rate of teen pregnancy in Michigan for youth ages 10-18. A comprehensive, evidence-based, health behavior change approach targeting youth and their parents/adults/caregivers will be used. Community agencies throughout Michigan will be funded to provide a comprehensive evidence-based pregnancy prevention program that targets the sexual and non-sexual factors that lead to delayed initiation of sex and increased condom or other contraception use. Community agencies throughout the State will be funded to provide youth with intense and direct programming which promotes personal respect and responsibility, builds skills for dealing with peer pressure and is age, gender and culturally relevant. (www.michigan.gov/tppi)

Child and Adolescent Health Center (CAHC) services are aimed at achieving the best possible physical, intellectual, and emotional status of children and adolescents by providing services that are high quality, accessible, and acceptable to youth. The centers provide comprehensive primary care services and health education on a variety of health topics including pregnancy prevention. Through primary care, one on one counseling and health education in group settings, research based programs are implemented to reduce the risk factors associated with teen pregnancy. The total number of pregnancy tests (along with the number of positive tests) is tracked on required quarterly data reports. (www.michigan.gov/cahc)

Talk Early & Talk Often (TETO) is a grassroots parent education program focused on giving parents of middle school students the tools they need to talk to their children about the important issue of sexuality. When given the information and tools, they can be instrumental in providing critical messages to their children that can help them abstain from sexual intercourse and avoid HIV, sexually transmitted diseases and early pregnancy. TETO town hall meetings and district-wide training sessions will assist parents who are looking for additional information and tools to help increase their comfort level in talking with their children on this important topic. (www.michigan.gov/talkearly)

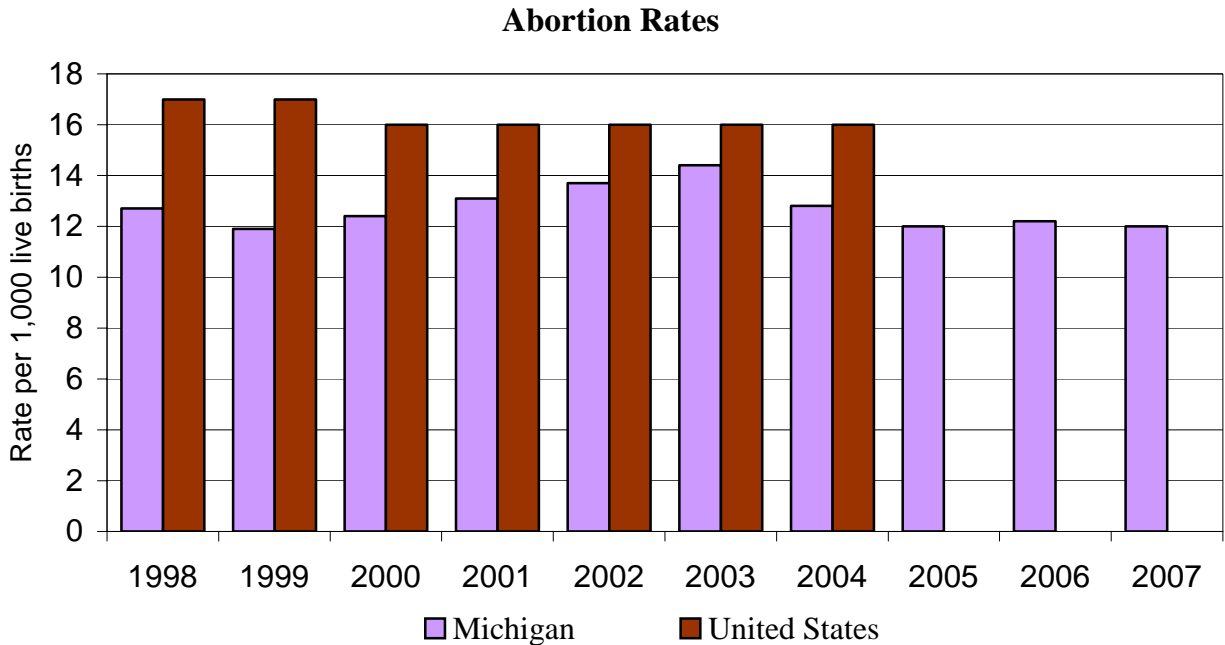


Topic: Maternal Health

24. Abortions

Induced abortions typically result from unintended pregnancies. While abstaining from sex is the most successful means of avoiding unintended pregnancies, effective family planning services can reduce the number of abortions.

How are we doing?



There were a total of 24,683 induced abortions that occurred in Michigan in 2007, resulting in a rate of 12.0 per 1,000 women aged 15-44. Abortion rates have risen and fallen in the past ten years, with the 1999, 2005, and 2007 rate of 12.0 per 1,000 women being the lowest.

How does Michigan compare with the U.S.?

The Michigan abortion rate has consistently been lower than the U.S. rate. In 2004, the most recent year for which national figures are available, the Michigan abortion rate of 12.8 per 1,000 was lower than the U.S. rate of 16.0 per 1,000.

How are different populations affected?

In 2007, 88.2% of induced abortions in Michigan were to unmarried women. In 2005, 51.3% of abortions were to Michigan women under 25 years old; this percentage decreased slightly to 51.1% in 2007. The proportion of abortions to teenagers decreased from 18.7% in 2005 to 18.5% in 2007.



What is the Department of Community Health doing to improve this indicator?

Plan First! a Family Planning Waiver was launched in 2006 to hasten the progress made in abating unintended pregnancies.

The MDCH makes family planning services available and supports the Michigan Abstinence Program, Adolescent Health Centers, and the Talk Early & Talk Often Initiative. Family planning providers offer contraceptives and reproductive health services to encourage fertility control that promotes the health and well-being of women, children, and families. The educational and counseling components of the program help to reduce health risks and promote healthy behaviors. In 2007, family planning services were provided to 142,432 women and 6,697 men.



Topic: Maternal Health

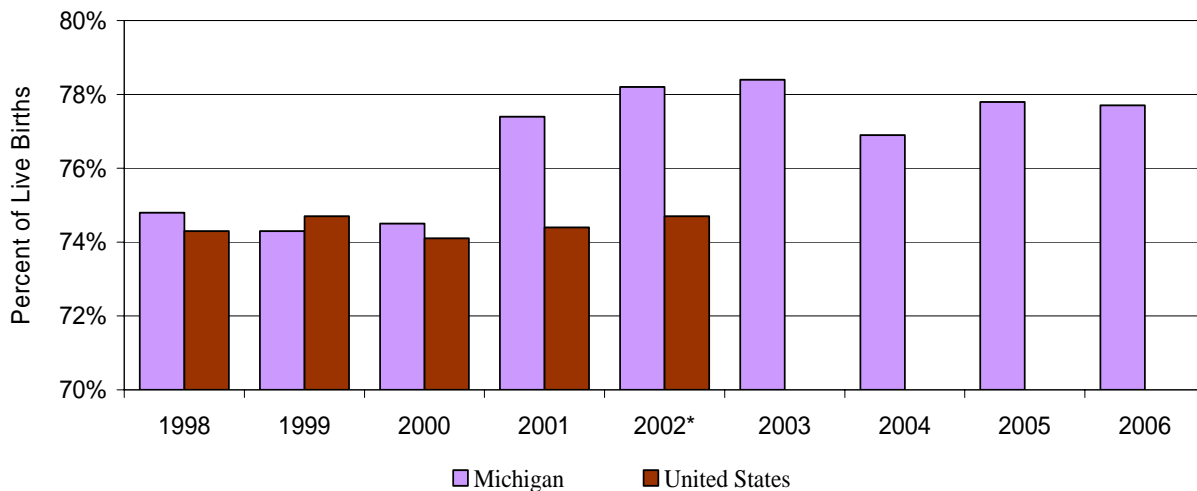
25. Adequacy of Prenatal Care

Adequate prenatal care, including initiating care in the first trimester and receiving regular care until delivery, can be an indicator of access to care and may result in fewer birth complications and healthier babies. Early prenatal care has a more significant impact for high-risk groups such as teens and low-income women.

The Kessner Index is a standard measure of prenatal care based on information obtained from birth certificates. It combines information on the month prenatal care began, the gestational age at birth, and the number of prenatal visits.

How are we doing?

Percent of Live Births with Adequate Level of Prenatal Care



*U.S. prenatal care rates are not shown after 2002. Not all states implemented the 2003 revised birth certificate, resulting in data incompatibilities.

In 2006, 77.7% of live births in Michigan were to mothers with an adequate level of prenatal care. The percentage of mothers with adequate levels of prenatal care increased slightly over the past 10 years from 74.8% in 1998 to 77.7% in 2006. Michigan is slowly heading in the right direction.

How does Michigan compare with the U.S.?

The percentage of live births to mothers with an adequate level of prenatal care in Michigan is slightly higher than the U.S. level. In 2002, the most recent year for which national figures are available using the Kessner Index, 74.7% of mothers received adequate levels of prenatal care in the U.S compared to 76.2% in Michigan. At that time, Michigan was ranked 27th among the states for this indicator.

How are different populations affected?

In 2006, women age 30-34 and 35-39 years were most likely to start prenatal care in the first trimester (88.9% and 88.3%) while women under age 20 are least likely to initiate early prenatal care (68.2%). In



rates of adequate levels of prenatal care, Black women are least likely to receive adequate levels of care (69.8%) compared to Whites and other races (86.4% and 78.1%, respectively).

What is the Department of Community Health doing to improve this indicator?

The Department has different strategies and activities targeted to improving the timely and adequate prenatal care. The Maternal and Infant Health Program (MIHP) provides services to pregnant Medicaid beneficiaries identified as needing assistance to assure adequate and appropriate medical care and support services. Transportation to medical appointments and services is a frequently used service of MIHP.

The Prenatal Care Clinic program is a demonstration project designed to facilitate healthy pregnancy outcomes in high-risk communities around Kalamazoo. The current project is addressing bereavement and provides preconception home visits to families who have had a fetal or infant loss in Kalamazoo County. The project's goals are to prolong the pregnancy interval, plan the next pregnancy and reduce morbidity, and mortality in subsequent pregnancy outcomes.

The Department supports the Nurse Family Partnership. This is an evidence-based home visitation program that provides intensive prenatal care support and education services to first-time, low-income pregnant women to enroll them by 16 weeks of pregnancy, and no later than 28 weeks, in the Michigan cities of Benton Harbor, Detroit, Grand Rapids, Kalamazoo, and Pontiac. In order to reduce health disparities, African Americans are the major target population in Michigan, although services are not denied to any eligible recipient in the participating communities. Goals of the program include improving pregnancy outcomes by helping women engage in good preventive health practices, including thorough prenatal care from their healthcare providers, improving their diets and reducing use of cigarettes, alcohol and illegal substances.

The Department provides Healthy Kids Medicaid for pregnant women who need health insurance and meet the expanded income eligibility criteria. In this special program, women will have Medicaid coverage for health care services, including prenatal care through the second month postpartum for follow-up care.

The Department also provides another option for pregnant women when the criteria for Healthy Kids are not met. For instance, these women may qualify for the Maternity Outpatient Medical Services (MOMS) program which offers outpatient antepartum care and in-patient labor and delivery.

The WIC program refers pregnant women to healthcare and social services during pregnancy. Of Michigan women enrolled in WIC, 74.3% enter prenatal care during the first trimester. The WIC Division's Project FRESH provides access to Michigan-grown fruits and vegetables and nutrition education for low-income pregnant women.

The Department provides prenatal and perinatal testing services that assist in diagnosing life-threatening maternally-transmitted infectious diseases..

Finally, to encourage early access to prenatal care, the Title X Family Planning program offers care referrals to women at the time of a positive pregnancy test.

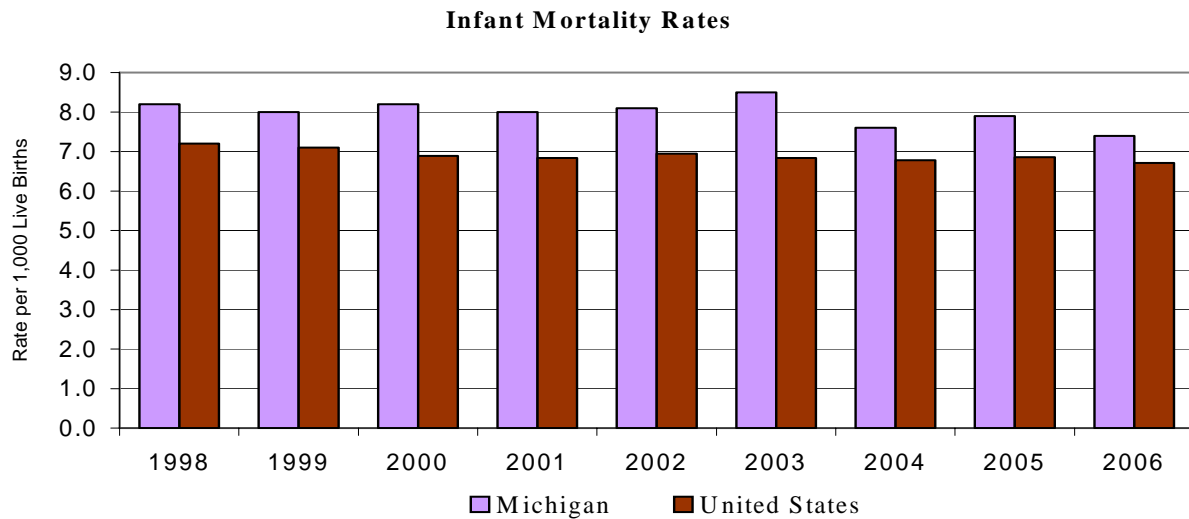


Topic: Infant and Child Health

26. Infant Mortality

Infant mortality refers to the number of deaths to children under age one (infants). It is measured as Infant Mortality Rate (IMR) that means the number of infant deaths per 1,000 live births. Infants with low birth weight or pre-term delivery have a higher risk of infant death. Socioeconomic status, lifestyle behaviors, health of the mother before pregnancy, prenatal care, and medical care for the infant are factors that impact infant mortality.

How are we doing?



In 2006, there were 940 infant deaths in Michigan, resulting in a death rate of 7.4 per 1,000 live births (infant mortality rate – IMR). During the past 10 years, Michigan’s infant mortality rate has been fluctuating with a decline below 8.0 per 1,000 for the first time in 2004. The rate has remained below 8.0 in 2005 and 2006. Post neonatal deaths, babies who die after the 28th day of life, make up almost one third of Michigan’s infant deaths annually. The state has experienced a dramatic decline in SIDS over the last 10 year, a 72% reduction since the national Back to Sleep campaign. However, we continue to be challenged by healthy infants who die in unsafe sleep environments. In 2006, 52 Michigan babies, or **one child every week** died because of unsafe sleep practices.

How does Michigan compare with the U.S.?

Michigan’s infant mortality rate is consistently above the national average. In 2006, Michigan’s infant mortality rate of 7.4 per 1,000 was higher than the U.S. rate of 6.7 per 1,000 live births.

How are different populations affected?

Historically, the Black infant mortality rate is more than two-and-a-half times that of the White infant mortality rate. In 2006, the Michigan infant mortality rate for Black infants was 14.8 per 1,000 live births, while for White infants it was 5.4 per 1,000. Infant mortality rates are double for unmarried moms in Michigan, 10.4 per 1000 for unmarried mothers compared to 5.4 per 1000 for married mothers. Babies born to mothers with inadequate prenatal care had an infant mortality rate of 18.2 per 1000 in 2006, three times greater than the rate of 6.1 per 1000 for infants born to mothers with adequate prenatal care. Infant mortality rates are higher for babies born to teen mothers. For instance, in 2006, infants born to Michigan



mothers under age 20 had a death rate (IMR) of 10.9 per 1,000. Mothers who use tobacco during pregnancy also experience poorer birth outcomes, with infant mortality rates of 9.9 per 1000.

What is the Department of Community Health doing to improve this indicator?

The Governor signed into law the Safe Delivery of Newborns Act of 2001 which encourages the placement of unwanted newborns in a safe environment. The law allows for an anonymous surrender of an infant, less than 72 hours of age, to an Emergency Service Provider. There have been 64 successful surrenders in Michigan since the Law went into effect, an average of 10 – 12 babies per year. Governor Jennifer M. Granholm declared September as Infant Safe Sleep Month in Michigan to help stem the growing tide of deaths caused by babies being put to sleep in unsafe environments. An on-line Infant Safe Sleep training module has been developed and is available to health care providers and the public.

The Michigan Women, Infants, and Children program (WIC) provides nutrition, education, and referral services to more than 200,000 moms, babies, and children less than age 5 every month. Services include breast-feeding education and support, infant formula, and nutrition education referrals to other community health services. WIC services generally result in increased birth weight, longer gestational age, and lower incidence of pre-term birth.

Interconception Care Projects are funded in 11 target communities in Michigan: Berrien, Genesee, Ingham, Kalamazoo, Kent, Macomb, Oakland, Saginaw, Washtenaw, Wayne and in Detroit. Women are enrolled into direct service pilot projects that provide evidenced based services to women with a previous poor pregnancy outcome. Registered nurses provide home-based education and case management services to improve health before a subsequent pregnancy. The projects' goals are to reduce the number of premature and low birth weight babies, increase time intervals between pregnancies, and increase the number of pregnancies which are planned.

The Maternal and Infant Health Program (MIHP), through contracts with the Department and other providers, offers services to Medicaid-eligible pregnant women and infants who receive support services from a nurse, social worker, and nutritionist.

The Nurse-Family Partnership (NFP) is a program in which nurses visit low-income women in their homes during their first pregnancies through the first two years of their children's lives. The major goals are to improve pregnancy outcomes by helping women improve health behaviors; improve child health and development by teaching competent and responsible parenting skills; and improve families' economic self-sufficiency. The Nurse-Family Partnership program is available in Benton Harbor, Detroit, Grand Rapids, Pontiac and Kalamazoo.

Michigan Sudden Unexpected Infant Death Programs aim to reduce infant mortality through efforts to educate the public and providers about the risks for **SUIDS** and sudden infant death, to provide grief support for those affected by an infant death, and to promote an optimal outcome for the next pregnancy. An autopsy and death scene investigation reimbursement component serves to improve the information available on cause and manner of sudden unexpected infant death.

Fetal and Infant Mortality Review Teams are in place in 16 Michigan sites, establishing core MCH surveillance in the communities which account for approximately 75% of Michigan's infant deaths. These multidisciplinary review teams systematically examine fetal and infant deaths to determine gaps in care and resources in a community, and factors that contribute to these poor pregnancy outcomes.

Michigan newborns are tested for 50 disorders, many of them potentially fatal and/or debilitating. The **Newborn Screening Program** is conducted jointly by the Bureau of Laboratories and the Bureau of Epidemiology. Program efforts assures that: 1) all Michigan infants are screened; 2) follow-up is provided for infants with positive and borderline screening tests including access to treatment and a medical home, and 3) health outcomes are assessed and monitored through the long term follow-up.



Topic: Infant and Child Health

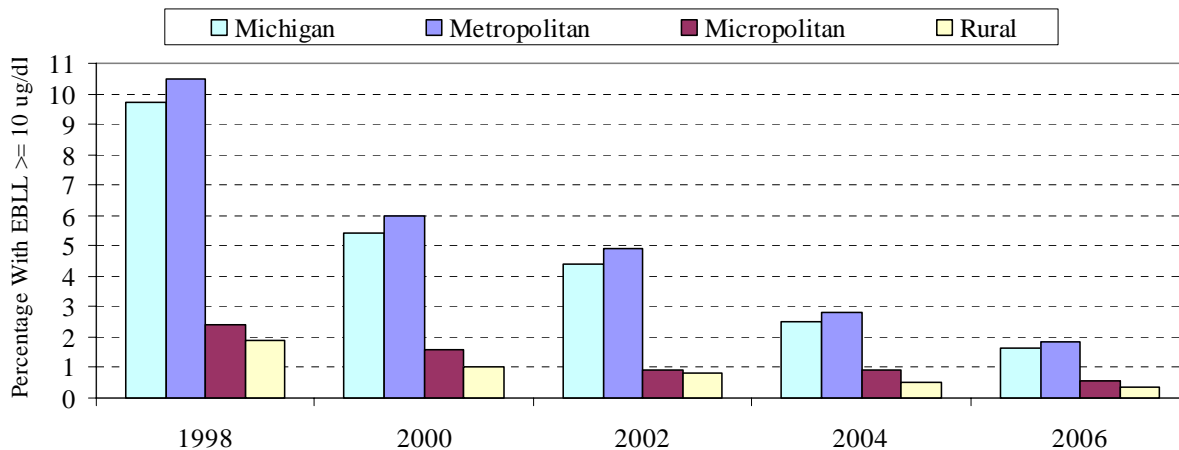
27. Children’s Blood Lead Levels

Lead exposure remains one of the most serious environmental threats to a child’s health and has significant physical, cognitive, and behavior effects. For children under six years of age, CDC has defined an elevated blood lead level (BLL) as $>10 \mu\text{g/dL}$, but serious health effects have been seen at even lower levels. Data show that average BLLs in children decreased since the late 1970s but that elevated BLLs remain more common among low-income children, urban children, and those living in older housing.

The dramatic decline in BLLs from the late 1970s through the early 1990s resulted primarily from the phase-out of leaded gasoline and the resulting decrease in lead emissions, although other exposures also decreased. While air lead levels and lead emissions continued to decrease during the 1990s, most of this decline occurred before 1995. The primary remaining sources of childhood lead exposure are deteriorated lead paint and soil and dust in and around old housing. Lead poisoning also occurs as a result of remodeling and renovation activities in older homes. New housing construction and the demolition and rehabilitation of older housing, using lead safe work practices, may be contributing to a continued decline in BLLs.

How are we doing?

**Percentage of Tested Children Under Age 6 Years
With Venously Confirmed Elevated Blood Lead Levels
Greater Than or Equal to 10 ug/dL**



An estimated 1.4% of the population of children tested in Michigan from birth to six years is lead-poisoned, with the majority of these children eligible for publicly funded services such as Medicaid, MI Child, WIC, Head Start and Early Head Start. This rate has substantially decreased from 1998 when the percentage was 9.7%. CDC indicates that lead poisoning in children should be eliminated by 2010, a goal that Michigan is working toward achieving. Preliminary data for 2008 indicate that the number of children tested for lead poisoning has increased while the number of children poisoned continues to decline.



How does Michigan compare with the U.S.?

Michigan ranks seventh in the nation in the number of children lead poisoned, primarily due to deteriorating housing stock and the resulting dust and debris. While significant strides have been made during the last ten years, the number of Michigan children poisoned is still above the national rate.

How are different populations affected?

Lead poisoning is more likely to be seen in low-income populations living in sub-standard or deteriorating housing, so while it is found in children statewide; it tends to be concentrated in older urban areas. All children living in the City of Detroit are considered to be at-risk, but risk is found statewide. Fourteen communities across Michigan have been identified as high-risk due to the high percentage of pre-1950 housing and greater prevalence of poisoned children. Children can be poisoned if exposed to lead hazards during renovation or remodeling of houses built before 1950. Children may also be exposed as result of cultural practices.

What is the Department of Community Health doing to improve this indicator?

The Department has identified 14 communities that represent the areas of greatest risk. Several activities occurring in these target communities include: coalition activities aimed at eliminating childhood lead poisoning through public education and outreach, advocacy, and building community partnerships, local efforts to increase testing of children within the community, and securing additional funding for lead hazard abatement services.

Case management training was conducted at four local health departments and was attended by public health nurses from seven local public health agencies. These trainings assure that lead poisoned children from the represented areas can receive comprehensive case management services. The training focuses on the eight components of effective case management which includes: client identification and outreach; individual assessment and diagnosis; service planning and resource identification; linkage to needed services; service implementation and coordination; monitoring of service delivery, and advocacy.

The Childhood Lead Poisoning and Control Commission has been re-established with four priority areas identified by the members. These four priority areas include increased testing of high-risk children, legal protections and liabilities, lead hazard abatement loans and credits and sustainable funding.

Print material has been developed detailing the two new lead laws in Michigan that will have a significant impact on renovation and remodeling activities across the state.

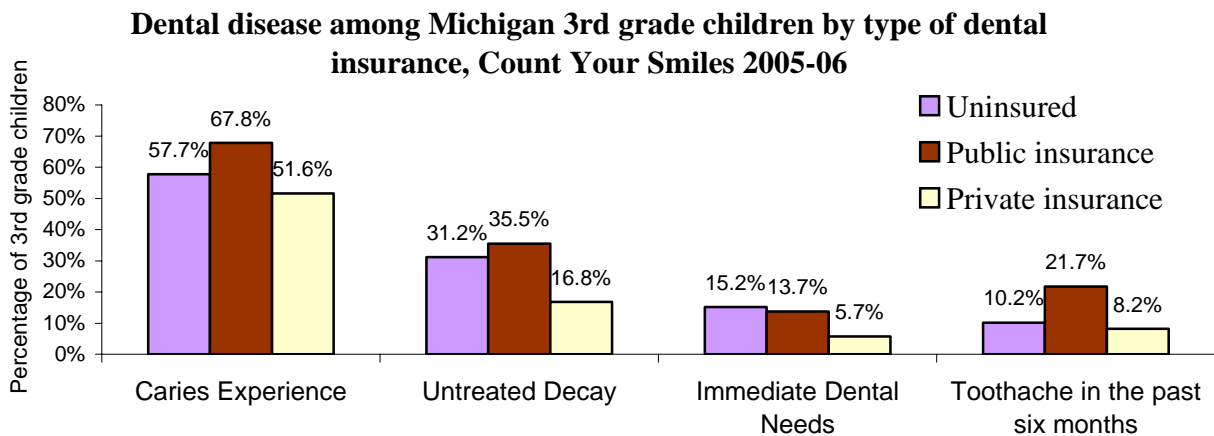
Secondary prevention efforts will be increased. These efforts will focus on children who have BLLs below the CDC defined level of concern and pregnant women. Intensive education and outreach to these potentially at risk families will hopefully result in fewer children becoming poisoned. Efforts to improve awareness of different cultural practices are essential to assuring appropriate interventions and outreach activities targeting a variety of ethnic populations.



Topic: Oral Health

28. Improving Oral Health Among Third Grade Children

Dental caries (tooth decay) is the single most common chronic childhood disease. In Michigan, 28% of children account for 75% of the disease. Nearly one in ten third grade children in Michigan have immediate dental care needs with signs or symptoms of pain, infection or swelling. One in eight parents of 3rd grade children report that their child had a toothache when biting or chewing in the past six months. One in four Michigan 3rd grade children has untreated dental disease.



How are we doing?

Early childhood caries (ECC) is rampant caries of the primary dentition of infants and toddlers caused by frequent and prolonged exposure to carbohydrates (sippy cups, putting the baby to bed with a bottle of milk or other liquid other than water). Approximately 38% of children 1-2 years of age and 56% of children 2-3 years of age experience ECC.

Lack of dental insurance poses a significant barrier to obtaining dental care for children. Nearly one in six 3rd grade children (15.1%) lack dental insurance – twice the number of Michigan children who lack medical insurance. Uninsured children have significantly more dental disease and substantially less access to dental services.

How does Michigan compare with the U.S.?

In comparison to the United States, Michigan remains close in many measures. In Michigan, 25% of children, ages 6-8 have untreated dental decay while in the U.S. 29% of children do. Michigan has 58% of children with caries experience in their primary or permanent teeth, age 6-8, while the U.S. has 52%. Only 23.3% of 3rd grade children in Michigan had sealants present on first molar teeth, ranking Michigan in the bottom quartile of the nation in lack of a dental sealant program.

Michigan exceeds the U.S in community water fluoridation. While only 67% of the U.S. has water fluoridation, 87% of Michiganders have community water fluoridation.

How are different populations affected?

Sealant rates varied geographically with Michigan’s lowest rate of 19.2% occurring in the Southern Lower Peninsula. Sealant rates were similar across racial and ethnic groups except in Hispanic children



whose sealant rate was 14.6%. Uninsured children had significantly lower sealant rates, 16.8% compared to publicly insured, 26.7% or privately insured, 24.3%.

Roughly one in nine Michigan 3rd grade children, 11.2%, encountered problems that prevent them from obtaining dental care in the past year. Increased difficulty in obtaining dental care is common among all racial and ethnic minorities as well as children not covered by private dental insurances. Cost and a lack of dental insurance were the two most frequently cited reasons for failure to obtain dental care.

Low-income children and some racial/ethnic minorities are affected by ECC at higher rates. The social costs of ECC are enormous. In addition to the obvious pain and suffering, the social costs of ECC include: poor eating habits, speech problems, low self-esteem and distraction in learning. Disparities in populations for dental disease exist among geographic regions of the state.

What is Department of Community Health doing to improve this indicator?

The department is actively working to build a sustainable and effective oral health infrastructure to reduce the prevalence and impact of dental disease on children in Michigan. The following programs are being developed to address dental disease in children.

- The Healthy Kids Dental program is a model program in 59 counties that has greatly increased dental access for 195,000 Michigan children. Expansion of Healthy Kids to all counties in Michigan could significantly reduce dental decay in children. Child utilization of dental services in Healthy Kids counties is 60% compared to 28% for all of Medicaid.
- Dental Sealant Program for 3rd grade children in underserved areas
- Fluoride Varnish Program
 - The Michigan Oral Health Program is working with Early Head Start and Head Start facilities to pilot a fluoride varnish program for children 0-3yrs and 3-5 yrs respectively. Fluoride varnish is a protective coating that is painted on the teeth of children.
- Oral Health Intervention Program for High-Risk Pregnant Women and Infants
 - This program will include interventions to reduce the bacteria in the mouths of pregnant women and minimize the spread of bacteria to infants and possibly reduce the risk of premature and low weight births. This program will also include educational information to reduce exposure to sodas, juices, milk and other decay-causing liquids that are given in baby-bottles and sippy cups.
- Improved Utilization of PA 161
 - PA 161 allows hygienists to provide preventive dental hygiene measures (sealants, fluoride varnish) to underserved populations under relaxed dental supervision.
- Community Water Fluoridation
 - Community water fluoridation is a preventable practice that has been recognized as one of the 10 greatest achievements of the 20th century (CDC 1999). Water fluoridation reduces or eliminates disparities in preventing dental caries among different socioeconomic, racial and ethnic groups. Every \$1 invested in community water fluoridation saves \$38 dollars in averted costs.

For more information, please go to the MDCH/Oral Health web page: <http://www.michigan.gov/oralhealth>.

The following documents referenced in this section can be accessed through this hyperlink:

Oral Health Disease Burden Document, 2006

Count Your Smiles 2005-2006 Survey Report (after October 1, 2006)

State Oral Health Plan, 2006 "A Plan of Action for Improving the Oral Health Status of Michigan Residents"

Fact Sheets on Community Water Fluoridation, Fluoride Varnish and Dental Sealants.



Topic: Mental Health

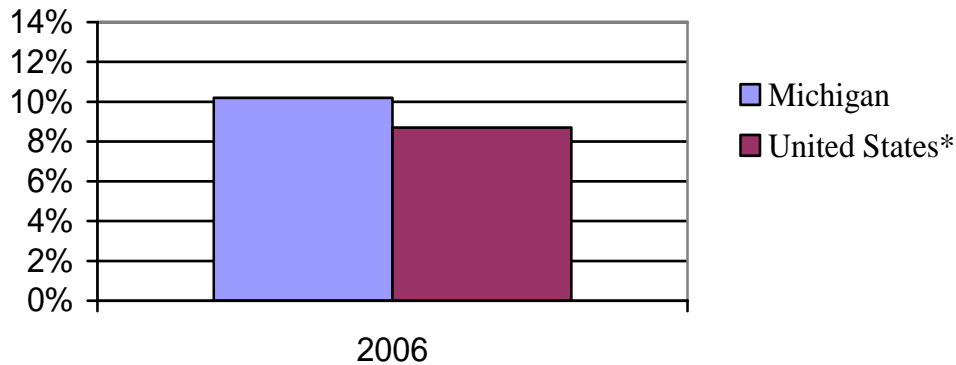
29. Depression

Research has identified two main types of depression. The first type is a major depressive disorder which may be recurrent and is characterized by at least one major depressive episode of five or more symptoms for at least two weeks. The second type is dysthymia, which is a chronic moderate type of depression that often goes undiagnosed because it does not greatly impair functioning. Dysthymia is characterized by disturbances in eating (poor appetite or overeating), sleeping (insomnia or oversleeping) and low energy or fatigue symptoms.¹

How are we doing?

Based on data from the 2006 CDC Anxiety and Depression Module, the prevalence of current major depression was higher in Michigan [Michigan: 10.2% (95% CI: 9.2-11.3)] than in the United States* [United States*: 8.7% (95% CI: 8.3-9.1)].^{2,3} Many highly-effective therapies are currently available to individuals with depression⁴, but less than 20% of these individuals are currently being treated for this condition.⁵ Without treatment, depression itself can become a chronic condition, and it is expected that by 2030, depression will surpass heart disease to become the number one burden of disease in the world.⁶

Current Major Depression (BRFS)



* Data from 38 states, Washington D.C., Puerto Rico, and the Virgin Islands.

How does Michigan compare with the U.S.?

Using a broader measure of poor mental health, Michigan residents in 2007 were estimated to experience an average of 3.7 mentally unhealthy days (95% CI: 3.4-4.0) within the past month, compared with an average of 3.4 mentally unhealthy days (95% CI: 3.3-3.5) for the U.S. population. Based on the 2007 Behavioral Risk Factor Survey (BRFS), 11.0% (95% CI: 10.0-12.1) of Michigan adults reported poor mental health, which included stress, depression, and problems with emotions, on at least 14 days in the past month. Michigan’s prevalence of poor mental health is comparable to that of the U.S. population [10.1% (95% CI: 9.9-10.4)].⁷

How are different populations affected?

Depression is more prevalent in vulnerable populations such as persons who live in poverty and persons who have one or more physical health problems. The likelihood of having poor mental health was higher for women than for men [12.8% (95% CI: 11.6-14.1) for women compared to 9.1% (95% CI: 7.7-10.6)



for men], and for individuals whose household income levels were below \$20,000 [19.7% (95% CI: 16.6-23.3) compared to 8.7% (95% CI: 6.8-11.1) for those with a household incomes of \$50,000 to \$74,999).²

Recent studies have shown that the prevalence of reported depression is higher among those with other chronic conditions. For example, Michigan residents with other chronic conditions, such as having a disability, coronary heart disease, heart attack, diabetes, and being obese, were more likely to have major depression when compared to individuals without each chronic condition.⁸

Children of depressed mothers are more likely than other children to have behavioral, cognitive, socio-emotional, health and academic problems.⁹ Estimates indicate that one in every 5 children and adolescents have a mental disorder.¹⁰

Depression can also be a problem for adults over 65 years of age.⁸ Untreated depression is the most common psychiatric disorder and leading cause of suicide within the United States elderly population.¹¹

What is the Department of Community Health doing to improve this indicator?

In 2005, MDCH applied for federal funding to implement the CDC anxiety and depression optional module within the 2006 Michigan BRFS. MDCH received this funding and has since developed a publication entitled “Depression among Michigan Adults: Results from the 2006 Michigan Behavioral Risk Factor Survey” that focuses on the statistical findings from this module. More specifically, this publication includes prevalence estimates of depression in Michigan’s adult population, and allows for better estimates of depression among people with other chronic conditions.⁸

Also in 2005, a group of over 80 stakeholders developed a strategic plan to address prevention and control of depression in Michigan. Several common needs were identified: 1) public awareness campaigns to reduce the stigma associated with depression diagnosis and treatment; 2) programs to address the prevalence of mental illness in poor communities; 3) parity in health plan coverage for mental health; 4) programs to address racial and ethnic disparities in prevalence, early detection and referral efforts, and access to quality treatment; and 5) surveillance to monitor needs and evaluate outcomes. Addressing these needs is essential to achieving the plan goals, which include increasing screening for depression in at risk populations, improving the quality of management and treatment services for depression, and building a public-private infrastructure to address depression. The plan remains a framework to explore opportunities for intervention and resources.

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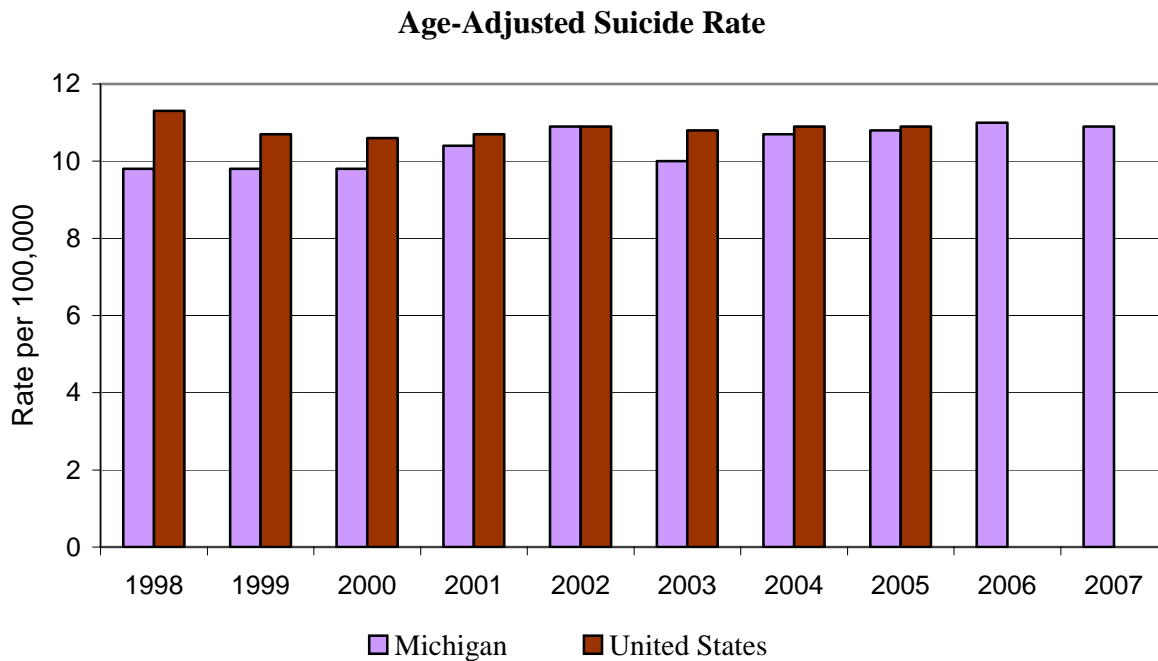


Topic: Mental Health

30. Suicide

Suicide is death caused by injury (including suffocation and poisoning) where there is either implicit or explicit evidence that the injury was self-inflicted and the decedent intended to kill himself or herself. Almost all people who kill themselves have a diagnosable mental or substance abuse disorder or both, and the majority has depressive illness. The most promising way to prevent suicide and suicidal behavior is through early recognition and treatment of depression and other psychiatric illnesses.

How are we doing?



In 2006, suicide was the tenth leading cause of death and the fifth leading cause of Years of Potential Life Lost (YPLL) for people below the age of 75 in Michigan. In 2007, there were 1,123 Michigan resident suicides. The corresponding age-adjusted rate was 10.9 per 100,000 residents. The suicide rate has remained statistically stable since 1990.

How Does Michigan compare with the U.S.?

In 1998, the U.S. suicide rate was 13% greater than Michigan's rate. By 2005, the two rates were virtually equivalent as Michigan's rate had increased 10% while the national rate had decreased 3.5%.

How are different populations affected?

White males ages 75 years and older have the highest rate of completed suicide. Between 2002 and 2006, males had rates that were more than four times female rates (17.6 per 100,000 and 4.2 per 100,000, respectively), and whites had rates more than double African-American rates (11.8 per 100,000 and 5.6 per 100,000, respectively). Males most commonly utilized firearms to complete suicide (57%), while for females the leading mechanism was poisoning 43%.



Suicide was the third leading cause of death in Michigan in 2006 for persons ages 15-34 (13.5%). In 2007, 15% of high school students reported having seriously considered suicide, and one in every 11 high school students (9.1%) reported having attempted suicide one or more times in the past year with three percent of respondents requiring medical attention after an attempted suicide.

What is the Department of Community Health doing to improve this indicator?

The Department responds directly to persons who are at risk as a result of mental illness by providing psychiatric inpatient care at three adult and one child and adolescent state-operated psychiatric hospitals, as well as one community hospital. Community Mental Health Service Programs (CMHSPs), through contract with the department, offer services such as psychiatric inpatient care, hospital-based crisis observation care, intensive crisis residential and stabilization services, and assertive community treatment. CMHSPs offer wrap-around services to minors with serious emotional disturbances or serious mental illness and their families, and include treatment and personal support services to maintain children in their homes. Currently, five grants support suicide prevention in the older adult population. All CMHSPs continue to provide and expand their services to persons with serious mental illness who reside in county jails, detention facilities, or are under court supervision and on parole.

In 2005, the Surgeon General released the Suicide Prevention Plan for Michigan, which was developed by the Michigan Suicide Prevention Coalition. Based on the national suicide prevention strategy, the plan's goals are to increase awareness, develop and implement best clinical and prevention practices, and advance and disseminate knowledge about suicide and effective methods for prevention. As part of the plan's implementation process, the MDCH has established the Michigan Suicide Prevention Program and has published a resource directory of organizations and programs in the state working on suicide prevention. The Suicide Prevention Plan for Michigan can be found at: www.michigan.gov/documents/Michigan_Suicide_Prevention_Plan_2005_135849_7.pdf.

In 2006, the MDCH was awarded a Garret Lee Smith Youth Suicide Prevention Grant from the Substance Abuse and Mental Health Service Administration. Grant activities over three years include a health communication campaign, training of trainers in evidence-based prevention programs, and community suicide prevention program development grants.



Topic: Immunizations

31. Older Adult Flu Shots

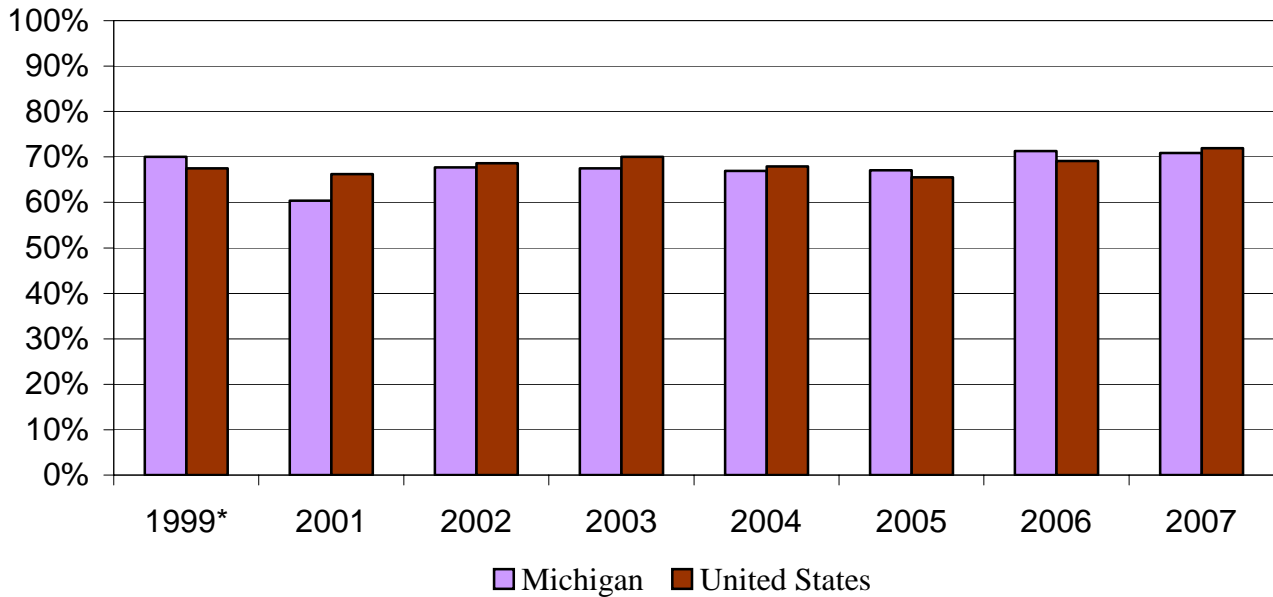
Vaccination programs, traditionally associated with protecting young children from diseases, are increasingly focusing on the lifelong benefits that immunizations bring. One of the greatest public health challenges is extending the success in childhood immunization to the adult population. Illnesses, such as influenza, caused by vaccine-preventable diseases are expensive both in terms of dollars and human lives.

In the United States, billions of dollars are spent annually treating adults for vaccine-preventable illnesses, and each year, on average, about 50,000 adults die from diseases that could have been prevented (1).

Vaccines are available to prevent many potentially debilitating diseases, including influenza, pneumococcal disease, and Hepatitis B virus infection.

How are we doing?

Percentage of Adults Age 65+ Who Had Flu Shot in the Past Year



*Data was not collected in 2000 on Flu Shots.

Results from the 2007 MI BRFSS indicate that two-thirds (70.9%) of Michigan adults aged 65 years and older were immunized against influenza in the past year. The prevalence of immunization in Michigan among adults 65 years and older has varied over the past eight years with the highest percentage being in 2006 at 71.3% and the lowest in 2001 at 60.4%.

How does Michigan compare with the U.S.?

Adult immunization rates in Michigan as measured by the BRFSS have remained consistent with those for the United States. For 2007, 70.9% of Michigan adults were immunized, while the U.S. median was slightly higher at 71.9%.



How are different populations affected?

BRFSS shows that only 58.4% of Blacks aged 65 years or older received an influenza vaccine in the past year compared to 72.3% of Whites. This is similar to the national averages which showed that 57.4% of Blacks compared to 73.8% Whites received an influenza vaccine in the past year.

What is the Department of Community Health doing to improve this indicator?

The Department continues to coordinate with local health departments to present educational programs focusing on adult immunizations to private provider practices and physician groups. These programs promote adult immunizations and provide guidance on improving adult immunization programs.

The Department distributed articles to a number of professional publications, as well as some publications that are targeted to consumers. For example, an article called “Protect Yourself and Get Vaccinated”, written by a Department staff member, was printed in the Spring 2008 issue of Michigan Generations publication.

Michigan recently expanded the use of the Immunization Registry, now known as the Michigan Care Improvement Registry (MCIR) to help in tracking adult immunizations. Prior to this expansion, the MCIR only held records for individuals younger than 20 years of age. This expansion allows providers to track and assess vaccines for all individuals.

When the Michigan Antibiotic Resistance Reduction Coalition (MARR) created and distributed folders for long-term care facilities, Department staff worked with them in updating the section on vaccination. The Department also contributed 200 copies of a packet addressing tetanus, pneumococcal polysaccharide (PPSV), and influenza vaccines to this effort by MARR.

The Department has developed a multi-pronged approach to seasonal influenza education and outreach. A complete overhaul of the seasonal flu website was undertaken in the summer/early fall of 2008. MDCH staff leads the Flu Advisory Board (FAB), which was formed in 2005 as a result of the flu vaccine shortage. MDCH’s seasonal influenza projects include its flu website at www.michigan.gov/flu, the 2008 seasonal flu slogan and campaign “Flu Vaccine: For Everyone, Every Year,” the Flu Fighter Action Kit for Health Care Personnel at www.michigan.gov/flufighterkit, FAB’s mission and activities, and the Immunization Nurse Education (INE) flu modules. Staff developed and promoted flu holiday posters, which encourage people to continue to get vaccinated into December and January, and throughout the winter months. The goal of these posters is to facilitate or encourage dialogue between the general public and their health care providers, as recent NFID data shows that 7 out of 10 people would be “likely” or “very likely” to get an annual influenza vaccine if their health care professional recommended it (NFID Influenza/Pneumococcal News Conference 2008).

Sources: National Foundation for Infectious Diseases, Bethesda, MD. Immunization: Supporting a Healthier Life Throughout the Lifespan - National Adult Immunization Awareness Week 2008 Campaign Kit.

<http://www.nfid.org/pdf/publications/naiaw08.pdf>



Topic: Immunizations

32. Childhood Immunizations

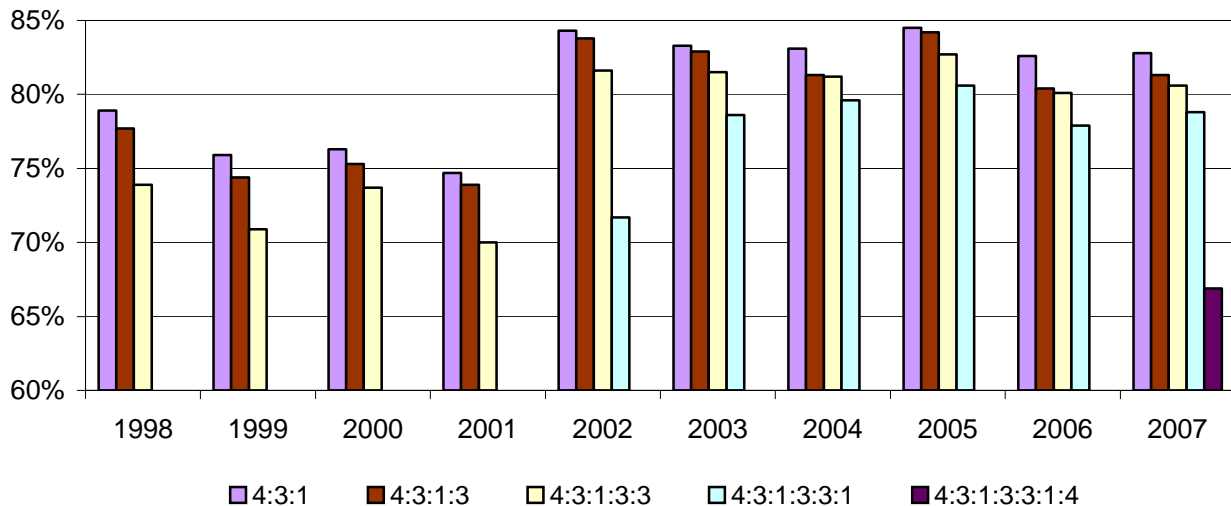
Childhood immunization, the process by which children are rendered immune or resistant to a specific disease, has grown in scope over the years. There are an increasing number of vaccines being licensed and added to the routine immunization schedule resulting in more diseases becoming vaccine-preventable.

The ultimate goal is to eliminate vaccine preventable diseases or at a minimum, reduce the number of serious vaccine preventable diseases occurring in Michigan. Childhood immunizations provide protection against: Diphtheria, *Haemophilus influenzae* type B, Hepatitis A, Hepatitis B, Measles, Mumps, Pertussis (whooping cough), Pneumococcal disease, Polio, Rubella, Rotavirus, Tetanus, Varicella (chickenpox), Human Papillomavirus (HPV), Influenza (flu), and Meningococcal disease.

Prior to 1999, immunization levels in Michigan were measured by the percentage of children who, at two years of age, had received four doses of a vaccine containing diphtheria, tetanus and pertussis components (DTP or DTaP), three doses of polio vaccine, and one dose of a vaccine containing measles, mumps and rubella components (4.3.1). In 1999, three doses of *Haemophilus influenzae* type B vaccine (Hib) and three doses of Hepatitis B vaccine (Hep B) were added to the list of vaccines used to assess the extent to which Michigan’s children were appropriately immunized (4.3.1.3.3). One dose of varicella vaccine and four doses of pneumococcal conjugate vaccine are the most recent vaccines that have been added to the National Immunization Survey (NIS), creating a current standard of 4:3:1:3:3:1:4.

How are we doing?

Percentage of Immunized 19-35 Months of Age Michigan Children



The NIS data from the January – December 2007 time frame indicates that 78.8% of Michigan’s two-year olds were fully immunized using the 4:3:1:3:3:1 standard assessment. If we add in the assessment for 4 doses pneumococcal conjugate vaccine (4:3:1:3:3:1:4) the vaccination level for Michigan is 66.9%.



How does Michigan compare with the U.S.?

Results for the NIS conducted from January through December of 2007 showed that the 4:3:1:3:3:1 vaccination coverage level for children aged 19 through 35 months in Michigan was 78.8% ($\pm 6.7\%$). The national average was 77.4% ($\pm 1.1\%$). The 4:3:1:3:3:1:4 coverage level for Michigan is 66.9% and nationally the level for the same measure is 66.5%.

Michigan has come a long way in protecting children from vaccine-preventable diseases. Michigan now has the twelfth highest immunization rate compared to other states. In 1994, Michigan had the lowest immunization rates in the country (61%) for the 4:3:1 assessment.

How are different populations affected?

Using the Michigan Care Improvement Registry (MCIR) as a data source, the vaccination coverage levels for blacks are about 9% lower than the coverage levels for whites in Michigan for the 4:3:1:3:3:1 assessment.

What is the Department of Community Health doing to improve this indicator?

The Department is working to increase childhood immunization. The federal Vaccines for Children (VFC) and the MI-VFC programs make vaccines available to children from low-income families. This eliminates a major financial barrier to children being vaccinated. In 2007, 2,305,549 doses of vaccine were distributed from the Michigan Department of Community Health. All recommended vaccines are available for eligible children.

The Michigan Care Improvement Registry (MCIR) is a statewide registry of immunizations administered to children and adults that can be accessed by approved users anywhere in the state to reduce missed opportunities. In addition to maintaining an immunization record for each person, MCIR generates recall letters for individuals. Providers and local health departments can generate profiles of the immunization levels in their clinic or community to determine whether additional interventions should be developed. MCIR contains over 57 million shot records on more than 4.7 million citizens.

It is important for parents to receive accurate information about vaccines so they can make informed decisions about their children's health. Federal law mandates that Vaccine Information Statements must be given to individuals or parent(s) to read prior to any immunization of their children. In addition, the Department produces informational pamphlets on immunization and specific vaccines. Information on new vaccines, vaccine schedules, and appropriate storage and handling of vaccines is made available to providers through newsletters, seminars, conferences, videoconferences and the MDCH website (www.michigan.gov/immunize). Immunization field representatives work with local health departments to encourage immunization as part of maternal and child health services.

Additional focus has been put on assuring that adolescents are age appropriately vaccinated. Several vaccines have now been licensed such as Meningococcal, Tdap, which provides protection against pertussis (whooping cough), and human papillomavirus for girls.

The Migrant Outreach and Immunization Services program works to assure that all children (birth – 18 years) served in Migrant Health Centers are age-appropriately immunized, and that all immunizations (historical and newly administered) are entered into the Michigan Care Improvement Registry (MCIR).

The Department provides testing services for the diagnosis of many vaccine-preventable diseases. This is essential in assessing vaccine failure and disease control in unvaccinated populations.



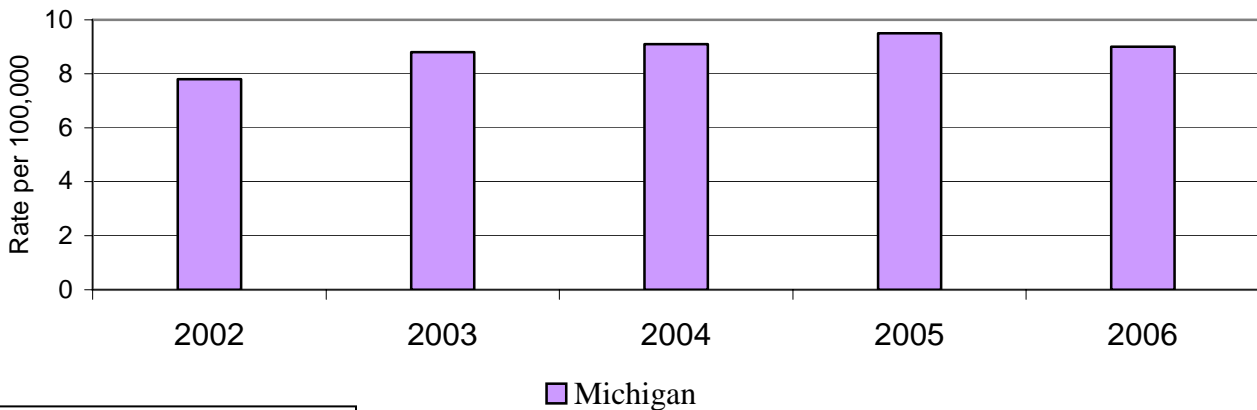
Topic: HIV/AIDS

33. HIV/AIDS New Cases

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.

How are we doing?

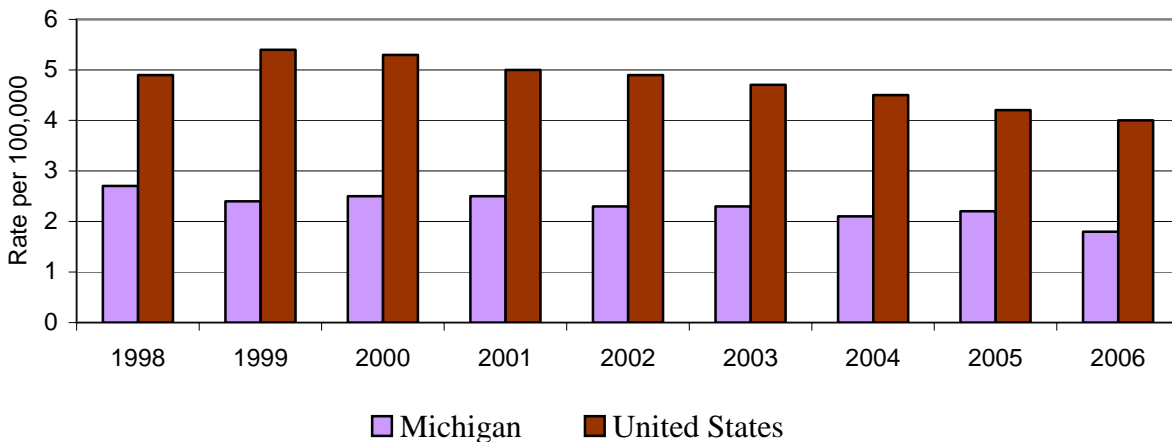
Rate of New HIV Diagnoses in Michigan



*Data not available nationally.

The rate of new HIV diagnoses have increased by an average of four percent per year, from 7.8 per 100,000 in 2002 to 9.0 per 100,000 in 2006 (779 cases to 908 cases, average of 890 cases), after peaking at 9.5 per 100,000 in 2005. The increasing trend and peak in 2005 are most likely due to the implementation of mandatory laboratory reporting in 2005. These new diagnoses include persons who learned of their HIV infection status after developing AIDS symptoms. Each year, there are more new diagnoses of HIV infection than deaths. Therefore, the reported number of persons living with HIV/AIDS in Michigan is increasing. The MDCH estimates that 18,000 residents are living with HIV infection in Michigan (including those with AIDS).

Age Adjusted AIDS Death Rates





HIV-related age-adjusted deaths decreased from 2.7 per 100,000 in 1998 to 1.8 in 2006. We have seen improvements in treatment and care since the mid-1990s, especially after the advent of anti-retroviral therapy. The rate of new HIV diagnoses is increasing as the rate of deaths is decreasing. This results in overall increasing prevalence, reminding us that prevention must remain an important focus.

How does Michigan compare with the U.S.?

Among the 45 states and 5 U.S. dependent areas with confidential name-based HIV reporting as of December 2006, Michigan ranks 18th in reported cases of HIV infection and 30th in rate of HIV diagnoses. Michigan's rate of new diagnoses in 2006 (6.2 per 100,000) was lower than the overall rate for the 45 states and 5 U.S. dependent areas (18.29 per 100,000). Michigan's prevalence rate (124.8 per 100,000) was lower than the prevalence rate among the 50 areas (143.7 per 100,000) at the end of 2006.

How are different populations affected?

The reduction in deaths over the last decade is not equally distributed according to race/sex group. For instance, between 1995 and 2001, the percent decrease in deaths among white males (76 percent) between 1995 and 2001 was more pronounced than the percent decrease among black males (56 percent), and the percent decrease among white females (57 percent) was larger than the percent decrease among black females (38 percent). Encouragingly, the number of deaths in black males has fallen substantially from 2001 to 2005 (43 percent), even in comparison to white males (26 percent), black females (25 percent), and white females (5 percent), but the number of deaths among black males still exceeds that of any other race/sex group.

Black persons are impacted disproportionately by HIV, when compared to their numbers in the population. Black persons make up 14% of the general population of Michigan, but accounted for 62% of new HIV diagnoses in 2006 and 58% of persons living with HIV/AIDS. Alternately, white persons comprised 31% of diagnoses in 2006, 36% of persons living with HIV/AIDS, and 78% of Michigan's population.

Between 2002 and 2006, the number of new diagnoses among men who have sex with men increased by an average four percent per year, whereas the number of new diagnoses among IDU decreased by an average of seven percent per year. Decreases among intravenous drug users have been noted for three consecutive years, most likely evidence of the success of programs like needle exchange. New diagnoses among heterosexuals have remained stable.

What is the Department of Community Health doing to improve this indicator?

The MDCH focuses its prevention efforts on early identification of HIV infection through testing and reduction/elimination of behaviors associated with HIV transmission. Early access to care is essential to maintain optimal health for persons infected with HIV. To ensure that persons living with HIV/AIDS receive appropriate and effective care and treatment, the Department offers active counselor-assisted referrals to care and support services for all newly identified persons who test positive (confidentially) and agree to such referral.

The Department also supports a comprehensive continuum of care including a drug assistance program, a dental assistance program, medication adherence programs, immune system monitoring, viral load and genotype testing, as well as case management services. In addition, the Department also supports a community re-entry program for HIV positive parolees newly released from Michigan Department of Corrections facilities, to assist them in obtaining medical care and medication.

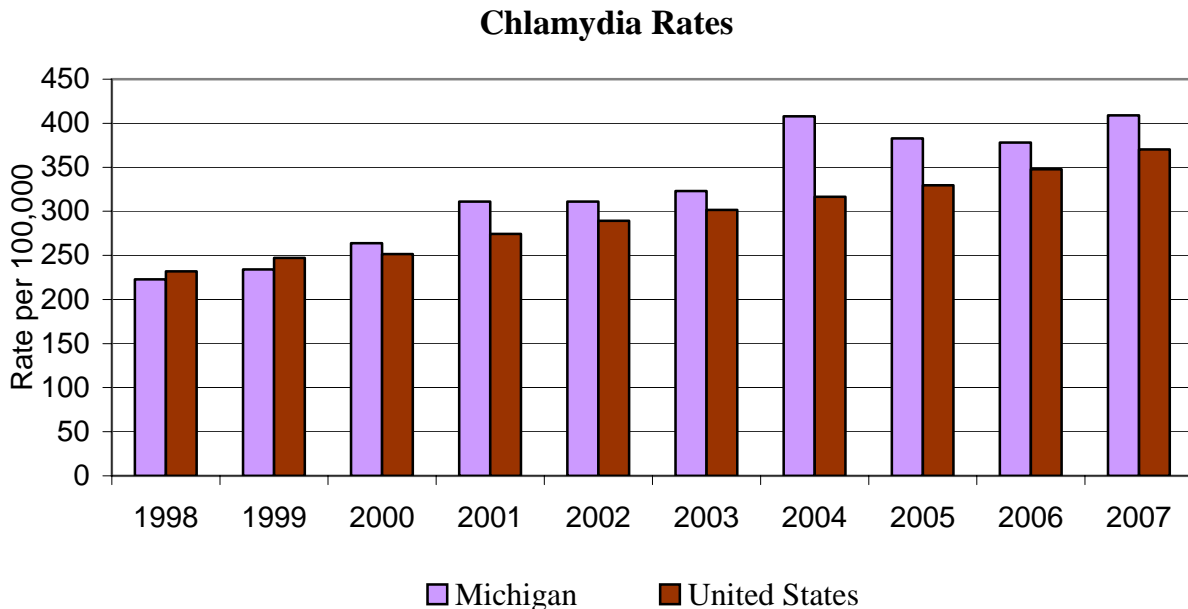


Topic: Sexually Transmitted Disease

34. Chlamydia

Chlamydia is a bacterial infection predominately spread through sexual contact. It is one of the most common sexually transmitted diseases (STDs) in the United States, responsible for an estimated one million cases each year.

How are we doing?



The rates of chlamydia have increased since Michigan began reporting cases in 1992. This is due to several factors, including improved reporting, increased levels of testing, targeting of testing, and advances in testing technology. In 2007, there were 41,291 reported cases of chlamydia, an eight percent increase from 2006. In 2006, 38,142 cases were reported, a seventeen percent increase from 2003. These increases follow national trends. In 2007, for the first time, over a million Chlamydia cases were reported nationally. Michigan has continued efforts to screen the populations at highest risk. Additionally, improved data systems have resulted in more accurate counting of cases. Michigan’s goal is to see a decrease in the number of reported chlamydia infections by maintaining current screening and surveillance practices. Based on data from the Michigan Infertility Prevention Project (IPP), over 90% of reported chlamydia cases are treated.

How does Michigan compare with the U.S.?

The rate of chlamydia in Michigan was 409 per 100,000 population in 2007, significantly higher than the national rate of 370.2 (provisional) per 100,000.



How are different populations affected?

The highest rates of chlamydia are found among the 15-19 and 20-24 year old age cohorts. These two groups combined accounted for 74% of the 2007 morbidity. The rates are highest among women in this age range, especially Black women. The rate among Blacks is 9.6 times that of Whites. The rate among Black women is eight times higher than for White women. Given that sexual activity does not vary by race, this rate is evidence that once a pathogen is in a community or social network, the likelihood of acquiring that infection increases significantly, thus resulting in higher transmission rates.

The overall rate among women is 3.2 times higher than in men, largely due to targeted screening towards females. Males are more often symptomatic and treated presumptively (without testing), based on symptoms. Additionally, young females are at increased risk for infection because of an immature cervix which has a thin layer of epithelium that provides less protection from bacteria than a mature cervix.

The highest rates of chlamydia, in 2007, were in the City of Detroit, and in Genesee, Muskegon, Ingham, and Kent Counties.

What is the Department of Community Health doing to improve this indicator?

Because chlamydia causes costly complications such as pelvic inflammatory disease (PID), the Department is working to decrease the prevalence of chlamydia and its health consequences. The MDCH participates in the National Infertility Prevention Project (IPP) which targets adolescents and young adults (15-24 year olds). Adolescents and young adults are a population on which Michigan places special emphasis; IPP is the core of these efforts. The IPP provides chlamydia screening in STD and family planning clinics, as well as school-based clinics, juvenile detention centers, and alternative adolescent sites, such as runaway shelters and alternative schools.

Increased screening is encouraged as part of local health department reviews, Health Plan Employer Data and Information Set (HEDIS) reports, and IPP program evaluation.

The Division of Health, Wellness and Disease Control/STD Section has been awarded \$750,000 to identify and treat infections in the highest risk population. As a part of this, a Request For Proposal (RFP) has been released in which 4-6 awards will be made to applicants best exemplifying their ability to screen at least 350 adolescent/young adults ages 15-24 who are considered high risk.



Topic: Sexually Transmitted Disease

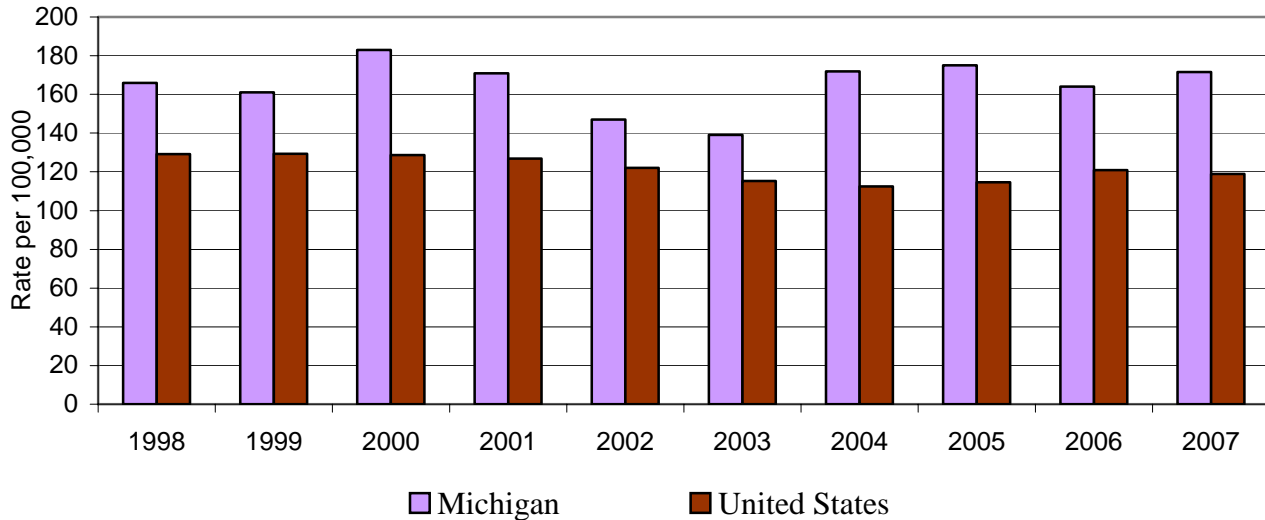
35. Gonorrhea

Gonorrhea is a bacterial infection spread through sexual contact. It is one of the most common sexually transmitted diseases (STDs) in the United States, responsible for over 300,000 cases each year.

Gonorrhea can be successfully treated with antibiotics, but individuals infected with gonorrhea remain infectious until they are diagnosed and treated. Many infections are asymptomatic, and, therefore, difficult to diagnose. Current program resources make it difficult to identify, treat, and provide partner referral to every person infected with gonorrhea.

How are we doing?

Gonorrhea Incidence Rates



In the last decade, the rate of gonorrhea incidence in Michigan has varied from a low of 139 cases per 100,000 in 2003 to a high of 183 in 2000. The 2007 rate was 174 cases per 100,000 with the highest rates in the City of Detroit, and in Genesee, Muskegon, Berrien, and Calhoun Counties. As rates and number of reported cases remain steady while targeting screening to those populations at highest risk, Michigan’s goal is to continue current screening and surveillance practices.

How does Michigan compare with the U.S.?

The rate of gonorrhea in Michigan at 174 per 100,000 population in 2007 is significantly higher than the national rate of 118.9 (provisional) per 100,000.

How are different populations affected?

The highest rates of gonorrhea are found among those 15-24 years old, who accounted for 62% of the cases in 2007. Rates of gonorrhea are higher among women (200 per 100,000) compared to men (147 per 100,000). Rates are significantly higher among Blacks, regardless of gender. The rate among Black women is 16.7 times higher than for White women. The rate among Black men is 52 times higher than



for White men. Rates are somewhat higher among Hispanic men and women when compared to rates for White men and women. Given that sexual activity does not vary by race, this rate is evidence that once a pathogen is in a community or social network, the likelihood of acquiring that infection increases significantly, and higher rates of transmission are the result.

Males are more often symptomatic and treated presumptively (without testing), based on symptoms. Young females are at increased risk for infection because an immature cervix has a thin layer of epithelium; this provides less protection from bacteria than a mature cervix.

What is the Department of Community Health doing to improve this indicator?

The MDCH is working to decrease the prevalence of gonorrhea and its health consequences. The Department participates in the national Infertility Prevention Project (IPP). Adolescents and young adults are populations on which Michigan places special emphasis; IPP is the core of these efforts.

The Division of Health, Wellness and Disease Control, STD Section has been awarded \$750,000 to identify and treat infections in the highest risk population. As part of this, a Request For Proposal (RFP) was released in which 4-6 awards will be made to applicants best demonstrating their ability to screen at least 350 adolescent/young adults ages 15-24 who are considered high risk.

The MDCH and local public health personnel provide follow-up and partner referral to persons testing positive for gonorrhea, with priority placed on females of child bearing age. The Department is exploring innovative methods of partner management, including expedited partner therapy. The MDCH distributes antibiotics to local health department clinics to treat gonorrhea and also provides presentations on the gonorrhea epidemic in Michigan. Increased screening is encouraged as part of local health department reviews, and IPP program evaluation.

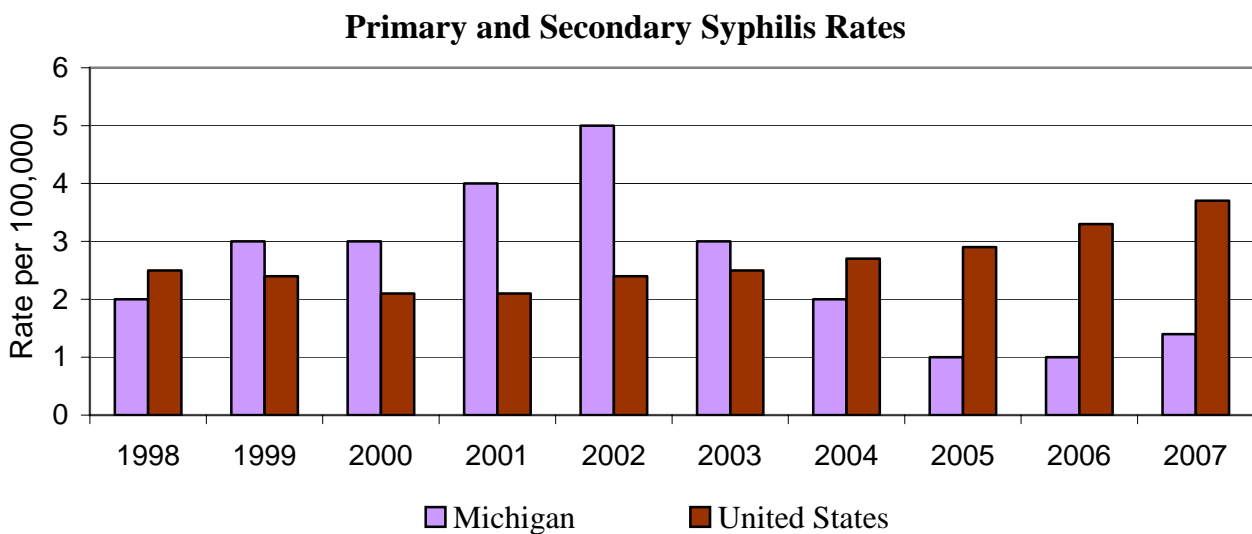


Topic: Sexually Transmitted Disease

36. Syphilis

Primary and secondary (P&S) or infectious syphilis is a bacterial infection predominately spread through sexual contact. It can also be spread from mother to child. Syphilis is relatively difficult to transmit. The social networks at risk for syphilis in Michigan vary by geography and include individuals who use crack, cocaine, or heroin, exchange money or drugs for sex, or who are men who have sex with men. People are infectious for a short period of time, and the incubation period is long, providing opportunity for treatment and prevention. P&S syphilis can be successfully treated with antibiotics.

How are we doing?



The total number of reported primary and secondary syphilis cases in Michigan in 2007 has increased slightly to 137 (nearly 10%), compared to 2006, following a significant downward trend that started in the latter half of 2002.

After years of steady increases, Detroit reported 69 P&S syphilis cases in 2007, an 86% decrease compared to 2002. Numbers of infectious syphilis cases in outstate Michigan have stayed at low levels, with 68 cases in reported in 2007. Michigan’s goal is to maintain these historically low levels.

How Does Michigan compare with the U.S.?

The rate of primary and secondary syphilis cases in Michigan was 1 per 100,000 population in 2007, which was lower than the national rate of 3.7 per 100,000 population.

How are different populations affected?

The rates of primary and secondary syphilis are more evenly distributed among different age groups than gonorrhea and chlamydia, which primarily affect younger age groups. In 2007, the rates of infectious syphilis were higher among men, reflecting increased transmission in men who have sex with men. Blacks account for nearly 60% of the syphilis cases; however, there have been increases among White men in the past several years. Given that sexual activity does not vary by race, the increased rate is evidence that once a pathogen is in a community or social network, the likelihood of acquiring that



infection increases significantly. The highest numbers of reported cases of infectious syphilis, in 2007, were in the City of Detroit and Wayne, Genesee, Washtenaw, Kent, and Oakland Counties.

What is the Department of Community Health doing to improve this indicator?

As part of the National Syphilis Elimination Campaign, collaboration between the City of Detroit, the State of Michigan and local community-based organizations (CBOs) resulted in a model program that targets interventions to individuals most at risk.

The MDCH has developed many tools to assist CBOs. The most helpful partnerships are with CBOs that can reach high-risk communities. The Department collaborates with Partner Counseling and Referral Services (PCRS) staff in providing integrated HIV and syphilis prevention services targeting men who have sex with men (MSM) in Detroit and Oakland County.

Partnerships with various programs have been successful in providing onsite services to high-risk populations. MDCH collaborations have brought STD education and care services to populations who rarely seek medical services and, more importantly, may not otherwise have had access to health care. The rapport between the MDCH and these CBOs has reduced the stigma often attached to syphilis interventions and provided opportunities for high risk populations to access services.

The MDCH has worked in partnership with the Genesee County Health Department (GCHD) to address a syphilis outbreak in their area in 2008. The MDCH has attended regular meetings of the GCHD's internal disease response team to provide technical assistance. Disease Intervention Specialists from other counties have been assigned on a routine basis to assist in interview and investigative duties. Additionally, outreach specialists have been made available to draw blood at nontraditional screening events.



Topic: Other Communicable Diseases

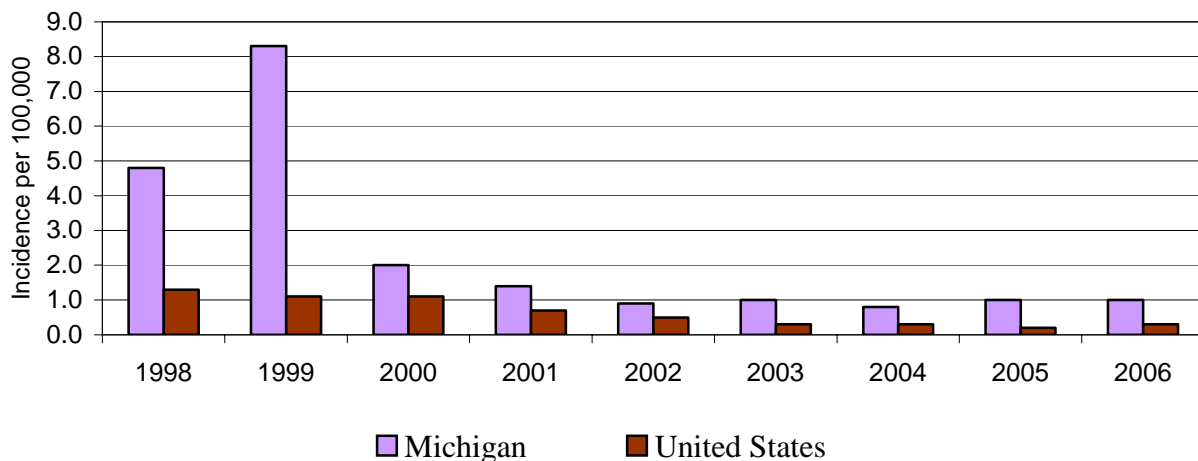
37. Hepatitis C

Hepatitis C is a disease of the liver caused by infection with the hepatitis C virus, in which the newly acquired (or acute) infection can progress to a chronic, long-term infection. Fifteen to 25% of those newly or acutely infected will resolve the infection on their own. However, the majority of infected people, 75 to 85%, will develop chronic infection. Disease progression in those chronically infected is variable but it can move from fibrosis, to cirrhosis, to end-stage liver disease and death. Ten to 20% of those chronically infected will develop cirrhosis within 20 to 30 years after infection. Hepatitis C is the leading indicator for liver transplantation.

The primary mode of transmission for the hepatitis C virus is through the sharing of needles, syringes, and other drug paraphernalia. It is estimated that 60 to 90% of injection drug users are infected with the virus. Other routes of transmission include sexual contact, from mother to unborn child during the birth process, and via occupational exposure to blood. In addition, the virus was transmitted through blood transfusions prior to 1992 and during receipt of blood products developed before 1987.

How are we doing?

Infection Rates Hepatitis C



Differentiating between acute and chronic hepatitis C is complicated and requires extensive case investigation. When chronic cases are incorrectly reported as acute cases, the acute infection rates become erroneously inflated. In addition, before 2000, when a chronic hepatitis C case definition was developed and chronic hepatitis C cases became reportable, chronic hepatitis C cases may have been more often inaccurately reported as acute cases. This can be seen in the above graph showing higher rates of acute cases in 1998 and 1999 followed by the substantial decrease in reported acute cases in 2000 when the new chronic hepatitis C case definition was introduced.

From 1998 to 2002, Michigan’s rate of acute infection decreased steadily, and since that time, has remained relatively stable with a 2006 acute infection rate of 1.0 per 100,000. However, since individuals with acute infection often have no symptoms and remain undiagnosed until later in the disease course; acute infection rates underestimate the actual number of hepatitis C cases. To gauge the true hepatitis C disease burden we often rely on estimates derived from national data. It is estimated that 160,000 Michigan residents have ever been infected with hepatitis C and approximately 128,000 individuals are chronically infected. A significant concern is that 60 to 70% of those chronically infected do not know



they have the virus. As a result, Michigan is headed in the wrong direction with respect to meeting the need for increased hepatitis C screening, education and prevention.

How does Michigan compare with the U.S.?

The rate of acute infection for hepatitis C in Michigan has been significantly higher than in the United States. Michigan's current rate of 1.0 per 100,000 is more than three times higher than the U.S. median rate of 0.3 per 100,000. Michigan ranks as the third highest state in the United States for rate of acute hepatitis C. However, state hepatitis C data can be unreliable for a number of reasons.

How are different populations affected?

National data indicate that African-Americans are approximately two times more likely to have been exposed to the hepatitis C virus than Caucasians. The Centers for Disease Control and Prevention estimate that approximately 1.6% of the total U.S. population has ever been infected with hepatitis C. However, it is estimated that 3% of the African-American population in the U.S. has ever been infected with hepatitis C, accounting for 23% of all the individuals with hepatitis C in this country. While the reasons for the higher rate of infection in African-Americans are not completely understood, it is thought to be due to more occupational blood exposures, more blood transfusions before 1992, more intravenous drug use, and limited access to hepatitis C information and preventative medical care among the African-American population.

In addition, men of all races are more likely to have been infected with hepatitis C than women. Also, individuals between 40 and 49 years of age, regardless of race or sex, have the highest prevalence rate of hepatitis C among all age groups. The increased rate of infection in men and in individuals between 40 and 49 years of age is thought to be attributed to an increased likelihood of participating in high-risk behaviors such as intravenous drug use.

What is the Department of Community Health doing to improve this indicator?

The Department works to increase hepatitis C knowledge and skills among professionals with a role to play in addressing hepatitis C through a variety of educational offerings.

In December 2007, the second statewide conference on hepatitis C was held. This event included sessions on hepatitis C treatment and working effectively with patients, hepatitis C in populations that use injection drugs and other special populations, living with hepatitis C, and co-infection.

During 2008, three other comprehensive trainings on viral hepatitis were provided. The first targeted individuals providing training and education to substance use disorder treatment professionals and clients. The second was for individuals working in HIV/AIDS organizations. The third was offered to a diverse group of individuals interested in increasing hepatitis knowledge and training skills. During the year, numerous one-time presentations on a wide range of hepatitis C-related topics were also provided.

In addition, the Department works with a variety of groups to increase awareness of hepatitis and the need for the development of a continuum of hepatitis C-related services.

In 2008, the Hepatitis C Task Force, whose ten members were appointed by the Governor, met four times. Meetings focused on services that need to be provided to effectively address this disease, including services for correctional populations, people who use injection drugs and individuals at risk for or with HIV/HCV co-infection. The Department also worked with the Michigan Drug Users Health Alliance and the Michigan HIV/AIDS Council on hepatitis C issues.

More information about hepatitis C can be found at <http://www.cdc.gov/hepatitis/index.htm>.



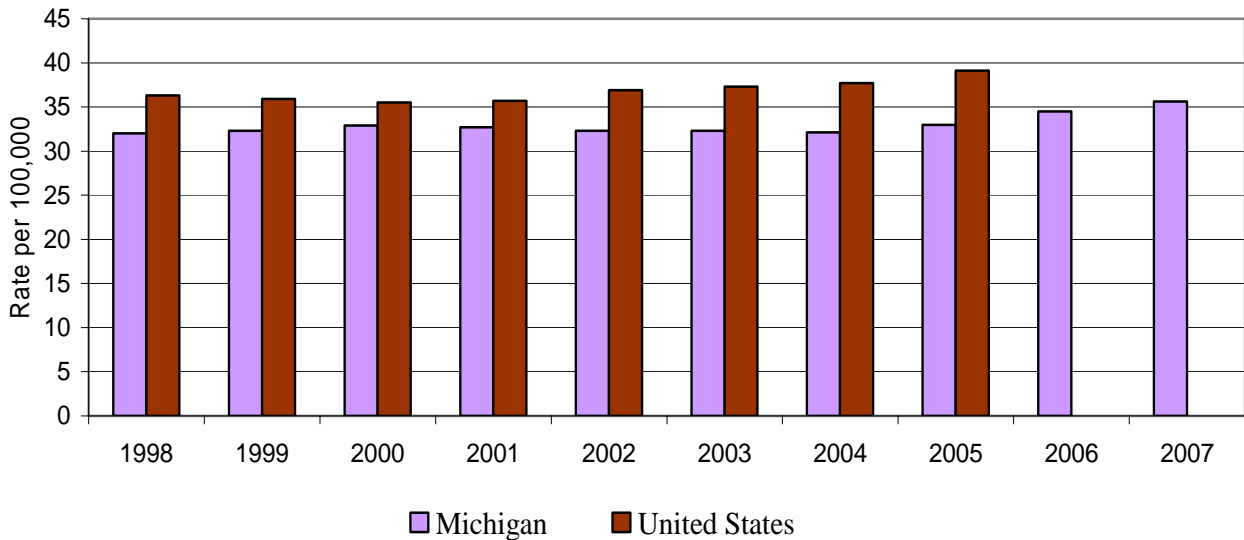
Topic: Unintentional and Childhood Injuries

38. Unintentional Injuries

Unintentional injuries are the fifth leading cause of all deaths in Michigan and the third leading cause of Years of Potential Life Lost (YPLL) for people below the age of 75. They are the leading cause of death to Michigan residents who are at least one year of age but under age 35.

How are we doing?

Age-Adjusted Unintentional Injury Death Rates



In 2007, there were 3,714 Michigan resident deaths due to all causes of unintentional injury. The corresponding age-adjusted death rate was 35.6 per 100,000 population. This rate has remained relatively stable since 1992, although the change to ICD10 coding artificially increased the rate by three percent. There is one notable exception to this stable trend: the Michigan unintentional poisoning death rate had increased more than 500% between 1995 and 2006.

Motor vehicle traffic crashes are the most common cause of unintentional injury deaths, representing 36 percent of the total. The trend for motor vehicle deaths has improved since 1996; by 2006, the age-adjusted death rate had decreased by 31 percent. The introduction of advanced safety equipment in cars, combined with stricter laws regarding use of seatbelts and child restraints, and drinking and driving, has pushed the trend downward since the late 1970s.

How Does Michigan compare with the U.S.?

The unintentional injury death rate for Michigan has been consistently lower than the U.S. rate. In 2006, the most recent year for which national data are available, Michigan’s age-adjusted death rate of 34.5 per 100,000 was 10% lower than the U.S. rate of 38.5 per 100,000.

How are different populations affected?

In Michigan between 2002 and 2006, the unintentional injury death rate was 80% higher for males than females, 440% higher for those aged 75 years and older than those under age 75, and 3% higher for whites



Critical Health Indicators

than African-Americans. For certain causes of unintentional injury, however, disparities were much larger. The drowning rate was 240% higher for males than females. The death rate due to unintentional falls was 31 times higher for those aged 75 years and older than for those under age 75. African-American males under age 1 year had a suffocation/strangulation rate that was 54 times the state rate.

What is the Department of Community Health doing to improve this indicator?

The Department is decreasing the incidence and burden of unintentional injuries by providing leadership, training, public education, data collection and analysis, funding support and technical assistance related to the leading causes of injuries. With statewide stakeholders, several injury prevention plans have been developed over the past few years addressing key injury issues in Michigan. One such plan is the Michigan Plan for Injury Prevention which contains recommendations to build the core capacity of the state injury program as well as impact the top four priority causes of injury in Michigan (motor vehicle crashes, firearms, falls and poisoning).

The Department compiles fatality and hospitalization data on injuries to determine the magnitude of the problem, describe the characteristics of the populations at risk, and determine causes of injuries so that prevention programming can be effectively targeted. Several reports have been prepared and are available at: www.michigan.gov/injuryprevention. In addition, strategic plans, program descriptions and reports, educational materials and injury prevention links are available at this website.



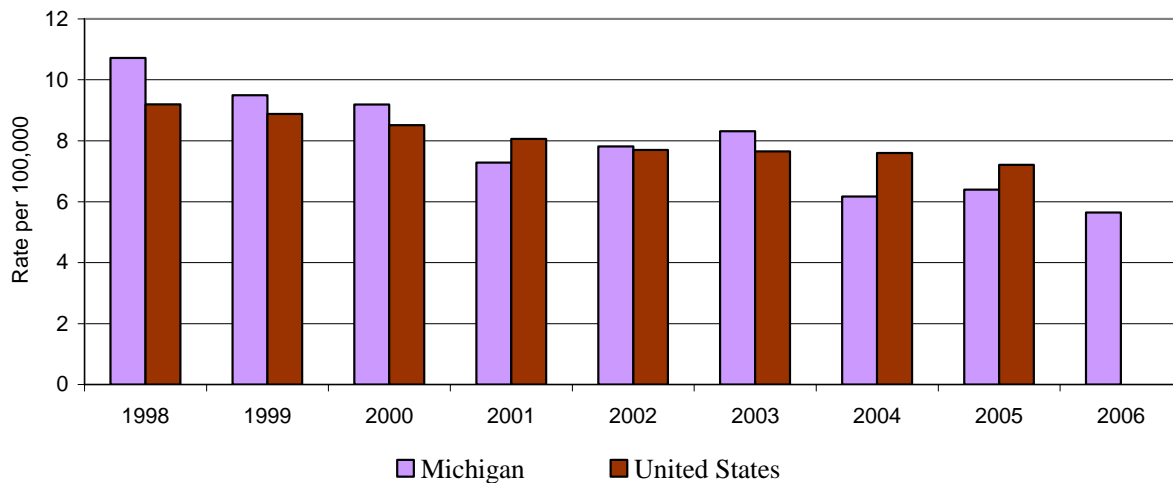
Topic: Unintentional and Childhood Injuries

39. Childhood Injuries

Unintentional injuries are the leading cause of death for children ages 1-14 in Michigan, resulting in 1,196 deaths between 1999 and 2006. During this time, motor vehicle traffic crashes were the most common cause of unintentional injury death to this age group (524 deaths, 43.8%). Fire/burn was the second leading cause of death (212 deaths, 17.7%) and drowning was the third leading cause of death (191 deaths, 16.0%).

How are we doing?

Unintentional Injury Deaths, Ages 1-14



In 2006, there were 107 deaths due to all unintentional injuries in Michigan for children ages 1-14, a crude rate of 5.64 (number of deaths per 100,000 residents). This is a substantial decrease from 1998, when there were 217 deaths and a crude rate of 10.72.

How does Michigan compare with the U.S.?

The unintentional injury death rate for Michigan children is very similar to the U.S. rate. This similarity is true for most of the individual causes as well (e.g., motor vehicle traffic crashes, falls, drowning). However, Michigan's death rate due to fires among ages 1-14 was 71% greater than the corresponding national rate during 1999-2005.

How are different populations affected?

Although unintentional injury death rates for Michigan and U.S. children were nearly equivalent during 1999-2005, rates for Michigan Hispanic and African-American children exceeded their national counterparts by 26% and 15%, respectively. During this period in Michigan, the death rate for African-American children due to fires was nearly four times the rate for white children. Boys have higher drowning rates than girls and for both sexes the highest rates are among those ages 1-4 years. During 1999-2005, boys in this age group had a drowning rate that was two-and-a-half times the rate for all children ages 1-14.



What is the Department of Community Health doing to improve this indicator?

The Department is decreasing the incidence and burden of unintentional injuries by providing leadership, training, public education, data collection and analysis, funding support and technical assistance related to the leading cause of injuries.

A Child Passenger Safety (CPS) strategic planning process was coordinated by the MDCH, which resulted in a five-year plan. Law enforcement, health care, injury prevention, auto insurance, research institutes, and auto manufacturers were represented on the strategic planning team and contributed to the plan. The five-year plan includes recommendations in: Education and Training, Public Information and Education, Health Care and Family Service Providers, Research, and Funding. The Department is in the process of implementing objectives of the plan. The Department is expanding its CPS program to include injury prevention activities directed toward the 9-18 year-old population.

MDCH coordinates the distribution of child safety seats and safety education materials with a focus on at-risk populations such as rural, non-English speaking, minority, and low-income families. The Department also offers training to certify child passenger safety technicians so that they can conduct child safety seat inspections; and continuing education training to help technicians retain their certification. To publicize the recent enactment of the booster seat law for Michigan children ages 4-7, the Department worked in conjunction with the Michigan State Police Office of Highway Safety Planning to develop public service announcements that included television and radio spots. The Department works with hospitals to provide training and car seats as incentives for them to establish or strengthen policies for discharging infants in car seats.

Safe Kids Worldwide is a non-profit organization with the mission of preventing accidental injury to children age 14 and under. MDCH is the lead agency for Safe Kids Michigan, a state coalition comprised of local coalitions and chapters. Local Safe Kids groups are comprised of firefighters, medical and health professionals, law enforcement officers, educators, parents and other child safety advocates. Local groups conduct events and programs designed to teach parents, caregivers and children how to prevent unintentional injuries. Currently, there are 22 local Safe Kids coalitions and chapters in Michigan that address major risk areas for children (motor vehicle crashes, bicycle-related injuries, pedestrian injuries, fire/burn injuries, drowning, scald burns, poisoning, choking and falls).

The Department compiles fatality and hospitalization data on injuries to determine the magnitude of the problem, describe the characteristics of the populations at risk, and determine causes of injuries so that prevention programming can be effectively targeted. Several data reports have been prepared and are available at: www.michigan.gov/injuryprevention. In addition, strategic plans, program descriptions and reports, educational materials and injury prevention links are available at this website.



Topic: Health Insurance Coverage

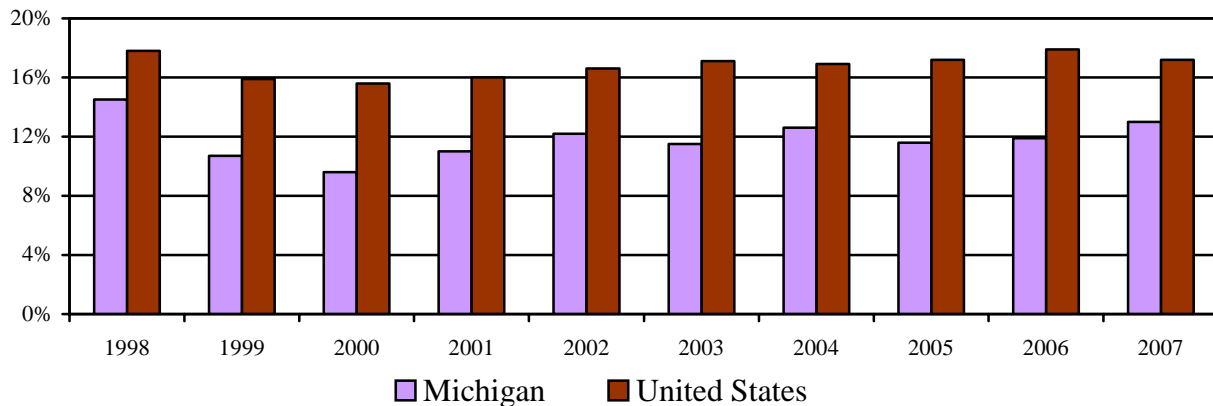
40. Uninsured Adults

Health insurance coverage is critical to keeping Michigan’s residents healthy. Studies have shown that having over one million Michiganians without insurance coverage is detrimental to both to those without coverage, as well as to those who have health insurance. Given the changing nature of the health insurance market, it is important to have accurate information about the uninsured, as well as the insured, to work towards improving access to health care.

The Current Population Survey (CPS) conducted by the U.S. Census Bureau is one of the most widely cited and available sources for data on health insurance or lack thereof.

How are we doing?

Percentage of Non-Elderly Adults (18-64) Who Are Uninsured



In 1998, Michigan’s non-elderly population without health insurance was 14.5%. In 2007, Michigan uninsured rate was 13.0%, and has remained between 9 and 13 percent over the past ten years.

How does Michigan compare with the U.S.?

In 2007, 13.0% of Michigan’s non-elderly residents (0 to 64 years) were uninsured, compared to 17.2% of all non-elderly Americans. The percentage of uninsured in Michigan has been consistently lower than the U.S. rate.

How are different populations affected?

Black and Hispanic Michigan residents are more likely to be uninsured at 19% than Whites at 10.3%. Family income is a factor in who is uninsured. Those with incomes 199% or below the Federal Poverty Level are nearly twice as likely to be uninsured (22.2%) as those with incomes above the poverty level (12.1%). However, even though those with lesser incomes are more likely to be uninsured, they make up only half (51.4%) of the uninsured population.

What is the Department of Community Health doing to improve this indicator?

The department is charged with the responsibility for administering several health care programs. The largest of these programs are Medicaid and Children's Special Health Care Services, Titles XIX and V of



the Social Security Act, both jointly funded with federal and state dollars. The department also administers the Maternity Outpatient Medical Services (MOMS) program, which provides immediate outpatient prenatal care to non-citizens who are eligible for emergency services only, and to teens and other pregnant women while they have a pending Medicaid application. The Plan First! Waiver is another program administered by the department that provides family planning services to women who otherwise would not have medical coverage. And the Adults Benefit Waiver provides health care benefits for Michigan's adults who do not have children and whose income is at or below 35% of the Federal Poverty Level (about \$271 a month for a single adult).

DCH also reports on the uninsured in Michigan, publishing reports on statistics annually to create awareness and dialogue on the uninsured population.

Major Accomplishments of the Michigan Medicaid Program

1. Over the past seven years, the Michigan Medicaid caseload has grown by approximately 500,000 beneficiaries, yet during this same period, the percentage of the total general fund consumed by Medicaid expenditures remained at 25%. Spending control was achieved by implementing administrative efficiencies and policies, without reducing provider rates or beneficiary services.
2. About 1 million of the 1.6 million Medicaid enrolled beneficiaries receive services through managed care.
3. U.S. News and World Report ranks six of the Michigan Medicaid Health Plans (MHP) in the top 20 health plans nationwide and 13 Michigan MHPs ranked in the top 70 nationwide.
4. Implementing the Community Health Automated Medicaid Processing System (CHAMPS) that will replace the current Medicaid claim processing payment system.
5. Realizing savings from the Pharmacy Quality Improvement Project, which yielded cost avoidance figures of \$16 and \$20 per utilizer per month for adults and children respectively, with a total cost avoidance for Michigan of more than \$7,100,000 during the evaluation period of June 2005-October 2007.
6. Implementing the NCPDP Prescription Origin Code field for pharmacy providers to report the type of prescription presented at the pharmacy. This change complies with the federally mandated tamper resistant prescription pad policy and allows MDCH to track practitioners who engage in e-prescribing.
7. Finalizing a new contract for eyeglasses estimated to provide additional \$542,000 annual savings.
8. Creating an online beneficiary application that determines eligibility for the Medicaid Healthy Kids, pregnant women, MICHild, and Plan First! Programs.
9. The MI Choice program served over 9,500 people during 2008 with a budget of approximately \$123 million. The program serves participants who meet the nursing facility level of care standards at a cost to the Medicaid program that is less than half the cost of nursing facility care.

More information on the uninsured in Michigan can be found in the Characteristics of the Uninsured and Individuals with Select Health Insurance Coverage in Michigan located at:

http://www.michigan.gov/mdch/0,1607,7-132-2946_5093-17224--,00.html



Topic: Health Insurance Coverage

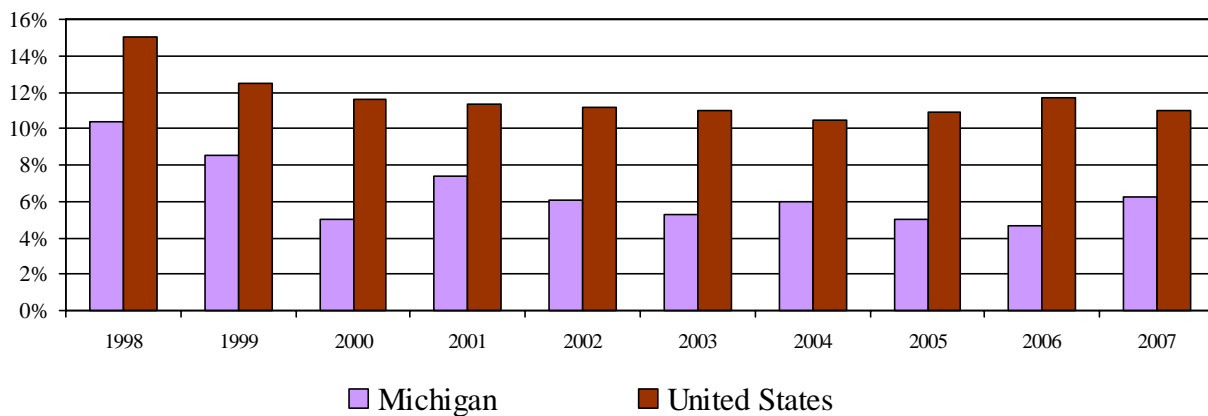
41. Uninsured Children

Although adults are typically more likely to be uninsured than children, there are still over eight million children without insurance in the United States.

The Current Population Survey (CPS) conducted by the U.S. Census Bureau is one of the most widely cited and available sources for data on health insurance or lack thereof

How are we doing?

Percentage of Children (Under 18) Who Are Uninsured



Michigan continues to experience a considerably lower rate of uninsured children than the United States rate. Michigan has experienced an overall reduction in rate of uninsured children from a high of 10.4% in 1998. This is due, in part, to the establishment of MI Child, a state insurance program that insures low-income children under age 18.

How Does Michigan compare with the U.S.?

The rates of uninsurance for children (0 to 17 years) are lower in Michigan than throughout the United States as well. In 2007, 6.2% of Michigan’s children were uninsured, a rise in comparison to 2005 and 2006. However, 11.0% of all children in the United States are uninsured, a much higher rate than that of Michigan. Michigan ranks 2nd in having the lowest rate of children uninsured on average from 2005 to 2007.

How are different populations affected?

Families with children are more likely to be insured than those without children. Married couples with children have the lowest uninsured rate at 6.2 percent while single individuals without children have an uninsured rate of 23.8 percent.

Children living in homes with income 100-149% above the Federal Poverty Level (FPL) have the highest uninsured rate at 10.3 percent; however, this rate drops more than half for children living in homes with income 150-199% above the FPL. The lowest uninsured rate falls with children in families with income 400% or above the FPL at 2.6 percent.



What is the Department of Community Health doing to improve this indicator?

The department has responsibility for administering the state's Children's Health Insurance Program, called MICHild, which was established under authority of Title XXI of the Social Security Act, and when combined with Medicaid Healthy Kids Program, makes health care coverage available to uninsured children in low-income families.

Major Accomplishments of the Michigan Medicaid Program

1. Expanding the Healthy Kids Dental Program to Genesee and Saginaw counties; the contract with Delta Dental covers children in a total of 61 Michigan counties.
2. Implementing a new CMS-approved School-Based Services FFS Program reimbursement methodology that allows continued Medicaid coverage in this setting.



Topic: Health Insurance Coverage

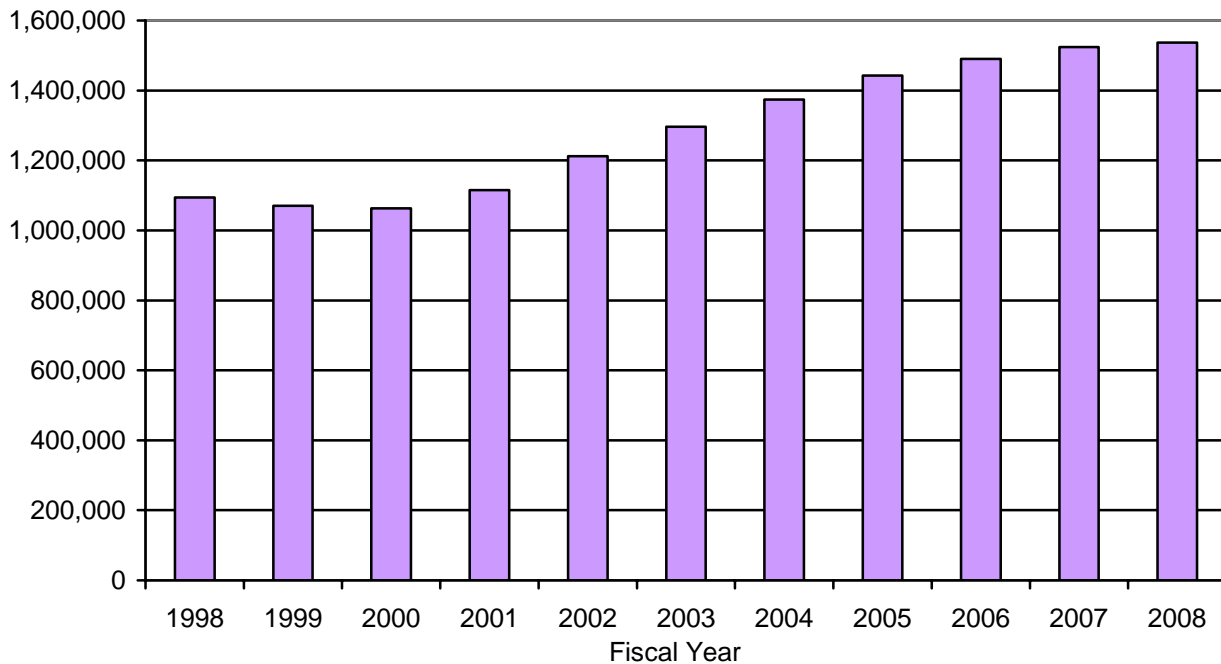
42. Medicaid and MIChild Enrollment

Medicaid is the state/federal health program for individuals that cannot afford health care themselves, that is administered by Michigan. Michigan has a children’s component to Medicaid called Healthy Kids. Healthy Kids is a program for children whose family income is below 150% of the federal poverty level. Children under the age of one and pregnant women with family incomes up to 185% of the federal poverty level are eligible.

Another health insurance program in Michigan is MI Child, an initiative which began in 1998. It provides health insurance to children of low-income and moderate-income families. Children under the age of one year with family incomes between 185% and 200% of the federal poverty level, and children age one to 18 without health coverage and whose family income is between 150 and 200% of the federal poverty level are eligible. MIChild enrollment is coordinated with Healthy Kids enrollment since both programs share a single application.

How are we doing?

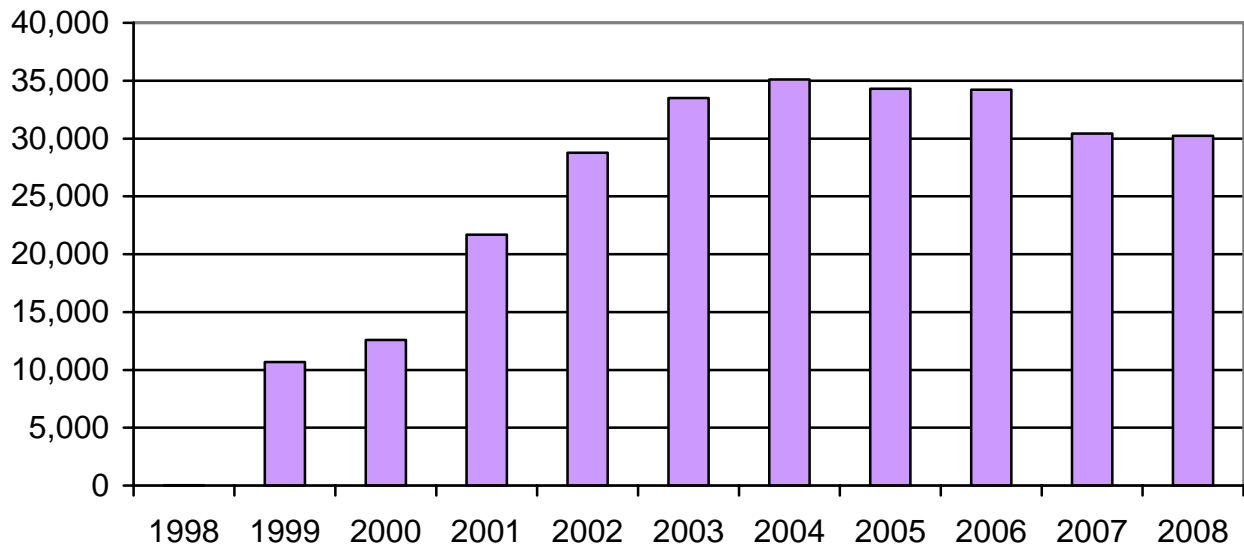
Medicaid Enrollment in Michigan



Total enrollment in the Michigan Medicaid program in 2008 was 15.3% of the population at 1,536,853 residents. Over the past few years, the Michigan Medicaid program has continued to cover an increasing number of residents, including low-income children who have lost dependent coverage and adults who have lost their jobs and exhausted their unemployment benefits.



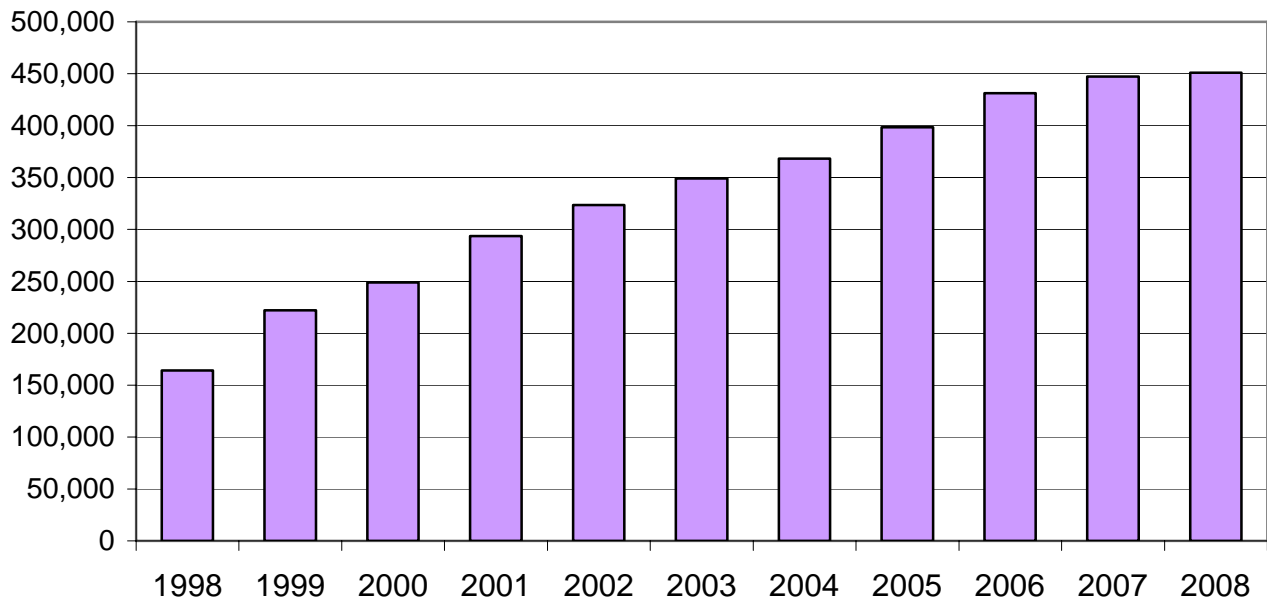
MI Child Enrollment in Michigan



* MI Child documents enrollment in June of each year.

For MICHild, enrollment increased from 28 children in June of 1998 to 30,245 in June 2008.

Healthy Kids Enrollment in Michigan



* Healthy Kids documents enrollment in May of each year.



Healthy Kids has steadily increased over the past 10 years. Its growth corresponds with the rising enrollment in Medicaid as well. Healthy Kids enrollment has risen from 164,190 in May 1998 to 450,988 children in May 2008.

How Does Michigan compare with the U.S.?

Michigan's Medicaid rolls increased 40.2% between fiscal year 2000 and fiscal year 2006 while the average increase across the nation from December 2000 to December 2006 was only 31%.

How are different populations affected?

A much larger percentage of children are eligible for Medicaid than adults. In 2007, 37.1% of Michigan's children were eligible for Medicaid, as were 8.0% of adults. In 2007, Michigan Medicaid covered 11.1% of Whites, 34.2% of Blacks, and 21.1% of Hispanics.

What is the Department of Community Health doing to improve this indicator?

The MDCH has comprehensive outreach efforts for the MICHild program, including a combined Medicaid and MICHild application, pamphlets, and posters. Toll-free telephone lines (1-888-988-6300) offer translation services for other languages as well. In addition, the Department is very active in outreach to the Native-American community. The Department has trained many of the tribal health centers in Medicaid and MICHild eligibility and has enrollment assistance workers at each tribal health center.

The Department also provides preventive and primary health care to its dually-eligible Children's Special Health Care Services (CSHCS) and MICHild enrollees. Eligible families may choose to enroll in one of the CSHCS's managed care programs that also provide MICHild services or receive services on a fee-for-service basis.

The MDCH has worked with local Multi-Purpose Collaborative Bodies and Child and Adolescent Health Centers and Programs to develop locally-driven, innovative outreach programs throughout the state. Outreach materials are provided through schools and local organizations. The Department has also offered widespread training assistance to community-based groups and contacted community business organizations (small businesses, self-employed persons, etc.) for outreach efforts.

Another asset of the MICHild and Healthy Kids program is the co-location of Medicaid eligibility workers at the MICHild administrative site of business. This allows faster Medicaid determinations, better communication between the two programs, and continuity of care for children transferring between programs.

MICHild and Healthy Kids also have an online application tool at www.healthcare4mi.com. More than 50% of the applications received for Healthy Kids and MICHild are filed through the online application. Online applications can be filed from home, library or anywhere there is an internet connection available including one of the trained sites. Along with the trained Tribal Health Centers, over 350 sites are trained to assist applicants with the online application for Healthy Kids Medicaid and MICHild. Applications for children and pregnant women received from the trained sites allow presumptive eligibility for the applicants. Applications from other sources are processed within 5 days for MICHild.



Topic: Public Health Preparedness

The Office of Public Health Preparedness (OPHP) within the Michigan Department of Community Health (MDCH) was formally established in 2002 to coordinate development and implementation of public health and medical management services preparedness and response to acts of bioterrorism (BT), infectious disease outbreak and other public health emergencies. The mission of the office has expanded to encompass “all hazards” preparedness and response. This is accomplished by working within the department as well as with local and private partners. Funding for the preparedness program is provided exclusively through two federal cooperative agreements; the Centers for Disease Control and Prevention (CDC) Public Health Preparedness and Response for Bioterrorism and the Office of the Assistant Secretary for Preparedness and Response (ASPR) Hospital Preparedness Program (HPP). Additional information can be found at: www.michigan.gov/ophp and www.michigan.gov/prepare.

Listing of Major Accomplishments:

COMMUNICATIONS

MIHAN – The Michigan Health Alert Network is an internet web-based system for immediate alerting and notification. The MIHAN has over 4,000 users from public health, hospitals, life support agencies, health clinics, emergency management, state departments, federal partners and other. The MIHAN is able to send alerts through landline phones, cell phones, text pagers, 800 MHz radio systems and email. Users may identify three levels of alerting preferences in high, medium and low alerts. This extensive network containing a document library accessible to members is the primary method for communications on a health related event.

MI-TRAIN - Michigan’s Learning Management System which contains a centralized, searchable database of courses relevant to public health, healthcare, and emergency preparedness. Through TRAIN, users have access to courses from nationally recognized course providers. There are over 10,000 course listings from over, 2600 providers of training. The courses on TRAIN are offered in the form of web-based learning, on-site learning, satellite broadcasts and more. A user can browse the course listing or perform a search by keyword, subject area, course provider, and competency, among others. Recently MSP became partners and will use this excellent system as well.

EMSystem / EMResource – Internet system adopted within healthcare statewide. This allows real time status of hospital bed capacity including the ability to meet the requirements of the DHHS SOC to provide hospital bed capacity within 2 hours of a request. Ventilator availability within hospitals is also collected via this system. Users on the system are tested at least monthly in all regions and the system has been successfully used in real Michigan events. This is an important tool used by each Regions Medical Coordination Center (MCC).

Patient Tracking – Michigan has adopted a statewide triage tag which is compatible with electronic patient tracking initiatives. Each region continues to implement, train and exercise patient tracking systems to be used during a mass casualty event.

Risk Communication Strategies – The office has worked extensively to develop risk communication plans and resources to support any health emergency. This includes pre-scripted materials at the ready. Extensive work has established a network of Public Information Officers within the health arena for coordinated messaging.



MEDICAL SURGE PLANNING

20% Above Average Daily Census, Michigan hospitals continue to identify mechanisms to surge their current capacity above 20%. An important planning strategy is to implement all strategies to care for injured persons within traditional hospital setting. This is the first step in surging the current capacity of the healthcare system. Additional strategies move outside of hospital settings.

Modular Emergency Medical System (MEMS) – In 2004, Michigan adopted the MEMS concept (developed by the Department of Defense, Biological Weapons Improved Response Program, in response to the Nunn-Lugar Domenici Domestic Preparedness Program of 2003). Currently each region has identified, equipped and implemented a Regional Medical Coordination Center (MCC) and has the ability to standup a Neighborhood Emergency Help Center(s) (NEHC) and an Alternate Care Center (s) (ACC). The Regional Medical Coordination Center (MCC) is designed to be a NIMS-consistent Multi-Agency Coordination System (MACS) that emphasizes coordination among local/regional medical health agencies and local emergency management. The Regional MCC assists with the provision of a flexible, coordinated, uninterrupted health response and serves to support the healthcare system within Michigan.

Michigan Transportable Emergency Surge Assistance (MITESA) Medical Unit – In 2007 Michigan purchased two interoperable mobile medical facilities from Western Shelter Systems that have the capability to join as a statewide 140-bed mobile facility. A 100-bed mobile facility is housed in Southeast Michigan, where a large majority of the state’s population resides. In Southwest Michigan, a 40 bed mobile facility is stored in rapidly deployable trailers. A concept of operations is in final draft and the resource continues to be equipped as funding is available.

Mobile Field Medical Teams – 2009 is targeted for the identification of at least one mobile field medical team (consistent with FEMA resources typed definition) within each of the preparedness regions. These teams will be trained to support medical surge initiatives as noted above.

Michigan Mortuary Response Team (MI-MORT) – Established to provide the State of Michigan a mass fatality resource that could be readily deployed to any location in the State in response to an incident in which the number of fatalities had exceeded local or regional resources. The MI-MORT team consists of various professions including; forensic pathologists, forensic dentists, forensic anthropologists, funeral directors, x-ray technicians and many others. This team works to support the local Medical Examiner and ultimately the local, regional and state response by providing technical assistance and personnel to recover, identify and process deceased victims in a dignified manner.

Disaster Portable Morgue Unit (DPMU) – Contains the equipment and supplies for a fully functional morgue, necessary to initiate operations. All materials are segregated into kits by section of use and are palletized in four trailers for truck transport. The DPMU is designed to be erected as needed inside of usable facilities.

MI-Volunteer Registry - Since 2003, Michigan has followed an aggressive implementation plan to develop an all hazards registry for any citizen that wishes to volunteer in an emergency consistent with the national Emergency System for the Advanced Registration of Volunteer Health Professionals (ESAR-VHP). The MI Volunteer Registry (www.MIVolunteerRegistry.org) currently has over 4000 volunteers, 50% of which are health professionals. Efforts continue to develop the capability of registering all types of volunteers, verify their credentials and qualifications, and utilize them in local, regional, and state exercises in anticipation of potential real events.

Volunteer groups on the registry include Community Emergency Response Team (CERT), Fire Corps, General Support Volunteers, Licensed Health Professions, Medical Reserve Corps (MRC), Michigan



Mortuary Response Team (MI-MORT), Michigan's State Animal Response Team (MI-SART), Neighborhood Watch, Unlicensed Health Volunteers and Volunteers in Police Service (VIPS).

PHARMACEUTICAL CACHE DEVELOPMENT

Michigan Emergency Preparedness Pharmaceutical Plan (MEPPP) - Is a statewide plan that contains information on current local, regional, state and federal pharmaceutical caches established. This plan is updated quarterly and available to the SEOC and CHECC. It provides critical information on the type of cache, target audience, content, deployment and availability to ensure prompt identification and distribution of resources during an event

Michigan Emergency Drug Delivery Resource Network (MEDDRUN) – This program provides standardized caches of medications and supplies to treat approximately 100 casualties. These caches are located between Michigan's rotary air, and select ground, Emergency Medical Services (EMS) agencies to minimize deployment time when needed during an event. MEDDRUN rapidly deliver these medications and supplies to hospitals and on scene, ideally within one hour of request. This is critical as the need to provide nerve agent antidotes is extremely time sensitive. These resources can be deployed to 90% of the State of Michigan in less than one hour or request.

CHEMPACK – A CDC supplied, state managed, supplemental source of pre-positioned nerve agent (NA)/organophosphate antidotes and associated pharmaceuticals that will be readily available for use when local supplies become depleted. This large quantity resource is intended to have them rapidly available to state and/or local emergency responders. This would be a second resource to the above noted MEDDRUN which is more quickly mobilized.

Strategic National Stockpile (SNS) Plan – Michigan has consistently received the highest marks by the CDC for its state and local SNS plan(s). Partnerships with private entities have proven extremely valuable in identifying resources to serve the citizens in Michigan. This includes each hospital developing and exercising their SNS request process at the completion of 2009.

ADDITIONAL ACCOMPLISHMENTS

Long Term Care Outreach - A multi-disciplinary committee with representatives throughout the state of Michigan developed a toolkit and DVD to assist this special population. This toolkit contains sample policies, procedures and template such as hazard vulnerability assessments, mutual aid agreements, and emergency checklist that a facility may utilize when putting together an emergency plan. Also included is contact information for representatives in their geographical area who are willing to help prepare emergency plans such as local health department Emergency Preparedness Coordinator, Local Emergency Manager, or Regional Medical Biodefense Network Coordinator.

Michigan School Preparedness and Response Curriculum - In 2006, OPHP met with representatives from the Michigan Department of Education and Michigan Department of State Police, Emergency Management and Homeland Security Division, to develop a comprehensive Preparedness and Response Curriculum for all public and private/non-profit schools in Michigan. The curriculum will be integrated and aligned with the Michigan Model for Health®, a school health education program implemented in over 90% of Michigan's public schools and in more than 200 private and charter schools. The purpose of this curriculum is to empower children with the knowledge, skills and judgment to make smart decisions before, during and after an incident.



Topic: Senior Health

Currently, more than 45 million Americans are 60 years of age or older. This number is expected to double during the next 25 years as the over 75 million Boomers (those born between 1946 and 1964) grow older. By the year 2030, the Centers for Disease Control and Prevention (CDC) estimates that almost 20% of the U.S. population will be 60 or older and the number of centenarians in the U.S. will increase to 324,000, up from 72,000 in 2000.¹ These future seniors will live longer, be better educated, and be even more racially and ethnically diverse than previous senior cohorts.

However, this aging of the American population is expected to trigger a huge demand for health care and social services. At least 80% of seniors have at least one chronic condition, and 50% have at least two. These conditions can cause years of pain, disability, and loss of function, especially if they are not managed properly. About 12 million seniors living at home report that chronic conditions limit their activities. Three million older adults say they cannot perform basic activities of daily living, such as bathing, shopping, dressing, or eating. Their quality of life suffers as a result, and demands on family and caregivers can be challenging.² Health-care expenditures for a 65-year-old are now four times that of a 40-year-old. Overall U.S. health care expenditures are projected to increase 25% by 2030.³

Michigan Boomers and Seniors

When comparing the health status of the “boomer” and “senior” populations within Michigan, the Michigan Department of Community Health, Division of Chronic Disease Prevention and Injury Control focuses on the following two age groups: adults aged 40-59 years and adults aged 60 years and over. In 2006, adults aged 40-59 years made up 29.0% of the total population, while adults aged 60 years and over made up 17.1% of the population.

As Michigan’s adult population ages and the prevalence of chronic diseases increases, Michigan health care costs are expected to reach \$11.4 billion by 2015.⁴ In 2007, 62.4% of Michigan adults age 60 and over reported doctor-diagnosed arthritis, 56.7% reported hypertension, and 25.0% reported cardiovascular disease.⁵ Many of these adults also suffer from other chronic conditions including oral health challenges such as root and coronal caries, oral cancers, and from complications due to multiple medicines.⁶ Table 1 uses 2007 Michigan BRFSS data to directly compare the current health status of Michigan adults within the 40-59 and 60+ age categories.

Table 1: Health Status of Michigan’s Aging Population: 2007 Michigan BRFSS

Self Reported Data:	40-59 Years	60+ Years
Disability	23.2%	38.0%
No physical activity in the past month	19.8%	29.0%
Obese (weight & height report)	31.7%	30.2%
Overweight	37.9%	39.9%
Smoking	22.3%	10.0%

¹ Centenarians in the United States, U.S. Department of Health and Human Services and U.S. Census Bureau, 1990.

² Centers for Disease Control and Prevention, “Healthy Aging: Preventing Disease and Improving Quality of Life among Older Americans”, 2004.

³ Altpeter, Mary. University of North Carolina Institute on Aging. “Aging and Health: What it Means for Older Adults” Conference presentation at the 19th National Conference on Chronic Disease Prevention and Control. Atlanta, GA. 2005

⁴ Michigan Population Estimates. MDCH Division of Vital Records and Health Statistics, 2006.

⁵ Michigan Behavioral Risk Factor Surveillance System. MDCH Chronic Disease Epidemiology Section. www.michigan.gov/brfss

⁶ Crozier, Stacie. ADA News. “Elder Care: Resolution addresses oral health needs of ‘vulnerable’ older adults.” November 2006.



Binge Drinking	17.3%	6.2%
Heavy Drinking	5.7%	3.8%
Diabetes	8.5%	20.8%
Asthma	13.7%	10.2%
No health care coverage	10.9%	2.5%

What is the Department of Community Health doing to address senior health?

The Healthy Aging Initiative, established in 2005, is supported by the MDCH Division of Chronic Disease Prevention and Injury Control and the Office of Services to the Aging (OSA). The two entities collectively work toward the prevention and management of significant chronic diseases and injury. Major chronic disease program areas include cancer, heart disease and stroke prevention, physical activity, nutrition, injury and violence prevention, diabetes, kidney, osteoporosis, arthritis, asthma prevention programs and tobacco smoking cessation programs for individuals, businesses and worksites. The mission of the Division is to provide leadership in the prevention and control of disease risk factors, emphasizing physical activity, healthy eating and the reduction of health disparities; as well as creating environments that support healthy behaviors in communities, schools, health care systems and work sites.

What is Healthy Aging?

Each person defines healthy aging through their own lens. For some Healthy Aging is the development and maintenance of optimal physical, mental, and social well-being and function in older adults. It is most likely to be achieved when physical environments and communities are safe, and support the adoption and maintenance by individuals of attitudes and behaviors known to promote health and well-being; and by the effective use of health services and community programs to prevent or minimize the impact of acute and chronic disease on function and maintain optimal quality of life.⁷ Within our partnership (OSA and DCH) we emphasize quality of life and include self determination and person centeredness in this definition.

Key components of healthy aging include:

- Regular physical activity such as brisk walking, raking leaves, or household chores for 30 minutes most days of the week (at least 5 days);
- Maintaining a healthy diet and healthy weight with enough consumption of fresh fruits and vegetables and a healthy body mass index;
- Preventing and/or treating depression - many life changes as people age may trigger depression, but it's not a normal part of growing older. Left untreated, depression in older adults can lead to suicide, disability or worsen existing illnesses;
- Remaining socially active has shown to be beneficial in helping older adults combat chronic diseases such as dementia;
- Being smoke-free and avoiding second-hand smoke. Smoking and regular exposure to secondhand smoke can cause chronic illnesses such as heart disease, cancer, lung disease, and stroke. For older adults, smoking is associated with eye disease such as cataract and macular degeneration, and oral health problems;
- Routine dental checks and maintaining good oral health are very important components of healthy aging;
- Regular preventive screenings and immunizations can help prevent or control medical conditions if they are caught early. The tests given and how often will depend on age, health history and risk

⁷ Adapted from Healthy Aging Research Network, 2005



factors, such as family history and lifestyle. Older adults should be aware of what screening tests and immunizations are needed at each stage of life, including yearly flu shots.

Additional indicators of health and wellness that often change as people age include economic status, social status, and support systems such as: workforce participation, financial status changes and issues related to poverty, changes in marital status, living arrangements, mobility, volunteerism or use of time, care giving status and/or support, and elder abuse problems.⁸ These social determinants of health are often precursors to health status and health care utilization.

Disease prevention/health promotion programs provide information and support to older individuals with the intent to assist them in avoiding illness and improving health status. Services include health risk assessments, physical fitness programs, group exercises, music, art, dance movement therapy, mental health screening and education programs. Information concerning diagnosis, prevention, treatment and rehabilitation of age related diseases and chronic disabling conditions may also be provided.⁹

Critical Health Indicators

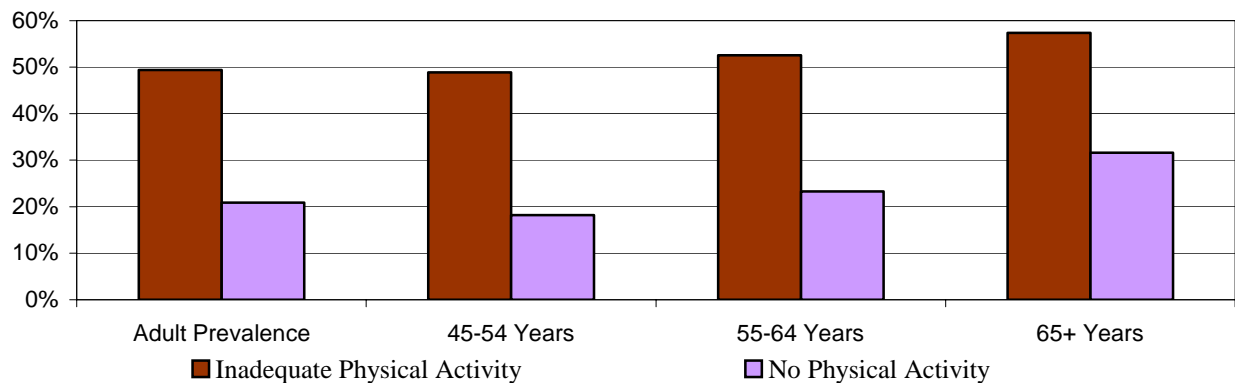
Key Critical Health Indicators for older adults include those associated with healthy lifestyles (such as health risks and behaviors) and quality of life (including access to and utilization of health care resources).

Physical Activity

How are we doing?

The percentage of older people not engaging in regular physical activity increases with age, although this increase is not significant. 2007 MiBRFS data indicate that 18.2% of Michigan adults age 45-54 reported no leisure-time physical activity, while 23.3% of those aged 55-64 reported no leisure-time physical activity. Among seniors (adults aged 65 and over), the prevalence of no leisure-time physical activity was equal to 31.6%. Additionally, over half of Michigan's adult population report inadequate engagement in physical activity (45-54 years: 48.9%, 55-64 years: 52.6%, and 65+ years: 57.4%).

Prevalence of Adults Who Do Not Engage in Physical Activity: 2007 MiBRFS



How does Michigan compare with the U.S.?

In 2007, the adult population 45 years of age and older within Michigan is similar to that of the nation in terms of physical activity. Nationwide, 51.5% of people aged 45-54 years, 53.0% of those aged 55-64

⁸ Federal Interagency Forum on Aging-Related Statistics. Older Americans 2008: Key Indicators of Well-Being. Washington, DC: U.S. Government Printing Office. March 2008.

⁹ Michigan Office of Services to the Aging 2009.



years reported inadequate engagement in physical activity (compared to 48.9% and 52.6% in Michigan, respectively). 61.0% of those aged 65 years and over reported inadequate engagement in physical activity, compared to 57.4% of Michigan adults within the same age category.

How are different populations affected?

In Michigan, females were more likely than males to report inadequate physical activity (Michigan: 50.5% and 48.3%, respectively).¹⁰ In addition, Michigan non-Hispanic blacks aged 60 years and over reported higher levels of inadequate physical activity (73.7%) when compared to non-Hispanic whites (55.6%).

What is the Department of Community Health doing to improve this indicator?

The Michigan Partners on the **PATH** (Personal Action Toward Health) are committed to helping Michigan Seniors reduce their risk of chronic disease, as well as manage existing conditions. PATH partners are both public and private agencies, organizations, and programs that offer evidence based disease prevention and self-management programs. These programs provide seniors with an opportunity to learn to set goals in nutrition and fitness, and help those with chronic disease learn to take control of their condition, as well as learn how to communicate with their medical care provider more effectively. Additional evidence-based physical activity programs for seniors include “Matter of Balance,” and “Enhanced Fitness.” Boomers, seniors and/or their caregivers can find information about the schedule, location and availability of these programs in their area by checking the website at www.MiPath.org. The Michigan Healthy Eating and Physical Activity Plan (Obesity Prevention Program) works with a number of communities and organizations to create and promote opportunities for physical activity. Groups include local health departments, local barber shops and hair salons (delivered through the National Kidney Foundation of Michigan), and local faith-based organizations.

In addition, the Department’s Healthy Aging Initiative Coordinator works closely with the National Association of Chronic Disease Directors, the National Institutes of Health, and the Centers for Disease Control and Prevention in reviewing publications that promote guidelines for physical activity and older adults.

Nutrition and Diet

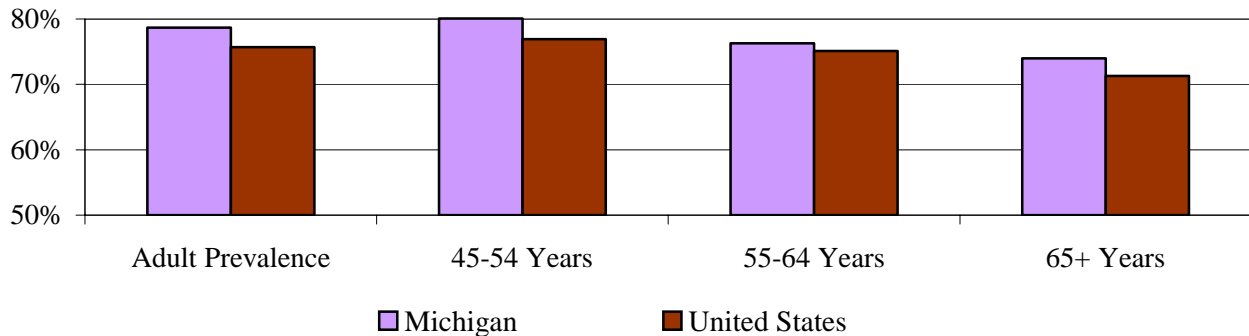
How are we doing?

Increasing the consumption of fruits and vegetables in Michigan remains challenging among the older adult population. Statistics show that diet habits are formed early on and do not change significantly as people age. Based on 2007 MiBRFS data, 80.1% of Michigan adults aged 45-54 years, and 76.3% of those aged 55-64 years do not consume an adequate amount of fruits and vegetables. Seniors over the age of 65 years fared slightly better with 74.0% of these individuals reporting inadequate fruit and vegetable consumption.

¹⁰ Centers for Disease Control and Prevention (CDC). *Behavioral Risk Factor Surveillance System Survey Data*. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2007.



Prevalence of Adults Who Have Inadequate Fruit and Vegetable Intake: 2007
MiBRFS



How does Michigan compare to the US?

In 2007, fruit and vegetable consumption within Michigan was similar to that of the nation as a whole. Nationally, 76.9% of adults aged 45-54 years, and 75.1% of adults aged 55-64 years reported that they did not consume the recommended daily amount of fruits and vegetables; this is compared to 80.1% of Michigan adults aged 45-54 years and 76.3% of adults aged 55-64 years. Nationally, 71.3% of seniors aged 65 years and over reported not consuming the recommended amount of fruits and vegetables, while 74.0% of Michigan adult within the same age group reported inadequate fruit and vegetable consumption.

How are different populations affected?

MiBRFS data also indicates that for adults aged 60 years and over there is no significant difference in reported levels of inadequate fruit and vegetable consumption by race (non-Hispanic whites: 71.5%, non-Hispanic blacks: 79.3%, and Hispanics: 75.7%).

What is the Department of Community Health doing to improve this indicator?

MDCH promotes healthy nutrition for older adults through collaborative efforts with state and local organizations whose mission and/or target population includes chronic disease prevention and health promotion for older adults. Activities include disseminating educational information about the nutritional values of consuming more fruits and vegetables, promoting farmers' markets at senior living facilities, and promoting demonstrations of the variety of ways in which fruits and vegetables may be served to seniors.

Direct nutrition services for older adults are provided by the Office of Services to the Aging. These include nutrition education and counseling services, the Senior Project Fresh Program (a joint program between MDCH and OSA), Michigan's Coordinated Access to Food for the Elderly (MiCafe), home delivered meals, and congregate meal sites.¹¹ Nutrition counseling services provide options and methods for improving nutrition status to seniors age 60 and over and disabled adults age 18 and over who are at nutritional risk (because of health and/or medication use or chronic illness). The assessment will determine at minimum a person's nutritional history, both chronic and acute health problems, and a listing of all prescription and over the counter medications taken. Senior Project FRESH provides seniors 60 and older with incomes of 185% of poverty or less with coupons to purchase fresh fruits and vegetables at local authorized Michigan farmers' markets and roadside stands. MiCAFE assists low income seniors with food stamp applications, food assistance in the community, and instructions for using the Michigan

¹¹ Ibid



Bridge Card. The Home Delivered Meals program provides at least one nutritionally sound meal per day to adults who are homebound and who do not have friends or family to assist with meal preparation. In some areas of the state, meals are available seven days a week. Congregate meals are provided in group settings in churches, schools, residential communities, senior centers or recreational centers. They often promote socialization among the participants.

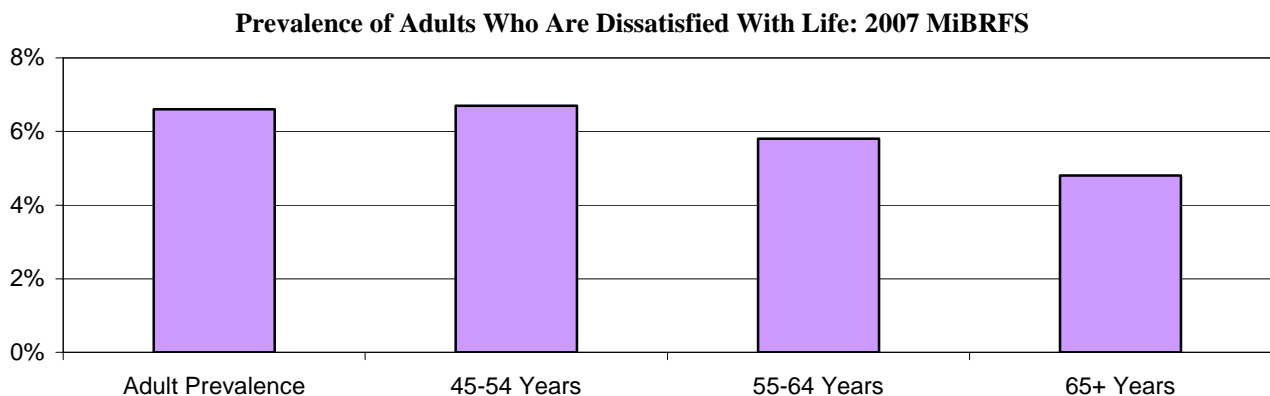
Depression

It is estimated that 20% of the national population ages 55 and over have experienced some type of mental health concern (including major depressive disorders).¹² Changes in financial status, participation in the labor force, health status, marital status, living arrangements, abuse, social networks and lack of mobility can all contribute to increased depression among older adults. People who report many depressive symptoms often experience higher rates of physical illness, greater functional disability, and utilize more health care resources.¹³ Mental health is currently measured through a variety of different methods, but this report focuses only on the number of poor mental days, as well as the presence of specific depressive symptoms.

How are we doing?

Based on estimates calculated from the 2007 MiBRFS for adults aged 45 years and older, 9.4% reported having poor mental health. 11.9% of adults aged 45-54 years and 9.2% of those aged 55-64 reported that their mental health was not good during at least two weeks out of the last month. When compared to adults aged 45-64 years, seniors aged 65 years and over report lower levels of poor mental health with only 6.5% reporting at least two weeks of poor mental health within the past month. Overall, 13.6% of adults aged 45-54 years, 19.5% of those aged 55-64 years, and 27.1% of seniors aged 65 years and over reported their general health as being fair or poor. In addition, 6.7% of adults aged 45-54 years, 5.8% of those aged 55-64 years, and 4.8% of seniors aged 65 years and over reported that they were dissatisfied or very dissatisfied with their lives.

In 2006, an analysis on the state of depression in Michigan was conducted through the BRFSS. Results revealed that 9.5% of adults aged 45-54 years and 10.5% of adults aged 55-64 years suffered from major depression. Among seniors age 65 and older, the rate was 5.5%.



¹² American Association of Geriatric Psychiatry (2008)

¹³ Federal Interagency Forum on Aging-Related Statistics. Older Americans 2008: Key Indicators of Well-Being. Federal Interagency Forum on Aging-Related Statistics. Washington, DC: US Government Printing Office. March 2008.



How does Michigan compare with the U.S.?

2007 MiBFRS general health status rates are comparable to national figures. Nationally, 15.3% of adults aged 45-54 years and 20.1% of those aged 55-64 years reported their general health as being fair or poor, while 26.5% of seniors age 65 and older report their general health as fair or poor.

How are different populations affected?

Women are 1.69 times more likely than males to have major depression, and highly educated adults are less likely to have major depression than adults with lower levels of education. When comparing prevalence of major depression among different racial categories, it was found that non-Hispanic whites aged 60 years and over (6.0%) report a significantly lower level of major depression when compared with non-Hispanic blacks within the same age group (8.4%). Unfortunately, depressive disorders are widely under-recognized conditions and often are untreated or under treated among older adults. Among Michigan residents classified as having a major depression in 2006, 43.9% had never been diagnosed by a doctor as having depression.

What is the Department of Community Health doing to improve this indicator?

MDCH promotes education about evidence-based programs for screening and treating older adults with depression through conference calls and webinars. These programs include “Healthy IDEAS,” “PEARLS,” and “IMPACT.”¹⁴ Healthy IDEAS: Identifying Depression, Empowering Activities for Seniors) is an evidence-based program that integrates depression awareness and management into existing case management services provided to older adults. There are four evidence-based components of Healthy IDEAS: screening and assessment of depressive symptoms, education for older adults and family caregivers about depression and self-care, referral and linkage to healthcare and mental health professionals, and behavioral activation (empowering older adults to manage their depressive symptoms by engaging in meaningful, positive activities). PEARLS, the Program for Encouraging Active Rewarding Lives for Seniors, empowers seniors through behavioral techniques to actively manage depression and improve quality of life. It uses a multi-faceted approach that includes problem solving, social and physical activation, and pleasant activity scheduling. IMPACT (Improving Mood-Promoting Access to Collaborative Treatment) uses two key processes. The first process is the systematic diagnosis and tracking of depression outcomes to determine if an adjustment in treatment is needed. The second process is the changing of care when needed with the addition of a care manager and a consulting psychiatrist to assist the primary care provider.

In addition to promoting the above resources, the Office of Services to the Aging provides support for professional-level counseling services, including emotional support, problem identification and resolution, and skill building, to older adults who are experiencing personal, social or emotional problems which may be relation to psychological and/or physiological dysfunction. Family and group counseling are available as well through a variety of settings including one's home, senior centers, congregate meal sites, and residential care facilities. Peer counseling programs, which utilize older adults as volunteer counselors, may also be provided.

¹⁴ <http://www.prc-hanconferences.com/action-briefs>

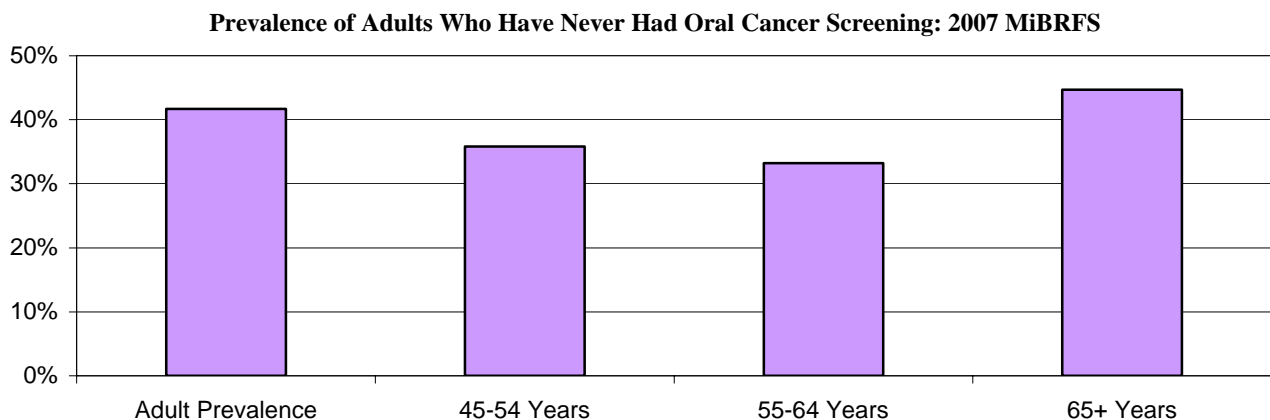


Oral Health

Oral health diseases are cumulative and more complex over a lifetime, have increasing impact on quality of life, and have increasing impact on general health. Older adults need special care in dentistry due to the fact that many have experienced extensive oral disease, medical problems complicate their care, and diagnosis and care planning are complex.

How are we doing?

2007 MiBRFS data indicate that only 58.3% of Michigan adults have reported ever having an oral/mouth cancer exam. The 2007 MiBRFS also indicates that 35.8% of Michigan adults aged 45-54 years and 33.2% of those aged 55-64 year have never had an oral/mouth cancer exam. Among seniors aged 65 years and older, 44.7% of adults within this age group have never had an oral/mouth cancer exam.



How does Michigan compare with the U.S.?

While 2007 national data is not available for the oral health category, the 2006 CDC BRFSS reports that 27.0% of adults aged 45-54 years, 27.0% of those aged 55-64 years, and 32.8% of seniors aged 65 years and older had not visited a dentist or dental clinic within the past year. Nationally, whites are more likely to see a dentist than are other racial/ethnic groups. On the other hand, women (72.2%) were slightly more likely to see a dentist or hygienist than men (68.0%). In addition, 19.3% of seniors aged 65 years and older have had all of their natural teeth extracted.

How are different populations affected?

Non-Hispanic whites (60.2%) were more likely to have an oral/mouth cancer exam when compared to non-Hispanic blacks (48.5%). In addition, the prevalence of ever having a oral/mouth cancer exam was similar for both males (59.3%) and females (57.3%).

What is the Department of Community Health doing to improve this indicator?

Staff from MDCH serve as advisory members to the Michigan Oral Health Coalition and the Michigan Geriatric Dentistry Coalition to promote and support oral health care for older adults. The Michigan Oral Health Coalition's mission is to improve oral health in Michigan by focusing on prevention, health promotion, oral health data, access and the link between oral health and overall health. More specifically, the mission of the Geriatric Dentistry Coalition is to improve the oral health of older people by focusing on prevention, health promotion, and evidence-based practices. The purposes of this Coalition are:



- To be a resource for providers of care for the elderly;
 - To promote the implementation of policies that support evidence-based strategies that provide optimal oral health for the elderly; and
 - To develop collaborative partnerships to address the oral health needs of the elderly.
- MDCH continues to seek state and national funding through grant proposal to expand services for older adults.

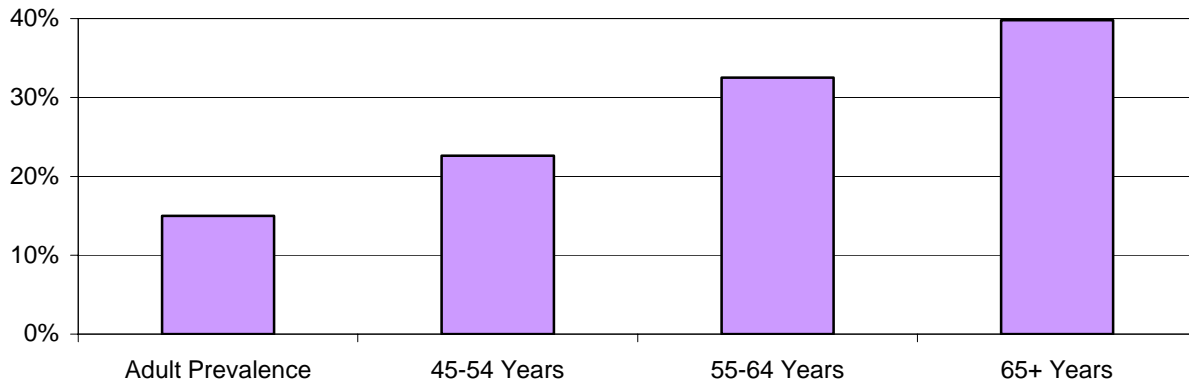
Disability

About 50 million American adults have a disability, such as hearing loss, mental disability, physical limitation, or vision loss. People with disabilities generally report poorer health than those without disabilities, smoke more, are more often obese, and get less exercise than people without disabilities.¹⁵ Some people may live with a disability all of their lives, while others may have a disability during childhood or as an older adult. However, disabilities that occur later in life can largely be prevented through regular health maintenance and preventive activities.

How are we doing?

The prevalence of disability increases with age, but is not a natural part of growing older. Based on 2007 Michigan BRFSS data, 22.6% of adults aged 45-54 years and 32.5% of adults aged 55-64 years reported being either limited in any activities because of physical, mental or emotional problems or that they use special equipment due to a health problem (total disability). In addition, 39.8% of seniors aged 65 years and older reported having a disability.

Prevalence of Adults Who Have a Disability: 2007 MiBRFS



How does Michigan compare with the U.S.?

Although total disability estimates are not available at the national level, national estimates do exist for each of the two components that make up the total disability estimate, both of which are similar at both the state and national level. For 2007, national estimates indicate that 20.1% of adults aged 45-54 years, 28.1% of those aged 55-64 years, and 31.2% of seniors aged 65 years and older reported being limited in any activities because of physical, mental or emotional problems, compared to 21.2% of those aged 45-54 years, 31.0% of adults aged 55-64 years, and 34.8% of seniors aged 65 years and older in Michigan. For the second disability component, national estimates indicate that 6.4% of adults aged 45-54 years, 9.7%

¹⁵ Centers for Disease Control and Prevention. Disability and Health State Chartbook, 2006: Profiles of Health for Adults With Disabilities. Atlanta (GA): Centers for Disease Control and Prevention; 2006.



of those aged 55-64 years, and 17.5% of seniors aged 65 years and older reported having a health problem(s) that required the use of special equipment, compared to 7.3% of those aged 45-54 years, 11.2% of adults aged 55-64 years, and 18.0% of seniors aged 65 years and older in Michigan.

How are different populations affected?

The prevalence of disability within males (21.4%) and females (23.9%) are very similar. In addition, for adults aged 60 years and older, the prevalence of disability was also very similar for non-Hispanic whites (35.8%), non-Hispanic blacks (39.8%), and Hispanics (30.6%). However, individuals with less than a high school education (34.3%) or with a household income of less than \$20,000 (41.8%) were more likely to report total disability when compared to college graduate (16.0%) and adults with household incomes above \$75,000 (12.9%).

What is the Department of Community Health doing to improve this indicator?

MDCH is working to address disability needs of older adults through a variety of channels and partners. The Office of Long Term Care, Ombudsman program was created to help address the quality of care and quality of life experienced by residents who reside in licensed long term care facilities such as nursing homes, homes for the aged, and adult foster care facilities. The Office of Services to the Aging provides resources for caregiver support and submits an annual report detailing data on care-giving services publicly funded throughout the state. The need for caregiver support is continuing to gain interest through statewide health promotion and chronic disease prevention groups such as the Michigan Dementia Coalition, and the Michigan Disabilities Prevention Workgroup. The Healthy Aging Initiative Program works closely with CDC and the National Association of Chronic Disease Directors to promote educational resources for the state health departments. These include publications on caregiver support and webinars.



Topic: Health Disparities/Health Inequalities

The elimination of racial and ethnic health disparities has been a recognized public health goal for a number of years. One of the two stated Healthy People 2010 goals is to eliminate health disparities among different segments of the population. “Health disparities” is defined as population specific (i.e. racial, ethnic, low SES) differences in the presence of disease, health outcomes, or access to health care. More recently, public health research has indicated the need for a more “upstream” approach to eliminating health disparities – that of assuring health equity. “Health equity” refers to the fair, just distribution of social resources and opportunities needed to achieve wellbeing. Put another way, health equity assures all groups, irrespective of race, ethnicity, SES, etc equitable access to social and environmental conditions (social determinants) that promote health. Social determinants include access to quality housing and education, employment, healthy foods, safe and walkable neighborhoods, good air quality, medical care, etc. A greater emphasis on social determinants is important to eliminating health disparities.

In Michigan, as well as nationally, racial and ethnic health disparities exist in the leading causes of morbidity and mortality. The 10 leading health indicators identified in Healthy People 2010 and its’ stated goal of health disparities elimination include:

- Physical Activity
- Overweight and Obesity
- Tobacco Use
- Substance Abuse
- Responsible Sexual Behavior
- Mental Health
- Injury and Violence
- Environmental Quality
- Immunization
- Access to Health Care

In the U.S. for the period 1991-2000 it is estimated that the number of African American deaths averted by medical advances was approximately 176,633. Contrast that number to 888,202, the number of African Americans whose deaths were attributable to excess mortality (African American deaths per 100,000 population in excess of White deaths per 100,000 population) – a five fold difference. This suggests that an emphasis on eliminating the root causes of health and social inequalities for African Americans may have a more profound impact on the overall health of this and, indeed, all racial and ethnic populations.¹

In Michigan, White adults (32.8%) were more likely to have graduated from college when compared to their Black (22.0%), Native American (8.0%), and Hispanic (17.9%) counterparts. Asian Americans (75.1%) reported a greater college completion rate than that of Whites (32.8%). Studies have shown a direct correlation between education level and understanding the importance of preventive medical care. According to the 2007 Michigan Behavioral Risk Factor Survey, Black and Native American residents in Michigan were more likely to lack health care coverage, and to report that they were not able to access health care in the last year due to cost.



Michigan Adults, 2007	No health coverage	No personal care provider	Unable to access health care due to cost
Whites	11.3%	14.2%	10.5%
Blacks	16.6% *	16.7%	17.2% *
Asian/Pacific Islanders	1.8%	15.8%	10.3%
American Indian/Native Americans	26.7% *	19.9%	24.1% *
Hispanic/Latinos	10.9%	20.6%	14.7%
* Significantly different when compared to White adults in Michigan (p < .05).			

What is the Department of Community Health doing to address disparities?

The Michigan Office of Minority Health (OMH) was established in 1988 by executive order. In 2004 the Michigan Department of Community Health changed the name of the OMH to the Health Disparities Reduction and Minority Health Section (HDRMH). The HDRMH mission is to provide a persistent and continuing focus on eliminating disparities in the health status of five identified populations of color: African-Americans, Hispanics/Latinos, Native Americans and Alaskan Natives, Asians and Pacific Islanders and Chaldeans/Arab Americans. HDRMH supports evidence based social, environmental and behavioral interventions to improve health status for identified racial and ethnic populations by providing grants to local health departments and community-based organizations.

In addition, the HDRMH works to promote and advance the principles published in the 2004 Commonwealth Report which identified eight key areas that state and national policymakers must consider to eliminate racial and ethnic disparities. They include: consistent racial/ethnic data collection; effective evaluation of disparities reduction programs; minimum standards for culturally and linguistically competent health services; greater minority representation within the health care workforce; expanded health screening and access to services (e.g., through expanded insurance coverage); establishment or enhancement of state offices of minority health; involvement of all health system stakeholders in minority health improvement efforts; and creation of a national coordinating body to promote continuing state-based activities to eliminate racial and ethnic health disparities.

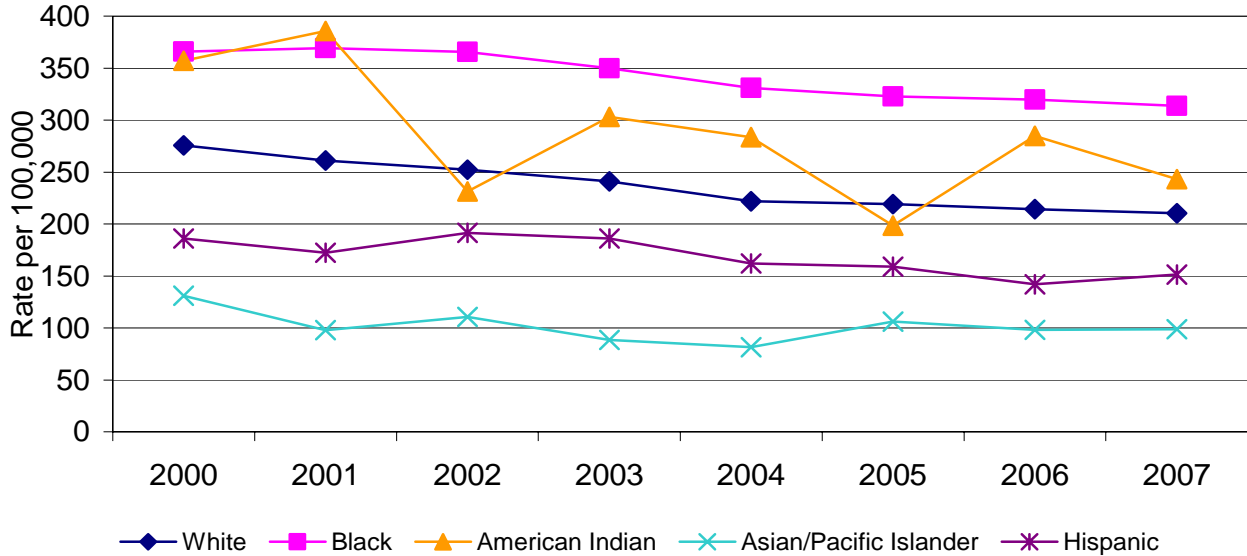
Cardiovascular Disease

How are we doing?

Poor cardiovascular health, in particular, heart disease, is the number one cause of death for all residents in Michigan; however, for African Americans in Michigan cardiovascular health disparities are clearly evident. In Michigan, Blacks are nearly 1.5 times more likely to die from heart disease than Whites, with mortality rates of 313.8 per 100,000 and 210.2 per 100,000 respectively. While Blacks have had rates consistently higher than Whites over the last five years, the rates for Hispanic/Latinos and Asian/ Pacific Islanders were consistently lower than White rates during the same time period. Heart disease death rates for the American Indian/Alaskan Native population are less stable. A rise in death rates in 2001 gave this population the highest heart disease death rate of all groups; since that time, the rates have reduced significantly.

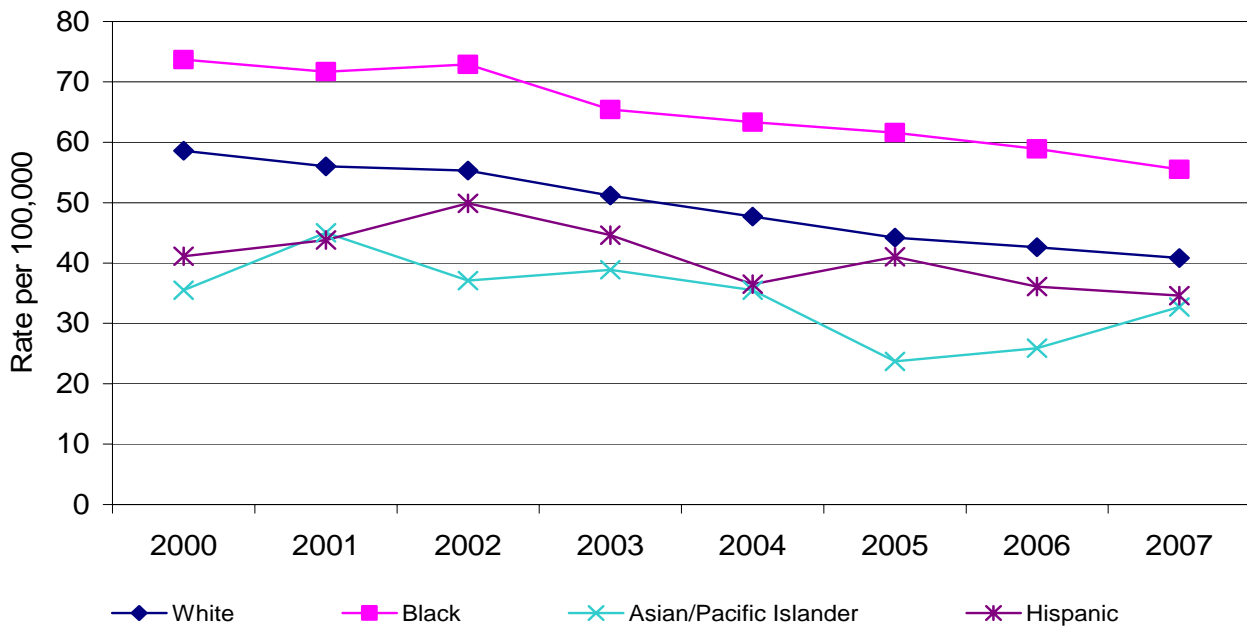


Heart Disease Death Rates by Race in Michigan, 2000-2007



Stroke rates also depict the disparity in health status that exists for racial and ethnic minorities. The largest disparity exists between Blacks and Asian/Pacific Islander, with Blacks being almost 1.7 times more likely to die from stroke than their Asian/Pacific Islander counterparts in 2007. The mortality rate for the Black population is 55.5 per 100,000 compared to Asian/Pacific Islanders who have a mortality rate of 32.7 per 100,000. For whites, the mortality rate is 40.8 per 100,000.

Stroke Death Rates by Race, Michigan 2000-2007



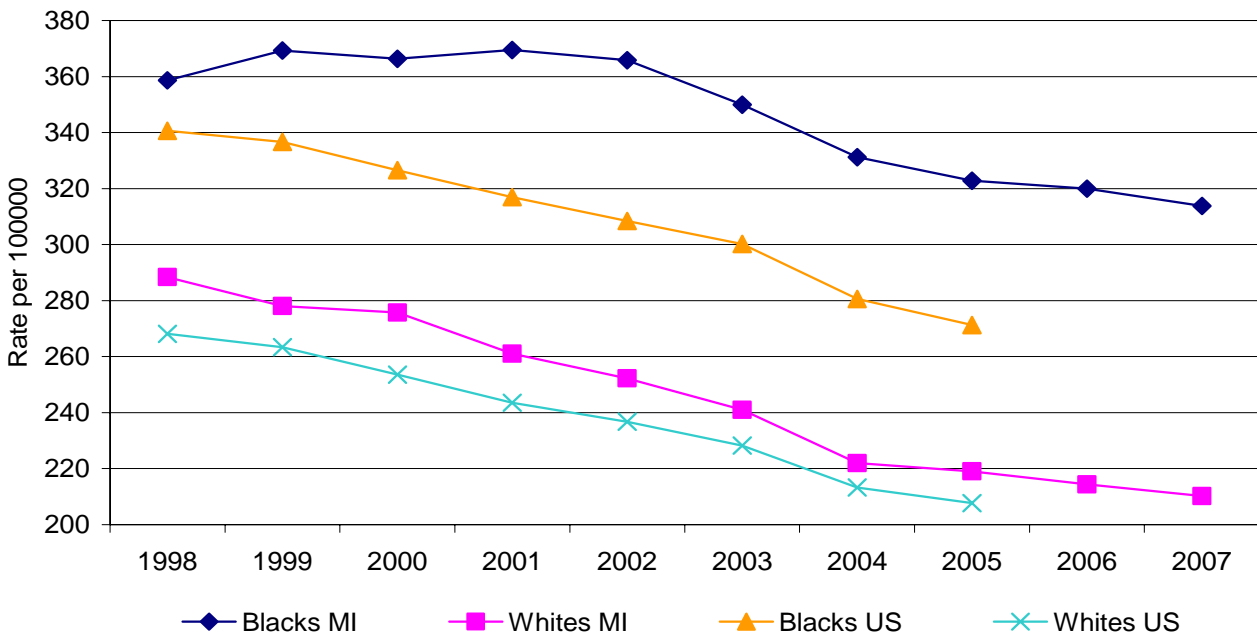
Heart disease death rates could not be calculated for Arab/Chaldean and stroke death rates could not be calculated for both Arab/Chaldean and American Indian residents due to un-stable population estimates; however mortality numbers for both of these populations suggest they are disproportionately impacted by both heart disease and stroke.



How Does Michigan compare with the U.S.?

According to 2005 data, the most current U.S. data available, heart disease death rates for both White and Black Michigan residents are greater than the U.S. rates for both populations (U.S.: 207.7 per 100,000 for Whites, 271.3 per 100,000 for Blacks; MI: 219.0 per 100,000 for Whites, 322.7 for Blacks). For Blacks in Michigan not only is the cardiovascular death rate higher than the national Black rate, the White-Black disparity is also greater than for the U.S. as a whole. In the U.S., Blacks have a 30% higher heart disease death rate than Whites, while in Michigan Blacks have a 47% higher heart disease death rate than Whites.

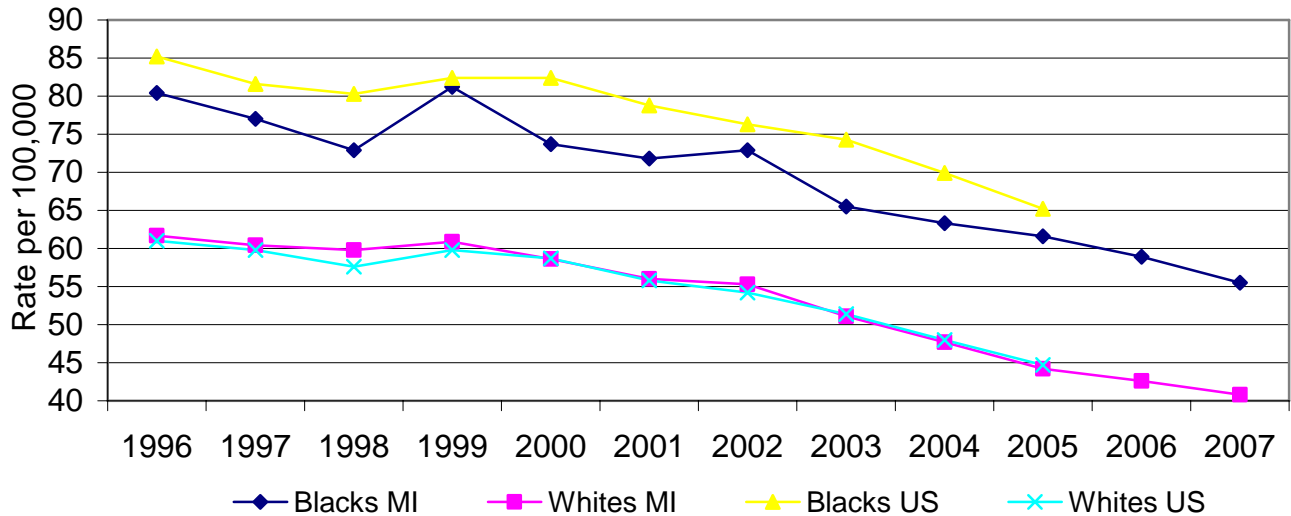
Heart Disease Death Rates, Blacks and Whites, MI vs U.S. 1996-2007



When looking at disparities in stroke death, Michigan fares better than the United States. This is most likely due to the large impact of the “stroke belt” - approximately 11 states with substantially higher rates of stroke, found disproportionately in Blacks: Alabama, Arkansas, Georgia, Indiana, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, and Virginia.. Blacks living in Michigan are 30% more likely to die from stroke as Whites, whereas in the U.S., Blacks are 45% more likely to die from stroke as Whites.



Age-Adjusted Stroke death rates for blacks and whites, Michigan and the US, 1996-2007



What is the Department of Community Health doing to improve this indicator?

The Department of Community Health’s main initiative that correlates to decreasing morbidity and mortality in cardiovascular health is the Surgeon General’s “Michigan Steps Up” campaign. This campaign urges Michigan’s citizens to “move more”, “eat better”, and “don’t smoke” by outlining what individuals, schools, communities, businesses, and healthcare professionals can do to improve the overall health of the state.

There are also other statewide initiatives aimed at promoting healthy eating, particularly in large urban areas such as Detroit, where fresh fruits and vegetables are not readily available. The Health Disparities and Minority Health Section funds a demonstration project to impact minority health. The project targets adults age 50 and older, primarily African-Americans, living in Detroit. The project activities seek to improve the overall health of participants through reduction/ control of their previously out-of-control hypertension. Participants in the program are demonstrating increased knowledge of hypertension management and increased health-seeking behavior.

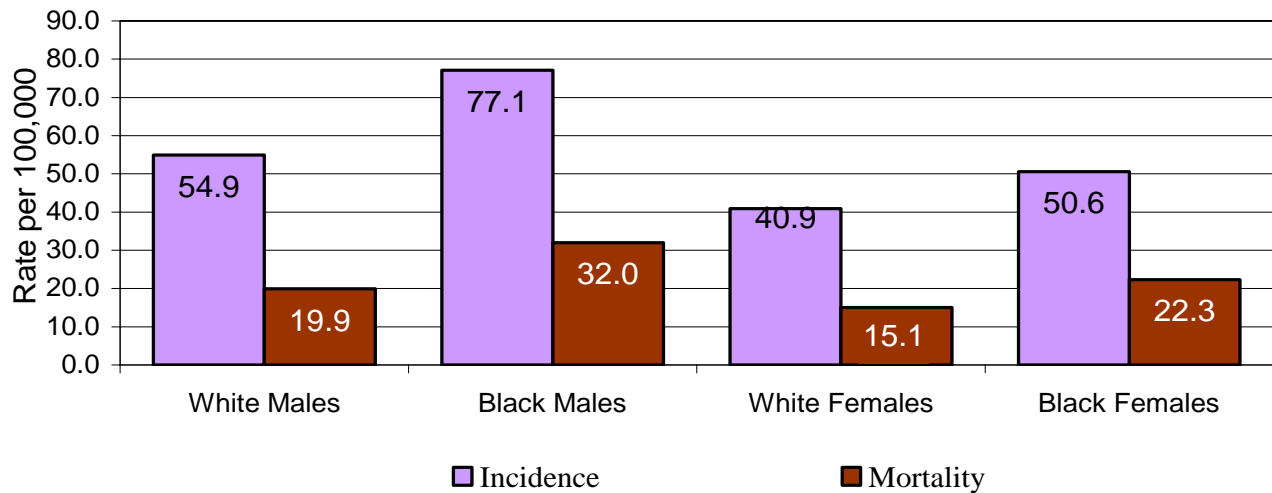
Cancer

Cancer incidence rates are higher for Blacks in four cancers traditionally monitored by public health: cervical, colorectal, lung, and prostate. In addition to African-Americans being disproportionately impacted by cancer, they are also getting into care later. Analysis of data by site and stage at diagnosis shows that Blacks are more likely to be diagnosed with cancer at later stages of disease progression.



How are we doing?

Age-Adjusted Colorectal Cancer Incidence and Mortality Rates in Michigan, by Race and Gender in 2004



The total cancer mortality rate for Blacks in 2006 was 237.7 per 100,000, which is nearly 30% higher than the rate in Whites at 186.7 per 100,000. Mortality rates are higher for Blacks than for Whites for all cancer sites previously mentioned.

In the example shown above in the graph, colorectal cancer incidence and mortality rates are higher for blacks than for whites. The survival rate for many cancers improves dramatically with early detection. This is also of particular concern with regard to breast cancer where incidence rates are slightly higher among White women (118.2 per 100,000 white women and 116.3 per 100,000 black women), but death rates are higher among Black women (22.7 per 100,000 white women and 32.3 per 100,000 black women).

How Does Michigan compare with the U.S.?

The disparities seen between Blacks and Whites for Cancer deaths in Michigan are similar to those seen across the U.S. Blacks in Michigan are 27% more likely to die from cancer as Whites; the U.S. disparity is similar.

What is the Department of Community Health doing to improve this indicator?

The Department of Community Health has several initiatives to reduce the disparities that exist in cancer for racial/ethnic minorities, particularly African-Americans. The Department’s Cancer Section conducted a study, released in 2005, characterizing cancer in African-Americans, and has interventions targeted specifically at increasing screening in this segment of the population. The Cancer Section has contracts with community agencies in the African-American, Native-American, Asian-American and Arab/Chaldean communities.

The Health Disparities Reduction Section (HDRMH) has added to the effort by funding the Healthy Asian American Project (HAAP), a program that provides colorectal cancer education, outreach and screening for underserved and uninsured Asian Americans in Southeast Michigan. The HAAP targets seven Asian ethnicities, which include; Asian Indian, Chinese, Filipino, Hmong, Korean, Japanese and Vietnamese.



HDRMH also provides funding to the Berrien County Breast and Cervical Cancer program which works to decrease system level barriers in an effort to increase the number of Medicaid managed care eligible women who seek breast and cervical cancer screening in Berrien County.

HIV/AIDS

How are we doing?

Black and Hispanic persons in Michigan are disproportionately affected by HIV/AIDS relative to other race/ethnicity groups. Blacks comprise 14% of Michigan's population yet make up over half (57%) of the cases currently living with HIV/AIDS. The MDCH estimates 10,280 Blacks are living with HIV/AIDS in Michigan. The rate of HIV infection among Blacks is 575 per 100,000, nine times higher than the rate among Whites. The Department estimates that as many as 1 of 120 Black males and 1 of 320 Black females may be HIV-infected.

Hispanics comprise four percent of cases and four percent of the population. The MDCH estimates 780 Hispanics are living with HIV/AIDS in Michigan.. This rate of HIV infection, 159 per 100,000, is higher than that among Whites. The Department estimates that as many as one out of 430 Hispanic males and one out of 1,280 Hispanic females may be HIV-infected.

White persons comprise 78% of Michigan's population and over one-third (37%) of reported HIV/AIDS cases. The MDCH estimates 6,630 Whites are living with HIV/AIDS in the state. This rate of HIV infection (67 per 100,000) is lower than the rate for Blacks and Hispanics. The MDCH estimates that as many as one out of 840 White males and one out of 5,710 White females may be HIV-infected.

The areas with the highest prevalence rates of HIV among Black, non-Hispanic persons (and have at least 10 Black persons living with HIV) include: Jackson Co. (683), Detroit (682), Allegan Co. (671), Wayne Co., excluding Detroit (648), Kent Co. (609), Berrien Co. (597), St. Clair Co. (568), Ingham Co. (495), Washtenaw Co. (488), and Kalamazoo Co. (482). In general, the areas with the highest rates surround the I-94 and I-75 interstate highway corridors. The areas with the highest prevalence rates of HIV among Hispanics (and have at least 10 Hispanic persons living with HIV) include: Detroit (284), Washtenaw Co. (237), Jackson Co. (235), Berrien Co. (223), Kent Co. (218), Genesee Co. (181), Ingham Co. (174), Oakland Co. (153), Van Buren Co. (152), Wayne Co., excluding Detroit (94), Macomb Co. (89), Saginaw Co. (89), and Ottawa Co. (85). The majority of these areas are in southeast Michigan. Kent, Berrien, Van Buren and Ottawa Counties, however, are in southwestern Michigan, a region with a large migrant population.

How Does Michigan compare with the U.S.?

In the 33 states and 5 U.S. dependent areas with confidential name-based HIV infection reporting, the total population is 68% White, non-Hispanic, 14% Black, non-Hispanic, and 13% Hispanic, while the population with HIV is 33% White, non-Hispanic, 46% Black, non-Hispanic, 17% Hispanic, and 1% are other race/ethnicity. In Michigan the population is 78% White, non-Hispanic, 14% Black, non-Hispanic, and 4% Hispanic, while the population with HIV is 37% White, non-Hispanic, 57% Black, non-Hispanic, 4% Hispanic, and 2% are other race/ethnicity. The proportion of White HIV positive persons in Michigan is smaller than the proportion of White Michiganders, while the number of Blacks with HIV is disproportionately larger and the number of Hispanics with HIV is similar. In comparison, Blacks and Hispanics with HIV in the United States are both disproportionately larger than their proportions of the population as a whole.



What is the Department of Community Health doing to improve this indicator?

The Department's Division of Health, Wellness and Disease Control (DHWDC) focuses prevention efforts on early identification of HIV infection through testing, and reduction and elimination of behaviors associated with HIV transmission. The Department's prevention efforts are guided by Michigan's Comprehensive Plan for HIV Prevention developed through an evidence-based planning process. The Plan identifies priority populations to be addressed by Michigan's HIV prevention programming and makes recommendations for the best strategies to address prevention needs. Racial and ethnic minorities are prioritized as targets for prevention efforts. The Plan includes a section that highlights the disproportionate impact HIV/AIDS has on the African-American community.

The MDCH supports HIV testing in local health departments, community health clinics, substance abuse treatment facilities, hospitals and community-based organizations, to encourage and facilitate knowledge of HIV serostatus among individuals at risk for HIV infection and to assist with timely access to care and treatment among those found to be HIV-infected. The Department supports targeted HIV counseling and testing services in 16 high prevalence local health agencies and more than 30 community-based and other non-governmental organizations. Targeted testing efforts are complemented by culturally competent health communication and public information activities designed to ensure awareness of the impact of HIV among targeted communities, to encourage knowledge of HIV serostatus and to provide information on resources for HIV testing.

The MDCH also supports routine HIV testing in selected clinical settings operating in areas of the highest HIV prevalence in the state and which serve primarily African-American populations. Routine testing facilitates knowledge of HIV serostatus among populations who might not otherwise seek HIV testing. The Department provides technical assistance and guidance to providers to assist them in implementing routine HIV testing in clinical settings. In 2008, 74,585 HIV tests were performed in publicly-supported venues. Of these 61% were for African-American clients and five percent were for Hispanic/Latino clients.

The Department supports a range of evidence-based and culturally competent behavioral interventions targeted to communities at greatest risk for transmission/acquisition of HIV. Behavioral interventions are designed to promote adoption and maintenance behaviors to reduce the risk for transmitting HIV (among those who are HIV-infected) or of acquiring HIV (among those who are HIV-negative). Racial/ethnic minorities receive emphasis in program efforts. DHWDC supports intervention models specifically endorsed by the Centers for Disease Control and Prevention for use with African-American communities including SISTA (Sisters Informing Sisters About Topics on AIDS), for African-American women, BSB (Brothers Saving Brothers) for African-American men, 3MV (Many Men, Many Voices) for African-American men who have sex with men, POL (Peer Opinion Leader) for African-American men who have sex with men and MPowerment for younger (ages 18-24) African-American men who have sex with men. In 2008, over 24,000 individuals participated in such interventions, of which 70 percent were African-American.

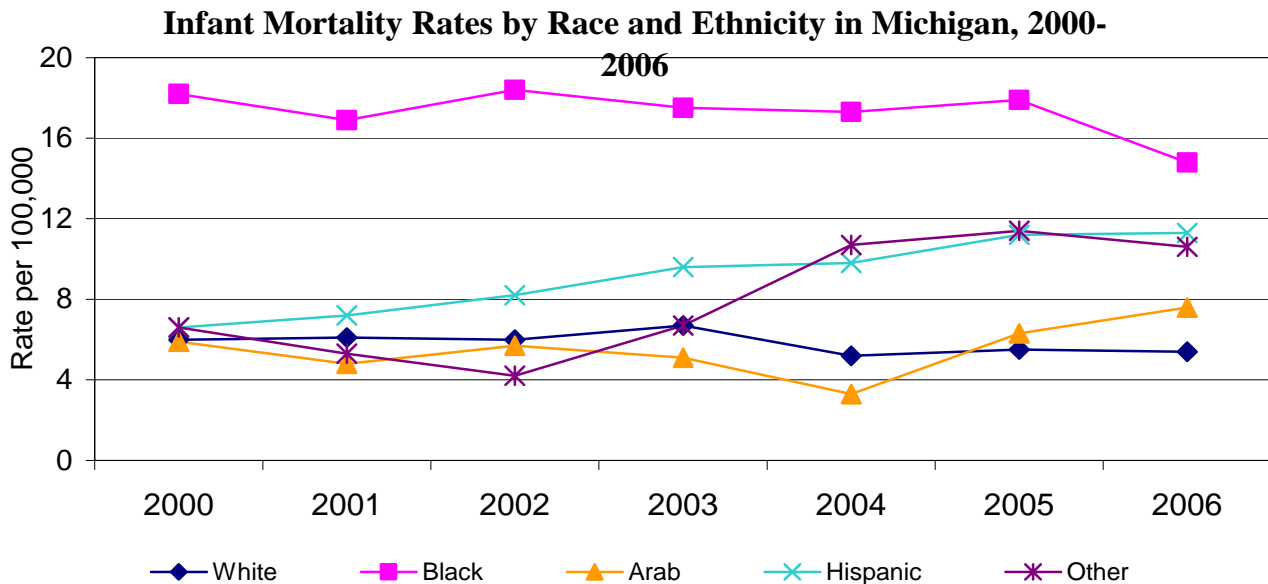


Infant Mortality

How are we doing?

As indicated in the Figure below, the overall infant mortality rate for the state decreased slightly from 7.9 deaths per 1,000 live births in 2005 to 7.4 deaths per 1,000 live births in 2006. The high rates of infant mortality experienced in Michigan are largely attributable to the higher rates of infant mortality in the African-American community that is almost three fold greater compared to Whites in Michigan. However, the disparity between Blacks and Whites declined between 2005 and 2006. While the infant mortality rate decreased for both populations, the reduction in African-Americans was significantly greater than among Whites. Specifically, the infant mortality rate fell from 5.5 to 5.4 among Whites and from 17.9 to 14.8 among African-Americans. Thus, virtually all of the reduction in infant mortality in 2006 relative to 2005 is attributable to improvements in the African-American infant mortality rate in Michigan.

Due to the high infant mortality rate in the African-American population, infant mortality in infants of other races/ethnicities often goes unmentioned. In 2006, the infant mortality rate in Hispanic/Latinos was approximately two times greater than in Whites; the gap between Hispanic/Latinos and Whites has been increasing significantly since 2000 when the risk of infant mortality in Hispanic/Latinos was only 10% greater than in Whites. Infant mortality also occurs at a greater rate among the Arab population relative to Whites in Michigan. While from 2000-2004 the Arab population experienced a lower infant mortality rate in Michigan, as of 2006 the infant mortality rate was 40% greater than in Whites.



Note: Infant deaths by race of infant; live births used in calculating infant death rates are by race of mother. Rates are per 1,000 live births. Adding and subtracting the number shown after the ± symbol from the rate creates a confidence interval indicating that the true rate lies between the lower and upper bounds of this interval with 95 % statistical confidence.

Infant deaths of unknown race are not included in this table.

Source: 1970 - 2006 Michigan Resident Birth and Death Files, Vital Records & Health Data Development Section, Michigan Department of Community Health



How Does Michigan compare with the U.S.?

The infant mortality rate in Michigan is greater than the overall rate for the U.S. The increased rate in Michigan is driven primarily by the disparity between infant mortality among African-Americans in Michigan relative to the U.S. The Black/White infant mortality rate ratio for Michigan has been consistently higher than the rate for the U.S. for the past 20 years meaning the disparity seen between Blacks and Whites is greater in Michigan than for the country as a whole.

What is the Department of Community Health doing to improve this indicator?

Concentrating efforts on reducing the infant mortality rate for African Americans would reduce the overall infant mortality rate in Michigan. Eleven cities were selected through a series of epidemiological studies. Starting in 2004, each of these cities became part of the state Infant Mortality Initiative, and received funding as well as program and epidemiological support to start community coalitions.

In May 2008, the Michigan Department of Community Health held the Infant Mortality Summit. The recommendations that came out of the breakout sessions were compiled and further actions were developed accordingly. One of those recommendations was to explore the perinatal system of care and advise the state on further steps. It was reinforced by the boiler plate reporting requirement. As a result, there is work in progress to not only explore the existing system but to also develop perinatal system of care guidelines that will be adopted across the state.

Another important activity targeted to decreasing infant mortality is demonstration project called the Tomorrow's Child/Michigan SIDS/Back to Sleep Campaign funded by the Department. This campaign supports Henry Ford Hospital in consistently teaching women about the safe sleep message. The goal is to reduce the incidence of deaths among African-American infants attributable to sleep position and sleep environment.

In addition, the state also conducted focus groups among African-American women to get gain a better understanding of the issues and concerns within this population.

An Infant Mortality Internal Workgroup has also been organized to evaluate further opportunities to address this issue in an integrated and efficient manner.

Data Sources: ¹ American Journal of Public Health - 2004