

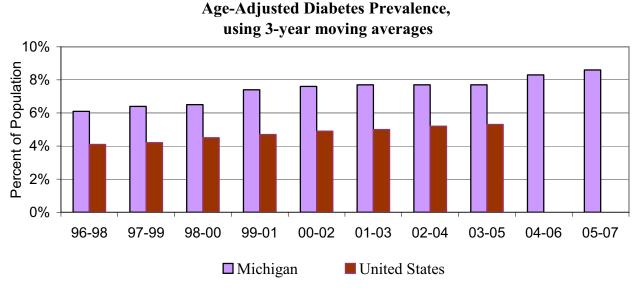
# Topic: Diabetes and Kidney Disease

## 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.

# Critical Health Indicators



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:

<u>Diabetes Outreach Networks (DONs)</u>: 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.

<u>Certified Diabetes Self-Management Education Programs:</u> 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.

<u>Diabetes Primary Prevention Initiative</u>: 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.

<u>Diabetes Partners in Action (DPAC)</u>: 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.

<u>National Kidney Foundation of Michigan (NKFM)</u>: 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

<u>African-American Initiative on Health Improvement Program (AIM-HI)</u>: 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.