

2011 Michigan CVD Fact Sheet

Cardiovascular Disease (CVD) - Heart Disease, Stroke & Other Categories

February 2011 Update

- ♥ CVD is the number one cause of death in Michigan and has been for over a hundred years. ^(1,2)
- ♥ In 2009, heart disease and stroke killed 27,459 Michiganians. ⁽¹⁾
- ♥ Michigan ranks 9th worst of the fifty U.S. states for CVD age-adjusted mortality (293.2 per 100,000), based on 2005-2007 death rates. ⁽²⁾
- ♥ CVD causes an adult death every 39 seconds in the United States. ⁽²⁾
- ♥ One out of every three deaths in Michigan is due to CVD. ⁽¹⁾
- ♥ The Michigan CVD economic burden (direct & indirect costs) for 2007 is estimated at \$9.4 billion and treatment of CVD accounts for 1 in every 6 United States healthcare dollars spent. ^(2,3)
- ♥ CVD prevalence is expected to increase due to the number of people over 65 years of age and increasing obesity and diabetes prevalence. ⁽²⁾
- ♥ 82.6 million Americans have one or more types of CVD; 76.4 million adults have high blood pressure; 16.3 million have coronary heart disease; 5.7 million have congestive heart failure; about 7 million have had a stroke. ⁽²⁾
- ♥ Most CVD risk factors in Michigan are above the national rate and are often more common among those with a lower socio-economic status. ⁽⁴⁾

Heart Disease

- ♥ Most CVD deaths are due to heart disease. Heart disease has been the leading cause of death for decades and killed 23,044 Michiganians in 2009. On average, someone dies about every 20 minutes of heart disease in Michigan. ⁽¹⁾
- ♥ Coronary Heart Disease (CHD) is the most prevalent & preventable form of heart disease. Costs due to CHD in Michigan in 2007 are estimated at \$5.9 billion. ⁽²⁾
- ♥ In 2009, 4.5% of Michiganians reported having ever had a heart attack. ⁽⁴⁾
- ♥ Michigan has the 6th worst age-adjusted CHD death rate (158.0 per 100,000 in 2005-2007) of the fifty U.S. states. ⁽²⁾ The Healthy People 2010 goal for CHD deaths is 162 per 100,000, and the 2020 goal is 100.8 per 100,000.
- ♥ Since the mid-1970's, Michigan's age-adjusted heart disease death rate has been above the national rate, although the gap has been narrowing. On average, Michigan has 67 heart disease deaths daily. ⁽¹⁾
- ♥ Michigan's age-adjusted heart disease death rate for Blacks remains higher than national rates. There is a large disparity in heart disease mortality for Black men when compared to white men and women and black women ⁽¹⁾
- ♥ Heart Failure is a growing problem and preventable re-hospitalization is a major contributor.

Stroke

- ♥ Stroke is a leading cause of long-term, severe disability and is the fourth leading cause of death in the U.S. and Michigan. In Michigan, someone dies of a stroke every 110 minutes and estimated stroke costs were \$1.4 billion in 2007. ^(1,2)
- ♥ In 2009, there were 4,415 stroke deaths in Michigan. ⁽¹⁾ Those who survive stroke often live with serious long-term impairments. In 2009, 2.7% of Michiganians reported having ever had a stroke. ⁽⁴⁾
- ♥ Michigan is ranked as 20th worst in the fifty U.S. states for stroke mortality (45.5 per 100,000), based on 2005-2007 mortality data. ⁽²⁾ Michigan's stroke mortality rate is below the Healthy People 2010 goal of 48 deaths per 100,000; the 2020 goal is 33.8 per 100,000. ⁽⁵⁾
- ♥ High blood pressure (HBP) is a major risk factor for stroke. HBP costs in Michigan are estimated at \$1.5 billion in 2007. ⁽²⁾ Controlling HBP can reduce the risk of stroke up to 40%. ⁽⁶⁾
- ♥ Michigan's age-adjusted stroke death rate for Blacks is above national and state rates for Whites. ⁽¹⁾



Emerging Issues: High Blood Pressure and Cholesterol Control

- ♥ High blood pressure (HBP) has been described as a neglected disease. It is one of the nation's leading causes of death and nearly 68 million adults have HBP but about 1 in 2 do not have it under control. ^(3,6)
- ♥ MDCH has developed programs and materials that encourage use of clinical guidelines, providing patient and public education materials and many other strategies to enhance control of HBP and will soon be launching materials to promote cholesterol control. A broad range of resources can be found at www.michigan.gov/hbpu.
- ♥ 71 million American adults have high blood cholesterol (HBC) but 2 in 3 have it under control. ⁽³⁾
- ♥ Improved care of HBP and HBC could save more than 100,000 lives a year. ⁽³⁾
- ♥ Reduction of sodium is a new emphasis to decrease the prevalence of HBP and also improve control in those with HBP. 2009 Michigan BRFSS data showed that 59.5% of individuals with HBP were advised by their healthcare provider to change their eating habits to lower their BP and 69.6% reported they were changing their eating habits for this purpose. Furthermore, 65.5% of individuals with HBP were advised by their healthcare provider to decrease their salt intake while 74.6% said they were making changes to decrease their salt intake to help lower their HBP. ⁽⁴⁾

Multiple Risk Factors

- ♥ The major modifiable risk factors for CVD are cigarette smoking, physical inactivity, diabetes, overweight, high blood pressure, and high blood cholesterol.
- ♥ In 2009, Michiganians continued to have higher than average CVD risk factor prevalence rates. Only 4.6% of Michiganians reported engaging in all 4 healthy lifestyles (healthy weight, adequate fruit and vegetable intake, not smoking, and engaging in adequate physical activity). ⁽⁴⁾
- ♥ With healthcare provider consultation, aspirin may be recommended as a preventive action for reducing risk of heart attack in men and stroke in women. 2009 Michigan BRFSS data showed that 26.4% of all individuals were taking aspirin daily or every other day. In the age groups recommended to take it, 38.1% of men ages 45-64; 66.5% of men ages 65-79; 36.4% of females ages 55-64 and 55% of females ages 65-79 reported taking it. ⁽⁴⁾

PERCENTAGE OF MICHIGAN ADULTS WITH CVD RISK FACTORS, 1990-2009 ⁽⁴⁾ (With comparison to 2009 National BRFSS Data)

RISK FACTOR	1990	1996	2002	2009	2009 US Median	2009 Ntl. Ranking*
Current Smoking	29.2	25.6	24.1	19.8	17.9	18
Blood Pressure: Ever Told High	23.3	23.8	NS	30.4	28.6	22
Cholesterol: Ever Told High ^(of tested)	27	30.1	NS	38.9	37.4	18 ^{tied}
Overweight (BMI ≥ 25) (Includes obesity)	47.4	54.7	62.1	66.6	63.2	17
Obese (BMI ≥ 30)	14.1	18.3	25.2	30.9	27.1	10
Fruits & Vegetables: Less than 5 servings/day	NS	77.9	77.4	77.8	76.5	20
No Leisure Time Physical Activity	NS	23.1	24.3	24.1	23.9	28
Diabetes	NS	5.3	8.1	9.4	8.4	15

*Ranking in comparison to the worst state estimate, i.e. a ranking of 18 would indicate the 18th worst state estimate.

NS = Not Sampled that year or question/survey not comparable

More detailed information including maps of heart disease and stroke rates by county and epidemiological statistics at <http://www.michigan.gov/mdch/cvh> or <http://www.michigan.gov/mdch> (statistics)

(1) Michigan Health Statistics. Division for Vital Records and Health Statistics - Michigan Department of Community Health. February 2011

(2) American Heart Association. Heart and Stroke Statistics – 2011 Update. Dallas, Texas: American Heart Association; 2011

*Cost estimated from report using MI % of U.S. pop [3.33%]. (Data source for economics changed from previous reports)

(3) Center for Disease Control and Prevention. Vital Signs. February 2011

(4) Behavioral Risk Factor Surveillance System/ Michigan Department of Community Health, 1990-2009 and United States, 2009.

(5) Healthy People 2010 and 2020 Objectives. DHHS.

(6) Institute of Medicine. 2010. A Population-Based Policy and Systems Change Approach to Prevent and Control Hypertension. Washington DC: The National Academies Press.