

2010 Michigan CVD Fact Sheet

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

- ♥ CVD is the number one cause of death in Michigan and has been nationally since 1919. ^(1,2)
- ♥ In 2008, heart disease and stroke killed 29,019 Michigianians. ⁽¹⁾
- ♥ Michigan ranks 10th worst of the fifty U.S. states for CVD age-adjusted mortality (291.7 per 100,000), based on 2006 death rates. ⁽²⁾
- ♥ One out of every three deaths in Michigan is due to CVD. ⁽¹⁾
- ♥ The Michigan CVD economic burden (direct & indirect costs) for 2010 is estimated at \$16.8 billion. ^{(2)*}
- ♥ More than one in three American adults have some form of CVD and growth in the number of people over 65 years of age, increasing obesity and diabetes will increase the prevalence of CVD. ⁽²⁾
- ♥ 74.5 million American adults have high blood pressure; 17.6 million have coronary heart disease; 5.8 million have congestive heart failure; about 6.4 million have had a stroke. ⁽²⁾
- ♥ The Michigan Behavioral Risk Factor Surveillance System (MI BRFSS) has consistently shown that CVD risk factors are often more common among those with a lower socio-economic status. ⁽³⁾

Heart Disease

- ♥ Most CVD deaths are due to heart disease. Heart disease has been the leading cause of death for decades and killed 24,369 Michigianians in 2008. 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 and estimated costs in Michigan are \$5.9 billion annually. ⁽²⁾ In 2009, 4.5% of Michigianians reported having ever had a heart attack. ⁽³⁾
- ♥ Michigan has the 7th worst age-adjusted CHD death rate (156.6 per 100,000 in 2006) of the fifty U. S. states. ⁽²⁾ Michigan's CHD mortality rate is no where near the Healthy People 2010 goal of 144 deaths per 100,000. ⁽⁴⁾
- ♥ 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 66 heart disease deaths daily. ⁽¹⁾
- ♥ Michigan's age-adjusted heart disease death rate for Blacks remains higher than national rates. The disparity is greatest between Black and White men. ⁽¹⁾
- ♥ Heart Failure is a growing problem and costs an estimated \$1.3 billion annually in Michigan, and preventable re-hospitalization is a major contributor. ⁽²⁾

Stroke

- ♥ Stroke is a leading cause of long-term, severe disability and is the third leading cause of death in the U.S. and Michigan. In Michigan, someone dies of a stroke every 110 minutes and estimated stroke costs are \$2.5 billion annually. ^(1,2)
- ♥ In 2008, there were 4,650 stroke deaths in Michigan. ⁽¹⁾ Those who survive stroke often live with serious long-term impairments. In 2009, 2.7% of Michigianians reported having ever had a stroke. ⁽³⁾
- ♥ High blood pressure (HBP) is a major risk factor for stroke. HBP costs in Michigan are estimated at \$2.56 billion annually. ⁽²⁾ Controlling HBP can reduce the risk of stroke up to 40%. ⁽⁵⁾
- ♥ Michigan is ranked as 25th worst in the fifty U.S. states for stroke mortality (44.5 per 100,000), based on 2006 mortality data. ⁽²⁾ Michigan's stroke mortality rate is approaching the Healthy People 2010 goal of 44 deaths per 100,000. ⁽⁴⁾
- ♥ Michigan's age-adjusted stroke death rate for Blacks is above national and state rates for Whites and national rates for Blacks. ⁽¹⁾

(1) Michigan Health Statistics. Division for Vital Records and Health Statistics - Michigan Department of Community Health. April 2010
(2) American Heart Association. Heart and Stroke Statistics - 2010 Update. Dallas, Texas: American Heart Association; 2010
*Cost estimated from report using MI % of U.S. pop [3.34%].



Emerging Issues: High Blood Pressure 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 1 in 3 has HBP. Only 61% of patients have their HBP controlled. ⁽⁵⁾
- ♥ 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. A broad range of resources can be found at www.michigan.gov/hbpu.
- ♥ The prevalence of HBP has increased over the past decade. The majority of Michigan's local health department regions have higher prevalence rates than that of the state average. ⁽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. ⁽³⁾

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, Michigianians continued to have higher than average CVD risk factor prevalence rates. Only 4.6% of Michigianians reported engaging in all 4 healthy lifestyles (healthy weight, adequate fruit and vegetable intake, not smoking, and engaging in adequate physical activity). ⁽³⁾
- ♥ 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 aspirin. ⁽³⁾

PERCENTAGE OF MICHIGAN ADULTS WITH CVD RISK FACTORS, 1990-2009 ⁽³⁾ (With comparison to 2009 National BRFSS Data)

RISK FACTOR	1990	1996	2002	2009	2009 US Median	2009 National 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)

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

(4) Healthy People 2010. DHHS.

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