

2008 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 every year since 1900 except 1918, the year of the devastating flu epidemic.
- ♥ In 2006, heart disease and stroke killed 28,969 Michigianians. ⁽¹⁾
- ♥ Michigan ranks 13th worst of the fifty U.S. states for CVD age-adjusted mortality. ⁽²⁾
- ♥ One out of every three deaths in Michigan is due to CVD. ⁽¹⁾
- ♥ The economic burden of CVD in Michigan, direct & indirect costs, is estimated at \$15.3 billion. ^{(2)*}
- ♥ More than one in three American adults has some form of CVD and growth in the number of people over 65 years of age will increase the prevalence of CVD. ⁽²⁾
- ♥ 73 million Americans have high blood pressure; 16 million have coronary heart disease; 5 million have congestive heart failure; about 6 million have had a stroke. ⁽²⁾
- ♥ Cardiovascular diseases such as congenital defects, diseases of the arteries like peripheral artery disease, aneurysms, etc. comprise the other causes of CVD deaths. ⁽²⁾
- ♥ The Michigan Behavioral Risk Factor Survey (BRFS) has consistently shown that risk factors for CVD are often more common among those with a lower socioeconomic status. ⁽⁴⁾
- ♥ In Michigan, 6.8% of individuals 35 years and older reported having a heart attack, 6.9% coronary heart disease or angina, and 3.4% reported having a stroke. ⁽⁴⁾ However, many more individuals don't know they have CVD or haven't had an acute event.

Heart Disease

- ♥ Most CVD deaths are due to heart disease. Heart disease has been the leading cause of death for decades. ⁽¹⁾
- ♥ Coronary Heart Disease (CHD) is the most prevalent & preventable form of heart disease.
- ♥ Michigan has the 8th worst age-adjusted CHD death rate of the fifty U. S. states. ⁽²⁾
- ♥ 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. There are 66 heart disease deaths per day in Michigan. ⁽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.

Stroke

- ♥ Stroke is a leading cause of long term severe disability and the third leading cause of death in the U.S. and Michigan. In the U.S., someone has a stroke every 40 seconds, and dies of it every 3 minutes. ⁽²⁾
- ♥ In 2006, there were 4,746 stroke deaths in Michigan. ⁽¹⁾ An estimated 200,000 Michigianians over the age of 18 are stroke survivors, many living with the serious impairments left by the stroke. ⁽⁴⁾
- ♥ High blood pressure is a major risk factor for stroke. Controlling high blood pressure can reduce the risk of stroke up to 40%. ⁽⁵⁾
- ♥ Michigan is ranked as 28th worst in the fifty U.S. states for stroke mortality. ⁽²⁾
- ♥ Michigan's age-adjusted stroke death rate for Blacks is above national and state rates for Whites and national rates for Blacks.

(1) Michigan Health Statistics. Division for Vital Records and Health Statistics - Michigan Department of Community Health. May, 2008.

(2) American Heart Association. Heart and Stroke Statistics – 2008 Update. Dallas, Texas: American Heart Association; 2008

* (Cost estimated from report using MI % of U.S. pop.)

(3) Behavioral Risk Factor Survey, Michigan Department of Community Health (MDCH), 2006.



Emerging Issues

- ♥ Section programs targeting healthcare organizations increased prevention and management of risk factors impacting 10,000 patients.
- ♥ Preventing 1% of cardiovascular disease could save Michigan \$139 million per year.

MICHIGAN YOUTH RISK BEHAVIOR SURVEY, 1999-2007

(With Comparison to 2007 National YRBS Average)

Students grades 9 to 12

RISK FACTOR	1999	2001	2003	2005	2007	US 2007
Overweight**	10%	11%	12%	12%	12%	13%

**Equal to or greater than the 95th percentile for body mass index by age and sex for children of same age (CDC data)

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 2006, Michigianians continuously had higher than average CVD risk factors. Only 4.8% 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⁾
- ♥ In 2007, the age-adjusted percent distributions show that 97.1% of Michigan adults have one or more of the major CVD risk factors: 13.9% reported one, 25.8% reported two, 26.3% reported three, and 18.6% reported four or more risks.⁽⁴⁾ Risk factors include high blood pressure, high cholesterol, smoking, overweight, diabetes, inadequate diet [<5 servings of fruit and vegetables/day] and inadequate physical activity [<30 min. 5 x/wk].
- ♥ Nationally, of those with high blood pressure, 30% don't know they have it, only 34% have their blood pressure controlled, 25% are on medication but it's not controlled, and 11% aren't on any medication.⁽⁵⁾

PERCENTAGE OF MICHIGAN ADULTS WITH CVD RISK FACTORS, 1990-2007⁽⁶⁾

(With Comparison to 2007 National BRFSS Data)

US 2007

RISK FACTOR	1990	1994	1998	2001	2005	2007	US 2007
Smoking	29.2	25.4	27.5	26.1	21.9	21.1	19.7
Blood Pressure: Ever Told High	23.3	NS	NS	27.1	27.8	28.6	27.5
Cholesterol: Ever Told High (of tested)	27	NS	NS	33.0	38.9	39.9	37.5
Overweight (BMI \geq 25) (Includes obesity)	47.4	54	57.8	60.4	63.1	64.3	63.0
Obese (BMI \geq 30)	14.1	17.1	21.5	24.7	26.5	28.2	26.3
Fruits & Vegetables: Less than 5 servings/day	NS	70.2	73.6	NS	77.2	78.7	75.7
No Leisure Time Physical Activity	NS	23.4	21.7	23.5	22.6	20.8	23.0

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/0,1607,7-132-2940_2955_2959_3208-80201--,00.html

(4) Behavioral Risk Factor Survey, Michigan Department of Community Health (MDCH), 2007*.

(5) JNC 7, NHLBI, NIH, Hypertension. 2003; 42:1206-1252 and NHANES III.

(6) Behavioral Risk Factor Surveys, MDCH, 1990-2007* & U.S. BRFSS 2007.

*2007 Michigan BRFSS statistics are preliminary results.