



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 2003, heart disease and stroke killed 31,257 Michiganians; more than cancer, accidents, pneumonia, influenza, chronic obstructive pulmonary disease, and diabetes mellitus combined.⁽¹⁾
- ◻ Michigan ranks 11th worst of the fifty U. S. states for CVD age-adjusted mortality.⁽²⁾
- ◻ Four out of every ten deaths in Michigan is due to CVD.
- ◻ The economic burden of CVD in Michigan, direct & indirect costs, is estimated at \$13.7 billion.^{(2)*}
- ◻ More than one in five Americans has CVD; the aging of the population may increase disease incidence, especially of coronary heart disease.⁽²⁾
- ◻ One in three men can expect to develop some form of CVD before age 60; the odds for women are 1 in 10. As women age, their rate increases.⁽²⁾
- ◻ Other cardiovascular diseases such as congestive heart failure, congenital defects, diseases of the arteries, aneurysms, etc. comprise about 29% of 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.⁽³⁾
- ◻ In Michigan, 7% of individuals 35 years and older reported having a heart attack, coronary heart disease or angina and 3.9% reported having a stroke.⁽³⁾ 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.
- ◻ Coronary Heart Disease(CHD) is one of the most prevalent & preventable forms of heart disease.
- ◻ Michigan has the 6th 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 71 heart disease deaths per day in Michigan.
- ◻ Michigan's age-adjusted heart disease death rate for Blacks has declined more slowly than for Whites since 1980 and remains higher than national rates. The disparity is greatest between Black and White men.

Stroke

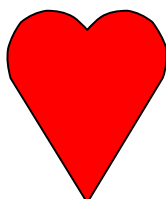
- ◻ Stroke is a leading cause of severe disability and is the third leading cause of death in the U.S. In the U.S., someone has a stroke every 45 seconds, and someone dies of it every 3 minutes.⁽²⁾
- ◻ Stroke deaths are not limited to older Michigan residents. In 2003, more Michigan residents under fifty years of age died of stroke than of AIDS.
- ◻ High blood pressure is a major risk factor for stroke. Controlling high blood pressure can reduce the risk of stroke up to 50%.
- ◻ Michigan is ranked as 27th worst in the nation 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. The stroke burden is heavier in Blacks.

⁽¹⁾ Michigan Health Statistics. Division for Vital Records and Health Statistics - Michigan Department of Community Health. January 2005.

⁽²⁾ American Heart Association. 2005 Heart and Stroke Statistical Update. January 2005

* (Costs estimated from AHA 2005 reported costs using MI percent of U.S. population. Other Fact Sheet cost estimate references available on request.)

⁽³⁾ 2003 Behavioral Risk Factor Survey, MDCH, 2004.



Emerging Issues

- C Quality of Care: The National Committee for Quality Assurance has identified quality of care performance measures for preventing & treating cardiovascular diseases. The goal is to reach 100% compliance. Data are from managed care groups (The State of Health Care Quality, 2003).⁽²⁾

	<u>Rates</u>
1. Use of beta-blockers after a heart attack	93.5%
2. Cholesterol screening in patients with coronary heart disease	79%
3. Cholesterol control in patients with coronary heart disease	61%
4. Control of high blood pressure	58%
5. Control of diabetes	67%
6. Advising smokers to quit	68%
- C Obesity & lack of physical activity are emerging as significant challenges with obesity rates increasing by more than 60% in the last decade and 4 million Michigan adults inactive. The annual estimated cost of obesity nationally is \$92.6 billion. Physical inactivity annual costs in Michigan were estimated at \$8.9 billion in 2002.

Multiple Risk Factors for CVD

- C The major modifiable risk factors for CVD are cigarette smoking, physical inactivity, diabetes, overweight, high blood pressure, and high blood cholesterol. Inflammation has recently been identified as a contributor to CVD.
- C Michiganians have continuously higher than average CVD risk factors. Only 4.7% of Michiganians reported engaging in all 4 healthy lifestyles (healthy weight, adequate fruit and vegetable intake, not smoking, and engaging in adequate physical activity).⁽³⁾
- C Nine out of ten Michigan adults (89.5%) have one or more of the major CVD risk factors: 25.5% reported one, 29.9% reported two, 20.6% reported three, and 13.5% reported four or more risks.⁽⁴⁾ Risk factors include high blood pressure, high cholesterol, smoking, overweight, diabetes, and inadequate physical activity [<30 min. 5 x/wk].
- C 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, 1990-2003⁽⁶⁾ (With Comparison to 2003 National BRFS Data)

RISK FACTOR	1990	1992	1994	1996	1998	2001	2003	US Median
Smoking	29.2	25.5	25.4	25.6	27.5	26.1	25.8	21.7 (2003)
Blood Pressure: Ever Told High <small>(of those tested)</small>	23.3	23.2	NS	23.8	NS	27.1	26.8	24.8 (2003)
Cholesterol: Ever Told High <small>(of those tested)</small>	27	26.8	NS	30.1	NS	33.0	37.6	33.1 (2003)
Overweight (BMI \geq 25) (Includes obesity)	47.4	52	54	54.7	57.8	60.4	62	59.5 (2003)
Obese (BMI \geq 30)	14.1	16.3	17.1	18.3	21.5	24.7	25.4	22.8 (2003)
Fruits & Vegetables: Less than 5 servings/day	NS	NS	70.2	77.9	73.6	NS	79.8	77.4 (2003)
No Leisure Time Physical Activity	NS	24.5	23.4	23.1	21.7	23.5	21.8	24.4 (2002)**

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

⁽⁴⁾ Behavioral Risk Factor Survey, Michigan Department of Community Health (MDCH), 2003; **U.S. BRFS 2003 data

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

⁽⁶⁾ Behavioral Risk Factor Surveys, MDCH, 1990-2003.