

2009

Michigan Health Disparities Dashboard: Burden of Disease

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Department of Health, Wellness and Disease Control
Health Disparities Reduction/Minority Health Section

What are Health Disparities and how are they measured?

Health disparities are differences in health status that exist between populations. Racial and ethnic health disparities refer to differences that are seen between different racial and ethnic groups, such as higher rates of diabetes in American Indians than in Whites, or lower cancer rates in Asian Americans than in African Americans. Health disparities are usually presented by comparing rates for a certain disease between two or more groups. Rates, usually age-adjusted rates, are used because they take into account the number of individuals in a group and the average age differences that may exist between groups. By using age-adjusted rates, we are able to better compare the effects of sickness and death across groups. It is important to remember that health disparities are the *what*, not the *why* of health. For example, having asthma does not explain why a person has asthma. The *why* has to do with different factors including genetics, personal lifestyle choices, and the social determinants of health. The social determinants of health, which are estimated to account for 70-80% of the *why*, are factors that influence an individual's health but are not biological; they are related to the social, economic, and environmental situation that a person lives their life in.



Why should I care?

Data in Michigan show that there are wide differences in disease across racial and ethnic groups—leading to increased death and sickness among certain groups. These differences are preventable, and thus raise a flag to policy makers, clinicians, and the public that action can be taken to save and improve lives across the state. Health disparities don't just affect communities of color, they affect everyone in Michigan. The economic cost to the state from health disparities is in the millions, and the health care system as a whole becomes less efficient and more costly when groups systematically experience unequal burdens.

Who is Health Disparities Reduction/Minority Health (HDR/MH)?

The HDR/MH section at MDCH seeks to provide a persistent and meaningful effort to eliminate health disparities in Michigan by working with communities/stakeholders and the State of Michigan to address the social determinants of health through effective programming, equitable and compassionate policymaking, and supporting community health groups through data and expertise. This burden of disease dashboard illustrates the difference in illness and death between populations in Michigan, focusing on the diseases that have been identified by public health practitioners and communities as being the most harmful to communities of color. Please see other publications from the HDR/MH section for more about the social determinants of health, or for more information about your racial/ethnic group or neighborhood.

What does it mean?

Overall Mortality Rate: This measure examines the differences in death from all causes, singularly showing the difference across populations. Note: Mortality rates are nearly always measured as the number of deaths per 100,000 people. For example, if 450 people in a town that had 200,000 residents died in one year from disease X, then the disease X mortality rate would be 225.

Infant Mortality Rate: This measure examines infant death, an indicator that is accepted world-wide as in marker of community health because of its multi-factor causation. It is the number of deaths per 1,000 live births.

Cardio Vascular Disease (CVD): Heart Disease Prevalence: The estimated percentage of people that have been told they have an angina or coronary heart disease.

CVD: Heart Disease Mortality Rate: The rate of all deaths from heart disease.

CVD: Stroke Prevalence: The estimated percentage of people that have been told by a medical professional that they have had a stroke.

CVD: Stroke Morality Rate: The rate of all deaths from stroke

HIV/AIDS Prevalence Rate: This prevalence rate is the number of individuals, out of 100,000, that have HIV/AIDS.

HIV/AIDS Mortality Rate: The rate of deaths from HIV/AIDS

Diabetes Prevalence: The estimated percentage of people that have diabetes

Diabetes Mortality Rate: The rate of death from diabetes

Cancer Incidence: The number of new cases of any type of cancer within one year, averaged from 2001-2005.

Cancer Morality Rate: The rate of death from any type of cancer

Cancer 5-year Survival: The percentage of people who have any type of cancer (excluding some mild forms of skin cancer), and survive for five years following their initial diagnosis. In calculating this, the type of cancer is taken into account.

Violence: Suicide Rate: The rate of death from suicide

Violence: Homicide Rate: The rate of death from homicide

Accidental Death Rate: The rate of death from any type of accident

Asthma Prevalence: The estimated percentage of adults, people 18 years and older, that have asthma

Asthma Morality Rate: The rate of death from asthma, or any death where asthma was determined as the major underlying cause.

Sexually Transmitted Diseases (STDs): Gonorrhea prevalence rate: The rate of reported gonorrhea infection

STDs: Chlamydia prevalence: The rate of reported chlamydia infection

Please note! that prevalence is an estimation—data is taken from a sample of state residents and then used by epidemiologists to create a state-wide estimate. Some estimates, while different from each other, may not be statistically different, meaning that they may represent a trend but mathematically are not different from each other, and caution must be used when interpreting and using these numbers.

** Fact: Between 2003-2006 the combined costs of health disparities and premature death in the US was \$1.24 trillion*

Michigan 2009

Indicator	Black	Hispanic	AI/AN	Asian	White
Overall mortality rate	1041.7	582.9	877.2	358.1	768.5
Infant mortality rate	16.5	10.3	11.1	5.6	5.8
CVD: Heart Disease					
Prevalence (%)	4.5*	3.1*	6.5*	1.2*	4.7
Mortality rate	313.8	151.4	243.3	98.7	210.2
CVD: Stroke					
Prevalence (%)	4.9	3.4*	5.2*	n/a	2.4
Mortality rate	55.5	34.6	n/a	32.7	40.8
HIV/AIDS					
Prevalence rate	575	159	92	27	67
Mortality rate	8.6	n/a	n/a	n/a	.7
Diabetes					
Prevalence (%)	14.7	12.4	16.5	10.8*	7.3
Mortality rate	38.3	35.3	47.5	n/a	24.5
Cancer					
incidence	544.0	350.5	302.6	253.5	487.0
Mortality rate	230.5	117.5	176.2	86.5	181.4
5-yr survival (%)	53.7	n/a	n/a	n/a	60.7
Violence					
Suicide rate	5.2	5.9	n/a	n/a	11.9
Homicide rate	31.9	5.8	n/a	n/a	2.3
Accidental death rate	37.8	31.8	34.7	13.9	34.5
Asthma					
Prevalence (%)	11.1*	12.6*	12.6*	4.2*	9.0
Mortality rate	28.7	n/a	n/a	n/a	9.7
STDs					
Gonorrhea prev.	480.1	n/a	38.1	8.5	19.6
Chlamydia prev.	904.4	n/a	147.5	61.8	102.8

* this estimate is not statistically different than White

Please see notes and sources



Notes:

All statistics are recent as possible, although due to different surveillance methods across indicators, may not be from the same year. Missing values (n/a) are a result of small population size or a small number of individuals affected; rates in some cases cannot be calculated. Cancer incidence and mortality rates are inclusive of all cancer types. Asthma prevalence rates are for adults only. All rates are calculated as deaths per age-adjusted 100,000 persons, with the exception of infant deaths which are calculated as deaths per 1,000 live births.

** MI Fact: Michigan's African American infant mortality rate, when compared to all nations in the world, places 81st...just behind Syria and Belize*

Data Sources:

Overall death rate: 07 MI Vital Statistics

(www.michigan.gov/mdch > Statistics and Reports > Vital Statistics)

Infant mortality rate: 07 MI Vital Statistics

CVD Heart Disease prevalence: 06-08 MI BRFSS

(www.michigan.gov/brfs)

CVD Heart Disease mortality rate: 07 MI Vital Statistics

CVD Stroke prevalence: 06-08 MI BRFSS

CVD Stroke mortality rate: 07 MI Vital Statistics

HIV/AIDS prevalence: 08 Michigan HIV/AIDS report

(www.michigan.gov/mdch > Physical Health & Prevention > HIV/STD > Statistics and Reports)

HIV/AIDS mortality rate: 07 MI Vital Statistics

Diabetes prevalence: 06-08 MI BRFSS

Diabetes mortality rate: 07 MI Vital Statistics

Cancer incidence: SEER 01-05

(<http://statecancerprofiles.cancer.gov/index.html>)

Cancer mortality rate: 07 MI Vital Statistics

Violence suicide rate: 07 MI Vital Statistics

Homicide rate: 07 MI Vital Statistics

Accidental death rate: 07 MI Vital Statistics

Asthma prevalence rate: 06-08 MI BRFSS

Asthma mortality rate: 04-06 MI Vital Records

What can I do to make a difference?

Seeing a health care provider regularly and maintaining a healthy lifestyle are two ways to avoid serious illness and catch potentially life-threatening diseases early. Being a community health advocate through involvement such as community gardening, promotion of community safety, or supporting clean air initiatives will improve your health as well as the health of your entire neighborhood.



FOR MORE INFORMATION:

www.michigan.gov/mdch

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Special thanks to:

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