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Milwaukee Health Report 2009

*Health Disparities in Milwaukee
By Socioeconomic Status*

Center for Urban
Population Health

Working together to improve the health of communities

Milwaukee Health Report 2009

*Health Disparities in Milwaukee
By Socioeconomic Status*

Han-Yang Chen, MS
Dennis J. Baumgardner, MD
Jessica P. Bergstrom, MPH
Naoyo Mori, PhD
Geoffrey R. Swain, MD, MPH
Ron A. Cisler, PhD

Center for Urban Population Health

1020 North 12th Street, Suite 4180
Milwaukee, WI 53233
(414) 219-5100
<http://www.cuph.org>

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Milwaukee Health Report 2009

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INTRODUCTION

The Center for Urban Population Health and the City of Milwaukee Health Department are pleased to present the *Milwaukee Health Report 2009*. Now in its first year, this Report is designed to summarize the current health of the city, as well as the distribution of key factors that may have implications for future health.

As the largest city in Wisconsin, Milwaukee contains 10.3% of the state's population. Recently, *Wisconsin County Health Rankings* compared Milwaukee's health outcomes and health determinants with the rest of the state. In 2008, the City of Milwaukee ranked worse than all but one county in overall health outcomes, and worse than all but one county in health determinants, or risk factors for future health (Taylor, Athens, Booske, O'Connor, Jones, & Remington, 2008).

The authors gratefully acknowledge the foundational work of the University of Wisconsin Population Health Institute's *Wisconsin County Health Rankings* (Taylor et al., 2008). The *Milwaukee Health Report 2009* builds upon that work by focusing on examining the disparities in health outcomes and health determinants between different areas of the City of Milwaukee, as defined by socioeconomic status (SES).

The relationship between socioeconomic status (SES) and health is one of the most robust and well documented findings in social science (Marmot, Wilkinson, 1999). Members of our current research team also found that health disparities exist within the City of Milwaukee itself (Vila, Swain, Baumgardner, Halsmer, Remington, & Cisler, 2007). Furthermore, in the United States, race is closely correlated with SES, and a previous study found Milwaukee to be the most segregated large metropolitan area for Blacks in the U.S. (Iceland, Weinberg, & Steinmetz, 2002).

The *Milwaukee Health Report 2009* is based upon the population health framework (Kindig & Stoddart, 2003). In that framework, health outcomes are considered the result of a set of health determinants, and the distribution of health outcomes results from the distribution of the determinants in the population. These determining factors and their outcomes may also be affected by policies or programs designed to alter their distribution in the community. Since the ultimate goal of population health is to improve the health of large groups of people, investments in policies and interventions that moderate the influence of these health determinants are essential (Kindig, 2007). Thus, the city itself – including not just the city government but also community groups, employers, and others - can play a significant role in improving health through the adoption of appropriate programs and policies.

The *Milwaukee Health Report 2009* aims to provide information regarding health disparities among the SES groups within the city. In addition, the *Milwaukee Health Report 2009* offers comparisons of health outcomes and health determinants between the City of Milwaukee, the State of Wisconsin and the U.S. These comparisons may inform further discussion on policy change and resource allocation.

METHODS

DEFINING SOCIOECONOMIC STATUS (SES)

The *Milwaukee Health Report 2009* focuses on investigating the health disparities of the city by socioeconomic status (SES). In this report, SES is determined based on income and education levels following a previous approach by Vila and colleagues (Vila et al., 2007).

There are 29 ZIP (postal) codes wholly or partially contained within the City of Milwaukee; these ZIP codes represent over 10% of the state's 5.5 million citizens. Income and education information were collected from the 2007 data, and were obtained at the ZIP code level. To stratify the Milwaukee ZIP codes by socioeconomic status (SES) into three groups, we used an SES index (Mustard & Frohlich, 1995) composed of two equally-weighted components: the median reported income (the income component) in the ZIP code, and the percentage of people with a bachelor's degree (the educational component) in the ZIP code. The average and standard deviation of the education level and income across all ZIP codes were obtained. A z-score was then assigned to each ZIP code by taking the value for the ZIP code minus the average across all ZIP codes, divided by the standard deviation across all ZIP codes. Each z-score (for education and income) was then averaged into one score, and the ZIP codes were ranked on this summary index and grouped into higher, middle, and lower tertiles.

Income Index

The Income Index is defined as:

$$\text{Income Index} = \frac{(\text{Household Median Income})_i - (\text{Household Median Income})_{\text{Mean}}}{(\text{Household Median Income})_{SD}}$$

Education Index

The Education Index is defined as:

$$\text{Education Index} = \frac{(\% \text{ People with a Bachelor's Degree})_i - (\% \text{ People with a Bachelor's Degree})_{\text{Mean}}}{(\% \text{ People with a Bachelor's Degree})_{SD}}$$

SES Index

The SES Index is defined as:

$$\text{SES Index} = \frac{\text{Income Index} + \text{Education Index}}{2}$$

i : the number for an individual ZIP code
Mean : average number across all the ZIP codes
SD : standard deviation of the number across all the ZIP codes

SELECTION OF POPULATION HEALTH MEASURES

The *Milwaukee Health Report 2009* focuses on two categories of health measures—health outcomes and health determinants. Outcomes are intended to measure the current state of health in an SES area, while determinants are viewed as risk factors or predictors of future health outcomes. In this report, a total of 27 measures of health outcomes and determinants were selected using the following criteria:

- (1) The measure is a direct or proxy measure of an important aspect of population health;
- (2) The data are sufficiently valid;
- (3) The data are available at the ZIP code level;
- (4) The data are adequately large for stratifying into SES groups; and
- (5) The data are current and updated periodically, in order to track measures over time.

Health Outcomes

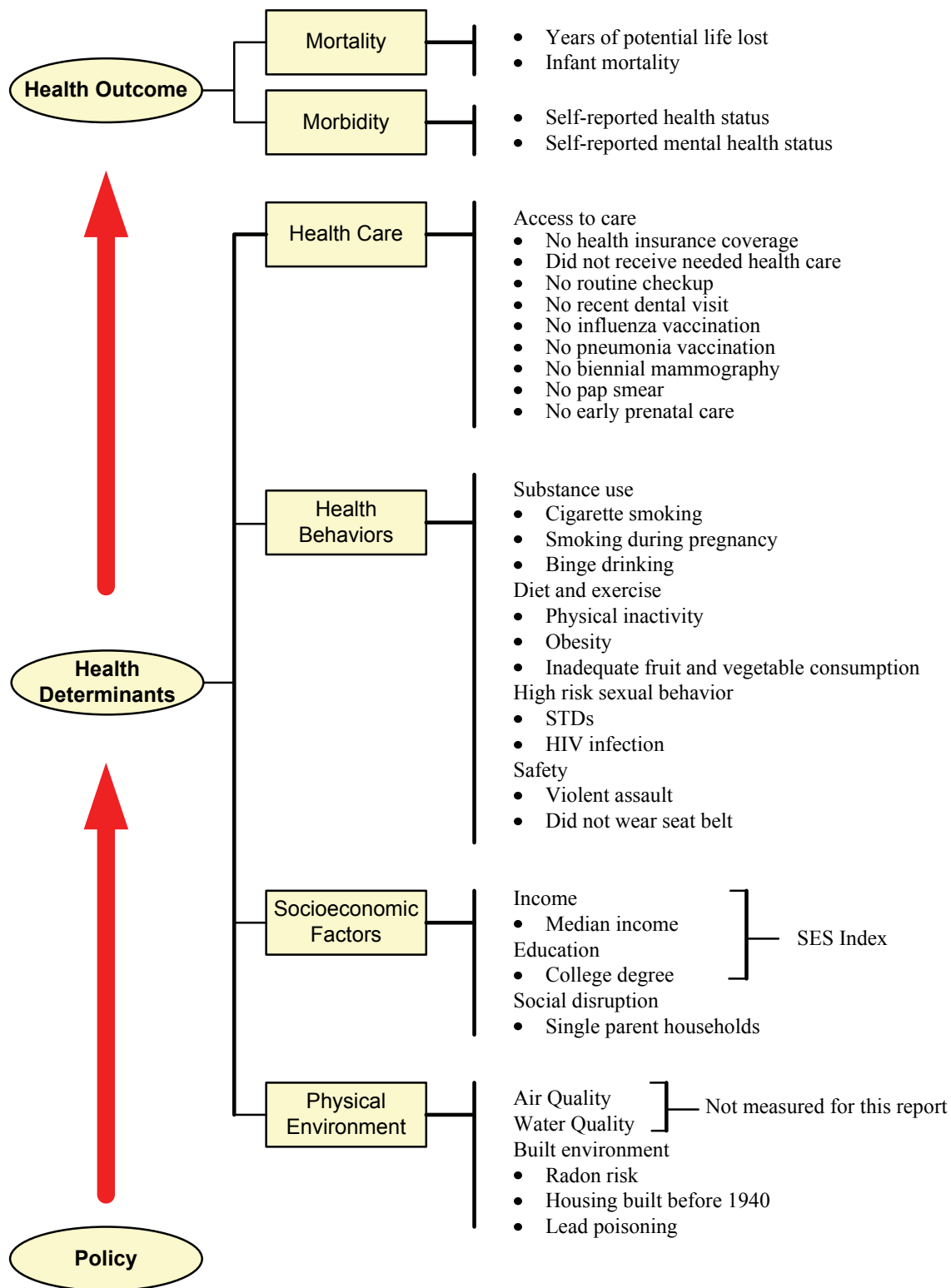
The selection of health outcome measures was primarily guided by the Wisconsin County Health Rankings (Taylor et al., 2008). Consistent with Taylor and colleagues, this report assessed both *years of potential life lost* and *self-reported health status* in representing mortality and morbidity, respectively. However, this current report also reports health outcomes with measures of infant mortality (as an additional mortality measure) and self-reported mental health status (as an additional morbidity measure). The four health outcome measures are shown in Figure 1.

Health Determinants

The selection of determinant measures was largely guided by the Wisconsin State Health Plan priorities (Wisconsin Department of Health and Family Services, 2005) and the Wisconsin County Health Rankings (Taylor et al., 2008). We divided the 23 health determinant measures into four major components: health care, health behaviors, socioeconomic factors, and physical environment. Each of the four major components is comprised of multiple categories of health measures, as shown in Figure 1.

It is important to note that, although the selection of the health measures of the *Milwaukee Health Report 2009* was based upon the framework of the *Wisconsin County Health Rankings* (Taylor et al., 2008), there were some differences in the measures used between the two reports. In the *Milwaukee Health Report 2009*, motor vehicle crash measures were not included because the ZIP code level data were collected based on drivers' information. We may not be able to draw a rational conclusion, since the residence information regarding the passengers was not provided. While socioeconomic factors such as education and income are, themselves, strong determinants of health, they were used in this report to stratify the ZIP code groups. Also, the physical environment measures of air quality and water quality were not included in this report as these measures typically encompass large areas, and differences between neighboring ZIP codes might not be noticeable or significant.

Figure 1. Health Outcomes and Health Determinants Measures Assessed in this Report.



Adapted from: Taylor K.W., Athens J.K., Booske B.C., O'Connor C.E., Jones N.R., & Remington P.L. (2008). *2008 Wisconsin County Health Rankings*. University of Wisconsin Population Health Institute.

DATA SOURCES

Data regarding sociodemographic characteristics, health outcomes, and health determinants were retrieved from various existing public health datasets. The data sources of the health measures for the City of Milwaukee are described below. A comprehensive list, including the health outcome and determinant components, the categories within each component, the specific measures, and the sources of data used to compile the report, is provided in Table 1. This project was approved by the institutional review board at the University of Wisconsin-Madison.

Aurora Community Health Survey (ACHS)

The Aurora Community Health Survey (ACHS) is a random digit dial (RDD) telephone survey of persons 18 years and older who lived in the City of Milwaukee and other counties in eastern Wisconsin. It is conducted every 3 years through a grant provided by Aurora Health Care. The survey gathers information on the health practices and health-related behavioral risks of residents. For the *Milwaukee Health Report 2009*, data from the ACHS are used to measure one health outcome and various determinants. All data from the ACHS are weighted by population. ZIP code level data obtained from the ACHS contain data only within the City of Milwaukee. The ACHS website is located at <http://www.aurorahealthcare.org/yourhealth/comm-health-reports/index.asp>.

Behavioral Risk Factor Surveillance System (BRFSS)

The Behavioral Risk Factor Surveillance System (BRFSS) is a national random digit dial (RDD) telephone survey. Data obtained from the BRFSS are representative of the total Wisconsin (non-institutionalized) population over 18 years of age living in households with a land line telephone. All data from the BRFSS are weighted by population. For the *Milwaukee Health Report 2009*, ZIP code level data were obtained directly from DHS to measure various health determinants and quality of life. ZIP code level data obtained from the BRFSS contain data only within the City of Milwaukee. The BRFSS website is located at <http://dhs.wisconsin.gov/stats/BRFS.htm>.

U.S. Census Data (CENSUS)

The U.S. Census Bureau takes a census of the entire United States every 10 years, as mandated by the U.S. Constitution. While mainly used for apportionment of the representatives for the U.S. House of Representatives, the census has evolved to serve many other purposes, including population-based research. For the *Milwaukee Health Report 2009*, census data from 2000 are used to obtain the total population within the City of Milwaukee. Census data are available online at <http://www.census.gov>.

Wisconsin Department of Health Services (DHS)

The Wisconsin Department of Health Services (DHS), specifically the Division of Public Health (DPH), is the state department that is responsible for public health in Wisconsin. For the *Milwaukee Health Report 2009*, DHS data are used to provide radon risk and rates of HIV infection (from the Wisconsin AIDS/HIV Program). The DHS website is located at <http://dhs.wisconsin.gov>.

Table 1. Overview of Data Sources for All Health Measures.¹

Health Report Framework	Measures	Data	Years
Health Outcome			
Mortality	Years of Potential Life Lost ²	MHD	2005 - 2007
	Infant Mortality ²	MHD	2005 - 2007
Morbidity	Self-reported Health Status ²	BRFSS	2004 - 2006
	Self-reported Mental Health Status ²	ACHS	2003, 2006
Health Determinants			
Health Care			
Access to Care/Quality of Care	No Health Care Coverage ²	FHS	2005 - 2007
	Did Not Receive Needed Health Care ²	FHS	2005 - 2007
	No Routine Checkup ²	FHS	2005 - 2007
	No Recent Dental Visit ²	FHS	2005 - 2007
	No Influenza Vaccination ²	BRFSS	2004 - 2006
	No Pneumonia Vaccination ²	ACHS	2003, 2006
	No Biennial Mammography ²	BRFSS	2004, 2006
	No Pap Smear ²	BRFSS	2004, 2006
No Early Prenatal Care ³	WISH	2005 - 2007	
Health Behaviors			
Substance Use	Cigarette Smoking ²	BRFSS	2004 - 2006
	Smoking During Pregnancy ³	WISH	2005 - 2007
	Binge Drinking ²	BRFSS	2004 - 2006
Diet and Exercise	Physical Inactivity ²	ACHS	2006
	Obesity ²	BRFSS	2004 - 2006
High Risk Sexual Behavior	Inadequate Fruit and Vegetable Consumption ²	ACHS	2003, 2006
	STDs ²	MHD	2005 - 2007
Safety	HIV Infection ³	DHS	2002 - 2007
	Violent Assault ²	ACHS	2003, 2006
	Did Not Wear Seat Belt ²	ACHS	2003, 2006
Socioeconomic Factors			
Social Disruption	Single Parent Households ³	EASI	2007
Physical Environment			
Built Environment	Radon Risk ³	DHS	2006
	Housing Built Before 1940 ³	EASI	2007
	Lead Poisoning ²	MHD	2005 - 2007

¹ Only lists city data sources; state and national data sources can be found on the page of each measure.

² ZIP codes wholly contained within the City of Milwaukee.

³ ZIP codes wholly or partially contained within the City of Milwaukee.

Easy Analytic Software, Inc. (EASI)

The Easy Analytic Software, Inc. (EASI) is the leading publisher of demographic data and software. The EASI has created The Right Site™ for demographic research. The Right Site™ provides various data such as standard demographics, site analyses, trend reports, etc. For the *Milwaukee Health Report 2009*, The Right Site™ data are used to obtain the sociodemographic factors. The EASI website is located at <http://www.easidemographics.com>.

Wisconsin Family Health Survey (FHS)

The Wisconsin Family Health Survey (FHS) is an annual survey carried out by the Wisconsin Department of Health Services (DHS), Division of Public Health, Bureau of Health Information and Policy. Conducted by the University of Wisconsin Survey Center, this survey is used to assess health coverage, health status, health-related activity limitations, chronic conditions, and health services utilization. All data from the FHS are weighted by population. ZIP code level data were purchased directly from DHS to obtain several measures of health care. ZIP code level data obtained from the FHS contain data only within the City of Milwaukee. The FHS website is located at <http://dhs.wisconsin.gov/stats/familyhealthsurvey.htm>.

Milwaukee Health Department (MHD)

The City of Milwaukee Health Department (MHD) is responsible for protecting and promoting public health in the City of Milwaukee. For the *Milwaukee Health Report 2009*, MHD data are used to provide years of potential life lost, rates of sexually transmitted disease, infant mortality, and lead poisoning data. ZIP code level data obtained from the MHD contain data only within the City of Milwaukee. The MHD website is located at <http://www.milwaukee.gov/health>.

Wisconsin Interactive Statistics on Health (WISH)

The Wisconsin Interactive Statistics on Health (WISH) database is prepared and maintained by the Department of Health Services (DHS), Division of Public Health, Bureau of Health Information and Policy. WISH reports many different public health indicators, and is used in the *Milwaukee Health Report 2009* to obtain the prenatal care and infant mortality outcome data. These data are available at <http://dhs.wisconsin.gov/wish>.

DATA ANALYSES

For all measures used in this report, data were analyzed at the ZIP code level. Based on the three ZIP code groups created via the SES index, estimates from each measure were averaged across each SES group using a weighted average by population. Rates and 95% confidence interval were then calculated for each measure and were used for comparison between the SES groups. All statistical analyses were performed using SAS 9.13 (SAS Institute, 2004).

RESULTS: OVERVIEW OF THE CITY OF MILWAUKEE

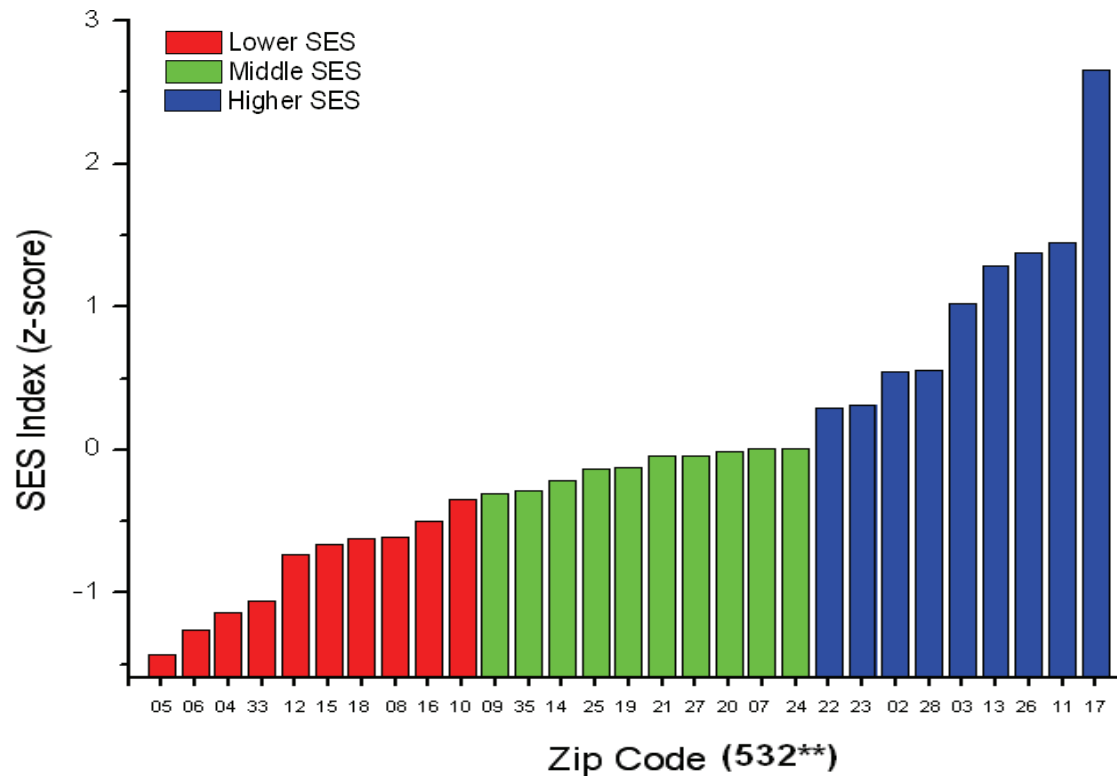
SOCIOECONOMIC STATUS (SES) GROUPS

Table 2 provides the stratification of the ZIP codes into three groups by SES. The SES index vs. ZIP code is shown in Figure 2. Although the ZIP codes were not initially stratified by geographic location, the ZIP codes in the lower SES group are all clustered within the central and near-northwest portions of the City of Milwaukee, while the higher SES group was found to be dispersed in pockets along the outer edge of the city, as shown in Figure 3.

Table 2. Socioeconomic Status Groups by ZIP Codes.

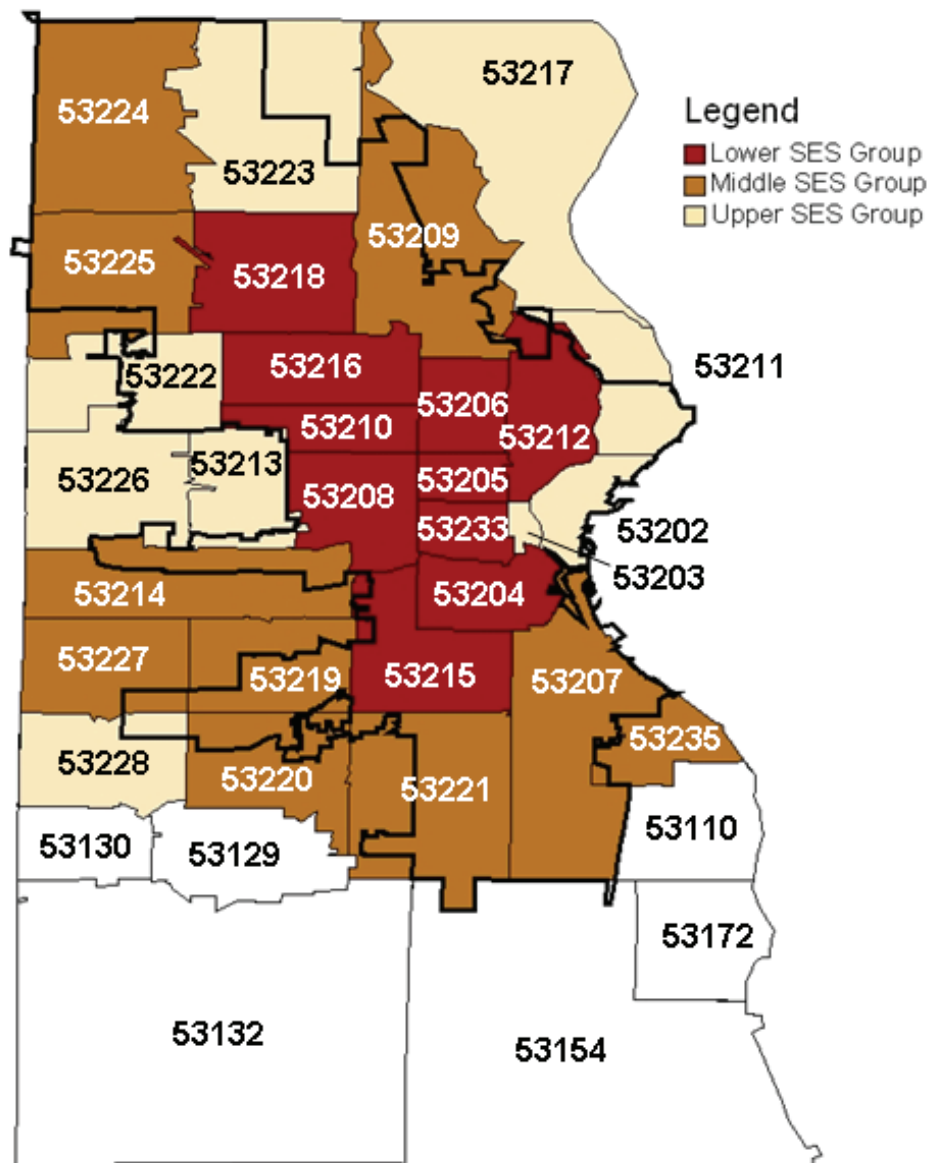
	Lower SES group	Middle SES group	Higher SES group
ZIP Code	53204, 53205, 53206, 53208, 53210, 53212, 53215, 53216, 53218, 53233	53207, 53209, 53214, 53219, 53220, 53221, 53224, 53225, 53227, 53235	53202, 53203, 53211, 53213, 53217, 53222, 53223, 53226, 53228

Figure 2. ZIP Code Tertiles by SES Index (Z-score).



(For example, Zip code "05" means "53205.")

Figure 3. Map of the City of Milwaukee by ZIP Code and SES Group.



SOCIODEMOGRAPHIC PROFILE

The sociodemographic characteristics of the City of Milwaukee by SES group obtained from 2007 data are provided in Table 3. The results demonstrate not only the large disparities in the distribution of education level and median and average income across the SES groups, but also differences in age, race/ethnicity, education, housing, and other SES-related measures between the ZIP code groups.

Table 3. Sociodemographic Characteristics of the City of Milwaukee by SES Group.¹

Characteristics	Milwaukee			Wisconsin	US
	Lower SES group	Middle SES group	Higher SES group		
Population					
Total Population	303,929	285,459	194,584	5,573,578	300,876,796
Square Miles	35.8	72.2	52.2	54,310	3,537,438
Population Density	8,492	3,952	3,728	103	85
Age (years)					
Median Age	27.3	37.2	37.5	36.1	35.3
0 - 17 (%)	32.9	24.0	19.5	25.9	25.9
18 - 64 (%)	59.2	60.3	64.9	61.5	62.2
> 65 (%)	7.9	15.7	15.6	12.6	11.9
Gender (%)					
Male	48.2	47.6	48.1	49.7	49.4
Female	51.8	52.4	51.9	50.3	50.6
Race (%)					
White	31.2	73.7	84.7	88.3	73.0
Black	48.3	18.4	8.5	5.3	12.1
Asian	4.1	2.1	3.3	1.9	4.3
Other Races	16.3	5.8	3.5	4.5	10.6
Hispanic Ethnicity (%)	21.1	6.2	3.3	4.5	15.0
Education (%)					
Less than High School	30.9	15.6	7.6	12.9	17.1
High School	29.7	33.7	18.4	33.5	27.7
Some College	20.9	24.4	20.6	21.9	22.5
Associate Degree	5.1	6.8	5.9	7.7	6.5
College	9.1	13.6	29.5	16.4	16.8
Graduate Degree	4.2	5.7	18.1	7.6	9.4
Language Speaking (%)					
Speaks English	79.3	91.6	91.1	93.9	82.6
Speaks Spanish	16.5	4.2	2.6	3.6	11.6
Income (\$)					
Household Income, Median	29,066	45,405	55,935	52,048	49,565
Household Income, Average	38,356	53,988	74,836	64,034	66,816
Housing (%)					
Occupied by Renters	58.2	42.2	45.6	30.1	32.2
Household					
Average Size	2.7	2.2	2.0	2.4	2.5
Parkland as % of Total Land ²	3.4	3.4	5.6	4.7	N/A

¹Data Source: The Right Site, EASI, 2007.

²Data Source: Milwaukee County Department of Parks.

RESULTS: OVERVIEW OF HEALTH MEASURES

The following section of this report contains one page of detailed information for each of the measures used in the Report. Each page provides the definition of the measure, and lists the data sources and reasons for inclusion. It also provides summary statistics for the city and comparison with the state and the nation, when applicable.

For each measure, there is a table of detailed data for all SES groups. In addition to the measure value, sample sizes and confidence intervals are included in the tables when applicable. Each page displays the measure data in a bar chart by SES groups in a consistent manner (i.e., the higher the number is, the worse the health state is). Some important facts regarding each measure are also provided.

In this report, SES groups were created via an SES index based on income and education levels. Differences in values between SES groups for the individual measures should be interpreted with some caution, especially when some measures were not based on a complete or random sample (i.e., radon risk and lead poisoning). We hope that the confidence intervals and additional information provided on the page for each measure will help to put values for specific SES groups in context.

YEARS OF POTENTIAL LIFE LOST

About the Measure

What It Is: Years of Potential Life Lost (YPLL) is a measure of premature mortality (early death). Every death occurring before the age of 75 contributes to the total number of years of potential life lost. For example, a person dying at age 50 would contribute 25 years of life to the YPLL index. The YPLL is reported as a rate per 100,000 people.

Where It Comes from: Milwaukee City Data: MHD
Wisconsin State Data: WISH - Mortality Module
U.S. National Data: WISQARS¹

Reasons for Reporting: YPLL is a widely used measure of the rate and distribution of premature mortality that allows one to target resources to high risk areas and investigate further into the causes of death.

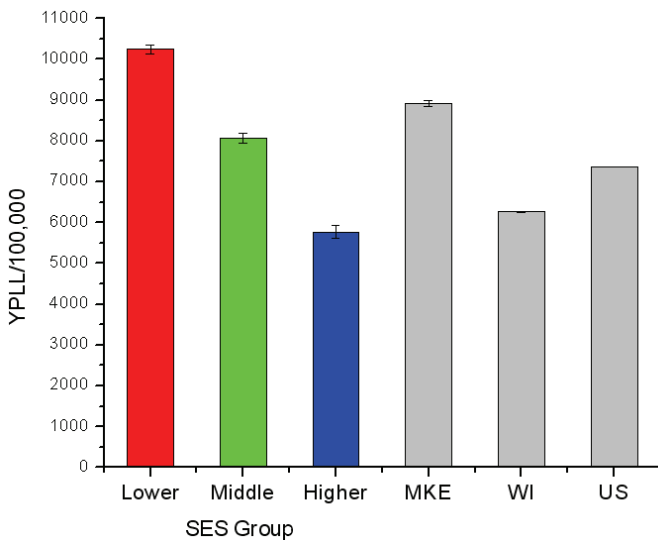
Report Methodology

Summary Measure: Health Outcomes Mortality
Years of Data Used: 2005-2007

Summary Information

Overall in Milwaukee: 8,921 (8,850 – 8,993)
Overall in Wisconsin: 6,267 (6,255 – 6,279)
Overall in U.S.: 7,355

SES Group	Population	YPLL	YPLL per 100,000	95% CI
Lower	331,069	33,912	10,243	10,140 – 10,347
Middle	182,551	14,724	8,066	7,941 – 8,191
Higher	89,304	5,154	5,771	5,618 – 5,924



The facts about years of potential life lost:

- Premature deaths are a national problem and reduction of these deaths is an important objective for health policy.²
- Preventing premature deaths is consistent with the national Healthy People 2010 objectives, and should be a major priority of public health programs.²
- Federal, state, county, and city health units can use YPLL rates to help guide activities toward Healthy People 2010 objectives and to help identify new health problems that require forming new community alliances.

¹CDC. WISQARS Fatal Injuries: Years of Potential Life Lost Reports, 2005. Available at <http://webappa.cdc.gov/sasweb/ncipc/ypll.html>.

²U.S. Department of Health and Human Services. *Healthy People 2010: understanding and improving health*, 2nd ed. Washington, DC: U.S. Government Printing Office; 2000.

INFANT MORTALITY

About the Measure

What It Is:	Infant Mortality is measured by the infant mortality rate (IMR), reported as number of infant deaths (at or before 365 days of age) occurring in a given year per 1,000 live births occurring during that same calendar year.
Where It Comes from:	Milwaukee City Data: MHD Wisconsin State Data: WISH - Infant Mortality Module U.S. National Data: National Center for Health Statistics ¹
Reasons for Reporting:	Infant mortality is an important measure of a population's health, and it is associated with a variety of factors such as maternal health, quality and access to medical care, socioeconomic conditions, and public health practices.

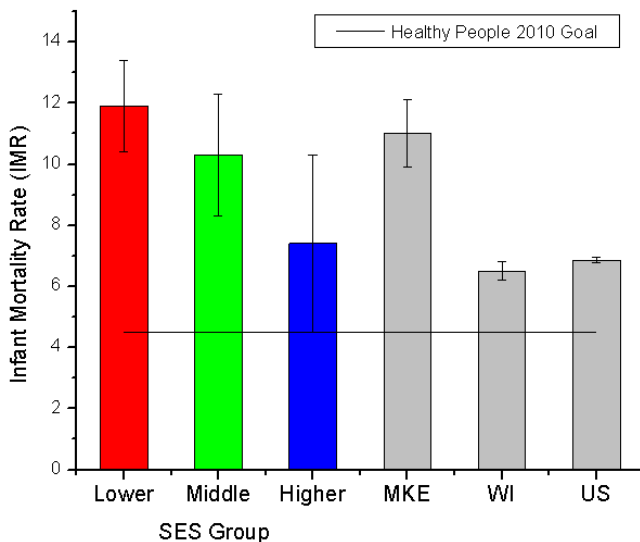
Report Methodology

Summary Measure:	Health Outcomes Mortality
Years of Data Used:	2005-2007

Summary Information

Overall in Milwaukee:	11.0 (9.8 – 12.1)
Overall in Wisconsin:	6.5 (6.1 – 6.8)
Overall in U.S.:	6.9 (6.8 – 6.9)

SES Group	# Live Births	# Infant Deaths	Infant Mortality Rate (IMR)	95% CI
Lower	20,307	241	11.9	10.4 – 13.4
Middle	9,458	97	10.3	8.2 – 12.3
Higher	3,359	25	7.4	4.5 – 10.3



The facts about infant mortality:

- The Healthy People 2010 goal for infant mortality is 4.5 deaths per 1,000 births (Objective 16-1c).
- In 2004, the U.S. ranked 29th in the world in infant mortality.² This low ranking is largely due to disproportionately high IMRs among various racial and ethnic groups in this country.
- According to the 2007 Big Cities Health Inventory, the City of Milwaukee ranks 7th worst for infant mortality among the 53 largest cities in the U.S.
- Milwaukee's infant mortality rate decreased from 12 per 1,000 live births in 2006 to 10 per 1,000 live births in 2007. This decrease is attributed to a reduction of infant deaths due to complications of prematurity.³ Black infants still die at more than twice the rate of whites.

¹Mathews TJ, MacDorman MF. Infant mortality from the 2005 period linked birth/infant death data set. *National Vital Statistics Reports*, vol 57 no 3. Hyattsville, MD: National Center for Health Statistics. 2008.

²MacDorman MF, Mathews TJ. Recent Trends in Infant Mortality in the United States. Available at <http://www.cdc.gov/nchs/data/databriefs/db09.htm>.

³City of Milwaukee Health Department. Press release: City Officials Announce Drop in Infant Mortality Rate. 2008. Available at <http://www.city.milwaukee.gov/display/router.asp?docid=3505>.

SELF-REPORTED HEALTH STATUS

About the Measure

What It Is:	The self-reported health status measure is based on answers to the question, "In general, would you say that your health is excellent, very good, good, fair, or poor?" The percentages stated in this Report are the percentage of people reporting fair or poor health.
Where It Comes from:	Milwaukee City Data: BRFSS Wisconsin State Data: BRFSS ¹ U.S. National Data: BRFSS ¹
Reasons for Reporting:	Self-reported health status provides an estimate of the health-related quality of life, or morbidity, of a population.

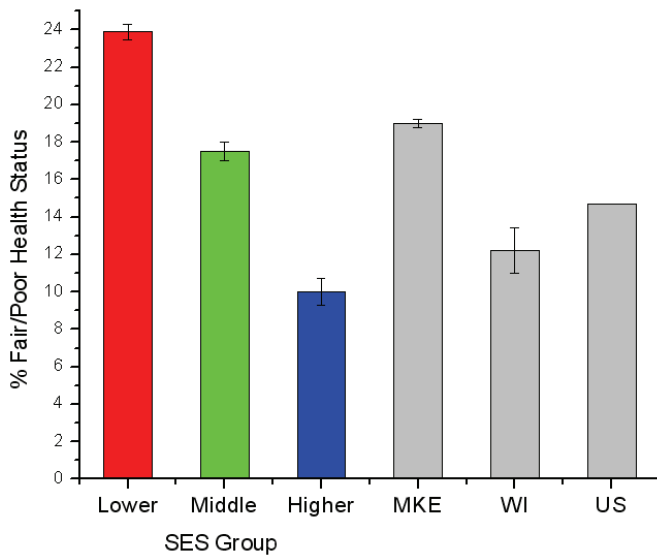
Report Methodology

Summary Measure:	Health Outcomes Health Status
Years of data used:	2004-2006

Summary Information

Overall in Milwaukee:	19.0 (18.8 – 19.3)
Overall in Wisconsin:	12.2 (11.0 – 13.4)
Overall in U.S.:	14.7

SES Group	Sample Size	# Fair/Poor	% Fair/Poor	95% CI
Lower	173,228	41,353	23.9	23.5 – 24.3
Middle	139,959	24,561	17.5	17.1 – 18.0
Higher	69,489	6,960	10.0	9.3 – 10.7



The facts about self-reported health status:

- Self-rated health status has been found to be an independent predictor of morbidity and mortality.²
- Racial/ethnic disparities in self-rated health status persist among the U.S. adult population. Black and Hispanic adults are more likely to report their general health status as fair or poor compared with white adults.²
- Adults with a disability were more likely to report fair or poor health than adults without one. Disproportionately high rates of disability persist among certain racial/ethnic populations. Efforts to reduce health disparities among racial/ethnic populations should also address the needs of adults with disabilities.²

¹Centers for Disease Control and Prevention (CDC), Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2006.

²Centers for Disease Control and Prevention (CDC), Racial/Ethnic Disparities in Self-Rated Health Status Among Adults With and Without Disabilities -- United States, 2004 – 2006. *MMWR* 2008; 57(39):1069-1073.

SELF-REPORTED MENTAL HEALTH STATUS

About the Measure

What It Is: The self-reported mental health status measure is based on answers to the question, “During the past 30 days, about how often would you say you felt sad, blue, or depressed?” The percentages stated in this Report are the percentages of people reporting always or nearly always felt sad, blue, or depressed in the past 30 days.

Where It Comes from: Milwaukee City Data: ACHS
Wisconsin State Data: N/A
U.S. National Data: N/A

Reasons for Reporting: Self-reported mental health status provides an estimate of the health-related quality of life, or morbidity, of a population.

Report Methodology

Summary Measure: Health Outcomes
Health Status

Years of data used: 2003, 2006

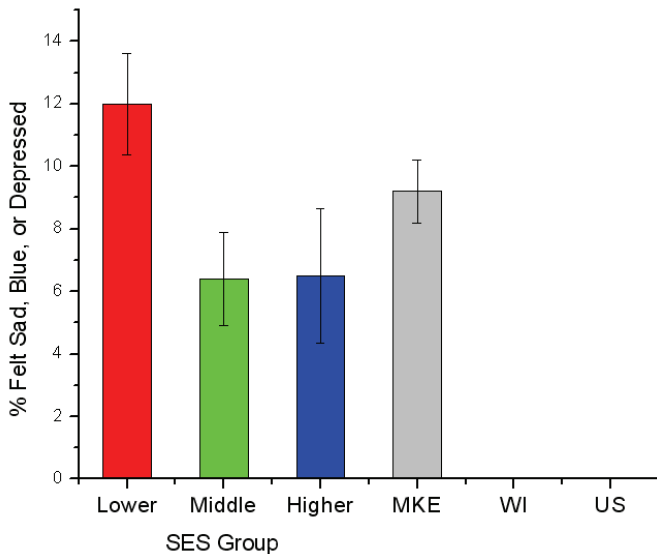
Summary Information

Overall in Milwaukee: 9.2 (8.2 – 10.2)

Overall in Wisconsin: N/A

Overall in U.S.: N/A

SES Group	Sample Size	# Sad/Blue/Depressed	% Sad/Blue/Depressed	95% CI
Lower	1,538	184	12.0	10.3 – 13.6
Middle	1,026	66	6.4	4.9 – 7.9
Higher	500	32	6.5	4.3 – 8.6



The facts about self-reported mental health status:

- An estimated 26.2 percent of Americans ages 18 and older—about one in four adults—suffer from a diagnosable mental disorder in a given year. Mental disorders are the leading cause of disability in the U.S. for ages 15-44.¹
- Major depressive disorder affects approximately 14.8 million American adults, or about 6.7 percent of the U.S. population age 18 and older in a given year.¹
- Major depressive disorder is more prevalent in women than in men.¹
- Depression is treatable. With adequate medications and psychological treatments, future episodes of depression can be prevented or reduced in severity.

¹National Institute of Mental Health. The Numbers Count: Mental Disorders in America. Available at <http://www.nimh.nih.gov/health/publications/the-numbers-count-mental-disorders-in-america.shtml>.

NO HEALTH INSURANCE COVERAGE

About the Measure

What It Is: No Health Insurance Coverage is the percentage of the population under 65 years of age (including children) that reported not having health insurance coverage of any kind, including prepaid plans, HMOs, or government plans such as Medicare or Medicaid, at the time of the survey.

Where It Comes From: Milwaukee City Data: FHS
Wisconsin State Data: National Health Interview Survey (NHIS)¹
U.S. National Data: National Health Interview Survey (NHIS)¹

Reasons for Reporting: Persons with health insurance are more likely to have a primary care provider and to have received appropriate preventive care. Lack of health care coverage is a strong barrier to health care access.

Report Methodology

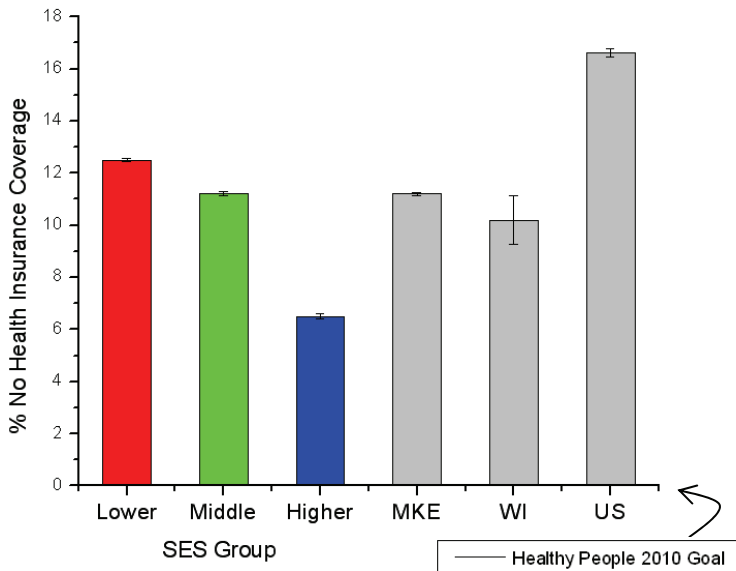
Summary Measure: Health Determinants
Health Care

Years of data used: 2005-2007

Summary Information

Overall in Milwaukee: 11.2 (11.1 – 11.2)
Overall in Wisconsin: 10.2 (9.3 – 11.1)
Overall in U.S.: 16.6 (16.4 – 16.8)

SES Group	Sample Size	# No Insurance	% No Insurance	95% CI
Lower	835,242	104,476	12.5	12.4 – 12.6
Middle	560,967	62,901	11.2	11.1 – 11.3
Higher	248,546	16,034	6.5	6.4 – 6.5



The facts about health insurance coverage:

- The Healthy People 2010 goal for all persons < 65 years old having some type of health care coverage is 100%, which means the goal for “No Health Insurance Coverage” is 0% (Objective 01-01).
- More than 45 million people in the U.S. do not have health insurance coverage. Most (27 million) of the uninsured are full-time or part-time workers. The number of uninsured children in 2007 was 8.1 million – or 10.7% of all children in the U.S.² People under age 65 with low incomes (< 200% of the poverty level) were much more likely to be uninsured than those with higher incomes.¹
- Population estimates of health insurance coverage are necessary for the development and assessment of federal and state insurance programs and policies.¹

¹ Cohen, R.A., Makuc D.M., State, Regional, and National Estimates of Health Insurance Coverage for People Under 65 Years of Age: National Health Interview Survey, 2004-2006. *National Health Statistics Report: no 1*. Hyattsville, MD: National Center for Health Statistics, 2008.

² DeNavas-Walt, C., Proctor, B.D., Smith, J.C., U.S. Census Bureau, Current Population Reports, P60-235, *Income, Poverty, and Health Insurance Coverage in the United States: 2007*, U.S. Government Printing Office, Washington, DC, 2008.

DID NOT RECEIVE NEEDED HEALTH CARE

About the Measure

What It Is:	Did Not Receive Needed Health Care is the percentage of the population reporting that they did not get the medical care or surgery that they felt they should have had within the past 12 months. This measure is based on answers to the question, "During the last 12 months, was there any time when you/anyone in your household needed medical care or surgery but did not get it?"
Where It Comes From:	Milwaukee City Data: FHS Wisconsin State Data: FHS U.S. National Data: N/A
Reasons for Reporting:	Not receiving needed health care may contribute to chronic conditions and cause more serious health problems in the future.

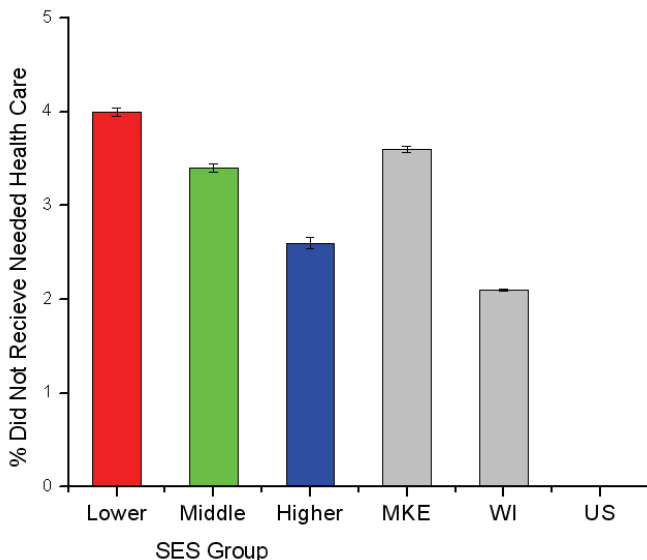
Report Methodology

Summary Measure:	Health Determinants Health Care
Years of data used:	2005-2007

Summary Information

Overall in Milwaukee:	3.6 (3.6 – 3.6)
Overall in Wisconsin:	2.1 (2.1 – 2.1)
Overall in U.S.:	N/A

SES Group	Sample Size	# No Needed Health Care	% No Needed Health Care	95% CI
Lower	835,242	33,705	4.0	4.0 – 4.1
Middle	560,967	18,909	3.4	3.3 – 3.4
Higher	248,546	6,554	2.6	2.6 – 2.7



The facts about needed health care:

- The Healthy People 2010 goal for the proportion of families that experience difficulties or delays in obtaining health care or do not receive needed care for one or more family members is 7% (Objective 1-6).
- Various barriers impede receiving needed medical services, including financial barriers (having no health insurance or being underinsured), structural barriers (no facilities or health care professionals nearby, services not available during non-work hours, lack of public transportation options, or environmental challenges for people with disabilities), and personal barriers (sexual orientation, cultural differences, language differences, not knowing what to do).

NO ROUTINE CHECKUP

About the Measure

What It Is:	No Routine Checkup is a measure of the percentage of respondents reporting that they didn't have a routine health checkup within the past 2 years. This measure is based on answers to the question, "A routine check-up is a general physical exam, not an exam for a specific injury, illness or condition. About how long has it been since you last received a routine checkup?"
Where It Comes From:	Milwaukee City Data: FHS Wisconsin State Data: FHS U.S. National Data: BRFSS ¹
Reasons for Reporting:	Routine visits can be used to monitor a person's health (e.g., blood pressure) and help prevent minor health issues from becoming major problems. People receive immunizations and other preventive care at routine visits.

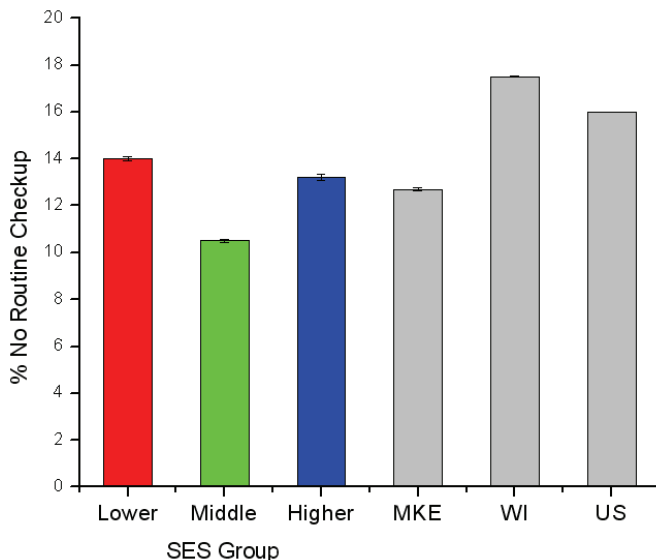
Report Methodology

Summary Measure:	Health Determinants Health Care
Years of data used:	2005-2007

Summary Information

Overall in Milwaukee:	12.7 (12.6 – 12.7)
Overall in Wisconsin:	17.5 (17.5 – 17.5)
Overall in U.S.:	16.0

SES Group	Sample Size	# No Routine Checkup	% No Routine Checkup	95% CI
Lower	835,242	116,738	14.0	13.9 – 14.1
Middle	560,967	58,672	10.5	10.4 – 10.5
Higher	248,546	32,796	13.2	13.1 – 13.3



The facts about routine checkup:

- Adults with health insurance are twice as likely to receive a routine checkup as adults without health insurance.
- Women have routine checkups more frequently than men.

¹Centers for Disease Control and Prevention (CDC). Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2000.

NO RECENT DENTAL VISIT

About the Measure

What It Is:	No Recent Dentist Visit is the percentage of the population reporting that they did not have a dental visit in the year prior to being interviewed.
Where It Comes From:	Milwaukee City Data: FHS Wisconsin State Data: FHS U.S. National Data: BRFSS ¹
Reasons for Reporting:	Oral health is an essential and integral component of health throughout life. Poor dental health markedly affects quality of life. Tooth and gum diseases are not only important themselves, but are also related to various other health problems, including cardiovascular health.

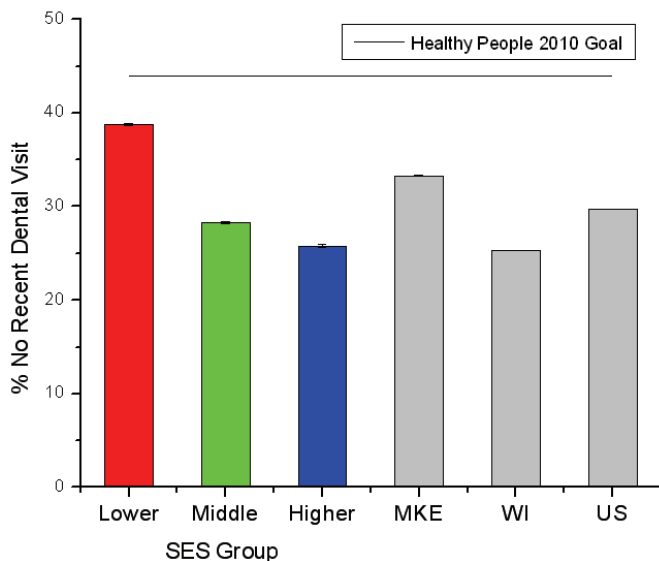
Report Methodology

Summary Measure:	Health Determinants Health Care
Years of data used:	2005-2007

Summary Information

Overall in Milwaukee:	33.3 (33.2 – 33.3)
Overall in Wisconsin:	25.3 (25.3 – 25.4)
Overall in U.S.:	29.7

SES Group	Sample Size	# No Dental Visit	% No Dental Visit	95% CI
Lower	835,242	324,313	38.8	38.7 – 38.9
Middle	560,967	158,698	28.3	28.2 – 28.4
Higher	248,546	64,091	25.8	25.6 – 26.0



The facts about dental visit:

- The Healthy People 2010 goal for an annual dental visit is 56%, which means the goal for “no dental visit” is no more than 44% (Objective 21-10).
- Poor oral health and untreated oral conditions can have a significant impact on quality of life.
- Barriers to dental care include cost; lack of dental insurance; lack of providers from underserved racial and ethnic groups or in underserved neighborhoods; and fear of dental visits.
- National surveys show that the proportion of the U.S. population that annually makes at least one dental visit and the average number of visits made vary significantly by age, race, dental status, level of education, and family income.^{2,3}

¹Centers for Disease Control and Prevention (CDC). Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2006.

²Centers for Disease Control and Prevention (CDC). National Health Interview Survey, unpublished data, 1997. Hyattsville, MD: CDC.

³Agency for Healthcare Research and Quality (AHRQ). Medical Expenditure Panel Survey (MEPS), unpublished data, 1996.

NO INFLUENZA VACCINATION

About the Measure

What It Is: No Influenza Vaccination is a measure of the percentage of respondents aged 65 years old and older reporting that they did not have a “flu” shot or “flu” vaccine that was sprayed in their nose within the past year.

Where It Comes From: Milwaukee City Data: BRFSS
Wisconsin State Data: BRFSS¹
U.S. National Data: BRFSS¹

Reasons for Reporting: Vaccination is an effective strategy to reduce illness and deaths due to influenza. Influenza vaccine is safe and effective, but must be given every year to protect against that year’s circulating strain(s).

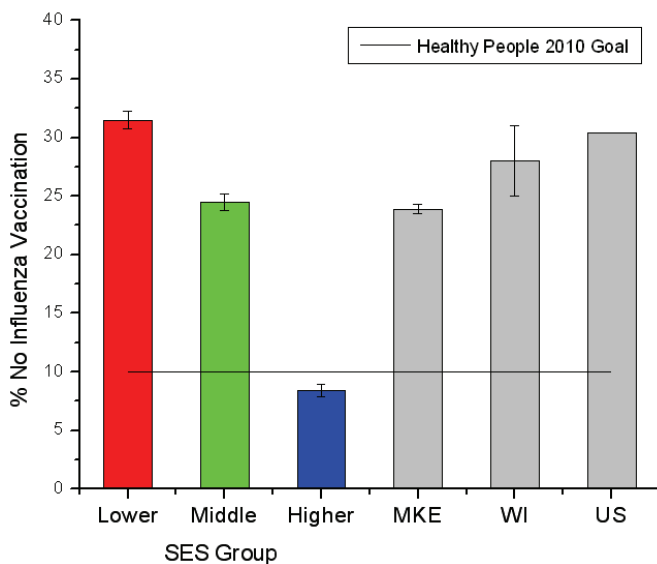
Report Methodology

Summary Measure: Health Determinants
Health Care
Years of data used: 2004 - 2006

Summary Information

Overall in Milwaukee: 23.9 (23.5 – 24.3)
Overall in Wisconsin: 28.0 (25.0 – 31.0)
Overall in U.S.: 30.4

SES Group	Sample Size	# No Influenza Vaccination	% No Influenza Vaccination	95% CI
Lower	20,435	6,429	31.5	30.9 - 32.2
Middle	18,355	4,506	24.5	23.8 - 25.3
Higher	10,758	909	8.4	7.9 - 9.0



The facts about influenza (“flu”) vaccination:

- The Healthy People 2010 goal for persons 65 and older having an influenza vaccination within the past 12 months is 90%, which means the goal for not having an influenza vaccination is no more than 10% (Objective 14-29a).
- Approximately 36,000 Americans die each year from influenza or its complications. Current levels of coverage vary widely among age, risk, and racial and ethnic groups.
- Influenza vaccine is covered by Medicare. Despite the continually increasing vaccination rates among persons aged 65 years and older over the decade, coverage rates for certain racial and ethnic groups remain substantially below the general population.²

¹Centers for Disease Control and Prevention (CDC). Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2006.

²Guyer B, Smith DR, Chalk R. Calling the shots: immunization finance policies and practices. Executive summary of the report of the Institute of Medicine. *American Journal of Preventive Medicine* 2000;19:4 –12.

NO PNEUMONIA VACCINATION

About the Measure

What It Is: No Pneumonia Vaccination is a measure of the percentage of 65 years or older respondents reporting that they have never had a pneumonia vaccination. This measure is based on answers to the question, "Have you ever had a pneumonia or pneumococcal shot?"

Where It Comes From: Milwaukee City Data: ACHS
Wisconsin State Data: BRFSS¹
U.S. National Data: BRFSS¹

Reasons for Reporting: Pneumococcal disease is a serious disease that causes much sickness and death. People 65 years and older are at greater risk from the disease. A pneumococcal vaccine is usually given once or twice in a person's lifetime. It is more than 90% effective against serious pneumococcal disease.

Report Methodology

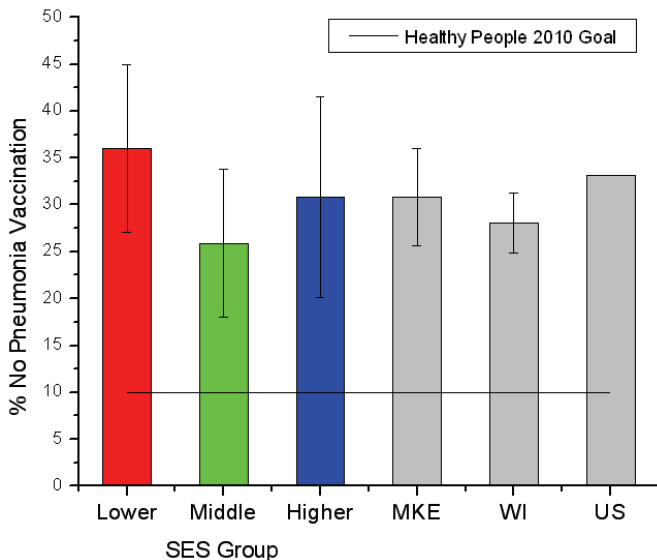
Summary Measure: Health Determinants
Health Care

Years of data used: 2003, 2006

Summary Information

Overall in Milwaukee: 30.8 (25.5 – 36.0)
Overall in Wisconsin: 28.1 (24.9 – 31.3)
Overall in U.S.: 33.1

SES Group	Sample Size	# No Pneumonia Vaccination	% No Pneumonia Vaccination	95% CI
Lower	110	40	36.0	27.0 – 44.9
Middle	119	31	25.9	18.1 – 33.8
Higher	71	22	30.8	20.1 – 41.5



The facts about pneumonia vaccination:

- The Healthy People 2010 goal for persons 65 or older ever having a pneumococcal vaccine is 90%, which means the goal for not having a pneumococcal vaccine is no more than 10%. (Objective 14-29b).
- Pneumococcal vaccine is fully covered by Medicare Part B if the healthcare provider accepts the Medicare-approved amount.
- Pneumococcal vaccine can be given at the same time as influenza vaccine.

¹Centers for Disease Control and Prevention (CDC). Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2006.

NO BIENNIAL MAMMOGRAPHY

About the Measure

What It Is: No Biennial Mammography is a measure of the percentage of female respondents 40 years and older who reported that they did not have a mammogram within the past 2 years. This measure is based on answers to the question, “A mammogram is an x-ray of each breast to look for breast cancer. How long has it been since you had your last mammogram?”

Where It Comes From: Milwaukee City Data: BRFSS
Wisconsin State Data: BRFSS¹
U.S. National Data: BRFSS¹

Reasons for Reporting: Mammography plays a central role in diagnosing breast cancer at an early stage. Improving mammography rates can lead to earlier identification of breast cancer, and can improve the survival rate of people with the disease in the population.

Report Methodology

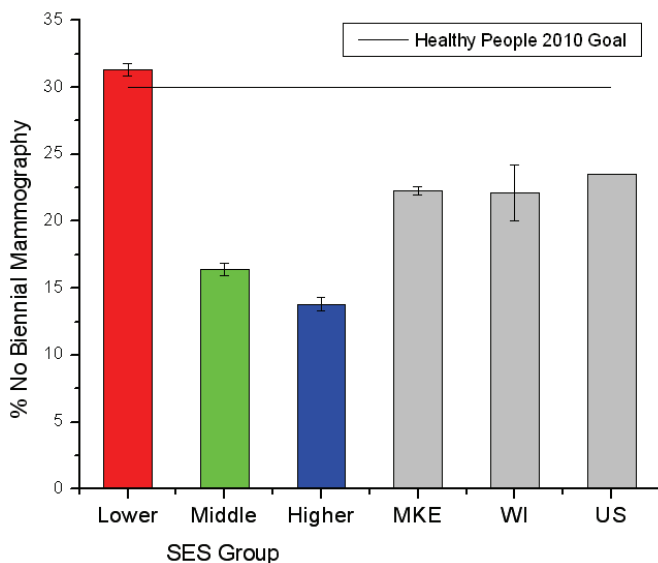
Summary Measure: Health Determinants
Health Care

Years of data used: 2004, 2006

Summary Information

Overall in Milwaukee: 22.3 (22.0 – 22.6)
Overall in Wisconsin: 22.1 (20.0 – 24.2)
Overall in U.S.: 23.5

SES Group	Sample Size	# No Biennial Mammography	% No Biennial Mammography	95% CI
Lower	35,434	11,078	31.3	30.8 – 31.7
Middle	27,800	4,572	16.4	16.0 – 16.9
Higher	18,247	2,526	13.8	13.3 – 14.3



The facts about mammography:

- The Healthy People 2010 goal for women 40 and older having a mammogram within the past two years is 70% (Objective 03-13), which means the goal for not having a mammogram is no more than 30%.
- Breast cancer is one of the most common forms of cancer among women in the United States. In 2004, 186,772 U.S. women were diagnosed with breast cancer, and 40,954 women died from breast cancer.
- Most women should have their first mammogram at age 40. Routine screening for breast cancer every one to two years with mammography is recommended for women 40 years and older.²

¹Centers for Disease Control and Prevention (CDC). Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2006.

²U.S. Preventive Services Task Force. Screening for Breast Cancer: Recommendations and Rationale. *Annals of Internal Medicine* 2002; 344-346.

NO PAP SMEAR

About the Measure

What It Is: No Pap Smear is a measure of the percentage of female respondents 18 and older reporting that they did not have a pap test within the past 3 years. This measure is based on the question, “How long has it been since you had your last pap smear?”

Where It Comes From: Milwaukee City Data: BRFSS
Wisconsin State Data: BRFSS¹
U.S. National Data: BRFSS¹

Reasons for Reporting: The pap smear is a screening test used to detect cancer and pre-cancerous conditions of the cervix. Pre-cancerous changes can often be treated, thus preventing cervical cancer. Improving pap smear rates can also lead to early detection of cervical cancer, which has a better survival rate if treated in early stages compared to later stages.

Report Methodology

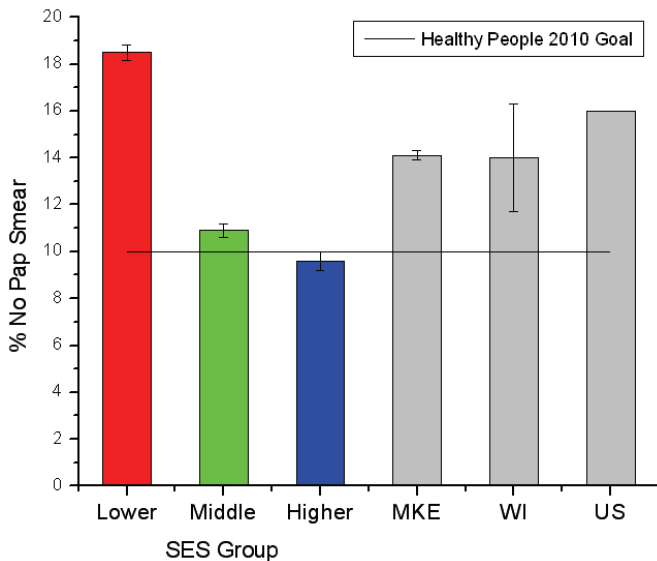
Summary Measure: Health Determinants
Health Care

Years of data used: 2004, 2006

Summary Information

Overall in Milwaukee: 14.1 (13.9 – 14.3)
Overall in Wisconsin: 14.0 (11.7 – 16.3)
Overall in U.S.: 16.0

SES Group	Sample Size	# No Pap Smear	% No Pap Smear	95% CI
Lower	53,219	9,862	18.5	18.2 – 18.9
Middle	42,422	4,632	10.9	10.6 – 11.2
Higher	22,061	2,110	9.6	9.2 – 10.0



The facts about pap smear:

- The Healthy People 2010 goal for women 18 years and older having a pap smear within the past three years is 90% (Objective 03-11b), which means the goal for not having a pap smear is no more than 10%.
- Cervical cancer morbidity and mortality rates are much higher among African American women than among White women. This is – in part – due to the fact that Black women in the U.S. tend to get fewer pap smears than White women.
- All women are at risk for cervical cancer. It occurs most often in women aged 30 years and older.² Routine pap smear screening should begin with the onset of sexual activity or at age 21, and should be repeated at least every three years.

¹Centers for Disease Control and Prevention (CDC). Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2006.

²U.S. Cancer Statistics Working Group. United States Cancer Statistics: 2004 Incidence and Mortality. Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention and National Cancer Institute; 2007.

NO EARLY PRENATAL CARE

About the Measure

What It Is:	Prenatal care refers to the medical care recommended for women during pregnancy. No Early Prenatal Care measures the percentage of women who did not receive prenatal care in the first trimester (first 3 months) of pregnancy.
Where It Comes From:	Milwaukee City Data: WISH - Prenatal Care Module Wisconsin State Data: WISH - Prenatal Care Module U.S. National Data: National Center for Health Statistics ¹
Reasons for Reporting:	Routine prenatal care can help in reducing maternal death rates and miscarriages as well as birth defects, low birth weight, pre-term labor, pre-eclampsia, and other preventable maternal and infant problems. ²

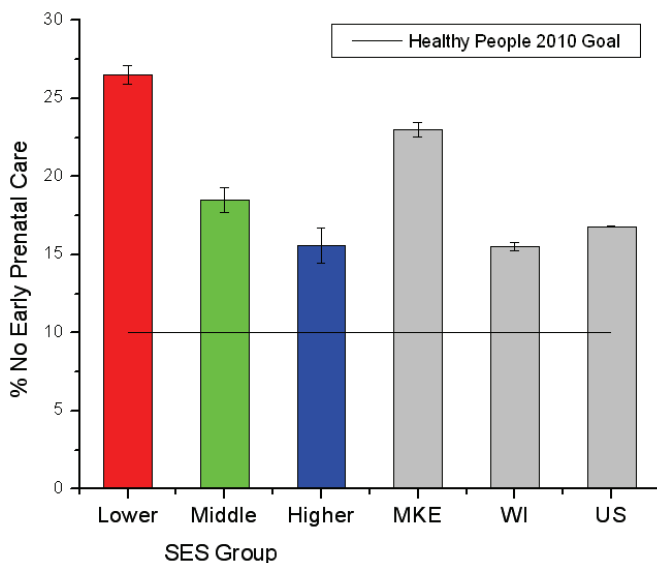
Report Methodology

Summary Measure:	Health Determinants Health Care
Years of data used:	2005-2007

Summary Information

Overall in Milwaukee:	23.0 (22.5 – 23.4)
Overall in Wisconsin:	15.5 (15.2 – 15.7)
Overall in U.S.:	16.8 (16.8 – 16.9)

SES Group	# Births	# Births to Mothers Who Received No Early Prenatal Care	% Births to Mothers Who Received No Early Prenatal Care	95% CI
Lower	20,365	5,404	26.5	25.9 – 27.1
Middle	9,828	1,820	18.5	17.7 – 19.3
Higher	3,996	623	15.6	14.5 – 16.7



The facts about prenatal care:

- The Healthy People 2010 goal for pregnant women receiving early and adequate care beginning in the first trimester of pregnancy is 90%, which means the goal for no care is no more than 10% (Objectives 16-6a and -6b).
- Various barriers impede receiving needed prenatal services, including financial barriers (having no health insurance or being underinsured or undocumented), structural barriers (no facilities or health care professionals nearby, services not available during non-work hours, lack of public transportation options), and personal barriers (language differences, not knowing what to do).

¹2005 Vital Stats, National Center for Health Statistics, accessed 12/18/2008. Available at <http://www.cdc.gov/nchs/data/w/vitalstats/VitalStatsbirths.htm>.

²Daniels P, Noe G, and Mayberry R. Barriers to prenatal care among black women of low socioeconomic status. *American Journal of Health Behavior*, March 2006;30(2):188-198.

CIGARETTE SMOKING

About the Measure

What It Is:	Cigarette Smoking is a measure of the percentage of the population reporting that they have smoked at least 100 cigarettes in their lifetime and that they currently smoke.
Where It Comes from:	Milwaukee City Data: BRFSS Wisconsin State Data: BRFSS ¹ U.S. National Data: BRFSS ¹
Reasons for Reporting:	Cigarette smoking has been shown to cause a variety of health problems including heart disease, several kinds of cancer (lung, larynx, esophagus, pharynx, mouth, and bladder), and chronic lung disease (e.g., emphysema).

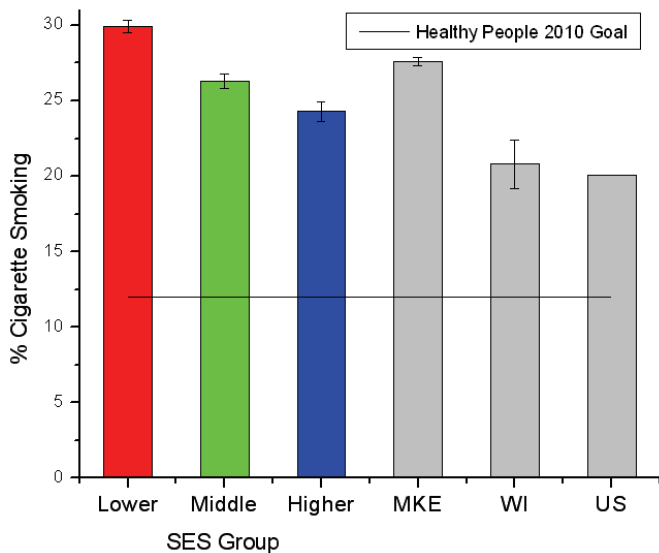
Report Methodology

Summary Measure:	Health Determinants Health Behaviors
Years of Data Used:	2004-2006

Summary Information

Overall in Milwaukee:	27.6 (27.3 – 27.8)
Overall in Wisconsin:	20.8 (19.2 – 22.4)
Overall in U.S.:	20.1

SES Group	Sample Size	# Current Smoker	% Current Smoker	95% CI
Lower	172,019	51,421	29.9	29.5 – 30.3
Middle	138,735	36,488	26.3	25.8 – 26.8
Higher	69,697	16,933	24.3	23.6 – 24.9



The facts about cigarette smoking:

- The Healthy People 2010 goal for adult smoking is 12% (Objective 27-01a).
- Cigarette smoking remains the leading preventable cause of death in the U.S.² Each year in the U.S., smoking results in more deaths than AIDS, alcohol, cocaine, heroin, homicide, suicide, motor vehicle crashes, and fires—combined.
- Cigarette smoking is more common among men (23.9%) than women (18.0%). Cigarette smoking is more common among adults who live below the poverty level (30.6%) than among those living at or above the poverty level (20.4%).³

¹Centers for Disease Control and Prevention (CDC). Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2006.

²Centers for Disease Control and Prevention (CDC). Annual Smoking-Attributable Mortality, Years of Potential Life Lost, and Economic Costs—United States, 1995–1999. MMWR 2002; 51(14):300–303.

³Centers for Disease Control and Prevention (CDC). Cigarette Smoking Among Adults—United States, 2006. MMWR 2007; 56(44):1157–1161.

SMOKING DURING PREGNANCY

About the Measure

What It Is:	Women giving birth in a hospital are asked about their smoking status after delivering the baby. Smoking During Pregnancy measures the percentage of women in the population reporting that they smoked during their pregnancy.
Where It Comes from:	Milwaukee City Data: WISH - Birth Counts Module Wisconsin State Data: WISH - Birth Counts Module U.S. National Data: Pregnancy Risk Assessment Monitoring System ¹
Reasons for Reporting:	Smoking during pregnancy has been shown to be associated with low birth weight, a higher risk of miscarriages, and Sudden Infant Death Syndrome (SIDS).

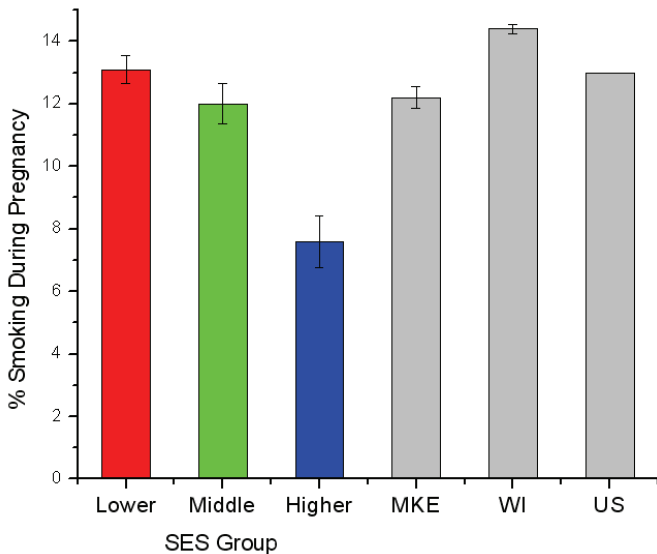
Report Methodology

Summary Measure:	Health Determinants Health Behaviors
Years of Data Used:	2005-2007

Summary Information

Overall in Milwaukee:	12.2 (11.8 – 12.5)
Overall in Wisconsin:	14.4 (14.2 – 14.5)
Overall in U.S.:	13.0

SES Group	# Births	# Mothers smoked during pregnancy	% Births for which mothers smoked during pregnancy	95% CI
Lower	20,365	2,675	13.1	12.7 – 13.6
Middle	9,828	1,174	12.0	11.3 – 12.6
Higher	3,996	305	7.6	6.8 – 8.4



The facts about smoking during pregnancy:

- Smoking before and during pregnancy is one of the most preventable causes of illness and death among mothers and infants. In particular, smoking increases the risk of preterm labor, low birth weight, infant mortality, and the development of chronic diseases in the infant.²
- Women who quit smoking before or early in pregnancy significantly reduce the risk for adverse outcomes.²
- Pregnant women who have received smoking cessation counseling are more likely to quit smoking. Effective smoking cessation interventions should be offered to pregnant smokers at the first prenatal visit, throughout the pregnancy, and after the baby is born.

¹2004 Pregnancy Risk Assessment Monitoring System (PRAMS) data from 26 states. Division of Reproductive Health, National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention.

²CDC. Preventing Smoking and Exposure to Secondhand Smoke Before, During, and After Pregnancy. Available at <http://www.cdc.gov/nccdphp/publications/factsheets/Prevention/smoking.htm>.

BINGE DRINKING

About the Measure

What It Is: Binge Drinking is a measure of the percentage of the population reporting that they drank more than five alcoholic beverages in one day, at least once per month. From 2004-2005, Binge Drinking is defined as 5 or more drinks on an occasion, regardless of gender. In 2006, Binge Drinking is defined as 5 or more drinks on an occasion for men, and 4 or more drinks for women.

Where It Comes from: Milwaukee City Data: BRFSS
Wisconsin State Data: BRFSS¹
U.S. National Data: BRFSS¹

Reasons for Reporting: Binge drinking is associated with many health problems, such as liver disease, STDs, and neurological damage. Alcohol abuse can cause psychosocial problems, including violence, and can contribute to injuries and deaths from drunk driving.

Report Methodology

Summary Measure: Health Determinants
Health Behaviors

Years of Data Used: 2004-2006

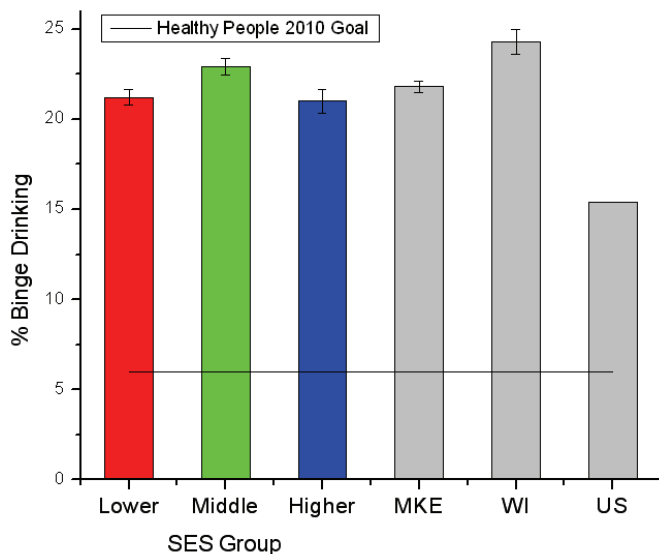
Summary Information

Overall in Milwaukee: 21.8 (21.5 – 22.1)

Overall in Wisconsin: 24.3 (22.6 - 26.0)

Overall in U.S.: 15.4

SES Group	Sample Size	# Binge Drinking	% Binge Drinking	95% CI
Lower	170,015	36,118	21.2	20.8 – 21.7
Middle	138,781	31,829	22.9	22.5 – 23.4
Higher	68,568	14,402	21.0	20.3 – 21.7



The facts about binge drinking:

- Healthy People 2010 goal for adult binge drinking is 6% (Objective 26-11c).
- Alcohol is the most commonly used substance, regardless of race or ethnicity. There are approximately 79,000 deaths attributable to excessive alcohol use each year in the United States.²
- Binge drinking is twice as prevalent among men as among women. The proportion of current drinkers that binge is highest in the 18- to 20-year-old group (51%).³
- Binge drinkers are 14 times more likely to report alcohol-impaired driving than non-binge drinkers.³

¹Centers for Disease Control and Prevention (CDC). Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2006.

²CDC. Alcohol-Related Disease Impact (ARDI). Atlanta, GA: CDC. Available at <http://www.cdc.gov/alcohol/ardi.htm>.

³CDC. Quick stats: Binge drinking. Atlanta, GA: CDC. Available at http://www.cdc.gov/alcohol/quickstats/binge_drinking.htm.

PHYSICAL INACTIVITY

About the Measure

What It Is: Physical Inactivity is a measure of the percentage of the population reporting levels of activity that do not meet the recommended levels of moderate physical activity (30 minutes per day of moderate physical activity >5 days a week) or vigorous physical activity (20 minutes per day of vigorous physical activity for >3 days of the week).

Where It Comes from: Milwaukee City Data: ACHS
Wisconsin State Data: BRFSS¹
U.S. National Data: BRFSS¹

Reasons for Reporting: Regular physical activity has been shown to prevent or reduce the severity of coronary heart disease (CHD), heart attack, diabetes, obesity, cancer, depression and a variety of other health problems.

Report Methodology

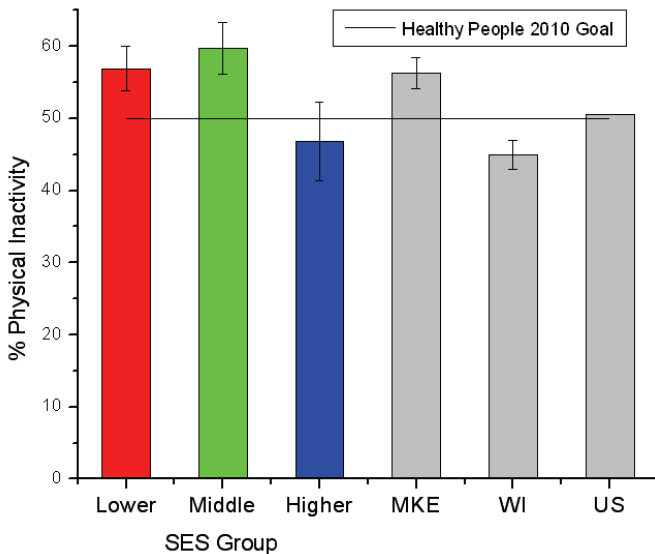
Summary Measure: Health Determinants
Health Behaviors

Years of Data Used: 2006

Summary Information

Overall in Milwaukee: 56.3 (54.1 – 58.5)
Overall in Wisconsin: 44.9 (42.9 – 46.9)
Overall in U.S.: 50.5

SES Group	Sample Size	# Inactivity	% Inactivity	95% CI
Lower	967	551	56.9	53.8 – 60.0
Middle	705	421	59.7	56.1 – 63.3
Higher	320	150	46.8	41.4 – 52.3



The facts about physical inactivity:

- The Healthy People 2010 goal for moderate physical activity for at least 30 minutes per day 5 or more days per week or vigorous physical activity for at least 20 minutes per day 3 or more days per week is 50%, which means the goal for physical inactivity is no more than 50% (Objective 22-02).
- On average, physically active people outlive those who are inactive. In general, people with lower levels of education and income are least active in their leisure time.²

¹Centers for Disease Control and Prevention (CDC). Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2007.

²Department of Health and Human Services. Physical Activity and Health: A report of the Surgeon General. Atlanta, Georgia: USDHSS, Centers for Disease Control and Prevention, 1996.

OBESITY

About the Measure

What It Is:	Obesity is a measure of the percentage of the population that has a body mass index (BMI) greater than or equal to 30 kg/m ² . This measure is calculated using a formula which is based on answers to the questions, “About how much do you weigh without shoes?” and “About how tall are you without shoes?”
Where It Comes from:	Milwaukee City Data: BRFSS Wisconsin State Data: BRFSS ¹ U.S. National Data: BRFSS ¹
Reasons for Reporting:	Obesity is a strong determinant of various health problems including hypertension, diabetes, coronary heart disease (CHD), stroke, sleep apnea, and a variety of others.

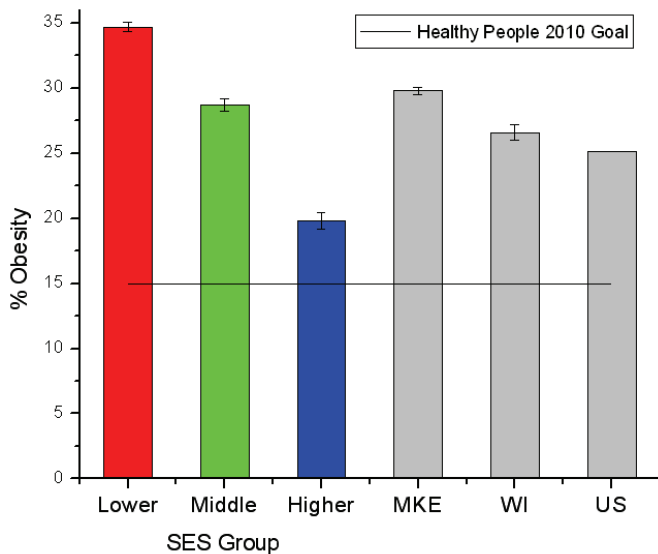
Report Methodology

Summary Measure:	Health Determinants Health Behaviors
Years of Data Used:	2004–2006

Summary Information

Overall in Milwaukee:	29.8 (29.5 – 30.0)
Overall in Wisconsin:	26.6 (25.0 – 28.2)
Overall in U.S.:	25.1

SES Group	Sample Size	# Obesity	% Obesity	95% CI
Lower	168,792	58,538	34.7	34.3 – 35.1
Middle	133,635	38,351	28.7	28.2 – 29.2
Higher	68,816	13,659	19.8	19.2 – 20.5



The facts about obesity:

- The Healthy People 2010 goal for obesity is 15% for persons 20 and older (Objective 19-02).
- More than half of adults in the U.S. are estimated to be overweight or obese. Obesity is especially prevalent among women with lower incomes.²
- People in low income neighborhoods often can not afford a health club membership and may live in more dangerous areas making it more difficult to exercise or play outdoors. Also, low income neighborhoods often have fewer and more expensive healthy food choices, and greater concentrations of fast food outlets and liquor stores. It is important to create environments that make it easier to engage in physical activities and healthy diets.

¹Centers for Disease Control and Prevention (CDC). Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2006.

²Fairburn CG, Brownell KD. *Eating Disorders and Obesity: A Comprehensive Handbook*. 2nd ed. New York, NY: Guilford Press; 2002.

INADEQUATE FRUIT AND VEGETABLE CONSUMPTION

About the Measure

What It Is:	Inadequate Fruit and Vegetable Consumption is a measure of the percentage of the population reporting that they consume less than 5 servings of fruits and/or vegetables per day.
Where It Comes from:	Milwaukee City Data: ACHS Wisconsin State Data: BRFSS ¹ U.S. National Data: BRFSS ¹
Reasons for Reporting:	There is strong evidence that a diet with a sufficient level of fruits and vegetables can lower the risk of heart disease, cancer, and stroke.

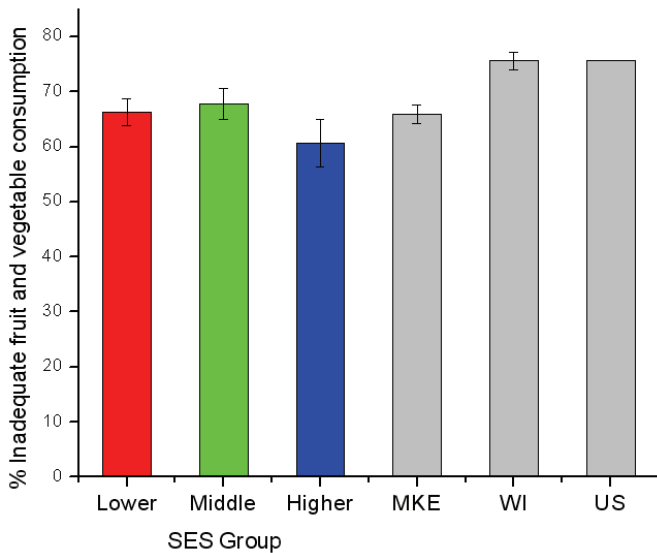
Report Methodology

Summary Measure:	Health Determinants Health Behaviors
Years of Data Used:	2003, 2006

Summary Information

Overall in Milwaukee:	65.9 (64.2 – 67.5)
Overall in Wisconsin:	75.6 (74.0 – 77.2)
Overall in U.S.:	75.6

SES Group	Sample Size	# Inadequate consumption	% Inadequate consumption	95% CI
Lower	1,538	1,019	66.3	63.9 – 68.6
Middle	1,026	696	67.8	65.0 – 70.7
Higher	500	303	60.6	56.3 – 64.8



The facts about fruit and vegetable consumption:

- A diet high in fruits and vegetables is associated with decreased risk for chronic diseases.²
- In 1991, the 5 A Day for Better Health program was initiated to promote healthy eating through fruit and vegetable consumption.²
- The Healthy People 2010 goal for persons aged 2 years and older consuming at least 2 daily servings of fruit is 75% (Objective 19-05), and consuming at least 3 daily servings of vegetables (at least 1/3 being dark green or deep yellow) is 50% (Objective 19-06).
- In 2005, no state reached the Healthy People 2010 national objectives for fruit and vegetable consumption.

¹Centers for Disease Control and Prevention (CDC). Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2007.

²Centers for Disease Control and Prevention (CDC). Fruit and Vegetable Consumption Among Adults --- United States, 2005. MMWR 2007; 56(10): 213-217.

SEXUALLY TRANSMITTED DISEASES (STDs)

About the Measure

What It Is:	Sexually Transmitted Diseases (STDs) is a measure of the average annual number of reported cases of chlamydia, gonorrhea, syphilis, and genital herpes (combined), and is reported as the crude rate per 100,000 in the population. The reported rate is not age-adjusted.
Where It Comes from:	Milwaukee City Data: MHD Wisconsin State Data: Wisconsin STD Program U.S. National Data: Sexually Transmitted Disease Surveillance ¹
Reasons for Reporting:	STDs are common in the U.S., with an estimated 15 million new cases reported each year. If left untreated, many STDs can develop into more serious health problems, including pelvic inflammatory disease, chronic pelvic pain, infertility, and tubal ectopic pregnancy (which can be life-threatening). STDs can also contribute to preterm labor in pregnant women; preterm labor is one of the key risk factors for infant mortality.

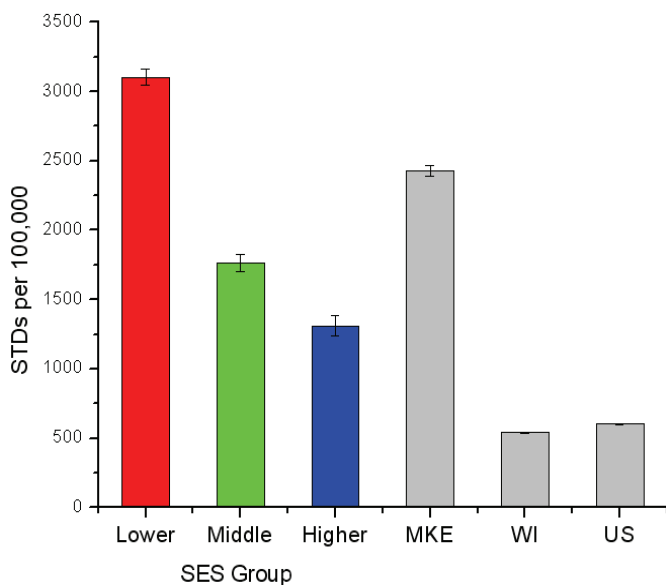
Report Methodology

Summary Measure:	Health Determinants Health Behaviors
Years of Data Used:	2005-2007

Summary Information

Overall in Milwaukee:	2,431 (2,393 – 2,470)
Overall in Wisconsin:	540 (534 – 546)
Overall in U.S.:	602 (601 – 603)

SES Group	Population	# STD Cases	STDs per 100,000	95% CI
Lower	331,069	10,270	3,102	3,043 – 3,161
Middle	182,551	3,219	1,763	1,703 – 1,824
Higher	89,304	1,170	1,311	1,236 – 1,385



The facts about sexually transmitted disease:

- Healthy People 2010 goal for STD is to promote responsible sexual behaviors, strengthen community capacity, and increase access to quality services to prevent STDs and their complications.
- The goal for new cases of gonorrhea in the total population is 19 per 100,000 population (Objective 25-2). There is no HP2010 goal for chlamydia cases per year; in Milwaukee chlamydia rates are about twice as high as gonorrhea rates. The goal for new cases of primary and secondary syphilis is 0.2 per 100,000 population (Objective 25-3).
- People with STDs are two to five times more likely than uninfected individuals to acquire HIV infection if they are exposed to the virus through sexual contact.²

¹CDC. Sexually Transmitted Disease Surveillance, 2006. Atlanta, GA: U.S. Department of Health and Human Services, November 2007.

²Wasserheit JN. Epidemiologic synergy: Interrelationships between human immunodeficiency virus infection and other sexually transmitted diseases. *Sexually Transmitted Diseases*, 9:61-77. 1992.

HIV INFECTION

About the Measure

What It Is: HIV Infection is a measure of the average annual number of reported cases of Human Immunodeficiency Virus (HIV) infection per year, and is reported as the crude rate per 100,000 in the population. The reported rate is not age-adjusted.

Where It Comes from: Milwaukee City Data: Wisconsin AIDS/HIV Program
Wisconsin State Data: Wisconsin AIDS/HIV Program
U.S. National Data: CDC¹

Reasons for Reporting: In the United States, HIV/AIDS remains a significant cause of illness, disability, and death. Elimination of disparities in the rate of infection among certain racial and ethnic groups, particularly African American and Hispanic populations, remains a challenge.

Report Methodology

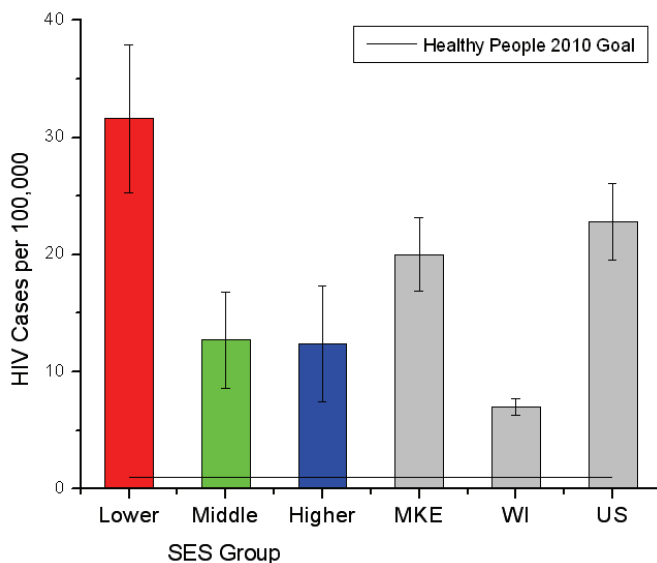
Summary Measure: Health Determinants
Health Behaviors

Years of Data Used: 2002-2007

Summary Information

Overall in Milwaukee: 20.0 (16.8 – 23.1)
Overall in Wisconsin: 7.0 (6.3 – 7.7)
Overall in U.S.: 22.8 (19.5 – 26.1)

SES Group	Population	# HIV Cases	HIV per 100,000	95% CI
Lower	303,929	96	31.6	25.3 – 37.9
Middle	285,459	36	12.6	8.5 – 16.7
Higher	194,584	24	12.3	7.4 – 17.3



The facts about HIV infection:

- The Healthy People 2010 goal for AIDS is 1.0 new case per 100,000 persons.
- About one-half of all new HIV infections in the United States are among people under age 25 years, and the majority of cases are infected through sexual contact.
- African Americans and Hispanics have been affected disproportionately by HIV and AIDS, compared to other racial and ethnic groups.
- The lifetime costs of health care associated with HIV have grown from \$55,000 to \$155,000 or more per person. HIV prevention efforts are more cost-effective and cost-saving than medical treatments.²

¹Hall HI, Song R, Rhodes P, et al. Estimation of HIV Incidence in the United States. *JAMA*. 2008;300:520–529.

²Holtgrave, D.R., and Pinkerton, S.D. Updates of cost of illness and quality of life estimates for use in economic evaluations of HIV prevention programs. *Journal of Acquired Immune Syndrome and Human Retrovirology* 16(1):54-62, 1997.

VIOLENT ASSAULT

About the Measure

What It Is:	Violent Assault is a measure of the percentage of the respondents reporting that they had been pushed, kicked, slapped or hit in the past year. It is based on the answers to the question, "During the past year has anyone pushed, kicked, slapped, hit or otherwise hurt you?"
Where It Comes from:	Milwaukee City Data: ACHS Wisconsin State Data: N/A U.S. National Data: N/A
Reasons for Reporting:	Each year, violence causes approximately 50,000 deaths and results in over 2.5 million injuries in the U.S. Violence erodes communities by reducing productivity, decreasing property values, and disrupting social services, not to mention the impact on social cohesion and overall stress levels.

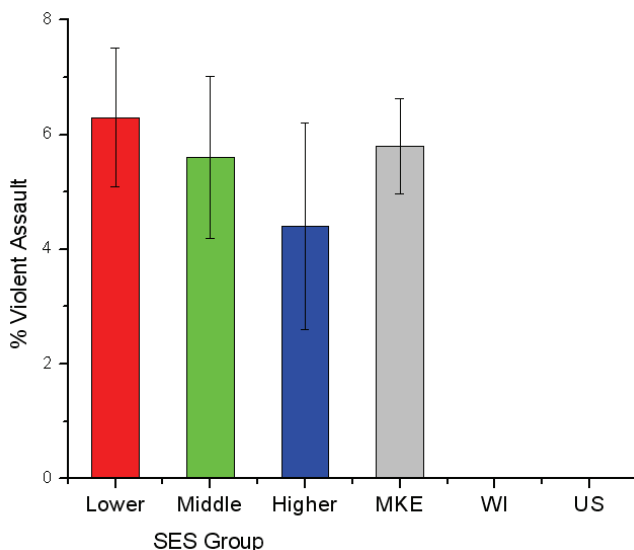
Report Methodology

Summary Measure:	Health Determinants Health Behaviors
Years of Data Used:	2003, 2006

Summary Information

Overall in Milwaukee:	5.8 (4.9 – 6.6)
Overall in Wisconsin:	N/A
Overall in U.S.:	N/A

SES Group	Sample Size	# Violent Assault	% Violent Assault	95% CI
Lower	1,538	97	6.3	5.1 – 7.5
Middle	1,026	58	5.6	4.2 – 7.0
Higher	500	22	4.4	2.6 – 6.2



The facts about violent assault:

- A recent study found that domestic violence was associated with poor health and risky sexual behavior.¹
- Violence in the U.S. is pervasive. On an average day in America, at least 18,000 persons survive interpersonal assaults.²
- The estimated total costs associated with nonfatal injuries and deaths due to violence in 2000 were more than \$70 billion.³
- Men or women living in poverty are at especially high risk of violence.^{4,5}

¹Centers for Disease Control and Prevention (CDC). MMWR 2008; 57(5).

²Moscicki, EK, O'Carroll, PW, Rae, DS, et al. Suicide ideation and attempts: The Epidemiologic Catchment Area Study. In: *Report of the Secretary's Task Force on Youth Suicide*. Vol. 4. Washington, DC: HHS, 1989.

³CDC. The Cost of Violence in the United States. Atlanta, GA: CDC. Available at <http://www.cdc.gov/ncipc/factsheets/CostOfViolence.htm>.

⁴Reiss, AJ Jr., Roth, JA (Eds). Understanding and preventing violence. Washington, DC: National Research Council. 1993.

⁵Browne, A, Bassuk, SS. Intimate violence in the lives of homeless and poor house women: Prevalence and patterns in an ethnically diverse sample. *American Journal of Orthopsychiatry*, 67(2), 261-278. 1997.

DID NOT WEAR SEAT BELT

About the Measure

What It Is:	Did Not Wear Seat Belt is a measure of the percentage of the respondents reporting they always or nearly always do not wear a seat belt while driving or riding in a motor vehicle. It was based on the answers of the question “How often do you use seat belts when you drive or ride in a motor vehicle?”
Where It Comes from:	Milwaukee City Data: ACHS Wisconsin State Data: National Occupant Protection Use Survey (NOPUS) ¹ U.S. National Data: National Occupant Protection Use Survey (NOPUS) ¹
Reasons for Reporting:	Motor vehicle crashes are the single most predictable and preventable cause of death and injury in the United States. Seat belts remain the most effective tool for preventing deaths and injuries from motor vehicle crashes.

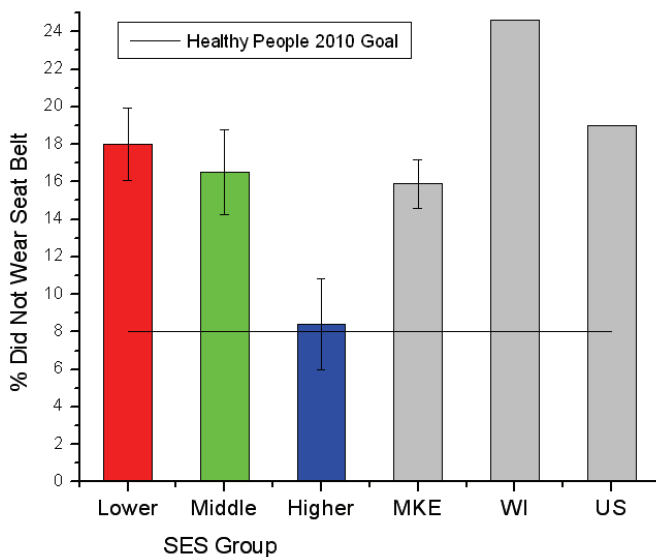
Report Methodology

Summary Measure:	Health Determinants Health Behaviors
Years of Data Used:	2003, 2006

Summary Information

Overall in Milwaukee:	15.9 (14.6 – 17.2)
Overall in Wisconsin:	24.6
Overall in U.S.:	19.0

SES Group	Sample Size	# Did Not Wear Seat Belt	% Did Not Wear Seat Belt	95% CI
Lower	1,538	277	18.0	16.0 – 19.9
Middle	1,026	169	16.5	14.2 – 18.8
Higher	500	42	8.4	6.0 – 10.8



The facts about wear seat belt:

- The Healthy People 2010 goal for total population using safety belts is 92%, which means the goal for not using safety belts is no more than 8% (Objective 15-19).
- In 2006, more than 32,000 people were killed in crashes while riding in motor vehicles, and about half of those who died were not using a seat belt or, for small children, a car seat or booster seat.
- Among reproductive-aged women (15–44 years), motor vehicle crashes account for 13% of all deaths. Proper seat belt use is an effective means of preventing morbidity and mortality among pregnant women and their unborn infants.²

¹National Occupant Protection Use Survey (NOPUS), 2006, Available at <http://www-nrd.nhtsa.dot.gov/Pubs/810690.PDF>.

²CDC. 2002 PRAMS Surveillance Report: Multistate Exhibits Prenatal Care Counseling: Seat Belt Use During Pregnancy, Atlanta, GA: CDC. Available at <http://www.cdc.gov/PRAMS/2002PRAMSSurvReport/MultiStateExhibits/Multistates6.htm>.

SINGLE PARENT HOUSEHOLDS

About the Measure

What It Is: Single Parent Households is a measure of the number of households run by a single parent (male householder with no wife present, or female householder with no husband present) with one or more of their own children under 18 years. It is reported as a percentage of the total number of households.

Where It Comes from: Milwaukee City Data: EASI
Wisconsin State Data: EASI
U.S.: EASI

Reasons for Reporting: This measure is included as a proxy for social disruption in the community. Studies have shown that being raised in a single-headed household can have negative effects on health in the future, such as increased anxiety symptoms¹

Report Methodology

Summary Measure: Health Determinants
Socioeconomic Factor

Years of Data Used: 2007

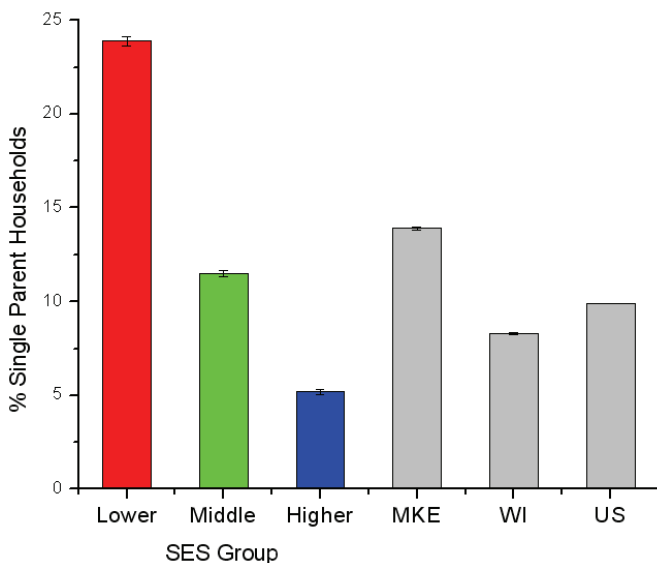
Summary Information

Overall in Milwaukee: 13.9 (13.8 – 14.0)

Overall in Wisconsin: 8.3 (8.3 – 8.4)

Overall in U.S.: 9.9 (9.9 – 10.0)

SES Group	# Total Households	# Households Run by a Single Parent	% Households Run by a Single Parent	95% CI
Lower	109,349	26,179	23.9	23.7 – 24.2
Middle	126,029	14,497	11.5	11.3 – 11.7
Higher	91,872	4,749	5.2	5.0 – 5.3



The facts about single parent households:

- According to the latest data on America’s families and households released by the U.S. Census Bureau, the percentage of households headed by single parents has stayed relatively stable from 1994 through 2006, at about 9%, up from 5% in 1970.
- Many factors influence how children develop in single-parent households: the parent’s age, education level, and occupation; the income, and the support network of friends and extended family members (including the non-resident parent, if available). Disadvantages in these factors that often accompany single parenting appear to cause most of the associations with poor health, rather than single parenting itself.¹

¹Kroes M, Kalff AC, Steyaert J, et al. A longitudinal community study: Do psychosocial risk factors and child behavior checklist scores at 5 years of age predict psychiatric diagnoses at a later age? *Journal of the American Academy of Child and Adolescent Psychiatry* 2002; 41: 955–963.

RADON RISK

About the Measure

What It Is: Radon Risk is the percentage of homes tested that report radon levels greater than 10 pCi/L at the basement level, which corresponds to a level of at least 4 pCi/L at ground level. (This measure is not based on a complete or random sample of housing units and should be interpreted with caution.)

Where It Comes from: Milwaukee City Data: DHS
Wisconsin State Data: DHS
U.S.: N/A

Reasons for Reporting: Indoor radon is the second leading cause of lung cancer after smoking, according to a 1999 report from the National Academy of Sciences. The United States Environmental Protection Agency and the U.S. Surgeon General strongly recommend that all homes be tested for radon, and if a problem exists, corrective action be taken.

Report Methodology

Summary Measure: Health Determinants
Physical Environment

Years of Data Used: 2006

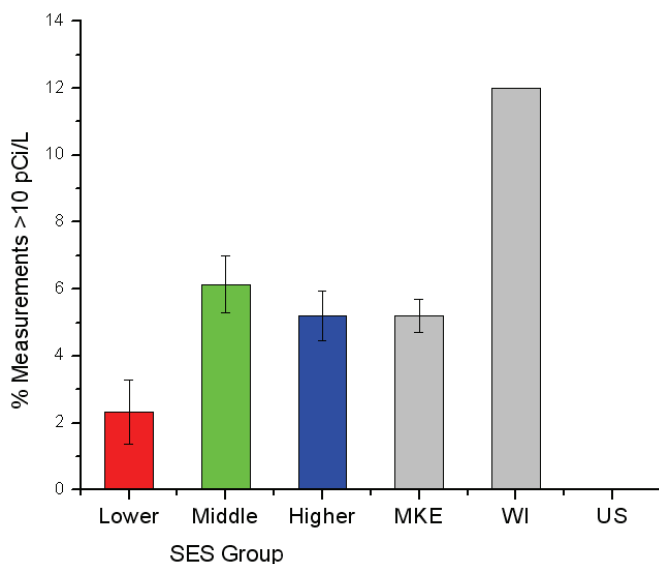
Summary Information

Overall in Milwaukee: 5.2 (4.7 – 5.7)

Overall in Wisconsin: 12.0

Overall in U.S.: N/A

SES Group	# Measurements in Basements	# Measurements >10 pCi/L	% Measurements >10 pCi/L	95% CI
Lower	950	22	2.3	1.4 – 3.3
Middle	3,027	186	6.1	5.3 – 7.0
Higher	3,421	178	5.2	4.5 – 5.9



The facts about radon risk:

- Radon is a naturally occurring, toxic, odorless radioactive gas that can cause lung cancer.
- The only way to know the radon level in a house is to measure it. Radon test kits can be obtained in hardware stores or from local health agencies for around \$20.
- The Healthy People 2010 goal for radon risk is to increase the proportion of persons who live in homes tested for radon concentrations and the number of new homes constructed to be radon resistant.

HOUSING BUILT BEFORE 1940

About the Measure

What It Is:	Housing Built Before 1940 is the percentage of houses that were built before the year of 1940. Residents of these houses are more likely to be exposed to lead paint.
Where It Comes from:	Milwaukee City Data: EASI Wisconsin State Data: EASI U.S.: EASI
Reasons for Reporting:	Housing that was built before 1940 has a higher risk of lead poisoning for its inhabitants. In children, lead poisoning can cause learning disabilities, attention deficit disorder (ADD), and many other problems. In adults, lead poisoning can cause fertility, neurological, and memory problems, among many others.

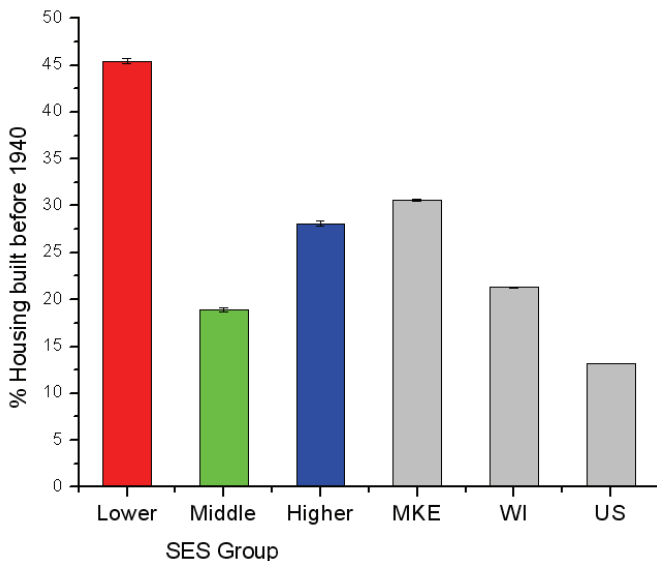
Report Methodology

Summary Measure:	Health Determinants Physical Environment
Years of Data Used:	2007

Summary Information

Overall in Milwaukee:	30.6 (30.4 – 30.7)
Overall in Wisconsin:	21.3 (21.2 – 21.3)
Overall in U.S.:	13.2 (13.2 – 13.2)

SES Group	# Total Housing	# Housing built before 1940	% Housing built before 1940	95% CI
Lower	118,218	53,619	45.4	45.1 – 45.6
Middle	130,758	24,761	18.9	18.7 – 19.1
Higher	94,935	26,700	28.1	27.8 – 28.4



The facts about housing built before 1940:

- Any home or multifamily housing building built before 1978 may contain lead-based paint. After 1940, paint manufacturers voluntarily began to reduce the amount of lead they added to their consumer paints. As a result, painted surfaces in homes built before 1940 are likely to have higher levels of lead than homes built between 1940 and 1978.^{1,2}
- Peeling, chipping, chalking, or cracking lead-based paint is a hazard and needs immediate attention. Lead-based paint may also be a hazard when found on surfaces that get a lot of wear-and-tear, including windows and window sills, doors and door frames, stairs, railings and banisters and porches and fences.^{1,2}

¹DHS. Lead-Safe Wisconsin. Available at <http://dhs.wisconsin.gov/lead/index.htm>.

²Energy Efficient Rehab Advisor. Lead-based Paint as a Hazard During Remodeling. Available at <http://www.rehabadvisor.pathnet.org/sp.asp?id=10420>.

LEAD POISONING

About the Measure

What It Is: Lead Poisoning is a measure of the percentage of positive lead tests on children < 72 months (age 6). A positive test in a child is defined as a blood lead level (BLL) ≥ 10 micrograms per deciliter (ug/dL). (This measure is not based on a complete or random sample and should be interpreted with caution).

Where It Comes from: Milwaukee City Data: MHD
Wisconsin State Data: MHD
U.S.: CDC Surveillance Data¹

Reasons for Reporting: Lead poisoning has been shown to cause many health problems. In children, lead poisoning can cause learning disabilities, attention deficit disorder (ADD), and many other problems.

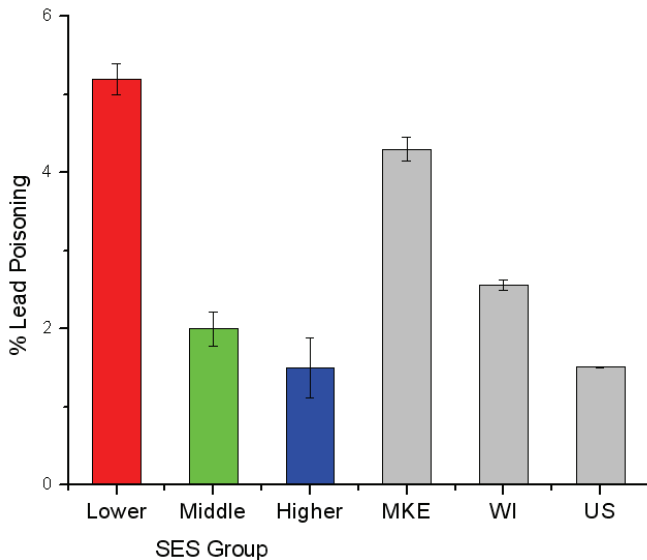
Report Methodology

Summary Measure: Health Determinants
Physical Environment
Years of Data Used: 2005-2007

Summary Information

Overall in Milwaukee: 4.3 (4.1 – 4.4)
Overall in Wisconsin: 2.6 (2.5 – 2.6)
Overall in U.S.: 1.5 (1.5 – 1.5)

SES Group	# Children Tested	# Lead Poisoning	% Lead Poisoning	95% CI
Lower	48,301	2,531	5.2	5.0 – 5.4
Middle	15,471	308	2.0	1.8 – 2.2
Higher	3,888	59	1.5	1.1 – 1.9



The facts about lead poisoning:

- Children in the cities of Milwaukee and Racine should be tested at ages 12, 18, and 24 months; if a child is enrolled in WIC, Medicaid or uninsured he or she is then tested annually until age 6.² For children living outside of the cities of Milwaukee and Racine, targeted screening is done for those who are at high risk of exposure to lead poisoning.
- Factors that put children at greater risk for lead poisoning: Age of Child (lead poisoning is most prevalent among 2-year-old children); Age of Housing (homes built before 1940 present a high risk for lead exposure); Socioeconomic Status (lead poisoning is more prevalent among children who are enrolled in Medicaid or WIC than among those who are not).³

¹ CDC. CDC Childhood Lead Poisoning Surveillance. 2004-2006. Available at <http://www.cdc.gov/nceh/lead/surv/data.htm>.

² DHS. Wisconsin Blood Lead Screening Recommendations. Available at <http://dhs.wisconsin.gov/lead/BloodTest.htm>.

³ DHS. Childhood Lead Poisoning Surveillance in Wisconsin. Available at <http://dhs.wisconsin.gov/lead/Data/lpsurveillance>.

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