

# 2015 - 2016

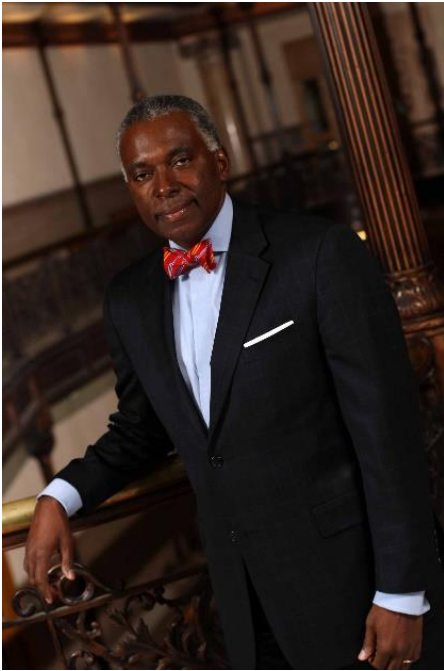


City of Milwaukee  
**COMMUNITY HEALTH ASSESSMENT**

*Understanding the Health Needs of Our Community*



## Letter from the Commissioner of Health



Dear Friends,

The City of Milwaukee Health Department (MHD) is pleased to present to you the 2015-2016 City of Milwaukee Community Health Assessment.

This report is the result of a yearlong effort to gather, analyze and summarize data on the health status and conditions that impact health for residents of the city of Milwaukee.

In developing this report the MHD was part of a broad consortium of partners, led by the Milwaukee Health Care Partnership (MHCP), who collaboratively completed a countywide community health survey, conducted key informant interviews, and collected and analyzed additional secondary data. We thank the MHCP for its leadership.

From this collaborative effort, the MHD has pulled city-specific data wherever possible and combined it with additional data sources available nationally, at the state level, and from our own internal data sources. As a result, this assessment represents a snapshot in time for the city.

Our goal with this assessment is not to prioritize health issues – that activity is part of our key next steps. Rather, this report presents information to the community to serve as the foundation for improving and promoting the health of Milwaukee residents.

Following the release of this assessment, we ask that community members and stakeholders offer feedback and comments. These comments will be used as the MHD convenes a Community Health Improvement Planning Process that will identify priority areas for action as well as those agencies and partners best suited to address these areas.

Public health is a shared responsibility. Improving the health of our community will not happen overnight, nor will it happen even when incredible institutions work alone. It is true everywhere and it is no less true in Milwaukee: To effectively address public health issues, we must look to the ripple effect of collective impact. We must work together.

Working alongside Mayor Tom Barrett, the MHD looks forward to the steps ahead that will build upon this report and will result in a community-driven plan for a healthier Milwaukee.

In good health,

Bevan K. Baker  
Commissioner of Health

## Acknowledgements

Conducting a large-scale community health assessment (CHA) of the size and scope contained in this report would not be possible without the contributions of many members of our community. The City of Milwaukee Health Department (MHD) wishes to express its gratitude for the contributions made by those who participated in the development of this assessment.

The following agencies participated in activities that contributed in the completion of this report:

- Acelero Learning
- AIDS Resource Center of Wisconsin
- American Cancer Society
- Amy Murphy Consulting
- Aurora Health Care
- Aurora Walker's Point Community Clinic
- Bader Philanthropies, Inc.
- Black Health Coalition of Wisconsin, Inc.
- Boys and Girls Clubs of Greater Milwaukee
- Center for Urban Population Health
- Center for Veterans Issues
- Centro Hispano Milwaukee
- Children's Environmental Health Sciences Core Center
- Children's Health Alliance of Wisconsin
- Children's Hospital of Wisconsin
- Columbia St. Mary's
- Community Advocates
- CORE/El Centro
- Feeding America Eastern Wisconsin
- Froedtert Health
- Gerald L. Ignace Indian Health Center, Inc.
- Hmong American Women's Association
- Impact, Inc.
- Independent Care Health Plan
- Marquette University College of Nursing
- Medical College of Wisconsin
- Mental Health America of Wisconsin
- Meta House
- Milwaukee Center for Independence
- Milwaukee County Department of Health & Human Services
- Milwaukee Oral Health Task Force
- Milwaukee Health Care Partnership
- Milwaukee Health Services, Inc.
- Milwaukee Police Department
- Milwaukee Public Schools
- Neighborhood House of Milwaukee
- Next Door
- Outreach Community Health Centers
- Pathfinders
- Planned Parenthood of Wisconsin
- Progressive Community Health Centers
- Sixteenth Street Community Health Centers
- Tri City National Bank
- United Way of Greater Milwaukee & Waukesha County
- UW-Milwaukee Joseph J. Zilber School of Public Health
- Walnut Way Conservation Corp.
- Wheaton Franciscan Healthcare
- Wisconsin Department of Health Services
- YMCA of Metro Milwaukee
- YWCA Southeast Wisconsin

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## Appendices

In order to reduce paper, the following appendices are available electronically on the City of Milwaukee Health Department website at [Milwaukee.gov/health](http://Milwaukee.gov/health):

### Appendix A: Detailed Community Health Assessment Methods

### Appendix B: Community-Identified Health Priorities

Alcohol and Drug Abuse	Mental Health
Chronic Disease	Violence

### Appendix C: Milwaukee Health Department-Identified Issues

- Childhood Lead Poisoning Prevention
- Healthy Birth Outcomes
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  - Low Birthweight
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  - Stillbirth
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- Teen Pregnancy Prevention

### Appendix D: Nationally-Identified Issues

Air Pollution	Housing	Sexually Transmitted Diseases
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Education	Obesity	Unintentional Injury
Employment	Poverty	Violence

### Appendix E: Data Table and Assessments

*Section 1: Data Table*

*Section 2: Data Assessments*

- Milwaukee City Community Health Survey Report, 2015
- Milwaukee County Community Health Report, 2015-2016
  - Executive Summary
  - Key Informant Interviews
  - Survey Report
  - Secondary Data Report
- Community Commons Report for the City of Milwaukee, 2016
- Community Commons Report for Milwaukee County, 2016
- CDC Community Health Status Indicator (CHSI) Report for Milwaukee County, 2016
- Milwaukee County Environmental Health Profile, 2015
- Milwaukee County Health Profile, 2015
- Milwaukee (City) Health Report, 2013
- Milwaukee County Health Ranking, 2016



## Executive Summary

The City of Milwaukee Health Department (MHD) is pleased to present the 2015-2016 City of Milwaukee Community Health Assessment. Community health assessment is a first step in the continuous community health improvement process, and provides a foundation for improving and promoting the health of city residents.

This report is the culmination of a yearlong effort to gather, analyze and summarize current local data on city of Milwaukee residents, their health status, and the variety of features and conditions which impact their health, healthy development and quality of life. To accomplish this task, primary and secondary data were compiled from multiple sources related to key health outcomes (morbidity, mortality), and key health determinants (health behaviors, health care and public health, social and economic factors, and physical environment factors).

The body of this report presents findings according to the multiple core variables provided by the Wisconsin Way model for community health assessments (Figure 1). In the appendices, the results of three additional perspectives on health priorities are presented: issues identified by the Milwaukee community through focus groups, surveys and key informant interviews, issues identified from national sources, and issues identified by the MHD.

A sizeable portion of the findings present data on social determinants of health such as income, employment, education, diversity and physical environment. Understanding the complex interaction among these factors and how they influence health is critical to improving community health. Research has shown that at most 20 percent of the modifiable variation in health outcomes is due to clinical care, whereas about 10 percent is due to the physical environment, 30 percent is due to health behaviors, and at least 40 percent is due to social and economic factors.

**Figure 1: Wisconsin Way Core Variables**

Core Variables	Health Department Profile	Injury (Unintentional)
	Local Demographics	Mental Health
	Mortality	Natural Environment
	Morbidity	Oral Health
	Access to Care	Physical Activity & Nutrition
	Alcohol & Other Drug Use	Racism
	Built Environment	Reproductive & Sexual Health
	Chronic Disease Management	Social Support
	Communicable Disease	Tobacco
	Education / Health Literacy	Violence / Community Safety
	Employment / Income	

It is important to note that our intent through this assessment is not to prioritize these issues, but rather to provide the community with a broad set of data-driven options from which to select goals for community health improvement. The next steps in the community health improvement process include prioritizing, planning, implementing and evaluating. The information contained in the City of Milwaukee CHA will be used to inform the selection of key priority issues and the development of the City of Milwaukee Community Health Improvement Plan (CHIP) as well as updates to the MHD Strategic Plan.

# Introduction

## Community Health Assessment (CHA)

A community health assessment (CHA) is both a process and a document, and is the foundation for improving and promoting the health of city residents. Through this CHA, the City of Milwaukee Health Department (MHD) seeks to investigate the current health status of the community, describe changes since the previous assessment, and identify opportunities to improve the health of the community. The process involves the collection and analysis of a large range of primary and secondary data, including demographics, socioeconomic and health statistics, environmental data, and primary data such as personal self-reports and public opinion collected by survey, focus groups, or other methods. This document is a summary of available evidence and will serve as a resource for the development of the City of Milwaukee Community Health Improvement Plan (CHIP).



Wisconsin state statute and Public Health Accreditation Board requirements call for local health departments to conduct a comprehensive community health assessment at least every five years. As part of the Affordable Care Act, non-profit hospitals must conduct a “community health needs assessment” at least every three years. In Milwaukee, community health assessment is guided by a public/private partnership. In the development of this CHA, the MHD was part of a regional effort led by the Milwaukee Health Care Partnership (MHCP), a consortium that includes area health systems, federally qualified health centers, academia, and public agencies dedicated to improving health care for underserved populations in Milwaukee County (a listing of members can be found at <http://mkehcp.org>). The MHCP affords members the opportunity to align resources in completing a community health survey, key informant interviews, and collection and analysis of secondary data that are required for completion of this report.

The body of this report presents findings according to the multiple core variables provided by the Wisconsin Way model for community health assessments (Figure 2). In the appendices, the results of three additional perspectives on health priorities are presented: issues identified by the Milwaukee community through focus groups, surveys and key informant interviews, issues identified from national sources, and issues identified by the MHD.

**Figure 2: Wisconsin Way Core Variables**

Core Variables	Health Department Profile	Injury (Unintentional)
	Local Demographics	Mental Health
	Mortality	Natural Environment
	Morbidity	Oral Health
	Access to Care	Physical Activity & Nutrition
	Alcohol & Other Drug Use	Racism
	Built Environment	Reproductive & Sexual Health
	Chronic Disease Management	Social Support
	Communicable Disease	Tobacco
	Education / Health Literacy	Violence / Community Safety
	Employment / Income	

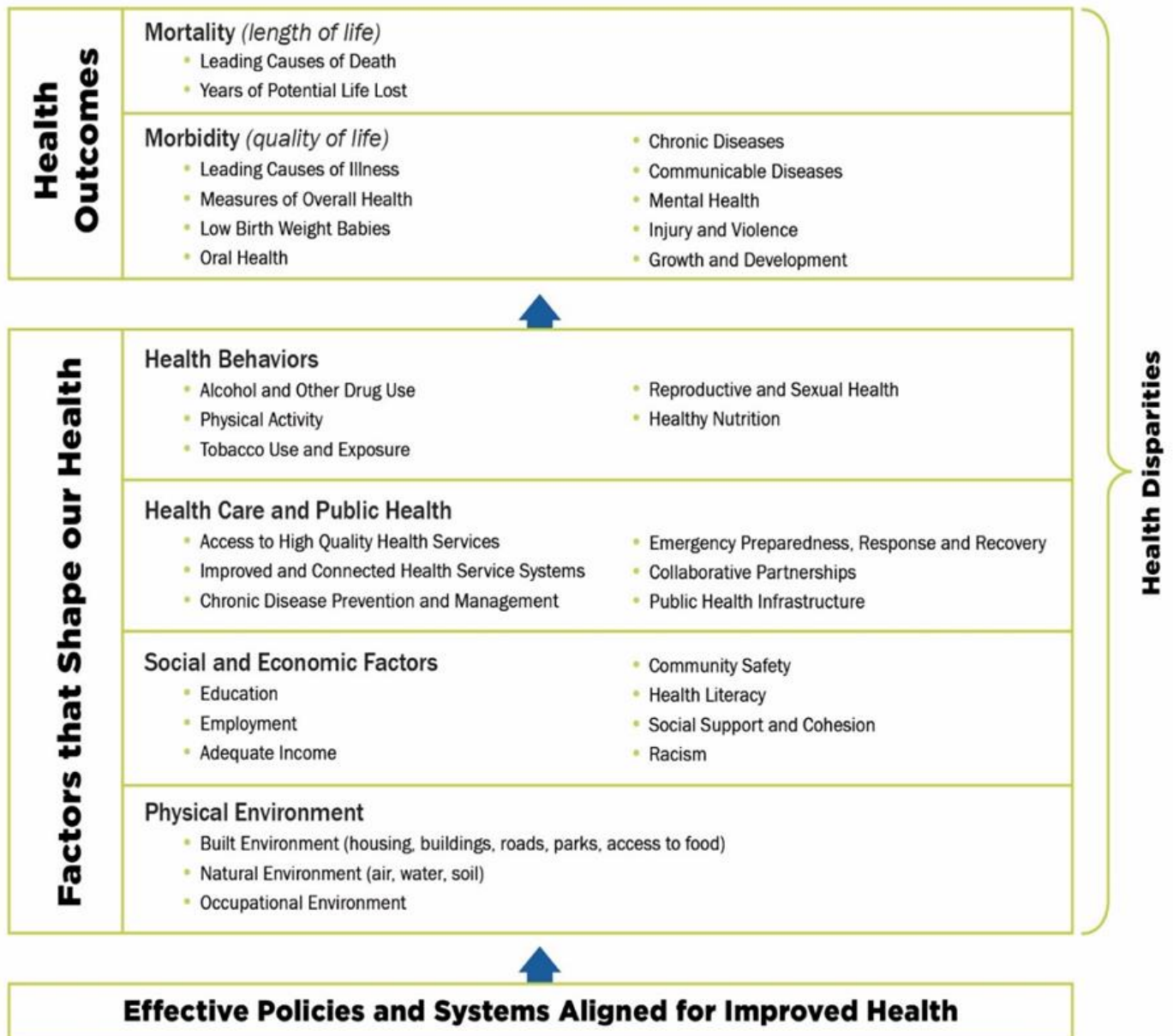
Community health assessment would not be complete without an analysis of the assets the community has available to address the issues or needs identified. The asset mapping process was begun through key informant interviews and focus groups, and through a community meeting hosted by the MHD that sought to bring together diverse agencies. This asset mapping will continue in preparation for a Community Health Improvement Plan (CHIP) that will follow this report. When the community asset map is complete it will be added as an appendix to this report.

## Methodology

Every community health assessment relies on an underlying methodology (see Appendix A for detailed information about the methods used in this community health assessment). The MHD chose to use “*Improving the Health of Local Communities: The Wisconsin Way*,” a shared framework for community health needs assessment and community health improvement planning developed by the Wisconsin Association of Local Health Departments and Boards (WALHDAB).

The Wisconsin Way Framework builds upon two models from the County Health Rankings and Roadmaps. The first model is a framework describing the relationships between modifiable health factors and health outcomes / health disparities (see Figure 3). Measurement of specific health determinants and health outcomes indicators (the core variables within the Wisconsin Way Framework) depends on the collection of both primary and secondary data, which are described further below.

Figure 3: The Wisconsin Way Model Framework





The second model (see Figure 4) describes the action cycle for continual improvement which includes the following core steps:

- Work Together and Communicate: Collaborate with Stakeholders & Community Members
- Assess Needs & Resources
- Focus on What's Important
- Choose Effective Policies & Programs
- Act on What's Important
- Evaluate Actions

### Primary Data

Primary data collected by the Milwaukee Health Care Partnership include an 18-minute phone-based survey of over 1,200 City of Milwaukee residents, as well as key informant interviews of 40 civic and health leaders and focus groups to identify community health needs, contributing social and economic factors, and those organizations best suited to address identified issues. More details about these data are included in Appendix E.

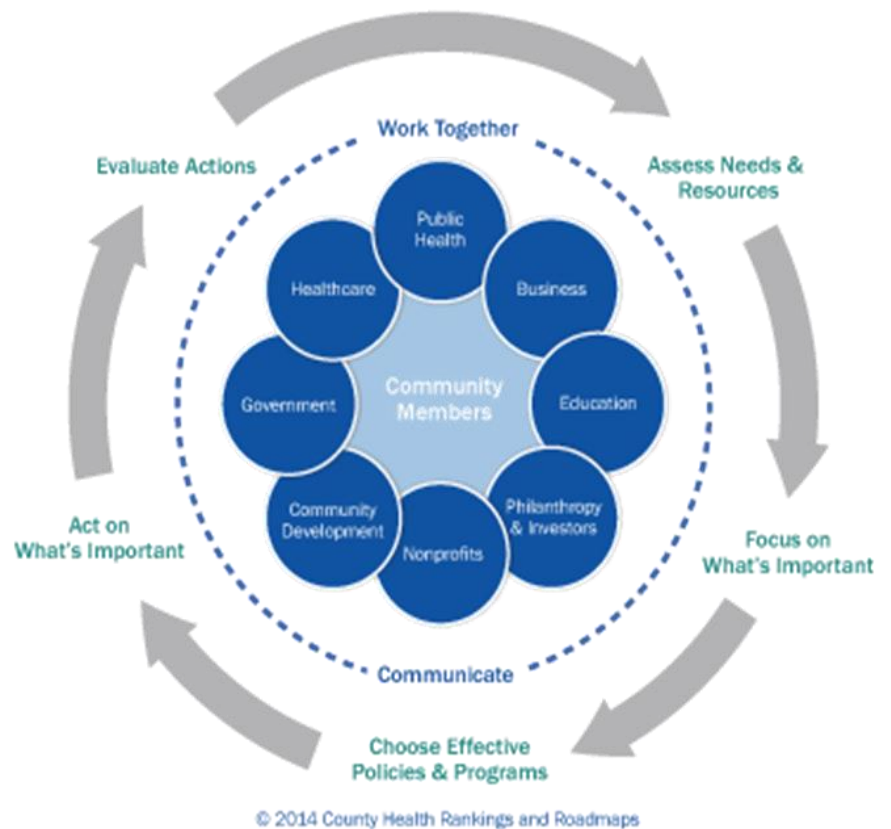
Primary data are also collected by the City of Milwaukee as part of its routine operations, including from the MHD's programs and initiatives as well as indicator data collected by other departments in the City such as violence and crime data collected by the Milwaukee Police Department and license data collected by the City Clerk's Office.

### Secondary Data

Secondary data selected for inclusion in the City of Milwaukee CHA is based upon "Improving the Health of Local Communities: The Wisconsin Way" recommended core data set (see Figure 2). Secondary data included in this report include both data compiled and analyzed by the Center for Urban Population Health as part of its work for the MHCP along with data generated and compiled by MHD from the Community Commons, the CDC Community Health Status Indicators, and a variety of additional sources detailed in Appendix E.

Preference is given to presenting data for the city of Milwaukee whenever city-specific data is available. However, as several national and state secondary data sources provide data only to the county level, data for Milwaukee County is reported for those particular indicators.

**Figure 4: The Wisconsin Way Action Cycle for Continual Improvement**



## Community Asset Mapping

Community asset mapping is a positive approach to building strong communities. The majority of primary data, secondary data, and the city-generated data identifies *needs* such as poor health outcomes or adverse health determinants (such as unemployment, poverty, crime and illiteracy), while ignoring the *assets* that exist in the community.

Working solely from a "needs" perspective can lead to external funds and services being sought to help the community (which may indeed have positive benefits to community residents), but often the result is a fragmented patchwork of services. Many of the services may not be appropriate to the culture and dynamics of that particular community, and do not contribute to building community capacity or enhancing self-sufficiency of residents. Long-term systematic change is only possible when the community and its assets are part of the solution.



The asset-based approach does not remove the need for outside resources, but makes their use more effective. Beyond developing a simple inventory, this "mapping" process is designed to promote connections or relationships between individuals, between individuals and organizations, and across organizations.

Three methods will be used to identify community assets. First, community assets were identified as part of the key informant interviews and focus groups. Second, a community planning meeting was held in June of 2015 with a group of more than 65 diverse stakeholders. Each stakeholder was given the opportunity to identify community assets (resources, programs, organizations) related to Healthy People 2020 health priorities. The final approach to asset mapping will be completed based upon community feedback to this report. The information gathered through this feedback process will be combined with other information to complete the asset maps and added as an appendix to this report.

The following section presents a summary of the City of Milwaukee Community Health Assessment findings, organized according to the key categories outlined in the Wisconsin Way model. Additional data and details about results related to community-identified issues, nationally-identified issues, and MHD-identified issues, are found in the appendices.

# Assessment Findings

## Overview

Assessment results selected for inclusion in the body of the City of Milwaukee CHA are based upon “Improving the Health of Local Communities: The Wisconsin Way” recommended core data set. This core data set is organized around a framework for describing what makes a community healthy. The core measures include:

- Health Department Profile
- Local Demographics
- Mortality
- Morbidity
- Access to Care
- Alcohol & Other Drug Use
- Built Environment
- Chronic Disease Management
- Communicable Disease
- Education / Health Literacy
- Employment / Income
- Injury (Unintentional)
- Mental Health
- Natural Environment
- Oral Health
- Physical Activity & Nutrition
- Racism
- Reproductive & Sexual Health
- Social Support
- Tobacco
- Violence / Community Safety

Preference is given to presenting data for the city of Milwaukee whenever city-specific data is available. However, as several national and state secondary data sources provide data only to the county level, data for Milwaukee County is reported for those indicators.

Rather than cite each specific source of data as it is used, the Assessment Findings section provides a description of the measure as well as a listing of time periods and geographic locations (city, county, state, or national) for which data is presented.

In the following pages, we present first an overview of the City of Milwaukee Health Department and then an overview of the Milwaukee community and its demographics. On the subsequent pages, which represent specific health determinants and health outcomes indicators, data have been collected from primary and secondary sources and, where possible, compared to state and national data. To help with that comparison, and where possible, each measure is given a “status” indicator and a “trend” indicator.

The Centers for Disease Control and Prevention’s (CDC) Healthy People 2020 set selected health benchmarks for all communities to achieve by the year 2020. These health benchmarks are labeled “HP2020.” Where possible, Milwaukee data has been compared with the HP2020 goals.

**A green checkmark ( ✓ ) “status” is shown if the data meets or exceeds the HP2020 benchmark. Conversely, if Milwaukee falls below the HP2020 goal, a red X ( ✗ ) is shown under “status.”**

If no HP2020 goal exists for a health indicator, Milwaukee was compared with national data. If national data was not available, Milwaukee data was compared to state data. If no information was available under HP2020, national, state, or community data, “na” is displayed for “not available.” For each indicator, data for the State and U.S. are listed for the year closest to the most recent city- or county-level data presented.

Trends are evaluated from the most recent 2-3 measurements (the most recent 3 are used if available).

**If the most recent measurements show mainly improvement in the indicator, a green plus sign ( + ) is shown under “trend.” Conversely, if the most recent measurements show movement away from the desired outcome a red minus sign ( - ) is presented. A gray double arrow ( ⇄ ) is displayed under “trend” if the recent measurements do not show consistent or notable movement in a single direction.**

## City of Milwaukee Health Department Profile

The City of Milwaukee Health Department (MHD) is the largest local public health agency in the State of Wisconsin and serves the residents of the city of Milwaukee.

### ▶ Mission

- The mission of the City of Milwaukee Health Department is to improve and protect the health of individuals, families, and the community.

### ▶ Vision

- The vision of the City of Milwaukee Health Department is that Milwaukee becomes the healthiest city in the nation through bold leadership, effective partnerships, and innovation in thinking and practice.

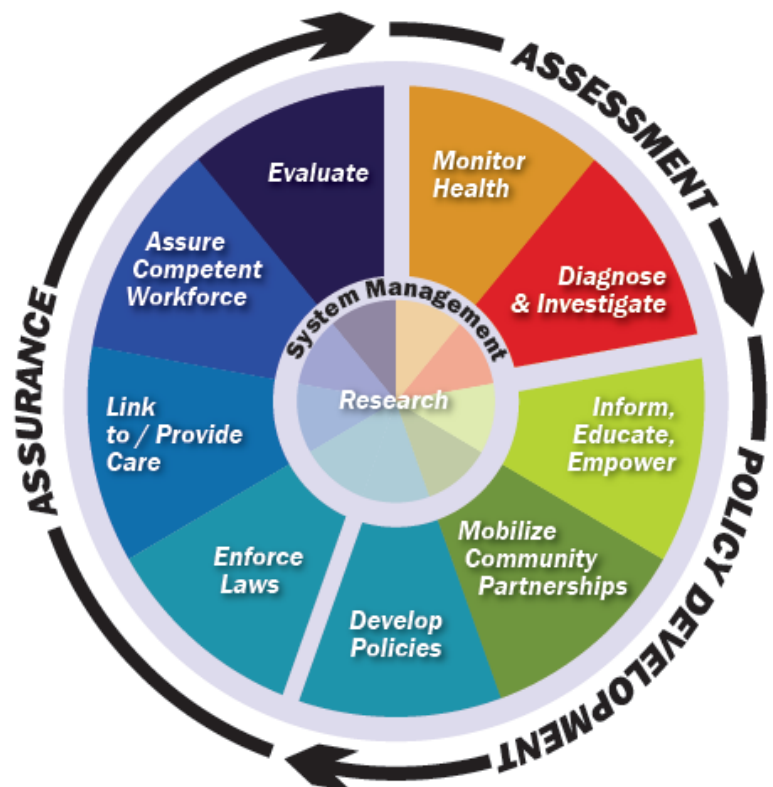
### ▶ Values

- Excellence – Our activities will be primarily evidenced-based and will be delivered with the highest quality.
- Equity – Our activities will address root causes of poor health outcomes and health disparities.
- Integrity – We will be honest, respectful, and ethical in all of our activities and interactions.
- Impact – We will measure our success by achieving significant, sustainable improvements in health outcomes for all.

While the MHD mission, vision, and values delineate its purpose, the MHD’s operational standards are guided by The Public Health Accreditation Board Standards and Measures, National Public Health Performance Standards’ 10 essential public health services (see Figure 5), and the requirements for local health departments defined under Wisconsin state statutes. The MHD strives to achieve a culture of continuous quality improvement in order to enhance department capacity, improve department processes, and achieve measurable improvement in health outcomes.

The MHD is led by the Commissioner of Health whose broad authority is established under Chapter 59 of the Milwaukee Code of Ordinances and by Chapter 252 and related chapters of the Wisconsin state statutes. The MHD offers a wide array of programs and services, providing 10 out of 10 of the most commonly provided services offered by local health departments nationally. Operationally, the department is organized into functional units or divisions with the following strategic aims:

Figure 5: The 10 Essential Public Health Services



1. **Business Administration:** Set and monitor MHD priorities while ensuring proper operations of administrative functions including finance, human resources, communications, and business operations.
2. **Consumer Environmental Health:** Employ regulatory, education and outreach, and surveillance and investigation activities as intervention strategies to improve the safety of the food being served and sold in Milwaukee as well as protect consumers from fraudulent business practices related to products or services sold by weight, by volume, or by time.
3. **Disease Control and Prevention:** Promote, initiate and lead innovation in public health emergency preparedness along with the prevention and control of reportable and emerging infectious diseases and environmental health threats within the city of Milwaukee and in partnership with the community.
4. **Family and Community Health:** Promote, initiate, and lead programs that seek to reduce racial and ethnic disparities and address health issues faced by individuals throughout their life cycles by supporting healthy birth outcomes and healthy child development, improving sexual and reproductive health, and encouraging healthy behaviors and health care access for all.
5. **Laboratory Services:** Provide real-time response to public health investigations to support public health disease and environmental hazard interventions and proactively detect and prevent disease outbreaks.
6. **Medical and Academic Affairs:** Support the work of the MHD through the provision of medical guidance and oversight, integration of graduate medical and public health education, and consultation on effective approaches to addressing health equity.
7. **Planning and Policy:** Monitor new and existing policies at the local, state, and federal levels, as well as work to develop new policies aimed at improving the community's health and well-being.
8. **Violence Prevention:** Work in conjunction with community partners and stakeholders to identify and implement strategies to reduce and prevent injuries, disabilities, and death across the lifespan and to assure that those affected by violence have access to justice and social service systems.

As of 2016, the MHD reported a total operating budget of \$13,619,554 and a total of 241.83 full-time employees. Comparing 2013 data, the most recent year statewide data is available, the department has 4.6 full-time equivalents per 10,000 population, as compared to 3.2 for local health departments across the state of Wisconsin.

Per capita total investments in public health programs and services for the MHD are \$41.28, of which \$21.01 are from tax levy, compared to \$26.61 and \$13.70 respectively across the state of Wisconsin. A 2013 national survey of local health departments conducted by the National Association of County and City Health Officials found that health departments serving populations of 500,000 to 1 million persons had an average per capita investment of \$78 and a median investment of \$40.

Trust for America's Health typically ranks Wisconsin's State public health spending in the bottom of all states in the nation in terms of state-level investments in public health, and America's Health Rankings identified low State-level public health funding as one of Wisconsin's challenges.

#### Local Health Department Staffing - 2013

Staffing	Milwaukee		Wisconsin	
	Total	per 10,000	Number	per 10,000
All LHD Staff	273.8	4.6	1812.8	3.2
Administrative/Supervisor	53	0.9	228.2	0.4
Public Health Nurses	58	1.0	527.4	0.9
Other Professionals	67.7	1.1	524.3	0.9
Paraprofessionals	44.5	0.7	225.4	0.4
Support	50.6	0.8	307.6	0.5

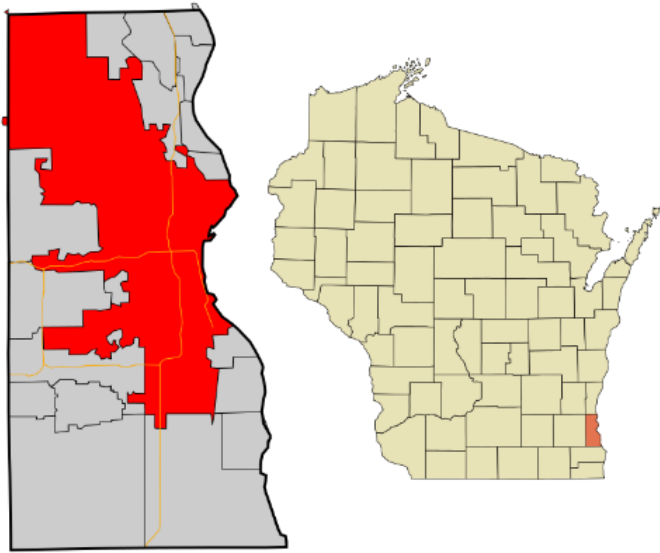


**Health Department Services, Milwaukee versus National Profile of Local Health Department Findings**

	<b>Service</b>	<b>% of Local Health Agencies Providing</b>	<b>MHD Offers Service</b>
1	Communicable/Infectious Disease Surveillance	91%	Yes
2	Adult Immunization Provision	90%	Yes
3	Child Immunization Provision	90%	Yes
4	Tuberculosis Screening	83%	Yes
5	Environmental Health Surveillance	78%	Yes
6	Food Service Establishments Inspection	78%	Yes
7	Tuberculosis Treatment	76%	Yes
8	Food Safety Education	72%	Yes
9	Population-Based Nutrition Services	69%	Yes
10	Schools/Day Care Center Inspection	69%	Yes (School food inspection) No (Day Care licensing/inspection is a state function)

## The Milwaukee Community – Overview

For the purpose of this report, “community” is defined as the municipal city limits of Milwaukee. Located along the shore of Lake Michigan, Milwaukee is the largest city in Wisconsin and the 31<sup>st</sup> largest city in the United States. The city of Milwaukee is largest of 19 municipalities in Milwaukee County, encompassing 96.1 square miles. According to 2014 five-year American Community Survey estimates, the current population of the city of Milwaukee is 598,078.



Milwaukee is the main cultural and economic hub of the Milwaukee–Waukesha–West Allis Metropolitan Statistical Area (MSA). The total population of the MSA is 1,572,245, making it the 33<sup>rd</sup> largest MSA in the US. The Milwaukee area’s seven-county region is home to The MSA places among the top manufacturing centers, ranking second among major metropolitan areas in the percentage of its workforce in manufacturing. The economy is dominated by small- to medium-size firms with representatives in nearly every industrial classification.

Professional and managerial positions are the fastest-growing occupations in Milwaukee accounting for almost 27 percent of the workforce. Service businesses constitute the largest sector of the local economy, and health care positions account for about 27 percent of

service sector jobs. The area is home to four major multi-hospital health systems. Other major areas of service employment include business services (27 percent), educational services (7 percent) and social services (10 percent).

Milwaukee hosts many festivals and parades throughout the year, and is home to nationally recognized museums, a zoo, professional sports teams, and entertainment venues. Altogether these attractions bring more than 5 million tourists and generate \$1.9 billion annually.

The majority of Milwaukee city residents are between the ages of 5 and 34 years. Milwaukee continues to boast a diverse population with approximately 53% of residents identifying as Black, Asian, or of another race other than white. Among Milwaukee’s population age 5 and older, 8.6% have limited English proficiency, equal to the national rate, but higher than the statewide rate of 3.2%.

Milwaukee is also city of contrasts. It houses many of Wisconsin’s wealthiest residents as well as the majority of the state’s poorest residents. Milwaukee is the nation’s fifth most impoverished city and has a poverty rate of 29%. This rate is more than double the rate for the state (13.3%). The overall percentage of children 18 years and under living in poverty is 43.3%. Poverty rates vary by race and ethnicity. Among African-Americans in the city, 39.9% are living in poverty compared to 31.8% of Hispanics and 14.8% of non-Hispanic Whites. In Milwaukee, 83% of students qualify for free or reduced lunch compared versus 42% statewide and 52% nationally.

Through school choice (which allows low-income students to attend private school with public money) and out-of-district open enrollment, Milwaukee children are provided numerous primary school educational options, yet only 61% of Milwaukee children will graduate from high school within four years compared to 89% statewide.

Although Milwaukee has Wisconsin’s most concentrated health resources, health disparities are also the most pronounced. Milwaukee has higher than state average rates of infant mortality, sexually transmitted diseases, cancer (breast, cervical, lung, and prostate), violence, teen pregnancy, childhood lead poisoning, and mortality due to unintentional injuries. The Milwaukee MSA is also the most racially segregated MSA in the nation.

## Milwaukee Demographics

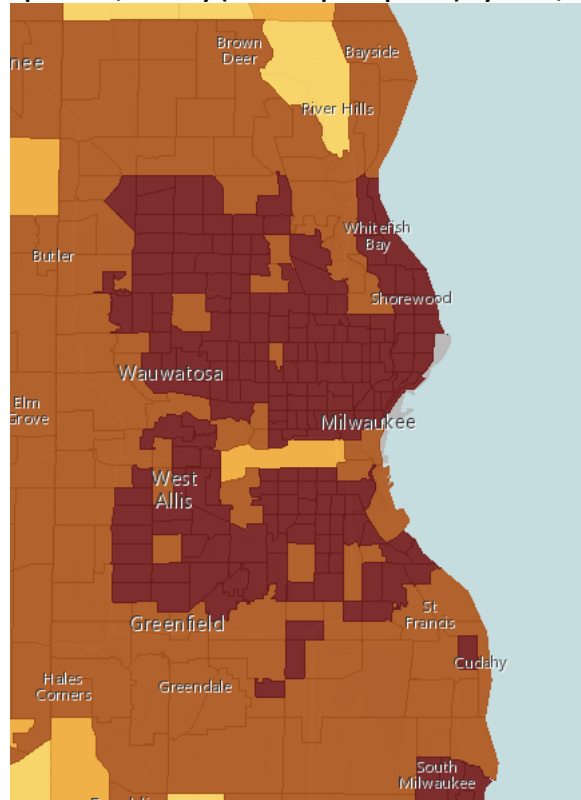
### Total Population

According to the U.S. Census Bureau American Community Survey, a total of 598,078 people live in the 96.12 square-mile municipal boundaries of the city of Milwaukee. The population density for this area, estimated at 6,188.3 persons per square mile, is significantly greater than neighboring jurisdictions.

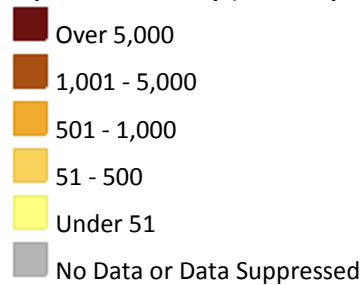
	Total Population	Total Land Area (Square Miles)	Population Density (Per Square Mile)
<b>City of Milwaukee</b>	598,078	96.12	6,222.2
<b>Wisconsin</b>	5,724,698	54,157.80	105.70
<b>United States</b>	314,107,084	3,531,905.4	88.93

Data Source: US Census Bureau, American Community Survey. 2010-14

### Population, Density (Persons per Sq. Mile) by Tract, ACS 2



#### Population, Density (Persons per Sq. Mile) by Tract, ACS 2

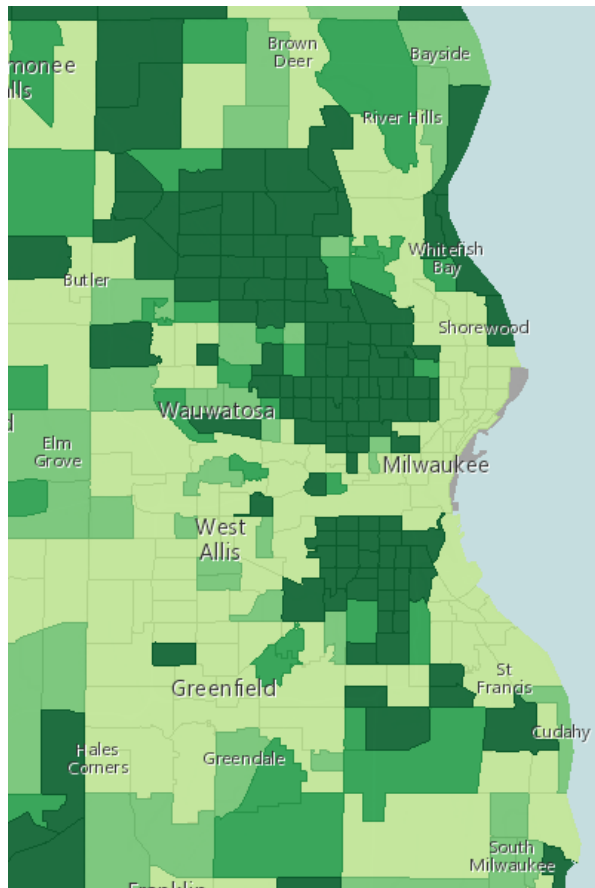


### City of Milwaukee Population by Age Group

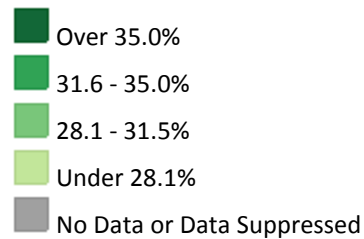
Age Group	Total Population		Males		Females	
	Number	%	Number	%	Number	%
Age 0-4	47,457	8%	23,841	8	23,616	8
Age 5-17	113,232	19%	57,125	20	56,107	18
Age 18-24	77,956	13%	38,247	13	39,709	13
Age 25-34	99,072	17%	47,466	17	51,606	17
Age 35-44	74,268	12%	35,897	13	38,371	12
Age 45-54	72,209	12%	34,687	12	37,522	12
Age 55-64	57,591	10%	27,072	10	30,519	10
Age 65 and older	54,674	9%	21,655	8	33,019	11

## Families with Children

According to the most recent the American Community Survey estimates, 33.7% of all occupied households in the city of Milwaukee are family households with one or more child(ren) under the age of 18. A family household is any housing unit in which the householder is living with one or more individuals related to him or her by birth, marriage, or adoption. Non-family households are any households occupied by the householder alone, or by the householder and one or more unrelated individuals.



Households with Children (Age 0-17), Percent by Tract, ACS 2010-14



## Percent Population by Race Alone, 2010-2014

Data Source: US Census Bureau, American Community Survey. 2010-2014

Report Area	White	Black	Asian	American Indian / Alaska Native	Native Hawaiian / Pacific Islander	Some Other Race	Multiple Races
City of Milwaukee	47.0%	39.3%	3.7%	0.5%	0%	5.8%	3.7%
Wisconsin	86.7%	6.2%	2.4%	0.9%	0%	1.6%	2.1%
United States	73.8%	12.6%	5.0%	0.8%	0.2%	4.7%	2.9%

## Total Population by Hispanic Ethnicity, 2010-2014

Data Source: US Census Bureau, American Community Survey. 2010-2014.

Report Area	Total Population	Hispanic or Latino Population	Percent Population Hispanic or Latino	Non-Hispanic Population	Percent Population Non-Hispanic
City of Milwaukee	598,078	106,086	17.7%	491,992	82.3%
Wisconsin	5,746,692	355,292	6.2%	5,369,400	93.8%
United States	314,107,084	53,070,096	16.9%	261,036,988	73.1%

**Population with Limited English Proficiency (LEP)**

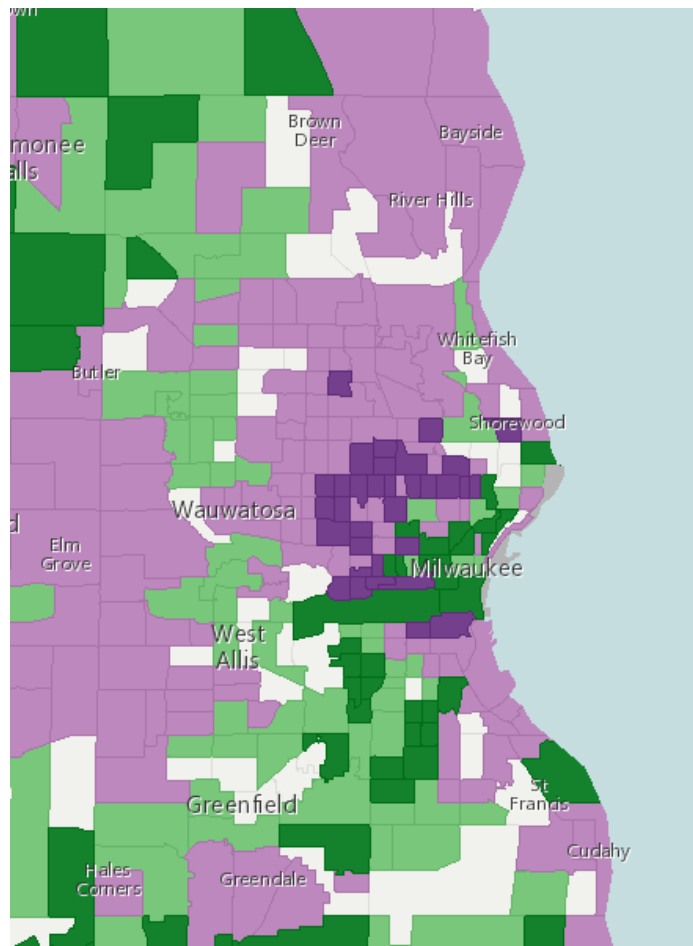
Percentage of the population aged 5 and older who speak a language other than English at home and speak English less than “very well.” The inability to speak or read English well creates barriers to health care access, provider communications, and health literacy. Data Source: US Census Bureau, American Community Survey. 2010-2014.

Report Area	Population Age 5 and older	Population Age 5 and older with Limited English Proficiency	Percent Population Age 5 and Older with Limited English Proficiency
City of Milwaukee	550,322	47,067	8.6%
Wisconsin	5,377,408	174,138	3.2%
United States	294,133,373	25,305,202	8.6%

**Change in Total Population**

According to the U.S. Census Bureau Decennial Census, between 2000 and 2010 the population in the report area fell by 2,003 persons, a decrease of 0.36%. A significant positive or negative shift in total population over time impacts health care providers and the utilization of community resources.

Report Area	Total Population, 2000 Census	Total Population, 2010 Census	Total Population Change, 2000-2010	Percent Population Change, 2000-2010
City of Milwaukee	596,974	594,833	-2,141	-0.36%
Wisconsin	5,363,6753	5,686,986	323,311	6.03%
United States	281,421,906	308,745,538	27,323,632	9.71%



**Population Change, Percent by Tract, US Census 2000 - 2010**

- Over 10.0% Increase ( + )
- 1.0 - 10.0% Increase ( + )
- Less Than 1.0% Change ( + / - )
- 1.0 - 10.0% Decrease ( - )
- Over 10.0% Decrease ( - )
- No Population or No Data



**Occupation, Civilian Employees Ages 16 and Older, 2010-2014**

	<b>Milwaukee</b>	<b>Wisconsin</b>	<b>US</b>
Management, business, science, and arts occupations	30.2%	34.3%	36.4%
Service occupations	24.2%	17.1%	18.2%
Sales and office occupations	23.0%	23.4%	24.4%
Natural resources, construction, and maintenance occupations	5.6%	8.5%	9.0%
Production, transportation, and material moving occupations	17.1%	16.8%	12.1%

**Industry, Civilian Employees Ages 16 and Older, 2010-2014**

	<b>Milwaukee</b>	<b>Wisconsin</b>	<b>US</b>
Agriculture, forestry, fishing and hunting, and mining	0.5%	2.5%	2.0%
Construction	3.1%	5.3%	6.2%
Manufacturing	14.0%	18.4%	10.4%
Wholesale trade	2.1%	2.7%	2.7%
Retail trade	10.3%	11.3%	11.6%
Transportation and warehousing, and utilities	4.4%	4.3%	4.9%
Information	2.0%	1.7%	2.1%
Finance and insurance, and real estate and rental and leasing	6.0%	6.1%	6.6%
Professional, scientific, and management, and administrative and waste management services	10.6%	8.0%	10.9%
Educational services, and health care and social assistance	27.4%	23.3%	23.2%
Arts, entertainment, and recreation, and accommodation and food services	11.1%	8.7%	9.5%
Other services, except public administration	4.6%	4.2%	5.0%
Public administration	4.0%	3.5%	4.9%

## Mortality

**Significance:** Premature death can provide a unique and comprehensive look at overall health status. To understand mortality in a community, analyzing leading causes of death as well as years of potential life lost is essential.

### Key Measures:

- **Years of potential life lost:**  
Calculated by subtracting the age of death from the 75-year benchmark. For example, a person dying at age 50 would contribute 25 years of life lost.
- **Mortality rates:** calculated by the number of deaths per 100,000 people in a given population over a given period of time. Sometimes they are “age-adjusted” to help compensate for whether a given population might be older or younger than average. Higher mortality rates tend to indicate that people are not living as long and are not as healthy.
- **Infant Mortality:** Defined as the death of an infant prior to his or her first birthday, this rate is an indicator often used to measure the health and well-being of a population. High infant mortality rates are often a sign of poverty, violence, chronic stress, and a number of other issues that greatly contribute to a child not making it to his or her first birthday. In Milwaukee, Black infants die at a rate that is three times higher than the rate of White babies. Reducing racial/ethnic disparities is one of the keys to reducing the overall rate in the city.

Sources: County Health Rankings (2014); Healthy People 2020

### Years of Potential Life Lost, Rate per 100,000 Population, Milwaukee County

2009-2011	2010-2012	2011-2013	WI	US	Status	Trend
7,939.7	7,818.2	7,945.4	5,952.5	6,605.3	✗	↔

### Life Expectancy at Birth (Years), City of Milwaukee

2011	2012	2013	2014	WI	US	HP2020	Status	Trend
76.0	75.8	76.2	76.9	80.3	78.8	-	✗	+

### Age-adjusted Mortality Rate per 100,000 Population, City of Milwaukee

2006	2009	2012	2014	WI	US	Status	Trend
975.0	850.4	904.5	823.6	719.9	732.8	✗	↔

### Deaths (All Causes) by Age Group, City of Milwaukee, 2014

Age	Number	Rate per 100,000
All Ages	4445	741
0-4	92	194
5-14	16	19
15-19	29	66
20-34	608	417
35-54	773	1248
55-64	791	2380
65-74	822	4780
85+	1,137	11,539

### Selected Underlying Cause of Death, City of Milwaukee, 2014

	Number	Rate (per 100,000)
Heart Disease (total)	1,016	169
Ischemic Heart Disease	594	99
Cancer (total)	1,008	168
Trachea/Bronchus/Lung	265	44
Colorectal	98	16
Female Breast*	70	23*
Cerebrovascular Disease	205	34
Lower Resp. Disease (total)	168	28
Pneumonia and Influenza	68	11
Accidents (total)	372	62
Motor Vehicle Accidents	63	11
Diabetes	111	19
Infect./Parasitic Dis.	81	14
Suicide	56	9

\*Based on female deaths from breast cancer and female population.

### Infant Mortality Rate per 1,000 Live Births, City of Milwaukee

2003-2005	2006-2008	2009-2011	2012-2014	WI	US	HP 2020	Status	Trend
11.6	10.9	10.1	9.9	5.7	6.0	6.0	✗	+

## Morbidity

**Significance:** Morbidity has been defined as any departure, subjective or objective, from a state of physiological or psychological well-being. In practice, morbidity encompasses disease, injury, and disability, and helps to understand measures of overall health in a community.

### Key Measures:

- Self-reported health status: Individuals reporting health as fair or poor (as opposed to good or excellent) provides an estimate of the health-related quality of life. Feeling physically unhealthy can lead to reduced ability to perform normal activities such as work, recreational activities and household tasks.
- Poor physical health days: This measure can help to understand quality of life. Self-reported poor physical health days may be the result of acute or chronic illness or injury.
- Low birth weight: Low birth weight infants are at high risk for health problems such as respiratory distress syndrome and bleeding in the brain as well as lifelong chronic conditions. This indicator can also highlight the existence of health disparities.
- Preventable hospitalizations: Understanding the burden on local health care systems and the community for preventable conditions where timely and effective outpatient care could have reduced the likelihood of hospitalization.

Sources: County Health Rankings (2014); Healthy People 2020

### Percent Reporting Health as Fair or Poor, City of Milwaukee

2003	2006	2009	2012	2015	WI	US	Status	Trend
17%	21%	22%	24%	21%	15%	17%	✗	↔

### Poor Physical Health Days (Number of Days Physical Health Was Not Good)

City of Milwaukee	WI	US	HP2020	Status	Trend
4.8	3.6	3.9	na	✗	na

### Low Birth Weight (percent of babies born <2500 grams), City of Milwaukee

2003	2006	2009	2012	2014	WI	US	HP 2020	Status	Trend
9.8%	10%	10.8%	9.7%	10.9%	7.3%	8.0%	7.8%	✗	↔

### Total Hospitalizations Per 1000 Population Milwaukee County

2008	2009	2010	2011	2012	2013	WI	Status	Trend
144.8	137.2	133.4	134.2	136.2	133.7	106.1	✗	↔

### Total Preventable Hospitalizations Per 1000 Population Milwaukee County

2008	2009	2010	2011	2012	2013	WI	Status	Trend
17.3	16.9	17.0	17.2	17.8	18.6	13.2	✗	—

### Coronary Heart Disease Hospitalizations Per 1000 Population Milwaukee County

2008	2009	2010	2011	2012	2013	WI	Status	Trend
5.0	4.0	3.0	3.0	3.0	3.0	3.1	✓	↔

### Cerebral Vascular Disease Hospitalizations Per 1000 Population Milwaukee County

2008	2009	2010	2011	2012	2013	WI	Status	Trend
3.1	3.0	2.9	3.1	2.9	3.0	2.5	✗	↔

### Drug-Related Hospitalizations Per 1000 Population Milwaukee County

2008	2009	2010	2011	2012	2013	WI	Status	Trend
1.0	0.8	0.7	0.8	0.8	0.7	0.6	✗	↔

### Alcohol-Related Hospitalizations Per 1000 Population Milwaukee County

2008	2009	2010	2011	2012	2013	WI	Status	Trend
2.2	2.0	1.9	2.0	2.2	2.1	1.7	✗	↔

### Cancer-Related Hospitalizations Per 1000 Population Milwaukee County

2008	2009	2010	2011	2012	2013	WI	Status	Trend
4.1	3.9	3.7	3.6	3.4	3.2	3.1	✗	+

### Emergency Department Visits age Adjusted Per 100,000 Involving Heroin for Milwaukee County

2006	2009	2014	WI	US	Status	Trend
2.9	3.7	10.5	19.1	8.7	✗	—

## Access to Care

**Significance:** Access to health care includes medical, dental and mental health care and impacts overall physical, social and mental health status. The prevention of disease and disability as well as detection and early treatment of conditions improve quality of life, prevent death, and increase life expectancy.

### Key Measures:

- Coverage: Having health insurance is essential but does not ensure full access. It is also necessary to have comprehensive coverage that includes preventive care, providers accepting the individual's insurance, close geographic location of providers to patients, clinics open at convenient times, adequate public transportation, and services from a usual and ongoing source (a medical home).
- Percent of adults with unmet care: Having a usual and ongoing source of primary care increases the likelihood that patients will receive appropriate care. Having a medical home is associated with greater trust and communication between patients and providers.

**Additional Considerations:** Barriers to care that may need to be addressed include:

- Transportation
- Long waits to get an appointment
- Culturally and linguistically appropriate services
- Lack of knowledge about the importance of preventive care
- Low health literacy

Sources: County Health Rankings (2014); Healthy People 2020

### Percent of Adults (18+) not Currently Covered by Health Insurance, City of Milwaukee

2003	2006	2009	2012	2015	WI	US	HP2020	Status	Trend
11%	13%	15%	17%	6%	12%	17%	0%	✗	↔

### Percent of Adults (18+) not Currently Covered by Health Insurance Anytime in Past 12 Months, City of Milwaukee

2009	2012	2015	WI	US	HP2020	Status	Trend
26%	22%	14%	na	na	0%	✗	+

### Percent of Households with One or More Members not Covered by Health Insurance Anytime in the Past 12 Months, City of Milwaukee

2003	2006	2009	2012	2015	WI	US	HP2020	Status	Trend
27%	30%	30%	25%	16%	na	na	0%	✗	+

### Percent of Population Uninsured all Year Over Past Year, City of Milwaukee

2005	2006	2007	2008	2009	2010	2011	2012	Trend
10%	7%	8%	8%	13%	11%	15%	10%	+

### Percent of Children without Health Insurance, City of Milwaukee

2012	2013	2014	WI	US	HP2020	Status	Trend
5.7%	5.5%	4.7%	4.6%	7.1%	0%	✗	+

### Percent of Population Reporting Someone in Their Household had not Taken Their Prescribed Medication due to Cost (Past 12 Months), City Of Milwaukee

2012	2015	WI	US	HP2020	Status	Trend
15%	12%	na	na	2.8%	✗	+

### Percent of Adults with Unmet Care (Past 12 Months), City of Milwaukee

	2012	2015	WI	US	HP2020	Status	Trend
Medical Care	13%	14%	10.6%	13.0%	4.2%	✗	↔
Dental Care	21%	21%	na	na	5.0%	✗	↔
Mental Health Care	6%	5%	na	na	na	na	↔

### Percent of Children with Unmet Care (past 12 months), City of Milwaukee

	2012	2015	WI	US	HP2020	Status	Trend
Medical Care	3%	3%	na	na	4.2%	✓	↔
Dental Care	10%	11%	na	na	5.0%	✗	↔
Specialist	2%	1%	na	na	na	na	↔

### Ratio of Population to Health Care Providers in Population Milwaukee County

	2014	2015	2016	WI	Status	Trend
Primary Care	1,340:1	1,336:1	1350:1	1,220:1	✗	↔
Dentists	1,526:1	1,455:1	1400:1	1,586:1	✓	+
Mental Health	734:1	430:1	401:1	587:1	✓	+

## Alcohol & Other Drug Use

**Significance:** Substance abuse has a major impact on individuals, families and communities. About 1 out of every 10 people (27 million in total) in the U.S. age 12 and older reported using an illicit (illegal) drug in 2014. More than double that number (61 million) reported binge drinking in the past year. The consequences of abuse and addiction are major contributors to other social, physical, mental, and public health problems, including teen pregnancy, HIV/AIDS and other sexually transmitted diseases (STDs), and various forms of violence and injury.

### Key Measures:

- Binge drinking and heavy drinking: Heavy drinking is defined as having an average of more than two drinks per day for men, or an average of more than one drink per day for women. Binge drinking is defined as consuming four or more alcoholic beverages at one time for women, or five or more alcoholic beverages at one time for men.
- Alcohol-related deaths: Alcohol abuse can lead to various physical health problems such as hypertension, heart attack, and liver, brain or heart disease. It can also result in death from illness such as cirrhosis of the liver, alcohol-related motor vehicle use, or other causes.

**Additional Considerations:** Wisconsin's rates for various measures of alcohol use and abuse are among the highest in the nation.

Sources: SAMSHA, Centers for Disease Control and Prevention; Healthiest Wisconsin 2020; Healthy People 2020

### Adults 18 Years and Older Reporting Binge Drinking in Past 30 Days, City of Milwaukee

2006	2009	2012	2015	WI	US	HP2020	Status	Trend
20%	19%	32%	35%	23%	17%	24.4%	✗	▬

### Proportion of the Population Reporting Heavy Drinking in Past 30 Days, City of Milwaukee

2006	2009	2012	2014	WI	US	HP2020	Status	Trend
7.9%	9.3%	8.0%	8.1%	7.2%	6.1%	na	✗	↔

### Percentage of Students who Ever had at Least one Drink of Alcohol on at Least 1 day During Past 30 days, City of Milwaukee

2005	2007	2009	2011	2013	WI	US	HP 2020	Status	Trend
36%	31%	30%	31%	27%	33%	35%	16.6%	✗	↔

### Percentage of Students Who Drank Alcohol For the First Time Before Age 13 Years, City of Milwaukee

2005	2007	2009	2011	2013	WI	US	HP 2020	Status	Trend
27%	27%	22%	22%	20%	15%	19%	na	✗	+

### Alcohol & Drug Abuse as Underlying or Contributing Cause of Death, City of Milwaukee 2014

	Number	Rate Per 100,000
Alcohol	194	32
Tobacco Use	672	112
Other Drugs	189	32

### Age-adjusted Rate of Cirrhosis Deaths per 100,000 population, Milwaukee County

2003	2006	2009	2012	WI	US	HP2020	Status	Trend
10.4	11.1	10.7	10.5	8.5	9.9	8.2	✗	+

### Rate of Alcohol-related Motor Vehicle Deaths per 100,000 population, Milwaukee County

2009	2012	WI	US	HP2020	Status	Trend
2	3	4.3	4.4	na	✓	▬

### Alcohol Licenses Issued by City Clerk's Office, City of Milwaukee 2014

Class A	Class B/C	Total	Class A Density (per 10,000)	Overall Density (per 10,000)	WI	US	Status
305	1,037	1,342	5.1	22.4	0.7	1.0	✗

### Drug Arrests (Adult and Juvenile)\* per 100,000, Milwaukee County

2006	2009	2012	WI	US	HP2020	Status	Trend
692	738	741	478	495	na	✗	▬



## Built Environment

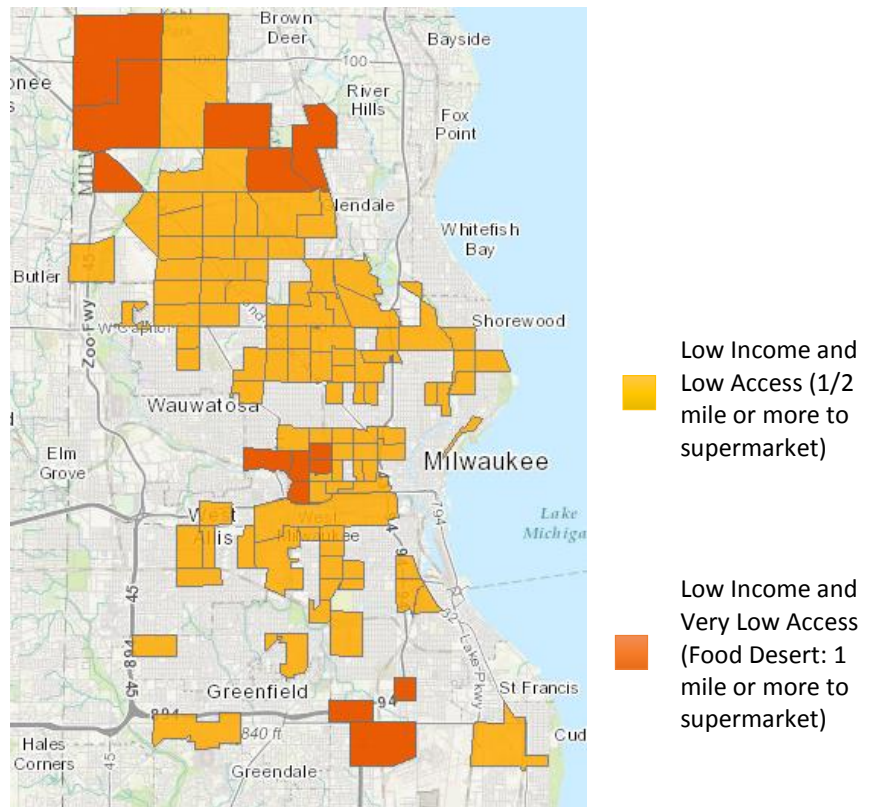
**Significance:** The built environment includes human-made resources and infrastructure such as buildings, roads, parks, restaurants and grocery stores. The built environment can support or constrain healthy behaviors through issues like neighborhood walkability and access to healthy foods. Physical hazards can also exist in the built environment, ranging from old housing stock with lead paint hazards or fire-prone electrical wiring, to brownfields and industrial pollution. Hazards that exist from the built environment can be reduced through engineering, regulation, safe work practices and other methods.

### Key Measures:

- Access to healthy food: Lack of access to fresh fruits and vegetables is related to overweight, obesity, and premature death. A “food desert” is a neighborhood where a high proportion of residents have low access (more than 1 mile in an urban setting and 10 miles in rural areas) to a supermarket or large grocery store.
- Childhood lead poisoning: Housing built prior to the nationwide lead paint ban may pose a risk to children when paint hazards exist in disrepair. No level of lead has been determined to be safe in humans.
- Access to recreational facilities: Access to recreational facilities has a strong relationship with physical activity levels in adults and children and is linked to lower obesity levels. Increasing access to recreational facilities is a recommended strategy to reduce obesity.

Source: County Health Rankings; Healthiest Wisconsin 2020

### Food Access by Census Tract, 2012



### Prevalence of Elevated Blood Lead Levels (Lead Poisoning) among Children Age 6 and Under (10 ug/dL)

2003	2006	2009	2012	2014	WI	US	Status	Trend
11.3%	6.5%	4.4%	3.4%	2.7%	0.77%	0.53%	✗	+

### Structure by Year Built, City of Milwaukee

Year Built	Number	Percent
Built 2010 or later	1,007	0.40%
Built 2000 to 2009	9,087	3.50%
Built 1990 to 1999	7,991	3.10%
Built 1980 to 1989	9,824	3.80%
Built 1970 to 1979	22,488	8.70%
Built 1960 to 1969	27,038	10.50%
Built 1950 to 1959	53,411	20.70%
Built 1940 to 1949	27,901	10.80%
Built 1939 or earlier	99,218	38.50%

### Recreation and Fitness Facilities per 100,000 Population, Milwaukee County

2008	2009	2010	2011	2012	2013	WI	US	Status	Trend
7.91	8.02	9.18	9.5	8.23	8.76	11.34	9.73	✗	↔

## Chronic Disease

**Significance:** Chronic diseases such as heart disease, stroke, cancer, diabetes, and asthma can be very costly, yet are preventable and can be effectively managed after they have occurred. Effective management can prevent more serious complications while prevention can be achieved through a healthy diet, physical activity, and eliminating tobacco use and substance abuse. In 2006, 84% percent of health care spending was generated by the 50% of the population who have one or more chronic diseases.

### Key Measures:

- Asthma: Can be aggravated by air pollution in urban settings and certain indoor allergens.
- Diabetes: A leading cause of death nationwide, diabetes can result in additional health complications and is costly. One in every five health care dollars in the U.S. is spent caring for people with diagnosed diabetes. The effectiveness of managing diabetes can be measured with a blood test called hemoglobin A1c (HbA1c).
- Heart disease: Heart disease is one of the nation's leading causes of death and disability. Modifiable risk factors include high blood pressure, high cholesterol, cigarette smoking, diabetes, poor diet, lack of physical activity, overweight and obesity.
- Cancer: A leading cause of death and health care costs nationwide, cancer rates can be reduced through early screening and other measures. Risk factors contributing to certain cancers include use of tobacco, physical inactivity, poor nutrition, obesity, UV light exposure and more.

Sources: National Diabetes Statistics Report, 2014 (CDC); FastStats (CDC); Economic Benefits of Preventing Disease (National Prevention Strategy); Centers for Disease Control and Prevention; Healthiest Wisconsin 2020; Healthy People 2020

### Asthma (Percent who Currently have Asthma), City of Milwaukee

2003	2006	2009	2012	2015	WI	US	Status	Trend
10%	12%	14%	14%	15%	10.3%	8.9%	✗	▬

### Diabetes\*, City of Milwaukee

2003	2006	2009	2012	2015	WI	US	Status	Trend
7%	8%	10%	10%	11%	9.0%	10.0%	✗	▬

### Percent of Diabetic Medicare Enrollees Ages 65 to 75 that Received HbA1c Screening in Past Year, Milwaukee County

2009	2010	2011	2012	WI	US	Status	Trend
88.4%	88.7%	88.4%	87.9%	89.6%	84.6%	✓	▬

### Heart Disease/Heart Condition, City of Milwaukee

2003	2006	2009	2012	2015	Trend
7%	8%	9%	9%	8%	↔

\* Treated for or told you had it in the past 3 years

### High Blood Pressure\*, City of Milwaukee

2003	2006	2009	2012	2015	WI	US	HP 2020	Status	Trend
23%	27%	29%	29%	30%	32.3%	31.4%	26.9%	✗	▬

### High Cholesterol, City of Milwaukee

2003	2006	2009	2012	2015	WI	US	HP 2020	Status	Trend
17%	21%	21%	19%	18%	31.2%	33.6%	13.5%	✗	+

### Cholesterol Screening (4 years ago or less), City of Milwaukee

2003	2006	2009	2012	2015	WI	US	HP 2020	Status	Trend
73%	70%	70%	70%	69%	77%	76%	82%	✗	↔

### Cervical Cancer Screening (18-65) – Pap Smear Within Past 3 years, City of Milwaukee

2003	2006	2009	2012	2015	WI	US	HP 2020	Status	Trend
90%	90%	88%	85%	81%	85%	81%	93%	✗	▬

### Mammography Screening (50 and older; within past 2 years), City of Milwaukee

2003	2006	2009	2012	2015	WI	US	HP 2020	Status	Trend
82%	76%	76%	77%	82%	82%	77%	81.1%	✓	↔

### Percentage of Female Medicare Enrollees Ages 67 to 69 that Received a Mammogram, Milwaukee County

2010	2011	2012	2013	WI	US	HP2020	Status	Trend
68.5%	66.8%	67.3%	67%	71%	71%	81.1%	✗	↔

**Blood Stool Test to Screen for Colon Cancer in in Adults, 50 and Older within the Past Year, City of Milwaukee**

2003	2006	2009	2012	2015	Trend
36%	23%	--	15%	15%	

**Sigmoidoscopy within Past 5 Years in Adults 50 And Older, City of Milwaukee**

2009	2012	2015	Trend
10%	12%	13%	

**Colonoscopy within Past 10 years in Adults 50 And Older City of Milwaukee**

2009	2012	2015	WI	US	Status	Trend
54%	59%	67%	65%	53%		

**Meeting the Current Colorectal Cancer Screening Recommendations in Adults 50 And Older, City of Milwaukee**

2009	2012	2015	HP2020	Status	Trend
57%	65%	73%	71%		

**Age-Adjusted Cancer Rates per 100,000 Population 2008-2012, Milwaukee County**

	County	WI	US	HP 2020	Status
Cancer	503.4	447.7	na	na	
Female Breast - Incidence	132.1	125.4	122.0	na	
Cervical - Incidence	8.7	6.3	na	na	
Male Colorectal - Incidence	53.5	42.4	46.1	na	
Female Colorectal - Incidence	39.3	31.6	34.9	na	
Male Lung/Bronchus - Incidence	88.1	66.7	73.0	na	
Female Lung/Bronchus - Incidence	61.7	53.4	52.0	na	
Prostate Cancer - Incidence	144.6	103.2	128.3	na	
Female Breast Cancer - Mortality Rate	24.1	21.4	21.5	20.7	
Cervical Cancer - Mortality	2.7	1.7	na	2.2	
Male Colorectal Cancer Mortality	21.5	18.6	18.1	14.5	
Female Colorectal Cancer Mortality	13.0	11.9	12.8	14.5	
Male Lung/Bronchus Cancer Mortality	67.3	56.1	57.9	45.5	
Female Lung/Bronchus Cancer Mortality	43.8	40.8	37.0	45.5	
Prostate Cancer Mortality Rate	25.3	23.5	20.8	21.8	

## Communicable Disease

**Significance:** Communicable diseases such as foodborne and waterborne illness, vaccine-preventable diseases, sexually transmitted infections, and more (including some respiratory and gastrointestinal illnesses) result in illness, increased health care costs and absenteeism and death. Prompt identification of illness and disease can prevent the spread of disease to others and reduce loss of time at work or school due to illness.

### Key Measures:

- Vaccine-preventable diseases and vaccination rates: Each year in the U.S., 42,000 adults and 300 children die of vaccine preventable illnesses. Improving immunization rates protects the health of individuals and the broader community. Each birth cohort fully vaccinated with the routine schedule of childhood vaccinations can prevent 14 million cases of disease.
- Foodborne illness: A cause of millions of illnesses every year in the U.S., foodborne illness (such as salmonella and campylobacter) can result in health care and economic costs due to absenteeism.

Sources: Healthiest Wisconsin 2020; Healthy People 2020; Centers for Disease Control and Prevention

### Percent of Adults 65 Years and Older that Received Annual Influenza ("Flu") Shot, City of Milwaukee

2012-2013	2014-2015	WI	US	HP2020	Status	Trend
33.2%	33.6%	56.7%	65%	70%	✗	↔

### Percent of Children Less than 18 Years of Age that Received Annual Influenza ("Flu") Shot, City of Milwaukee

2012-2013	2014-2015	WI	US	HP2020	Status	Trend
21.7%	31.1%	56.8%	58.9%	70%	✗	+

### Percent of Children Ages 24 Months who Completed Primary Recommended Vaccination Series (4:3:1:3:3:1:4 series), City of Milwaukee

2012	2014	WI	US	HP2020	Status	Trend
58.0%	63.6%	73.1%	70.4%	80%	✗	+

### Percent of Adolescents 13 to 18 Years Immunized with 1 or More Doses of the Tdap Vaccine\* City of Milwaukee

2012	2014	WI	US	HP2020	Status	Trend
67.0%	71.6%	78.8%	86%	80%	✗	+

\*Vaccine protects against tetanus, diphtheria, and pertussis

### Pertussis, Confirmed and Probable Per 100,000 Population, City of Milwaukee

2012	2014	WI	US	Status	Trend
57.9	16.34	25.1	10.4	✗	+

### Percent of Adolescents 13 to 18 Years that Received 3 or more Doses of the Human Papillomavirus (HPV) Vaccine, City of Milwaukee

2012	2014	WI	US	HP2020	Status	Trend
15.4%	23.6%	23.0%	na	80%	✗	+

### Hepatitis C, Chronic Per 100,000 Population, City of Milwaukee

2012	2014	WI	US	Status	Trend
59.51	75.04	55.3	na	✗	—

### Shigellosis Per 100,000 Population, City of Milwaukee

2009	2012	2014	WI	US	Status	Trend
22.86	1.01	30.76	5.64	5.81	✗	↔

### Salmonella Per 100,000 Population, City of Milwaukee

2009	2012	2014	WI	US	HP2020	Status	Trend
11.60	14.63	12.78	8.66	15.45	11.4	✗	↔

### Campylobacter Per 100,000 Population, City of Milwaukee

2009	2012	2014	WI	US	HP2020	Status	Trend
7.9	9.25	10.76	24.3	13.45	8.5	✗	—

**Significance:** More years of formal education are correlated strongly with better health. This is likely in large part because more education leads to better employment and economic opportunities including higher income, better working conditions, better access to health care (through work), more stability during variations in the job market, better housing, greater sense of personal control, and more opportunities for healthier lifestyles.

**Key Measures:**

- Education level: Even after controlling for income and insurance status, education still has significant positive effects on health outcomes. In addition, children born to parents with lower educational attainment are at higher risk for decreased cognitive development, increased tobacco and drug use, and a higher risk of some chronic mental and physical diseases.
- Reading level: Reading is a critical predictor of high school success or failure. Poor readers are more likely to drop out of school, and less education negatively impacts health.

**Additional Considerations:**

Educational attainment, reading and comprehension, and fluency in English all affect health literacy. Health literacy is defined as the degree to which individuals have the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions. Only 12% of U.S. adults have proficient health literacy (2003). Adults with low literacy are more likely to take more prescriptions, have chronic conditions, use more health services, and have poor health outcomes.

Sources: County Health Rankings (2014); United Way Worldwide (2014); Healthiest Wisconsin 2020; Annie E. Casey Foundation (2014)

**Milwaukee Public Schools High School Completion Rate Within 4 Years**

2010-2011	2011-2012	2012-2013	2013-2014	WI	Status	Trend
61.1%	62.8%	61.8%	60.9%	88.6%	✗	■

**Highest Education Level Obtained, Persons Ages 25 or Older, City of Milwaukee**

	2010-2014	WI	US
Less than High School	18.2%	9.2%	13.6%
High School	30.2%	32.4%	28.0%
Some College	22.1%	21.1%	21.2%
Associate's Degree	6.7%	9.9%	7.9%
College	14.9%	18.1%	18.3%
Graduate Degree	7.9%	9.3%	11.0%

**Milwaukee Public Schools Fourth Graders Either Advanced or Proficient**

	2013-2014	WI	US	HP 2020	Status
Reading	15.7%	36.3%	33%	36.3%	✗
Math	25.4%	52.0%	39.1%	43%	✗
Language Arts	51.2%	76.1%	na	na	✗
Science	49.2%	76.1%	na	na	✗
Social Sciences	77.0%	91.8%	na	na	✗

**Milwaukee Public Schools Eighth Graders Either Advanced or Proficient**

	2013-2014	WI	US	HP 2020	Status
Reading	15.2%	33.9%	32.4%	35.6%	✗
Math	17.3%	46.3%	33.9%	37.3%	✗
Language Arts	35.3%	63.3%	na	na	✗
Science	48.3%	80.3%	na	na	✗
Social Sciences	45.5%	76.5%	na	na	✗

**Percentage of Students Habitually Truant, Milwaukee Public Schools**

2013-2014	WI	Status
53.7%	9.9%	✗

**Population 3 Years and Over Enrollment by Grade, City of Milwaukee**

Grade	Number	Percent
Nursery school, preschool	5,283	2.80%
Kindergarten	16,266	8.70%
Elementary school (grades 1-8)	69,400	37.10%
High school (grades 9-12)	35,957	19.20%
College or graduate school	60,014	32.10%

**Percent of Population with a Disability, City of Milwaukee**

Population	2014	WI	US
All Ages	13.9%	11.4%	12.3%
Children	6.6%	4.3%	4.1%
Students within MPS	20.6%	na	na



## Employment / Income

**Significance:** Adequate income is important in obtaining health insurance, paying for medical care, and having access to other basic goods. Poverty, whether through unemployment, underemployment or low-wage earning employment, leads to an increased risk of a variety of adverse medical and mental health conditions. Poverty can affect people's access to health care, support or constrain people's ability to practice healthy behaviors, and directly affect people's physiology through chronic elevations of stress hormones, epigenetic changes, and other biologic mechanisms across the life course that can have lasting impacts across generations.

### Key Measures:

- Unemployment: Individuals who are unemployed are more than 50% more likely to be in fair or poor health than those who are employed.
- Income: Families with low incomes often struggle to afford food, rent, child care, and transportation. Additionally, some evidence suggests that poverty at a very early age may result in developmental damage. Children's IQ at age 5 has been shown to be more strongly related to income than to factors such as the mother's educational level.
- Housing: Severe housing problems include lack of complete plumbing or kitchen facilities, overcrowding, and excessive housing costs relative to income.

**Additional Considerations:** Compared to higher wage earners, underemployed individuals are less likely to have insurance and preventive care, more likely to work in hazardous conditions, less able to afford quality child care, and often have less access to paid leave.

Working non-standard hours and having little control over working conditions are associated with increased illness, injury and mortality.

Sources: Wisconsin Medical Journal (Swain et al, 2014), County Health Rankings (2014); United Way Worldwide (2014)

### Annual Unemployment Rate, City of Milwaukee

2006	2009	2012	2015	WI	US	Status	Trend
10.3%	12.9%	13.1%	-	5.3%	7.2%	✗	▬

### Percentage of Households Receiving Supplemental Nutrition Assistance Program (SNAP), City of Milwaukee

2006	2009	2012	2015	WI	US	Status	Trend
15.1%	17.1%	31.5%	-	13.1%	13.2%	✗	▬

### Count of Individuals enrolled in W-2 (Wisconsin Works) on the Last Working Day of the Month, Milwaukee County

2003	2006	2009	2012	2015	WI	Status	Trend
11,717	7,874	8,440	10,999	8,462	14,439	✗	↔

### Income, City of Milwaukee

	2014	WI	US	Status
Per Capita	\$19,636	\$27,907	\$28,555	✗
Median Household	\$35,489	\$52,735	\$53,482	✗
Mean Household	\$48,775	\$68,319	\$74,596	✗

### Income in Past 12 Months at or Below the Federal Poverty Line (FPL), City of Milwaukee

	2014	WI	US	Status
All People	29.4%	13.3%	15.6%	✗
Families	25.3%	8.9%	11.5%	✗
Children	43.3%	18.5%	21.9%	✗
Adults, 18 years and over	24.2%	12.6%	13.6%	✗
Adults, 65 years and over	13.6%	7.7%	9.4%	✗

### Percent Students Eligible for Free or Reduced Price Lunch, City of Milwaukee

2014	WI	US	Status
82.7%	41.2%	52.3%	✗

### Percentage of Households with at least 1 of 4 Severe Housing Problems, City of Milwaukee

2006-2010	2007-2011	2008-2012	WI	Status	Trend
26.0%	26.5%	27.3%	15%	✗	▬

## Injury (Unintentional)

**Significance:** Injury is a leading cause of disability and death, as well as a large contributor to health care costs and other significant economic costs such as lost productivity.

### Key Measures:

- Unintentional injury mortality: This is the rate of death due to unintentional injuries, as measured by the number of such deaths in a given timeframe and geographic area per 100,000 people. The figures are often age-adjusted, since some populations have greater or smaller proportions of individuals at age groups more prone to injury (such as children, teenagers, and the elderly).
- Falls: Falls have surpassed motor vehicle crashes as the most common cause of injury-related death in Wisconsin. The majority of fall-related deaths (87%) and in-patient hospitalizations (70%) involve people age 65 and older. More than 70% of the costs for fall-related hospitalizations and emergency department visits in the state are paid by Medicare and Medicaid.

### Unintentional Injury Mortality, Age-Adjusted Death Rate per 100,000 Population, Milwaukee County, 2014

2007-2009	2008-2010	2009-2011	2010-2012	2011-2013	WI	US	HP 2020	Status	Trend
52.4	50.8	49.7	50.8	53.7	44.8	39.2	36.4	✗	▬

### Top 15 Injuries Resulting in Hospitalizations Age-Adjusted per 100,000 Population, Milwaukee County, 2014

Cause of Injury Hospitalization	Rate of Injury Hospitalizations
1. Falls	498
2. Poisoning	170
3. Unspecified cause of injury	114
4. Other specified classifiable cause of injury	67
5. Other specified cause of injury, not elsewhere classifiable	45
6. Cutting or piercing objects	45
7. Struck by or against object or person	44
8. Motor vehicle traffic crash- Occupant	36
9. Natural or environmental factors	28
10. Firearms	24
11. Fire, heat, chemical burns	14
12. Overexertion	13
13. Suffocation	11
14. Motor vehicle traffic crash-Pedestrian	11
15. Motor vehicle traffic crash-Motorcyclist	8

### Injury Deaths Due to Falls for Age 65 and Older per 100,000 Population, Milwaukee County

2003	2006	2009	2012	WI	US	HP 2020	Status	Trend
120.9	149.4	147.8	162.8	120.9	56.7	47.0	✗	▬

### Profile for Milwaukee County Motor Vehicle Crashes, 2013

Type of Motor Vehicle Crash	Persons Injured	Persons Killed
All Crashes	9,269	47
Alcohol-Related	354	17
With Citation for OWI	435	0
With Citation for Speeding	775	0
Motorcyclist	273	12
Bicyclist	226	1
Pedestrian	523	8

### Percentage of High School Students Who Never or Rarely Wore a Seat Belt When Riding in a Car Driven by Someone Else, City of Milwaukee

2005	2007	2009	2011	2013	WI	US	Status	Trend
24.1%	25.1%	28.7%	24%	23.6%	8.3%	7.6%	✗	+

Sources: The Burden of Falls in Wisconsin (2010); Healthy People 2020; County Health Rankings (2014); Centers for Disease Control and Prevention

## Mental Health

**Significance:** Mental illness is the most common cause of disability in the U.S. Mental health can be defined as a state of successful mental function, resulting in productive activities, fulfilling relationships, and an ability to adapt and cope with challenges. Good mental health is essential to personal well-being, relationship building, and the ability to contribute to society. Mental health issues are associated with increased rates of risk factors such as smoking, physical inactivity, obesity and substance abuse.

### Key Measures:

- Mentally unhealthy days and mental health conditions: Depression is the most common type of mental illness, affecting more than 26% of the U.S. adult population. According to the CDC, mental health is “a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community.” Frequent mental distress is a measure of mental health.
- Suicide: A surprisingly widespread and preventable public health problem, there are an estimated 8-25 attempts for every suicide death. Suicide is the second-most common cause of death for Americans between 15 and 34, and the 10th-most common cause of death overall. Most suicides are caused by self-inflicted gunshots; in the U.S. there are more gun-related suicides than gun-related homicides.

Sources: County Health Rankings (2014); Healthiest Wisconsin 2020; Healthy People 2020; Suicide Voices of Awareness (2014); Centers for Disease Control and Prevention

### Average Number of Mentally Unhealthy Days Reported in Past 30 Days (Age-Adjusted), Milwaukee County

2012	2013	2014	2015	2016	WI	US	Status	Trend
4.2	4.2	4.2	5.1	4.0	3.4	2.8	✗	↔

### Mental Health Condition (Treated for or Told you had it in the Past 3 Years), City of Milwaukee

2009	2012	2015	Trend
14%	16%	19%	—

### Felt Sad, Blue or Depressed Always or Nearly Always in the past 30 days, City of Milwaukee

2003	2006	2009	2012	2015	Trend
9%	10%	9%	9%	8%	+

### Suicide Rate per 100,000, City of Milwaukee

2011	2012	2013	2014	WI	US	HP 2020	Status	Trend
7.2	9.4	9.0	9.3	12.8	13.0	10.2	✓	↔

### Considered Suicide in the Past Year, City of Milwaukee

2003	2006	2009	2012	2015	WI	US	Status	Trend
4%	7%	7%	6%	8%	na	3.7%	✗	↔

### Self-inflicted Hospitalization Rate per 100,000 Population, Milwaukee County

2003	2006	2009	2012	2014	WI	US	Status	Trend
78.1	80	67.6	85.4	103.8	100.3	na	✗	—

### Percent of High School Students Who Seriously Considered Attempting Suicide in the Past Year, City of Milwaukee

2003	2005	2007	2009	2011	2013	WI	US	Status	Trend
17%	12%	14%	12%	13%	16%	13%	17%	✓	—

### Psychiatric Hospitalizations Per 1000 Population Milwaukee County

2008	2009	2010	2011	2012	2013	WI	Status	Trend
10.1	10.1	10.3	9.8	9.7	9.6	6.4	✗	+

## Natural Environment

**Significance:** The natural environment includes a variety of factors but, in particular air and water quality. Poor air and water quality have the greatest impact on the very young, the old, and those with chronic health conditions.

### Key Measures:

- Air pollution: Air pollution, particularly in urban settings, can aggravate health conditions such as chronic bronchitis, asthma and other lung diseases.
- Water quality: Contaminants in water, such as prescription drugs, pesticides, and chemicals can lead to illness, infection and increased risk for illness or disease.

### Annual Days Above Standard, Ground Level Ozone, Milwaukee County

2007	2008	2009	2010	2011	WI	Status	Trend
9	0	2	6	2	0.67	✗	↔

### Annual Percent of Days Above Standard, Particulate Matter, Milwaukee County

2007	2008	2009	2010	2011	WI	Status	Trend
2.2	1.4	1.1	1.4	0.3	.03	✗	↔

### Annual Ambient Concentration of Particulate Matter, Milwaukee County (ug/m3)

2007	2008	2009	2010	2011	WI	Standard	Status	Trend
14.8	13.3	11.9	11.3	11	9.39	12	✓	+

### Detection of Select Contaminants Milwaukee Drinking Water, 2014

Substance	Ideal Goals (MCLG)	Median Value	Highest Level Detected
Coliform bacteria, Total	Zero	Zero	0.14% in one month
Haloacetic Acids	NA	3.3 µg/L	8.1 µg/L
Lead	Zero	8.2 µg/L (AL)	NR
Nitrate, as N	10.0 mg/L	0.30 mg/L	0.30 mg/L
pH	NA	7.63	7.89
Total Dissolved Solids	500	179 mg/L	205 mg/L
Trihalomethanes	NA	8.7 µg/L	12.2 µg/L
Turbidity	NA	0.04 NTU 95% of the time	0.28 NTU 1-day max

All contaminant levels are within applicable state and federal laws.

*Cryptosporidium* was detected in one source water sample out of 22 source water samples during 2014. There were no detections of *Cryptosporidium* in the finished water in 2014.

### Percentage of Days Milwaukee Beaches are Open with No Advisory or Closing from Memorial Day to Labor Day

Beach	2012	2015	Trend
Bradford	79%	88%	na
McKinley	84%	44%	na
South Shore	50%	30%	na

### Rate of Heat Stress Emergency Department Visits per 100,000 Population, Milwaukee County

2011	WI	Status
12.0	16.5	✓

Source: County Health Rankings (2014)

## Oral Health

**Significance:** Good oral health not only improves the ability to speak, smile, smell, taste, touch, chew, swallow, and make facial expressions, but it can prevent mouth pain, tooth decay and loss, oral and throat cancer, birth defects, other diseases of the mouth, and other systemic illnesses such as heart disease.

Good oral health care can also prevent other diseases through early detection of diseases that start with oral symptoms but that can affect health in other parts of the body.

### Key Measures:

- Water fluoridation: Over the past 50 years there has been a significant improvement in oral health in the U.S. This is mostly due to effective prevention and treatment efforts, especially community water fluoridation, which strongly, safely, and effectively reduces risk of tooth decay.
- Poor dental health: Individuals more likely to have poor oral health include those with disabilities, other health conditions, lower levels of education and income, and people from underserved racial/ethnic groups.

**Additional Considerations:** Barriers to adequate oral health care include a lack of dental insurance (public or private) and low reimbursement for dental services.

Sources: Healthiest Wisconsin 2020; Healthy People 2020

### Fluoride Levels in Milwaukee Water, 2014

Range	CDC Recommended	Status
0.53 to 0.6 mg/L	0.7 mg/L	✓

*Note: Milwaukee Water Works has adjusted the amount of fluoride it adds to the finished water in response to a recent change in the CDC recommendation. The CDC recommendation used to be at least 0.7 mg/L, and now the recommendation is exactly 0.7 mg/L and, as a result, Milwaukee waterworks has reduced the fluoride levels in its water.*

### Percent Adults with Poor Dental Health, Milwaukee County

2006-2010	WI	US	Status	Trend
15.8%	15.2%	15.7%	✗	na

### Percent of Adults with a Dental Checkup within the Past Year, City of Milwaukee

2003	2006	2009	2012	2015	WI	US	HP 2020	Status	Trend
66%	58%	52%	51%	57%	73.8%	67%	na	✗	↔

### Percent of Medicaid Members Receiving Dental Service, Milwaukee County

2005	2006	2007	2008	2010	WI	Status	Trend
24%	20.9%	23.2%	23%	33.3%	35.9%	✗	+

### Adults Age 65+ Who Have Had All Their Natural Teeth Extracted, Milwaukee County

2011-2012	WI	US	Status	Trend
12.65%	13.66%	16.54%	✓	na

### No Tooth Loss Among Adults 18 to 64 Years of Age, Milwaukee County

2011-2012	WI	US	Status	Trend
60.98%	69.71%	64.28%	✗	na

## Physical Activity & Nutrition

**Significance:** Regular physical activity and a healthy diet reduce the risk of chronic diseases, illness and injury.

### Key Measures:

- Overweight: At a healthy weight, people are less likely to develop chronic diseases and die at an earlier age.
- Physical activity: In adults, proper physical activity can lower the risk of early death, coronary heart disease, stroke, high blood pressure, type 2 diabetes, breast and colon cancer, falls and depression. In children and adolescents, physical activity is key for improving bone health, cardio-respiratory and muscular fitness, body fat levels, and symptoms of depression.
- Healthy diet: A healthy diet reduces the risk of a number of chronic diseases, some cancers, oral disease, malnutrition, anemia, and other risk factors, diseases and illnesses. In children, good nutrition is important to healthy growth and development and maintaining an appropriate weight.

**Additional Considerations:** Physical activity can be greatly associated with access to recreational facilities, parks and play areas, and neighborhood safety.

Additionally, healthy diet must be evaluated in context alongside the built environment, including food deserts, and food security. When families have easy access to sufficient and nutritious foods, they are more likely to be food-secure. Ten percent of Wisconsin households are food insecure.

Sources: Healthiest Wisconsin 2020; Healthy People 2020

### Percent of Overweight Adults, City of Milwaukee

2003	2006	2009	2012	2015	WI	US	HP 2020	Status	Trend
62%	65%	67%	66%	74%	67%	64%	66.1%	✗	➡

### Percent of High School Students Who are Overweight, City of Milwaukee

2003	2005	2007	2009	2011	2013	WI	US	Status	Trend
19%	18%	19%	17%	18%	15%	13%	17%	✗	↔

### Percent of Adults Reporting Recommended Moderate or Vigorous Activity, City of Milwaukee

2006	2009	2012	2015	WI	US	HP2020	Status	Trend
43%	40%	46%	48%	53%	51%	47.9%	✓	+

### Percent of Adults Reporting No Leisure Time Physical Activity, City of Milwaukee

2003	2006	2009	2012	WI	US	HP 2020	Status	Trend
23.9%	23.3%	27.5%	23%	34.7%	29.6%	32.6%	✗	↔

### Percent of Students Who Were Not Physically Active at Least 60 Minutes Per Day On 5 Or More Days, City of Milwaukee

2009	2011	2013	2015	WI	US	HP2020	Status	Trend
70.6%	69.4%	69.8%	-	50.5%	52.7%	na	✗	↔

### Percent of Adults Reporting Two or More Servings of Fruit Daily, City of Milwaukee

2003	2006	2009	2012	2015	WI	US	Status	Trend
63%	58%	56%	61%	59%	34.9%	32.5%	✓	↔

### Percent of Adults Reporting Three or More Servings of Vegetables Daily, City of Milwaukee

2003	2006	2009	2012	2015	WI	US	Status	Trend
29%	22%	20%	25%	26%	23.2%	26.3%	✗	+

### Percent of Infants in WIC Breastfed Exclusively Through 3 Months, Milwaukee County

2009	2012	2015	WI	US	HP2020	Status	Trend
12.7%	14.4%	-	21.6%	na	46.2%	✗	na

### Percent of City of Milwaukee Children 5 to 17 Years of Age Eating:

	2012	2015	Trend
Two or More Servings of Fruit	75%	82%	+
Three or More Servings of Vegetables	31%	30%	↔



# Racism

**Significance:** The relationship between experiencing racism and negative health outcomes is an emerging area of research. While still evolving, research clearly indicates a strong relationship between self-reported experiences of racism and ill health, particularly negative mental health outcomes and health-related behaviors.

Research also indicates that stress from experiencing chronic hostility and fear can lead to negative health outcomes. These outcomes are seen even after controlling for differences such as income and access to adequate health care.

The effect can be direct (typically through the effects of chronic elevations of stress hormones) including:

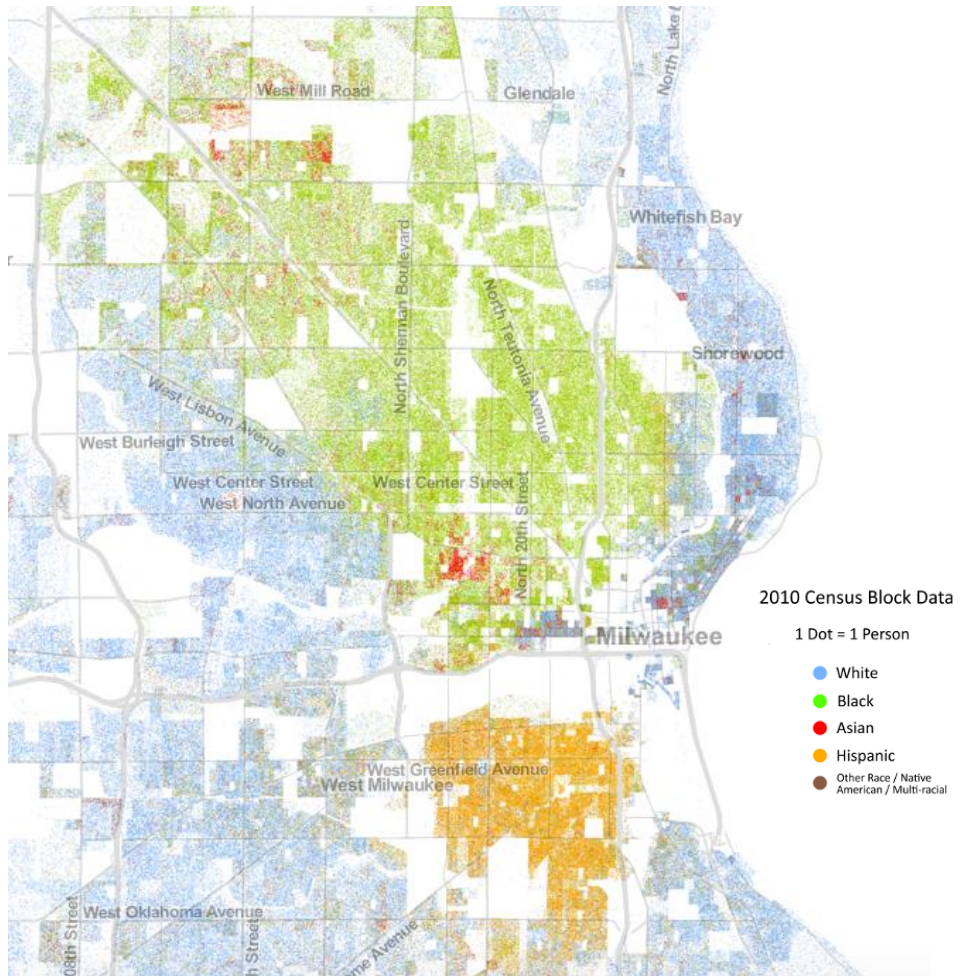
- Higher blood pressure
- Lower immune function
- Higher risk of obesity and diabetes

Or indirect:

- Higher rates of smoking, drinking, and over-eating
- Lower rates of exercise and social support

Sources: Paradies, Y. "A Systematic Review of Empirical Research on Self-Reported Racism and Health," *International Journal of Epidemiology* (August 2006), 35(4): 888-901. "The Toxic Power of Racism," Dean Ornish, *Boston Globe*, 3/24/08.

**Race/Ethnicity by Census Block, 2010 City of Milwaukee / Milwaukee County**



**Milwaukee-Waukesha-West Allis, WI Segregation Indices (0-100), U.S. Census 2010** (Univeristy of Michigan Population Studies Center, 2015)

	1990	2000	2010	Rank*
Black-White	82.8	83.3	81.5	1
Hispanic-White	56.4	59.5	57.0	9
Asian-White	42.2	43.4	40.7	52

\*(out of 102 Largest Metros)

**Hate Crimes (All Types) per 100,000 Population** (USA.COM, 2015)

Location	2006	2007	2008	2009	2010	2011	2012	2013
Milwaukee	7.6	4.5	5	2.6	5.8	4	2.3	1.5
WI	1.5	1.2	1.6	1	1.6	1.3	1.2	0.9
U.S.	3	2.9	2.9	2.4	2.3	2.2	2.3	2

## Reproductive & Sexual Health

**Significance:** Per the CDC, reproductive health “begins before conception with proper nutrition and a healthy lifestyle and continues with appropriate prenatal care and the prevention and treatment of complications when possible. The ideal result is a full-term pregnancy without unnecessary interventions ... a healthy infant, and a healthy postpartum period...” Factors affecting sexual health include violence or coercion, early sexual debut, and lack of safe sex practices to prevent sexually transmitted diseases.

### Key Measures:

- Teen birth rates: The number of births per 1,000 teenage females in a given location and time frame.
- Prenatal care: Ideally, women would begin their prenatal care before conception, or at least during their first trimester.
- Sexually transmitted infections: Sexually transmitted infections can lead to reproductive health problems, fetal and perinatal health problems, cancer and increase the risk of HIV infection.
- HIV diagnoses: Not only a significant health concern, but a costly health burden. For every HIV infection prevented, an estimated \$355,000 is saved in the cost of providing lifetime HIV treatment.

**Additional Considerations:** Access to family planning services is essential to consider when analyzing birth outcomes, sexually transmitted infection rates, and overall reproductive health. Family planning services help with desired birth spacing and family size and contribute to improved health outcomes for infants, children, women and families.

Sources: County Health Rankings (2014); Economic Benefits of Preventing Disease (National Prevention Strategy); Healthiest Wisconsin 2020; Healthy People 2020

### Birth Rate per 1,000 Females age 15-17, City of Milwaukee

2006	2009	2012	2014	WI	US	HP2020	Status	Trend
52.0	41.3	25.9	23.7	7.7	10.9	na	✗	+

### Birth Rate per 1,000 Females age 18-19, City of Milwaukee

2006	2009	2012	2014	WI	US	HP2020	Status	Trend
120.8	88.7	71.7	64.5	34.0	43.8	na	✗	+

### Percent of High School Students who Have Ever had Sexual Intercourse, City of Milwaukee

2003	2005	2007	2009	2011	2013	WI	US	Status	Trend
60%	59%	59%	63%	60%	52%	35%	47%	✗	+

### Percentage of High School Students who did not use a Condom During Last Sexual Intercourse (Among Students Who Were Currently Sexually Active), City of Milwaukee

2003	2005	2007	2009	2011	2013	WI	US	Status	Trend
30%	32%	39%	34%	35%	39%	38%	41%	✓	—

### Percent of Women Receiving Late or No Prenatal Care, City of Milwaukee

2003	2006	2009	2012	2014	WI	US	Status	Trend
4.7%	4.8%	4.2%	5.1%	6.7%	4.3%	6%	✗	—

### Percent of Births < 37 Weeks Gestation, City of Milwaukee

2006	2009	2012	2014	WI	US	HP 2020	Status	Trend
10.9%	10.7%	10.5%	10.9%	9.1%	9.6%	11.4%	✓	↔

### Chlamydia Cases per 100,000 Population, City of Milwaukee

2006	2009	2012	2014	WI	US	Status	Trend
1,618.6	1,550.2	1,543.6	1,405.1	406	456.1	✗	+

### Gonorrhea Cases per 100,000 Population, City of Milwaukee

2006	2009	2012	2014	WI	US	HP2020	Status	Trend
816.4	565.0	502.7	391.2	72	110.7	na	✗	+

### Primary and Secondary Syphilis Cases per 100,000 Population, City of Milwaukee

2006	2009	2012	2014	WI	US	HP 2020	Status	Trend
5.7	3.9	5.5	7.6	1.4	6.3	na	✗	—

### New HIV Diagnoses per 100,000 Population, City of Milwaukee

2006	2009	2012	2014	WI	US	HP 2020	Status	Trend
18.7	22.2	17.1	20.0	3.9	13.8	na	✗	↔

## Social Support

**Significance:** Family and social support includes the quality of relationships among family members, friends and acquaintances as well as involvement in community life. There is a strong association between social isolation and poor health outcomes. Social isolation is related to poor health outcomes and stress.

### Key Measures:

- Social and emotional support: Those self-reporting a lack of adequate social and emotional support.
- Single-parent households: Both adults and children in single-parent households are at higher risk for illness, mental health problems and mortality, and engagement in unhealthy behaviors. Self-reported health among single parents (both male and female) were found to be worse than for parents living as couples, even after controlling for socioeconomic characteristics.

### Sources:

County Health Rankings (2014).  
 Benzeval, M. The Self-Reported Health Status of Lone Parents. *Social Science Medicine* 1998 May; 46(10):1337-53.  
 House, JS. Social Isolation Kills, but How and Why? *Psychosomatic Medicine* 2001; 63:273-274.

### Percentage of Adults Without Adequate Social / Emotional Support, Milwaukee County

2005-2011	2006-2012	WI	US	HP2020	Status	Trend
21.2%	20.9%	16.1%	20.7%	na	✗	↔

### Single-parent Households, City of Milwaukee 2010-2014

2010-2014	WI	US	HP2020	Status	Trend
17.7%	8.8%	9.6%	na	✗	na

### Older Living Alone (Defined as householder living alone age 65 years and over), City of Milwaukee 2010-2014

2010-2014	WI	US	HP2020	Status	Trend
8.5%	10.4%	9.8%	na	✓	na

# Tobacco

**Significance:** Tobacco use is the single most preventable cause of death and disease in the U.S. For every death from tobacco use, 20 more people suffer with at least one serious tobacco-related illness. Tobacco use accounts for 11% of Medicaid costs and nearly 10% of Medicare costs. Annual health care costs are \$2,000 higher from smokers than nonsmokers. Most smokers want to quit, but doing so is difficult without adequate medical and psychological support.

### Key Measures:

- Current tobacco use: Every year in Wisconsin there are more than 6,600 deaths due to tobacco use (2008-2012 data), \$3 billion in direct health care costs, and \$1.6 billion in lost productivity. Tobacco use can cause cancer, heart disease, lung diseases, premature birth, low birthweight,
- Secondhand smoke exposure: Exposure to secondhand smoke can cause heart disease, lung cancer, severe asthma attacks, respiratory infections, ear infections and sudden infant death syndrome.
- Smoking and pregnancy: Smoking during pregnancy can cause premature birth, low infant birth weight, stillbirth and infant death.
- Use of other tobacco products: Smokeless tobacco products can cause cancer of the mouth and gums, periodontitis, and tooth loss. Electronic cigarettes, while not containing tobacco, do contain highly addictive nicotine, as well as cancer-causing chemicals.

Sources: Economic Benefits of Preventing Disease (National Prevention Strategy); Healthiest Wisconsin 2020; Healthy People 2020; Center for Urban Initiatives and Research, University of Wisconsin-Milwaukee (Burden of Tobacco in Wisconsin, 2015); Centers for Disease Control and Prevention

### Current Tobacco Cigarette Smoker (Adults), City of Milwaukee

2003	2006	2009	2012	2015	WI	US	HP 2020	Status	Trend
28%	29%	29%	28%	21%	19%	19%	12%	✗	+

### Tried to Quit (Quit Smoking 1 Day or More in Past Year), City of Milwaukee

2003	2006	2009	2012	2015	WI	US	HP 2020	Status	Trend
53%	55%	58%	66%	61%	49%	56%	80%	✗	↔

### Advised by Health Care Professional in Past Year to Quit, City of Milwaukee

2006	2009	2012	2015	Trend
78%	72%	83%	80%	↔

### Smoking Prohibited in Home, City of Milwaukee

2009	2012	2015	WI	US	HP2020	Status	Trend
59%	71%	72%	75%	79%	87%	✗	+

### Nonsmokers Exposed to Secondhand Smoke in Past 7 Days, City of Milwaukee

2009	2012	2015	WI	US	HP2020	Status	Trend
32%	25%	26%	52.7%	47.7%	33.8%	✓	↔

### Youth Tobacco Use: Smoked Cigarettes on at Least 1 day During Past 30 days, City of Milwaukee

2007	2009	2011	2013	WI	US	HP 2020	Status	Trend
12.3%	10.5%	10.4%	8.6%	11.8%	15.7%	16%	✓	+

### Tobacco Sales to Minors, Milwaukee County

2009	2012	2015	WI	US	Status	Trend
10%	15.9%	-	13.6%	9.6%	✗	na

### Tobacco Licenses Issued by City Clerk's Office, 2014

Number	Density per 10,000
1,024	17.12

### Smoking and Pregnancy, City of Milwaukee

2003	2006	2009	2012	WI	US	HP2020	Status	Trend
12%	12%	13%	14%	13%	9%	30%	✓	▬

### Use of Other Tobacco Products, City of Milwaukee

	2015	WI	US	HP2020	Status
Electronic Cigarettes	6%	na	2.6%	na	✗
Cigars/Cigarillos	5%	na	na	0.2%	✗
Smokeless Tobacco	4%	3.5%	4.2%	0.3%	✗

## Violence / Community Safety

**Significance:** Violence and community safety affect both physical safety and psychological well-being. Direct and indirect health impacts of intentional or unintentional injuries include poor mental health, poor, physical health, premature death, high medical costs and decreased productivity.

Additionally, exposure to crime and violence increases stress and anxiety, which are linked to many chronic health issues, as well as higher rates of preterm births and low birthweight babies.

Adverse childhood experiences (ACEs) are also associated with increased lifetime risk of chronic medical and mental health problems. ACEs include:

- Emotional Abuse or Neglect
- Physical Abuse or Neglect
- Sexual Abuse
- Mother Treated Violently
- Household Substance Abuse
- Household Mental Illness
- Parental Separation or Divorce
- Incarcerated Household Member

### Key Measures:

- Community violence: Lack of safety or a perceived lack of safety causes stress and anxiety, and can deter people from healthy behaviors such as exercising or outdoor play.
- Youth and children experiencing violence: Post-traumatic stress can affect children who experience unsafe circumstances which can result in more aggressive behaviors, increased alcohol and tobacco use, and increase sexual or other risk-taking.

Source: County Health Rankings (2014); Healthy People 2020; CDC

### Number of Assault Offenses per 100,000 Residents, City of Milwaukee

2011	2012	2013	2014	2015	WI	US	HP 2020	Status	Trend
1320	1620	1610	1550	1400	290	1650	1920	✓	+

### Number of Homicides per 100,000 Residents, City of Milwaukee

2011	2012	2013	2014	2015	WI	US	HP 2020	Status	Trend
14	15	17	14	24	2.9	5.1	5.5	✗	↔

### Number of Robberies per 100,000 Residents, City of Milwaukee

2010	2011	2012	2013	2014	2015	WI	US	Status	Trend
501	525	530	562	605	512	88	250	✗	↔

### Number of Sexual Offenses per 100,000 Residents, City of Milwaukee

2010	2011	2012	2013	2014	2015	WI	US	Status	Trend
121	128	124	115	117	97	29	110	✓	↔

### Maltreatment Substantiation Rate, Milwaukee County

2010	2011	2012	2013	2014	WI	HP 2020	Status	Trend
9%	10%	9%	10%	8%	12.4%	8.5%	✓	↔

### Percent of High School Students Who Have Been Bullied on School Property During the Past 12 Months, City of Milwaukee

2009	2011	2013	WI	US	HP2020	Status	Trend
12.6%	12.2%	14.0%	22.7%	19.6%	17.9%	✗	—

### Percent of High School Students Who Experienced Physical Dating Violence in the Past Year, City of Milwaukee

2013	WI	US	HP2020	Status	Trend
16.8%	8.5%	10.3%	na	✗	na

### Percent of Children 8 to 17 Afraid for their Personal Safety in the Past Year, City of Milwaukee

2003	2006	2009	2012	2015	Trend
7%	13%	10%	8%	8%	+



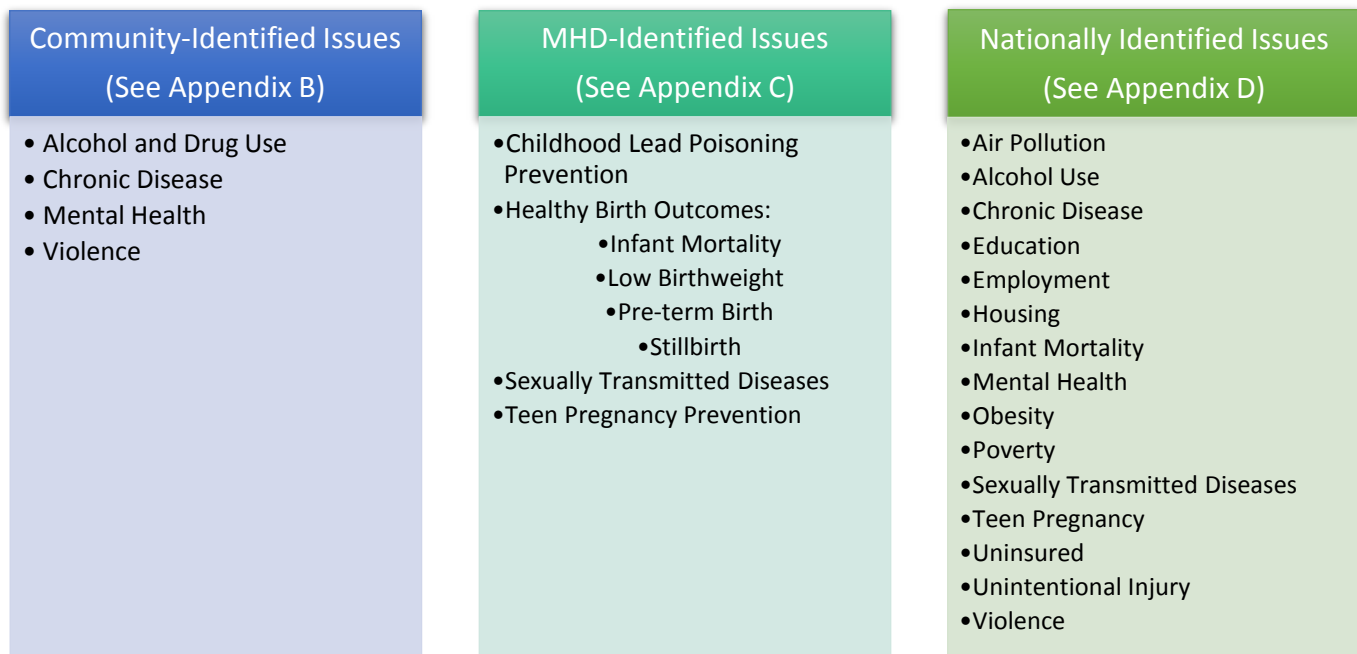
## Next Steps

The Institute of Medicine defines public health as *what we do as a society to assure the conditions in which people can be healthy*. Data collection is just the beginning of the work in addressing health needs in a community. The next step is to develop a community health improvement plan.

A community health improvement planning process uses community health assessment (CHA) data to select priority issues upon which to focus, develop and implement strategies for action, outline the responsibilities of a variety of stakeholders in addressing these issues, and establish accountability to ensure measurable health improvement.

Three perspectives of priority issues have already been identified (see Figure 6): issues identified by the Milwaukee community through a stakeholder meeting, focus groups, phone survey and key informant interviews; issues identified by the MHD; and issues identified from national sources.

**Figure 6: Priority Issue Perspectives**



The City of Milwaukee Community Health Assessment will be shared publicly for community comment and feedback. These comments and feedback, along with an asset map, will be added to the report and then used to move into a Community Health Improvement Planning (CHIP) Process that will identify the following:

- a) Three to five priority areas for action, and
- b) Those agencies and partners best suited for addressing these issues

Because public health is a shared social responsibility, the City of Milwaukee Health Department (MHD) cannot be primarily responsible for addressing and solving every health priority identified. However, the MHD does have its own specific responsibilities, represented in this process as the department's own strategic plan. The completion of the Milwaukee CHA and CHIP will therefore also be used to guide updates and revisions to the MHD strategic plan.