Wisconsin State Health Assessment and Health Improvement Plan 2017

Access the report at Healthy.Wisconsin.gov



A letter from Linda Seemeyer Secretary, Wisconsin Department of Health Services

Dear Partners in Health and the People of Wisconsin:

For decades, we have worked to be a healthier Wisconsin through the state health plan, which is informed by data, evidence, and the community.

The current ten-year state health plan, *Healthiest Wisconsin 2020*, is "both a product – a state health plan – and an ongoing process using science, quality improvement, partnerships and large-scale community engagement." It is in that spirit of collaboration and continuous improvement that we are pleased to share *Healthy Wisconsin*.

Healthy Wisconsin and the Wisconsin Health Improvement Planning Process were driven by the great collaborative work that has taken place since preparation for *Healthiest Wisconsin 2020* began nearly ten years ago. One of Wisconsin's great assets is the sense of community and innovation in health.

Even as people and communities throughout Wisconsin continue to work broadly on all matters of health and wellbeing, Healthy Wisconsin invites us to align around five health priorities - alcohol, nutrition and physical activity, opioids, suicide and tobacco. Together, we can ensure that everyone can live better, longer.

Sincerely,

Tin Deemuper



Index

Foundational Work of Healthy Wisconsin
Healthiest Wisconsin 2020: Framework, Vision, Goals and Focus Areas6
The People of Wisconsin
Wisconsin Health Improvement Planning Process
Public Health Infrastructure in Wisconsin
Health in Wisconsin23
Alcohol and Drug Abuse25
Chronic Disease
Communicable Diseases
Environmental Health
Healthy Growth and Development
Injury and Violence
Mental Health
Nutrition and Healthy Foods53
Oral Health
Physical Activity61
Reproductive and Sexual Health64
Tobacco
Emerging Issues
Adverse Childhood Experiences (ACEs), Trauma and Resilience73
Alzheimer's Disease and Related Dementia75
Wisconsin Health Improvement Plan77
Priority: Alcohol
Priority: Nutrition and Physical Activity85
Priority: Opioids
Priority: Suicide
Priority: Tobacco
References
Appendix
Demographic Maps103
Health Issue Maps



Thank you for reviewing the state health assessment and health improvement plan. This report provides important information regarding the health status of Wisconsin's residents — including successes, challenges and identified opportunities to work together to continue to make improvements.

Foundational Work of Healthy Wisconsin







Healthiest Wisconsin 2020: Framework, Vision, Goals and Focus Areas

Healthy Wisconsin is an initiative driven by Heathiest Wisconsin 2020 (HW2020), our current 10-year state health plan. HW2020 represents "statewide community health improvement planning that is designed to benefit the health of everyone in Wisconsin and the communities in which we live, play, work and learn." The extensive plan was a collaborative effort with a diverse range of public health workers and partners totaling 1,500 people.

The vision of HW2020 is "everyone living better, longer." This was chosen to stress the importance of living a quality life from birth to old age, and to be inclusive of all communities and regions.

Complementing HW2020's vision are two goals. The first goal is to improve health across the lifespan. This preventative approach emphasizes the importance of starting healthy practices at a young age in order to avoid things like chronic disease and injury, and continuing them until the end of life.

The second goal of HW2020 is to eliminate health disparities and achieve health equity. Making sure everyone in Wisconsin has access to good health is a very important part of this plan. There are large health differences between various communities in Wisconsin, which means not everyone has the same chance to live a healthy life. HW2020, and its follow-up Baseline and Health Disparities Report, looked at things like structural disadvantage along with the social determinants of health to help us better understand current health disparities.

HW2020 calls special attention to social determinants, which are the social, economic and educational factors that influence health. These factors became an element of the prioritization criteria established for identifying health issues of importance in Wisconsin, and the steering committee for WI-HIPP (Wisconsin Health Improvement Planning Process) included representation of stakeholders working in the areas of social, economic and educational policy and practice in Wisconsin. The steering committee strongly agreed with the public input that stressed the ongoing importance of social determinants in health outcomes.

Because we know that these factors underlie many health problems, we urge anyone working on the priorities issues identified in Healthy Wisconsin to seek ways to address these issues as well. Success in meeting the objectives laid out in this plan will be possible only as we include a focus on those experiencing health disparities, in the context of each priority and its associated implementation plans.

HW2020 includes 12 health focus areas that address specific health conditions and need our attention. This assessment is structured around these focus areas.

Finally, HW2020 includes nine infrastructure focus areas designed to look at our public health system and how it operates. This part of the plan aims to make health systems work more efficiently for the different people and communities in Wisconsin.

Assessing Population Health in Wisconsin

Another significant part of Healthiest Wisconsin 2020 was the <u>Baseline and Health Disparities</u> <u>Report</u>. This 26-chapter, 1,000-page document was created by the Wisconsin Department of Health Services in 2014 with the goal of using HW2020 to identify health differences throughout the entire state. The report focused largely on groups of people who are especially vulnerable to health disadvantages; these specifically chosen populations were racial and ethnic minority populations; people of lower socioeconomic status; people with disabilities; people who identify as lesbian, gay, bisexual and transgender (LGBT); and those in different geographical locations across the state.

Wisconsin state statute requires local health departments to complete regular community health assessments. The Affordable Care Act introduced the requirement that nonprofit hospitals assess their community's health every three years. Other organizations such as community action agencies and federally qualified health centers are also doing more to assess their population's health. Because so many community partners are required to conduct assessments, stakeholders are doing more to work together to ensure alignment. The University of Wisconsin-Population Health Institute has a project devoted to the review of these community health assessments in an effort to identify shared priorities across the state. The Institute is also the creator of the County Health Rankings and Roadmaps, and generates periodic progress reports and health report cards based on the HW2020 framework and indicators.

From December 2014 to January 2016 the State Innovation Model (SIM) was planned and executed with this goal: "to transform the health care system in a way that works for all stakeholders and advances health care value for Wisconsinites." The \$2.45 million plan was completed with the support of the Office of Governor Scott Walker, the Wisconsin Department of Health Services, the Statewide Value Committee, and the Center for Healthcare Value, along with several multi-sector workgroups representing the diverse interests of the project. The report, which included "specific population health components, was also available to the public for feedback through the SIM website and periodic town hall meetings.

The SIM report covered a significant amount of information. The leadership team recognized the importance for everyone involved to agree to clear, shared goals and a united purpose. The document was developed based on examples like the "Sustainable Transformation Model" and the "Collective Impact Model." In the report, diabetes was identified as a pilot issue, specifically looking at the co-conditions of diabetes and hypertension and diabetes and depression. It also included a Plan to Improve Population Health, which was reviewed by the Centers for Disease Control and Prevention. The team was invited to present its findings and experiences with the CDC's National Center for Chronic Disease Prevention and Health Promotion.

Population Health Assessments in Wisconsin

Assessment	Description	Resources
Healthiest Wisconsin 2020	This 10-year state health plan is the third in a series of statewide community health improvement plans designed to benefit the health of everyone in Wisconsin and its communities.	Healthiest Wisconsin 2020 Main Plan (2010)
Healthiest Wisconsin 2020: Baseline and Health Disparities Report	This report offers baseline data for the health focus areas of Healthiest Wisconsin 2020. Also included are data about health disparities among some populations and communities in Wisconsin.	Healthiest Wisconsin 2020 Baseline and Health Disparities Report (2014)
Assessing and Improving Community Health in Wisconsin	University of Wisconsin Population Health Institute project to look at the priorities selected through local health assessments.	Accessing and Improving Community Health in Wisconsin
State Innovation Model – State Health Innovation Plan	Through a \$2.49 million grant from the Centers for Medicare and Medicaid Services Innovation Center, a statewide collaboration created a comprehensive State Health Innovation Plan (SHIP) to transform the health care system.	State Health Innovation Plan (2016) Wisconsin State Profile
County Health Rankings and Roadmaps	An assessment driven by data to identify state- specific, data-driven and realistic priorities, objectives and strategies to address identified needs and gaps.	Wisconsin Mental Health and Substance Abuse Needs Assessment (2014)
Title V Maternal and Child Health (MCH) Block Grant Needs Assessment	A five-year statewide needs assessment and plan of action to address priorities identified during the process.	<u>Wisconsin Department of Health Services</u> <u>Maternal Child Health Needs Assessment</u> <u>Website</u>
Wisconsin Child Health Needs Assessment	A needs assessment, the first phase in the ACTIVATE Initiative. Assessed "Wisconsin's strengths, program and policy gaps and particular ideas of how a community-academic partnership might best serve Wisconsin's children."	<u>Activate – Partnering to Transform Child</u> <u>Health in Wisconsin (2015)</u>

The People of Wisconsin



In 2015, Wisconsin had a total population of:

5,771,331

This represented a 1.5% increase from 2010.

50.3%

Females are slightly greater in number than males.

49.7%

Wisconsin's racial and ethnic demographics mirror its neighboring Upper Midwestern states of Iowa and Minnesota.



Wisconsin has an older population than many other states, and the proportion of younger residents is going down.



Education is linked to better health outcomes, including having a greater sense of control for one's self, earning more money and living longer. Wisconsin ranks among the best in the U.S. for the number of residents who have graduated high school, nearly 9 out of 10. In Wisconsin, 2 out of 3 adults have some post-secondary (or college) education.



The average household income in Wisconsin is \$52,738; the U.S. national average was \$55,775. According to U.S. Census data, the national poverty rate in 2014 was 14.8%, or approximately 46.7 million people. In Wisconsin, the poverty rate for the same year was 12.1%. The Institute for Research on Poverty at the University of Wisconsin-Madison issued the Wisconsin Poverty Report with 2014 data in June 2016 using the Wisconsin Poverty Measure.



Minority and Vulnerable Populations in Wisconsin

In Wisconsin, and across America, there are certain groups of people who are especially vulnerable to poor health. Often it is harder for them to live healthy lives because of circumstances or other challenges beyond their control. Because we want everyone in our state to live better, longer, it is important that we directly name and address these groups. Continuing our work started in the Healthiest Wisconsin 2020 Baseline and Health Disparities Report, we identified these groups: racial and ethnic minorities; people of lower socioeconomic status; people with differing abilities; LGBT populations; and those who live in specific parts of the state.

It is important to remember that even within each of these groups there is a lot of diversity. While we are addressing them in larger, general terms, we recognize that the needs of individuals within each group might vary significantly. Where people live, various family structures, different values, assorted levels of education, plus many other factors influence each person's outcomes within these groups. There are also people who fit into more than one of these categories, which places them in a unique position, and we are working on figuring out how that affects their health and wellbeing.

The following report sections look specifically at some of the health disparities experienced by these groups. Reading this information can be difficult, but it is important to talk about these health differences and why they happen. It is also important to remember that each group has unique strengths and assets they can draw on to face challenges. The data below come from the Baseline and Disparities Report, which was relased in 2014.

Racial and Ethnic Minorities

The four diverse racial and ethnic minority populations identified by federal, state and local initiatives are: African American, Hispanic/Latino, Asian, and American Indian. These four groups make up an estimated 15% of Wisconsin's total population.

Some of the health differences for racial and ethnic minorities include:

- In 2013, the death rate of infants less than one year old, in a population of 1,000, is 5.2 for Whites and 14.0 in the Black community.
- Alcohol liver disease death rates were almost six times higher for the American Indian population than any other population in Wisconsin.
- The Black and Hispanic/Latino communities were twice as likely as whites to experience frequent mental distress.

Socioeconomic Status

Socioeconomic status measures economic, social and work status.

Some of the health differences we see here are:

- Adults with low household incomes (<\$20,000) have a significantly higher rate of smoking than both middle (\$20,000-\$74,999) and high income households (>\$75,000).
- Low-income adults in Wisconsin experienced frequent mental distress at a rate more than twice that of middle-income adults and six times that of high-income adults.
- Nearly one-half of children in poor households (0-99% of FPL) had experienced two or more Adverse Childhood Experiences (ACEs); the proportion decreased as household income increased.

Differing Abilities

Disabilities and impairments can include blindness and visual impairments, deafness and being hard of hearing, development disabilities and physical disabilities.

Some of the health differences for those with differing abilities include:

- Nearly 1 in 3 adults with a disability experienced frequent mental distress compared to 1 in 14 of those with no disability.
- Nearly 1 in 3 adults with disabilities reported four or more adverse childhood experiences (ACEs) compared to 1 in 7 of those who do not have a disability.
- People with disabilities are significantly more likely to be overweight or obese and have higher rates of diabetes.
- More than 1 in 3 adults with disabilities are current smokers, compared to 1 in 5 of those who not report a disability.

LGBT

The LGBT community includes people from diverse backgrounds. Community members vary by race, ethnicity, age, income and education. For some, sexual orientation or gender identity is central to their self-concept.

Some of the health differences for LGBT youth and adults include:

- LGBT youth are almost 5 times as likely to not go to school, to feel unsafe at school or on their way to or from school.
- LGBT youth are nearly twice as likely to feel so sad or hopeless that they stop doing some usual activities, 4 times as likely to attempt suicide and 6 times as likely to have a suicide attempt resulting in injury. LGBT adults are nearly 3 times as likely to feel sad or depressed and 7 times as likely to consider suicide.
- > LGBT adults are 6 times as likely to be afraid for their safety.

Wisconsin Health Improvement Planning Process

WI HIPP officially commenced in 2015 and concluded in 2016. The process was documented, communicated, and feedback solicited through the <u>WI HIPP web page</u>.

The state health assessment worked within the framework of Healthiest Wisconsin 2020 and the health focus areas. Using the state's assessments of health from 2010 through 2015, and applying prioritization criteria reviewed and approved by the WI HIPP Steering Committee, approximately two dozen health issues emerged for review by subject matter experts, the public and the Steering Committee. Through discussion and use of a multi-voting technique, the Steering Committee identified a shorter list of health issues. This list required additional feedback from subject matter experts, including identification of baseline data and potential measurable goals for 2020.

Through additional discussions, the list was shortened to five priorities and one cross-cutting issue. These priorities were reviewed and approved by Department of Health Services Secretary Kitty Rhoades in May 2016. The priorities were revealed to the public via a workshop at the Wisconsin Public Health Association annual conference, and then shared online for public feedback throughout the summer.

Subject matter experts for each priority were identified and asked to help develop concise work plans. These priority plans were vetted with leadership groups across the state who are working closely with the issues. The consolidated plans were shared with the Steering Committee for final discussion and review in September 2016.

The consolidated plans lay the framework for the Priority Action Teams, which will convene regularly through December 2019 to report on and track the progress of the State Health Improvement Plan. The Priority Action Teams will report to the Public Health Council, which is statutorily charged with monitoring and advising on the implementation of the state health plan.

Wisconsin Health Improvement Planning Process (WI HIPP)

Phase	Description					
Pre-WI HIPP	HW2020 (2010)					
	• "Do not re-invent the wheel", one of the strongest messages that emerged in preparation for HW2020 and a message that re-emerged throughout WI HIPP					
	 Recommended to 1) continue to focus on underlying determinants of health, not just specific diseases; 2) framework should allow partners to link their programmatic strategies to HW2020 goals; 3) retain focus on a strong public health system and connected partners 					
	Used multiple processes, techniques and practical knowledge					
	Engaged more than 1,500 stakeholders statewide					
	Identified 23 focus areas					
	Baseline and Health Disparities Report (2014)					
	• Consisted of 1,000+ pages, formatted as power point presentations by population and health issue					
	 Identified and highlighted health disparities among specific communities 					
	• Utilized in 2014 and 2015 for community conversations about health issues and disparities					
	State Innovation Model (SIM) - State Health Innovation Plan; Prioritization Criteria (2014-2015)					
	 Utilized collective impact model for engagement, other processes to engage many stakeholders in a short timeframe 					
	> Developed State Health Innovation Plan, with focus on diabetes, depression and hypertension					
	Collected feedback from stakeholders, the public and the CDC					
	Public Health Council - Prioritization Criteria Developed (2015)					
Phase 1	Establish Collaborative Process					
October – November 2015	Stakeholder groups identified					
	Steering Committee assembled; first meeting held					
	Prioritization criteria developed and approved					
Dhase 2	Compile Wisconsin State Health Assessment					
	Convened subject matter experts					
2016	Convened data experts, chief medical officers					
	Collected public feedback and input on pressing health issues					
	> Developed fact sheets for health issues that met prioritization criteria					

Chart continues on next page >

> Chart continued from previous page

Phase	Description				
Phase 3 February - May 2016	 Establish Three to Five Priorities for Wisconsin State Health Improvement Plan Convened WI HIPP Steering Committee (February, April) Facilitated Wisconsin Public Health Association presentation and feedback session 				
Phase 4	Develop Wisconsin State Health Improvement Plan				
May - February 2017	 Engaged subject matter experts in identification of goals, measurable objectives, and strategies for improvement 				
	Solicited feedback from priority-specific stakeholders				
	• Collected public feedback from Wisconsinsites on their involvement with the priorities				
	Convened Steering Committee to approve priority plans				
	Finalize State Health Improvement Plan				
Phase 5	Implement Wisconsin State Health Improvement Plan				
March 2017 - December 2019	Establish and regularly convene Priority Action Teams				
	 Monitoring of and advising on implementation of State Health Improvement Plan by Public Health Council 				
	> Prepare for next cycle				
	Launch Healthy Wisconsin				

Wisconsin Health Improvement Planning Process (WI-HIPP)

Steering Committee Members

- > Rick Abrams, Wisconsin Medical Society
- > Bevan Baker, Milwaukee City Health Department
- > Sarah Beversdorf, Ministry Health
- Isaiah Brokenleg, Great Lakes Inter-Tribal Epidemiology Center
- Mary Cay Freiberg, West Allis Department Board of Health and Wisconsin Association of Local Health Departments and Boards (WALHDAB) Board
- Bridget Cullen, Wisconsin Department of Children and Families
- > Cheryl DeMars, The Alliance
- > Gina Dennik Champion, Wisconsin Nurses Association
- > Lisa Ellinger, Employee Trust Fund
- Mari Freiberg, Wisconsin Primary Health Care Association and Scenic Bluffs Community Health Centers
- Mary Kay Grasmick, Wisconsin Hospital Association
- > Brenda Gray, Milwaukee Area Health Education Center
- > Pam Guthman, University of Wisconsin School of Nursing
- > Eileen Hare, Wisconsin Department of Public Instruction
- Bill Hanna, Wisconsin Department of Health Services
 Office of the Secretary
- Stephanie Harrison, Wisconsin Primary Health Care Association
- Elizabeth Hudson, Wisconsin Office of Children's Mental Health Director
- > Sarah Jensen, Wisconsin Department of Military Affairs
- Bill Keeton, Public Health Council Steering Committee Co-Chair
- Karen McKeown, Wisconsin Department of Health Services – Public Health Steering Committee Co-Chair
- Kevin Moore, Wisconsin Department of Health Services - Medicaid
- > Paula Morgen, Theda Care
- > Lisa Mattes, CVS

- > Karen Ordinans, Children's Health Alliance of Wisconsin
- > Neil Patel, CVS
- Molli Rolli, Wisconsin Medical Society and Mendota Mental Health Institute
- Matt Strittmater, La Crosse County Human Services
- > Joy Tapper, Milwaukee Health Care Partnership
- Barb Theis, Wisconsin Association of Local Health Departments and Boards (WALHDAB) Board
- Karen Timberlake, University of Wisconsin Population Health Institute
- > Becky Turpin, University of Wisconsin Hospitals and Clinics
- > Sam Wilson, AARP

Wisconsin Health Improvement Planning Process (WI-HIPP)

Department of Health Services Team

- > Milda Aksamitauskas
- > Joyce Allen
- Oskar Anderson*
- > Sarah Blackwell
- > Lisa Bullard-Cawthorne
- > Beth Collier
- > Ousmane Diallo
- > Julianne Dwyer
- > Megan Elderbrook
- > AJ Ernst
- > Jason Fischer
- Shari Galitzer
- > Crystal Gibson
- > Chris Gjestson
- > Brittany Grogan
- > Andrea Gromoske
- > Eric Grosso
- > Linda Hale
- > William Hanna
- > Chris Huard
- Vicki Huntington
- > Tasha Jenkins*
- Mimi Johnson*
- > Beth Kaplan
- > Alaina Knief
- > Ashley Kraybill
- > Paul Krupski
- > Terry Kruse
- > Martha Mallon
- > Carlie Malone
- > Robin Matthies

- > Karen McKeown*
- > Richard Miller
- > Donna Moore
- > Jon Morgan
- > Christine Niemuth
- > Liz Oftedahl
- > Mary Pesik
- > Mike Quirke
- > Camille Rodriguez
- > Angie Rohan
- Ragini Sathasivam
- Jessica Seay
- > Stephanie Smiley*
- > Kelli Stader
- Spencer Straub
- > Maggie Thelen
- > Susan Uttech
- > Shelby Vadjunec
- > Chuck Warzecha
- > Anne Ziege
- > And many others who provided review and support.

* WI HIPP Division of Public Health Leadership Team

Public Health Infrastructure in Wisconsin

In addition to identifying 12 health focus areas, Healthiest Wisconsin 2020 identified nine infrastructure focus areas as "essential underpinnings of how work gets done". Although the goal of WI HIPP was specifically to identify priority health issues for the state to work on together, the Steering Committee also recognized that many of these infrastructure focus areas are the tools by which the health goals will be met. The importance of a strong infrastructure was also a key theme that emerged from public input.

- Green represents ranking among the top 10 best states
- Red represents ranking among the bottom 10 states

Socioeconomic Status

- ▲ 3rd for high school graduation (AHR 2015)
- ▲ 4th (tied) for children with health insurance (AHR-HWC 2016)
- ▲ 6th for income disparity (AHR 2015)
- ▲ 6th for lack of insurance (AHR 2015)
- ▲ 6th for food insecurity among those 60 and older (AHR-SR 2016)
- ▲ 7th for percentage of households experiencing food insecurity (AHR-HWC 2016)
- ▲ 8th for percentage of adults aged 65 and older who live in households at or below 100% of the poverty threshold (AHR-SR 2016)
- ▲ 9th for percentage of adults aged 65 and older who report volunteering through or for an organization in the past 12 months (AHR-SR 2016)

Infrastructure in Wisconsin

Focus Area	Objectives	Reports and Resources
Access to High-Quality Health Services	 Assure access to high-quality health services Assure patient-centered health services for all 	Healthiest Wisconsin 2020 Baseline and Health Disparities. Report – Access to High-Quality Health Services (2014) Wisconsin Primary Care Program Health Care Coverage Health Insurance Coverage in Past Year (2014)
Collaborative Partnerships	 Identify resources to support partnerships Build effective partnerships resulting from respect and empowerment 	Local Public HealthArea AdministrationLocal Public Health DepartmentsTribal Affairs OfficePartner Communications and Alerting (PCA) PortalWisconsin Association of Local Health Departments and BoardsOther PartnershipshealthTIDEMinority Health ProgramAging and Disability Resource Centers (ADRCs)Healthy Brain Initiative (HBI) Project
Emergency Preparedness, Response, and Recovery	 Increase integration and partner collaboration Increase community engagement 	Health Emergency Preparedness and Response Wisconsin Hospital Emergency Preparedness Program (WHEPP) Wisconsin Emergency Assistance Volunteer Registry (WEAVR) Cities Readiness Initiative ReadyWisconsin
Funding	 Establish stable revenue sources to support health departments Effectively use funds available to support health departments 	Wisconsin Local Health Department Survey (2015) Preventive Health and Health Services Block Grant. (Prevention Block Grant) Public Health Consolidated Contracting

Chart continues on next page >

> Chart continued from previous page

Focus Area	Objectives	Reports and Resources
Health Literacy	 Increase awareness of literacy's effects on health outcomes Strengthen communication for effective health action 	Cultural and Linguistically Appropriate Sericies in Health and Health Care (CLAS Standards) Minority Health Community Grants Wisconsin Health Literacy
Improve Data to Advance Health	 Exchange data Make data accessible Use data standards to measure health 	 Wisconsin Interactive Statistics on Health Wisconsin Public Health Information Network Wisconsin Public Health Profiles Environmental Public Health Tracking: County. Environmental Health Profiles Wisconsin County Maternal and Child Health Profiles Public Health Meaningful Use Wisconsin Health Information Organization Wisconsin State Health Information Network Death Data Births and Infant Deaths Data Immunization Data
Public Health Capacity and Quality	 Strengthen quality in practice Achieve public health standards 	Public Health Accreditation in Wisconsin Public Health Employee Orientation Wisconsin Admin Code ch. DHS 140 - Required Services
Public Health Research and Evaluation	 Forge new paths to a healthy Wisconsin Take actions that are proven to work Target research to reduce health disparities 	University of Wisconsin Population Health Institute What Works for Health Wisconsin Public Health Research Network

Chart continues on next page >

> Chart continued from previous page

Workforce that Promotes and Protects Health Assure the workforce is prepared to practice in evolving delivery systems Establish systems to analyze workforce sufficiency, competency Wisconsin Stat ch. 251 – Local Health Officials Wisconsin Public Health Workforce Report (2011) Wisconsin Public Health Workforce Report (2011) Wisconsin Clinical Laboratory Spinsor (2011) Wisconsin Clinical Laboratory Spinsor (2011) Wisconsin Public Health Workforce Report (2011) Wisconsin Clinical Laboratory Spinsor (2011) Wisconsin Public Health Workforce Report (2011) Wisconsin Publi	Focus Area	Objectives	Reports and Resources
workforce sumercing, competency Wisconsin Clinical Laboratory Science Workforce Survey Report (2012) Wisconsin Public and Community Health Registered Nurse. Workforce Report (2013) Wisconsin Local Health Department Survey (2015) Wisconsin Area Health Education Center - Workforce Data and Analysis	Workforce that Promotes and Protects Health	 Assure the workforce is prepared to practice in evolving delivery systems Establish systems to analyze workforce sufficiency, competency and diversity 	Wisconsin Stat ch. 251 - Local Health Officials Wisconsin Public Health Workforce Report (2011) Wisconsin Clinical Laboratory Science Workforce Survey. Report (2012) Wisconsin Public and Community Health Registered Nurse. Workforce Report (2013) Wisconsin Local Health Department Survey (2015) Wisconsin Area Health Education Center - Workforce Data and Analysis





Health in Wisconsin

This section details health issues in the state, using the framework of Healthiest Wisconsin 2020.

The first table in this section highlights the leading causes of death by age group for Wisconsin residents. The data used by subject matter experts, data leadership team, the WI HIPP Steering Committee and the public were based on the 2014 death data from the state.* In 2014, there were 50,127 deaths of Wisconsin residents. While the total number of deaths increased 10% from 2009 to 2014, the age-adjusted death rate, 711 per 100,000, decreased slightly. The death rate in Wisconsin is comparable to the national rate. Overall, the leading causes of death in Wisconsin in 2014 were cancer and heart disease, accounting for almost half (45%) of all deaths.

The leading causes of death and death rates vary by sex, age, race/ethnicity and socioeconomic status. Age-adjusted mortality rates by sex in Wisconsin mirror the national rates; in 2014, males had a 38% higher risk of dying than females. Age-adjusted mortality rates were also higher among non-Hispanic American Indian/Alaska Native and Non-Hispanic Black/African American populations compared to White; Asian and Hispanic groups had lower age-adjusted mortality rates than White.

Following the table are profiles on the 12 health focus areas of Healthiest Wisconsin 2020, in addition to profiles of emerging issues. Each profile includes:

- Indicators from America's Health Rankings relevant to the health focus areas. These indicators can be used to demonstrate Wisconsin's ranking over time and across the nation.
- Where applicable, there are additional indicators included where Wisconsin was most recently among the 10 best or 10 worst states in the nation, as ranked by America's Health Rankings (AHR), America's Health Rankings Health of Women and Children Report (AHR-WC) and America's Health Rankings Senior Report (AHR-SR).
- Each profile includes a brief discussion of key health issues related to the focus area. All
 issues that were submitted for consideration and met preliminary criteria established by
 the WI HIPP Steering Committee are included.
- Each profile also contains highlights of what we are doing and what we can do to address the health issues related to the focus area.

* The 2015 data have since become available and can be accessed here.

Causes of Death

Leading causes are highlighted in different colors to demonstrate changes over age groups in population.

Leading Causes of Death by age	Infants under 1	1 - 4	5 - 14	15 - 24	25 - 34	35 - 44	45 - 54	55 - 65	65 and older	All ages
lst	Short Gestation/ Low birth weight (92)	Unintentional Injuries (9)	Unintentional Injuries (23)	Unintentional Injuries (209)	Unintentional Injuries (301)	Unintentional Injuries (256)	Malignant Neoplasms (767)	Malignant Neoplasms (2,091)	Heart Disease (9,215)	Malignant Neoplasms (11,278)
2nd	Congenital Malforma- tions (87)	Malignant Neoplasms (7)	Malignant Neoplasms (12)	Suicide (116)	Suicide (111)	Malignant Neoplasms (165)	Heart Disease (491)	Heart Disease (1,161)	Malignant Neoplasms (8,160)	Heart Disease (11,066)
3rd	Unintentional Injuries (23)	Pneumonia/ Influenza (7)	Suicide (47)	Homicide (47)	Malignant Neoplasms (51)	Heart Disease (143)	Unintentional Injuries (317)	Unintentional Injuries (346)	Chronic Lower Respiratory (2,390)	Unintentional Injuries (2,891)
4th	SIDS (21)	Homicide (7)	Chronic Lower Respiratory (5)	Malignant Neoplasms (24)	Homicide (46)	Suicide (125)	Chronic Liver Disease (159)	Chronic Lower Respiratory (263)	Stroke (2,168)	Chronic Lower Respiratory (2,742)
5th	Placenta/ Cord/ Membrane (17)	Congenital (*)	Homicide (*)	Heart Disease (14)	Heart Disease (36)	Chronic Liver Disease (43)	Suicide (159)	Chronic Liver Disease (262)	Alzheimer's (1,857)	Stroke (2,468)
6th	Maternal Pregnancy Complication (14)	Septicemia (*)	Heart Disease (*)	Congenital (6)	Chronic Liver Disease (11)	Diabetes (37)	Stroke (95)	Diabetes (197)	Unintentional Injuries (1,407)	Alzheimer's (1,864)
7th	Neonatal Hemorrhage (10)	In Situ Neoplasm (*)	Congenital (*)	Chronic Lower Respiratory (5)	Stroke (10)	Stroke (23)	Diabetes (81)	Stroke (165)	Diabetes (1,009)	Diabetes (1,331)
8th	Respiratory Distress (*)	Heart Disease (*)	Cerebro- Vascular (*)	HIV (*)	In Situ Neoplasm (9)	Pneumonia/ Influenza (20)	Chronic Lower Respiratory (64)	Suicide (120)	Nephritis (864)	Pneumonia/ Influenza (981)
9th	Bacterial Sepsis (*)	Pneumonitis/ Asp. (*)	Septicemia (*)	Pneumonia/ Influenza (*)	Chronic Lower Respiratory (7)	Homicide (16)	Pneumonia/ Influenza (43)	Septicemia (67)	Pneumonia/ Influenza (834)	Nephritis (964)
10th	Necrotizing Enterocolitis (*)	_	Diabetes (*)	Pregnancy Related (*)	Septicemia (6))	HIV (10)	Nephritis (22)	Pneumonia/ Influenza (66)	Parkinson's (600)	Suicide (755)

Source: Office of Health Informatics, Division of Public Health, Department of Health Services.

Health Profiles:

Alcohol and Drug Abuse



Alcohol and Drug Use

Focus Area	Objectives	Reports and Resources
Focus Area	 Objectives Change underlying attitudes, knowledge and policies Improve access to services for vulnerable people Reduce risky and unhealthy alcohol and drug use 	Reports and Resources Reports Healthiest Wisconsin 2020 Baseline and Health Disparities. Report (2014) Wisconsin Epidemiological Profile on Alcohol and Other. Drug Use (2014) Fact Sheets Neonatal Abstinence Syndrome in Wisconsin (2015) Neonatal Abstinence Syndrome Rate by County of Residence. Wisconsin, 2009-2014 (Map) (2015) Opioid Overdose Prevention in Wisconsin (2015) Opioid Overdose Prevention in Wisconsin (2015) Irauma and Substance Use in Wisconsin (2015) Alcohol and Drug-Facilitated Sexual Assault in Wisconsin (2015) Operating While Intoxicated (OWI) in Wisconsin (2015) Underage Drinking in Wisconsin (2015)
		Adult Binge Drinking in Wisconsin (2015) Risks of Snowmobiling with Alcohol and Other Drug Use (2014)

Alcohol and Drug Use	WI 2010	WI 2015	Best State 2015	WI Rank 2010	WI Rank 2015
America's Health Rankings (AHR)					
Binge Drinking (percent of adult population)	18.7	22.1	10.2	50	49
Drug Deaths (deaths per 100,000 population)	11.0	13.1	2.7	16	23

Utilizing America's Health Rankings (AHR), America's Health Rankings for Health of Women and Children (AHR-HWC), and America's Health Rankings Senior Report (AHR-SR).

Alcohol Abuse and Binge Drinking in Wisconsin

Binge Drinking

Binge drinking is the practice of consuming large quantities of alcohol in a single session, which is considered four drinks in one sitting for women and five drinks for men. Heavy

drinking is defined as more than two drinks per day for men and more than one drink per day for women. Adverse health outcomes associated with excessive alcohol consumption include cirrhosis of the liver and other chronic diseases, alcohol dependence and fetal alcohol spectrum disorder.

Wisconsin continues to rank among the worst in the nation for both heavy drinking and binge drinking among adults. Approximately one in four (24.3%) Wisconsin adults engaged in binge drinking in the previous month, compared to the national median of 18.3%; and 9.8% of Wisconsin adults engaged in heavy drinking, compared to the national median of 6.6%. More than one in three high school students in Wisconsin drank alcohol within the past 30 days.

In 2012, the estimated annual costs associated with excessive alcohol consumption in Wisconsin totaled \$6.8 billion. In 2010, at least 1,732 people died (3% of all deaths), 3,511 were injured and 67,345 were arrested as a direct result of alcohol use and misuse in Wisconsin. The death rate due to alcoholic liver disease has increased by 28% since 2001.

While Whites have the greatest number of deaths, American Indians have the highest age-adjusted death rate from alcoholic liver disease.

- Binge drinking rates were significantly higher among males and younger age groups.
- Wisconsin's rate of binge drinking among women of childbearing age is the highest in the nation.
- Binge drinking rates were significantly lower for Black adults compared to Whites.
- White students were significantly more likely to binge drink than were Black, Hispanic and Asian students.
- Early initiation of alcohol use (before age 13) was most prevalent among Latino and Black students.



Red represents ranking among the bottom 10 states

Alcohol Abuse and Binge Drinking

- 45th for chronic drinking (AHR 2015)
- 48th for excessive drinking (AHR 2015)
- 48th for women aged 18-44 who self-report either binge drinking (four or more drinks on one occasion) in the past month or chronic drinking (eight or more drinks per week) (AHR-HWC 2016)
- 48th (tied) for percentage of children aged 12 to 17 who were dependent on or abused illicit drugs or alcohol in the past year (AHR-HWC 2016)
- 49th for binge drinking (AHR 2015)
- 50th for percentage of adults aged 65 and older who self-report either binge drinking (five or more drinks [men] or four or more drinks [women] on one occasion in the last year) or chronic drinking (more than two drinks [men] or more than one drink [women] per day) (AHR-SR 2016)

Drug Use in Wisconsin

Drug overdose and prescription drug abuse are related to many types of mortality, morbidity, and criminal behavior. Drug overdose deaths are now the leading injury cause of potential years

of life lost before age 65, and have overtaken automobile accidents as a cause of death. More Wisconsin residents died in 2013 from drug poisoning than from suicide, breast cancer, colon cancer, firearms, influenza or HIV. Wisconsin's patterns of illicit drug consumption mirror national trends. This includes the use of prescription drugs for non-medical purposes.

Drug Use and Drug-related Death in Wisconsin

- Age-adjusted rate of drug-related mortality increased from 6.7 deaths per 100,000 population in 2004 to 15.2 deaths per 100,000 in 2015.
- Charges for drug-related hospitalizations in Wisconsin totaled \$317 million in 2012 (48% increase from 2004).

Non-Medical Use of Prescription Drugs in Wisconsin

- Of deaths related to prescription opioid overdose,
 93% occurred among individuals over age 25 in 2015.
- Opioid pain relievers including oxycodone, hydrocodone, methadone, and other prescription opioids contributed to 44% of overdose deaths in 2015.

Other Drug-Related Illness and Injury

- Heroin contributed to approximately 1 in 4 overdose deaths in 2013.
- Of deaths related to heroin overdose, 83% occurred among individuals over age 25 in 2015.
- > 70% of drug overdose deaths involved opiods in 2015.



What Are We Doing?

Governor's Task Force on Opioids

Heroin, Opiate Prevention and Education Agenda (HOPE) signed into law

Dose of Reality campaign

State Council on Alcohol and Other Drug Abuse (SCAODA)

What Can We Do?

Address underage drinking (ages 12-20)

Reduce adult binge drinking (18-34)

Reduce drinking among pregnant women

Reduce drinking and driving (especially among people ages 16-34)

Health Profiles: Chronic Disease



Chronic Disease

Focus Area	Objectives	Reports and Resources
Focus Area Chronic Disease Prevention and Management	Objectives	Reports and Resources Reports Healthiest Wisconsin 2020 Baseline and Health Disparities. Report (2014) The Epidemic of Chronic Disease in Wisconsin: Why it Matters to the Economy and What You Can Do to Help (2011) Wisconsin Diabetes Surveillance Report (2012) Burden of Asthma in Wisconsin (2013) Burden of Heart Disease and Stroke in Wisconsin (2010) Wisconsin Cancer Survival (2016) Wisconsin Pediatric Cancer Report (2016) Kisconsin Pediatric Cancer Report (2016) All Cancer in Wisconsin (2016) Breast Cancer In Wisconsin (2016) Breast Cancer Disparities between African American and White Women in Wisconsin (2016) Colorectal Cancer in Wisconsin (2016)
		Colorectal Cancer in Wisconsin (2016) Lung Cancer in Wisconsin (2016) Skin Cancer in Wisconsin (2016) Adolescent and Childhood Cancer in Wisconsin (2016)

Chronic Disease Prevention and Management	WI 2010	WI 2015	Best State 2015	WI Rank 2010	WI Rank 2015
America's Health Rankings (AHR)					
Cancer Deaths (deaths due to all causes of cancer per 100,000 population)	192.7	193.3	146.1	23	30
Cardiovascular Deaths (deaths due to CVD–including heart disease and stroke –per 100,000 population)	258.3	237.2	186.5	22	24
Obesity (percent of adults who are obese by self-report, with a body mass index [BMI] of 30.0 or higher)	29.2	31.2	21.3	34	36

Utilizing America's Health Rankings (AHR), America's Health Rankings for Health of Women and Children (AHR-HWC), and America's Health Rankings Senior Report (AHR-SR).

Chronic Disease

Chronic diseases are defined by the National Center for Health Statistics and the World Health Organization as illnesses that last for at least three months, and often for a long time. Chronic diseases, including cancer, cardiovascular disease, diabetes and stroke, are some of the most

common and expensive health problems. These diseases are hard to cure, often get worse over time and can leave people disabled. Some of the things people do that contribute to chronic disease, and the possible sickness and death that result from them, include smoking or chewing tobacco, not eating a healthy diet, not staying active and drinking too much alcohol.

Cardiovascular Disease

Cardiovascular disease is one of two leading causes of death in Wisconsin. Together, heart attacks and strokes cause approximately 1 in 3 deaths in the state. Direct and indirect costs for cardiovascular disease are estimated at approximately \$4 billion annually in Wisconsin. Even though the deaths from coronary heart disease have gone down, there is still a big difference in the number of people who die from it based on race and ethnicity.

Stroke is the leading cause of serious disability in Wisconsin, where over 2,500 people die from strokes each year. Many of the people who survive after a stroke will have major physical, mental and emotional disabilities. Strokes cost an estimated \$629 million each year in Wisconsin. People who have strokes are also much more likely to have hypertension.

According to the National Health and Nutrition Examination Survey (NHANES), more than 1.3 million adults have hypertension in Wisconsin. Of those, only half are controlled, and an estimated 275,000 people in Wisconsin do not know they have high blood pressure.

About 750,000 adults in Wisconsin have diabetes or prediabetes, and that number is growing each year. Diabetes costs about \$4.5 billion in Wisconsin. Diabetes causes many other health problems and people who have it need a lot of daily care to make sure they stay as healthy as possible.

▲ Green represents ranking among the top 10 best states

Cancer - Breast

 3rd for percentage of adults aged 65 to 74 who self-report having a mammogram and/or fecal occult/colonoscopy/ sigmoidoscopy screens within the recommended time period (AHR-SR 2016)

Cancer - Colorectal

 ▲ 4th for colorectal cancer screening (AHR 2015)

Cardiovascular

- ▲ 7th for heart attacks (AHR 2015)
- ▲ 8th for high cholesterol (AHR 2015)

Diabetes

- Ist (tied) for percentage of women aged 18 to 44 who have been told by a doctor that they have diabetes (excludes prediabetes and gestational diabetes) (AHR-HWC 2016)
- Sth for diabetes management (percentage of Medicare beneficiaries aged 65 to 75 with diabetes receiving a blood lipids test) (AHR-SR 2016)



Cancer

Cancer is not just one disease, but many diseases. There are more than 100 different types of cancer. The Wisconsin Tracking Program has data on 14 different types of cancer. Wisconsin also uses a population-based cancer registry, the Wisconsin Cancer Reporting System (WCRS). This system, housed within the Department of Health Services, was established in 1976 to collect information about how often people who live in Wisconsin get cancer. Since 1994, WCRS has been part of the National Program of Cancer Registries.

Every day, nearly 90 people in Wisconsin will find out they have cancer. Cancer is a leading cause of death in Wisconsin. In 2012, the most common types of cancer in Wisconsin were lung and bronchus, colon and rectum, breast and prostate. There are significant differences in the stages at which people are diagnosed and die depending on the kind of cancer and the race and gender of the person diagnosed.

What Are We Doing?

Million Hearts Wisconsin Blood Pressure Improvement Challenge

Wisconsin Chronic Disease Prevention Program

Wisconsin Comprehensive Cancer Control Program

Wisconsin Coverdell Stroke Program

Wisconsin Heart Disease and Stroke Alliance

Wisconsin Stroke Coalition

What Can We Do?

Increase implementation of quality improvement processes in health systems, including electronic health record adoption and increased institutionalization and monitoring of standardized quality measures at the provider and systems level.

Health Profiles:

Communicable Diseases



Communicable Diseases

Focus Area	Objectives	Reports	
Communicable Diseases	 Immunize Prevent disease, including strategies 	Healthiest Wisconsin 2020 Baseline and Health Disparities Report (2014)	
	populations	Wisconsin HIV Integrated Epidemiology Profile 2010-2014 (2016)	
		Wisconsin HIV/AIDS Surveillance Annual Review (2016)	
		Sexually Transmitted Disease in Wisconsin (2016)	
		Sexually Transmitted Disease in Wisconsin Surveillance Report (2016)	
		Epidemiologic Profile of Hepatitis C Virus (HCV) in Wisconsin (2014)	
		Wisconsin Hepatitis C Virus Surveillance Annual Review, 2015 (2016)	
		Wisconsin Tuberculosis Cases by County, 2005-2015 (2016)	
		Selected Vaccine Preventable Diseases Reported in Wisconsin, 1978-2015 (2016)	
		Immunization Data (2016)	
		Lyme Disease Trends in Wisconsin (2016)	

Communicable Diseases	WI 2010	WI 2015	Best State 2015	WI Rank 2010	WI Rank 2015		
America's Health Rankings (AHR)							
Infectious Diseases (cases per 100,000 population)	N/A	0.207	-1.09	N/A	35		
Immunization - Children (percent aged 19 to 35 months)	93.53	70.9	84.7	-	29		
Immunization HPV female	N/A	40.9	54.9	N/A	21		
Immunization HPV male	N/A	23.6	42.9	N/A	15		

Utilizing America's Health Rankings (AHR), America's Health Rankings for Health of Women and Children (AHR-HWC), and America's Health Rankings Senior Report (AHR-SR).

Communicable Diseases

Communicable diseases (infectious diseases) are illnesses caused by bacteria, viruses, fungi or parasites. As clean water, refrigeration, and sanitation get better and more common; and as safer, more effective vaccines become available, communicable diseases become less of a threat. However, people still get common diseases and new diseases are always being discovered.

Vaccines protect more than the individual that gets them, they prevent the spread of disease within the community. The number of adults who receive these possible life-saving vaccines remains low so new efforts are needed to encourage vaccination throughout life.

Immunizations

The Wisconsin Immunization Program, along with many other partners, has the goal of eliminating the spread of preventable diseases through vaccination and actions that will help stop outbreaks. Wisconsin has a computerized internet database program, the Wisconsin Immunization Registry (WIR), which records and tracks the dates Wisconsin children and adults get their shots.

In 2011, for most age groups, children in Wisconsin got their vaccines more frequently than other children in America. According to the CDC, in 2014:

- Vaccination rates among children aged 19-35 months living in Wisconsin were comparable to or higher than those of children nationally. Wisconsin ranked 29th for the percentage (70.9%) of children up-to-date with the full series of recommended immunizations.
- HPV vaccination rates among adolescents in Wisconsin are suboptimal, similar to the national rates, but are improving, with 39.7% of females and 21.6% of males aged 13-17 years receiving 3 doses of HPV vaccine. Among the 50 states, Wisconsin ranked 21st for females and 16th for males.
- During the 2014-2015 influenza season, only 57.2% of Wisconsin adults aged 65 and older received an influenza (flu) vaccination. Wisconsin ranked the lowest of all other states (national rate: 66.7%).

- Green represents ranking among the top 10 best states
- Red represents ranking among the bottom 10 states

Vaccinations

- Sth for percentage of adolescents aged 13 to 17 years who received ≥1 dose of tetanus toxoid, reduced diphtheria toxoid, and acellular pertussis (Tdap) since age 10 years (AHR HWC 2016)
- ▼ 43rd for pertussis (AHR 2015)
- 47th for percentage of adults aged 65 and older who self-report receiving a flu vaccine in the last year (AHR-SR 2016)

Incidence of Disease

- Since 2002, the number of people with meningococcal disease in Wisconsin has decreased because of new vaccines and increased vaccinations.
- During 2007-2010, the rates of infection of both Streptococcus pneumoniae and group B streptococcal (GBS) among Blacks and American Indians were considerably higher than among Whites.
- > During 2012, Black people with influenza in Wisconsin were hospitalized more often than other racial and ethnic groups.
- Asians experience hepatitis B and tuberculosis at higher rates than other racial/ethnic groups in Wisconsin.

Hepatitis C Virus

Hepatitis C is a liver infection caused by the hepatitis C virus (HCV). HCV is spread by exposure to blood from a person that has it; it can also be spread through sex or from a mother to her infant. Today most new HCV infections are caused by sharing needles, syringes or other equipment used to inject drugs. Wisconsin has about 2,500 new reports of HCV infections each year; approximately 90,000 people in Wisconsin are living with HCV infection. Many people are infected with HCV, but not diagnosed.

Infection rates are increasing among younger people in Wisconsin, with most of these cases related to injection drug use. In 2015 alone, 994 new HCV infections were reported among people aged 15-29 years. HCV as a cause of death is three times higher among males than females. Of the people living in Wisconsin known to have HCV, 65% are "baby boomers" or those born between 1945-1965. Annual rates among Native American and non-Hispanic Black people are more than two times higher than rates among non-Hispanic whites.

HIV/AIDS

An estimated 7,900 people are living with HIV in Wisconsin, including those who do not know they have it. The overall number of HIV diagnoses went down in Wisconsin between 2007 and 2016 but the number increased among younger males ages 13-29. More information on HIV/AIDS can be found in the Reproductive and Sexual Health section.

Sexually Transmitted Infections

Each year there are more STDs reported than all other reportable communicable diseases combined. In 2015, there were 23,945 new cases of chlamydia and 5,253 new cases of gonorrhea. Most of these new cases were among young people aged 15-25. African Americans also had a rate of infection that was nine times higher than that of whites. More information about sexually transmitted infections in Wisconsin can be found in the Reproductive and Sexual Health section.
Tick-Transmitted Disease

Lyme disease is the most commonly reported vectorborne illness in the U.S. In 2014, it was the fifth most common nationally notifiable disease. Lyme disease is the highest tickborne disease reported in Wisconsin with more than a total of 38,000 cases reported from 1990 to 2015. In 2015, a total of 1,883 cases of Lyme disease were reported in Wisconsin with the highest number of cases in the western and northern regions. In recent years, cases have increased in the central and eastern regions. Other tickborne illnesses identified in Wisconsin include anaplasmosis, the state's second most frequently reported tickborne illness, babesiosis, ehrlichiosis and Powassan virus disease. The Wisconsin Department of Health Services and local health departments investigate tickborne diseases to better understand the increasing risk tickborne diseases pose in Wisconsin.

Tuberculosis

Tuberculosis (TB) is a disease caused by bacteria that are spread from person to person through the air. TB usually affects the lungs, but it can also affect other parts of the body such as the brain, the kidneys or the spine. In most cases, TB is treatable and curable; however, persons with TB can die if they do not get proper treatment. The



What Are We Doing?

The Wisconsin Electronic Disease Surveillance System (WEDSS) has data on selected vaccine-preventable diseases

Wisconsin Immunization Registry

What Can We Do?

Continued surveillance

incidence rate of TB in Wisconsin is at or below 1 per 100,000; the national incidence rate is 3 per 100,000. The incidence rate among foreign-born individuals in Wisconsin, however, is 15 per 100,000, and 25.5 per 100,000 among foreign-born individuals from Asian countries.

Multidrug-resistant TB (MDR TB) is caused by an organism that is resistant to at least isoniazid and rifampin, the two most potent TB drugs. Resistance to anti-TB drugs can occur when these drugs are misused or mismanaged. Examples include when patients do not complete their full course of treatment; when healthcare providers prescribe the wrong treatment, the wrong dose or the wrong length of time for taking the drugs; when the supply of drugs is not always available; or when the drugs are of poor quality. The cost of one MDR TB infection is approximately \$260,000. The 10-year average of MDR TB in Wisconsin is 6% of all TB cases, while the national average is less than 2%. Health Profiles: Environmental Health



Environmental Health

Focus Area	Objectives	Reports and Resources
Environmental and Occupational Health	 Improve the quality and safety of the food supply and natural, built and work environments Promote safe and healthy homes in all communities 	ReportsHealthiest Wisconsin 2020 Baseline and Health Disparities. Report (2014)Environmental Public Health Tracker (2016)Burden of Asthma in Wisconsin (2013)Report on Childhood Lead Poisoning in Wisconsin (2014)Drinking Water Data (2016)Fact SheetsHarmful Algal Blooms Toolkit (2016)

Environmental and Occupational Health	WI 2010	WI 2015	Best State 2015	WI Rank 2010	WI Rank 2015
America's Health Rankings (AHR)					
Air Pollution (micrograms of fine particles per cubic meter)	11.1	9.1	5	31	30
Occupational Fatalities (deaths per 100,000 workers)	3.3	3.8	2	8	16

Environmental Health

Where people live, work and play affects their health. This is true whether we're talking about the environment inside or outside because both can have good or bad consequences on our health. For example, the air we breathe, water we drink, food we eat and communities we live in will influence how we feel and can even make us sick. Knowing this, it is important to make sure our homes and communities are environmentally safe.

Lead

About 30% of all homes in Wisconsin have lead-based paint hazards. Lead poisoning in Wisconsin has steadily gone down among children under age six since 2001, but there are still disparities between different groups. In 2010, Black children were three to six times as likely as White children to have experienced lead poisoning. Children who live in poverty are also at increased risk for lead poisoning, possibly because their families have limited housing options. In 2010, 81% of all children in Wisconsin who had elevated blood lead levels were enrolled in Medicaid.

Air Quality Issues and Asthma in Wisconsin

In Wisconsin, 1 in 10 adults and 1 in 13 children have asthma. Asthma can be controlled and even prevented. Still, many people with asthma do not have it under control. Many adults and children who have asthma do not have the recommended two checkups per year and a similar number do not get an asthma action plan from their provider.

While the statewide rate of asthma hospitalization has gone down slightly over the past 10 years, notable disparities exist:

 Black adults have a much higher percentage of lifetime and current asthma compared to other racial or ethnic groups.



What Are We Doing?

Wisconsin Asthma Program and Wisconsin Asthma Plan

280+ member Wisconsin Asthma Coalition

Wisconsin Radon Information Center -1-888-LOW RADON

New public data portal for environmental public health tracking

Department of Health Services Environmental Health Listserv

- Trips to the hospital because of asthma were five times greater for the Black population and two times greater for American Indians than for Whites.
- Milwaukee and Menominee counties had asthma hospitalization and emergency department visit rates roughly twice the statewide average.
- Lifetime and current asthma rates are significantly higher among people with lower incomes and those with less education.

Health Profiles:

Healthy Growth and Development

HEAT HIZ S

Healthy Growth and Development

Focus Area	Objectives	Reports and Resources
Healthy Growth and Development	 Assure children receive periodic developmental screening Improve women's health for healthy babies Reduce disparities in health outcomes 	Reports Healthiest Wisconsin 2020 Baseline and Health Disparities. Report (2014) Annual Wisconsin Birth and Infant Mortality Report, 2015. (2016) Fact Sheets Wisconsin Health Facts: Racial and Ethnic Disparities in. Infant Mortality (2012) Safe Sleep and SUID (2015) What Moms Tell Us: Postpartum Depression (2011) Wisconsin Infant Mortality Background and Related Efforts. (2013)

Healthy Growth and Development	WI 2010	WI 2015	Best State 2015	WI Rank 2010	WI Rank 2015
America's Health Rankings (AHR)					
Infant Mortality	6.4	6	4.2	19	23

Healthy Growth and Development

According to Healthiest Wisconsin 2020, healthy growth and development "requires familycentered, community-based, culturally competent, coordinated care and support throughout the life course during preconception and prenatal periods, infancy, childhood, adolescence and adulthood." This means in order to grow in the healthiest, best way possible we need to be lovingly supported by our family and community and receive care specific to our needs from the time we are in the womb through old age.

Prematurity and Low Birth Weight

In Wisconsin, In 2015:

- 6,251 infants were born prematurely (gestation of less than 37 weeks), or 9.3% of all births
- 4,889 infants were low birth weight (weighed less than ~5.5 pounds at birth), or 7.3% of all births; 8% of all infants in the U.S. are born with a low birth weight
- 889, or 1.3% of all births, were born at very low birth weight (weighed less than ~3.3 pounds at birth)

The March of Dimes aims to reduce preterm births to 8.1% by 2020. In 2016, March of Dimes gave Wisconsin a grade of "C" for its preterm birth rate. However, there is variation across the state; Milwaukee earned a D for its rate of 10.4%, while Green Bay received an A for its rate of 8%. This means that low birth weight is a noteworthy health difference between groups and we will need to keep working to reduce this disparity.

Infant Mortality

Fetal deaths or stillbirths are reported if the fetus reached 20 weeks of gestation or 250 grams. In Wisconsin in 2015, there were 331 recorded fetal deaths. During this same year, there were 384 deaths of infants under the age of one year. The infant mortality rate was 5.7 infant deaths per 1,000 live births, unchanged from 2014. The rate was 11.1 per 1,000 births for teens aged less than 20.



Green represents ranking among the top 10 best states

Infant Health

- ▲ 4th for percentage of babies aged 0 to 2 years who had a well-baby checkup in the past 12 months (AHR-HWC 2016)
- 5th for percentage of women with a recent birth who report their infants are usually placed on their backs to sleep (AHR-HWC 2016)
- 6th for baby-friendly facilities (AHR-HWC 2016)

2012-2014 three-year rolling average infant mortality rates calculated for major race/ethnicity groups showed large differences between groups:

- > Hispanic/Latino 4.8 infant deaths per 1,000 births
- White 4.8 infant deaths per 1,000 births
- > Laotian/Hmong 6.5 infant deaths per 1,000 births
- American Indian/Alaska Native 8.1 infant deaths per 1,000 births
- Black/African American 13.8 infant deaths per 1,000 births

What Are We Doing?

Prenatal Care Coordination (PNCC) - Medicaid and BadgerCare Plus benefit

Wisconsin Healthiest Women Initiative

Wisconsin First Step

Maternal and Child Health Hotline

Collaborative Improvement and Innovation Network (CollN) to Reduce Infant Mortality

What Can We Do?

Increase rate of annual preventive medical visits for women and adolescents

Health Profiles:

Injury and Violence

HEAT HIZS

Injury and Violence

Focus Area	Objectives	Reports
Injury and Violence Prevention	 Create safe environments and practices through policies and programs Improve systems to increase access to injury care and prevention services 	Healthiest Wisconsin 2020 Baseline and Health Disparities Report (2014) Burden of Injury in Wisconsin (2011) Burden of Falls in Wisconsin (2010)
	 Reduce disparities in injury and violence 	Wisconsin Fall Prevention Activities Survey Report (2011)

Injury and Violence Prevention	WI 2010	WI 2015	Best State 2015	WI Rank 2010	WI Rank 2015
America's Health Rankings (AHR)					
Violent Crime (offenses per 100,000 population)	257	278	121	_	19

Injury and Violence

Injury is a leading cause of death and disability among Wisconsin residents every year. Injury and violence encompass a broad array of topics. Unintentional injuries are sometimes referred to as accidents despite being often preventable. Intentional injuries are those that were purposely inflicted, and often involve violence. Injuries are the leading cause of death among Wisconsin people aged 1 - 44 years and are a significant cause of morbidity and mortality at all ages. Injuries and violence occur in all ages, races, and socioeconomic classes; however, some groups experience more injuries and violence than other groups.

Falls

In 2010, unintentional falls accounted for the greatest number of Wisconsin injury deaths among adults, mainly among adults 65 and older. White adults had a significantly higher age-adjusted death rate from falls than did Black, Hispanic, and Asian adults. During 2008-2010, injury deaths due to falls happened among residents from all 72 counties of Wisconsin. Counties with age-adjusted rates that topped the statewide rate of fall-related injury death were found in urban, suburban, and rural regions. In 2010, unintentional falls were responsible for the greatest number of Wisconsin injury hospitalizations, nearly 50% of all injury hospitalizations. In 2010, Medicare was listed as the primary payer for nearly 75% of fall-related hospitalizations in Wisconsin.

Motor Vehicle Crashes

In 2013, there were 118,254 traffic crashes, 28,747 injury crashes and 491 fatal crashes in Wisconsin, resulting in 527 deaths. The average fatality rates are slightly lower in Wisconsin than the Midwestern average, at 0.89 deaths per 100 million miles of vehicle travel. Minnesota has the lowest rate regionally, 0.68, while lowa, Indiana, and Michigan have rates at or above 1.0.



Green represents ranking among the top 10 best states

Falls

 7th for rate of hospitalization for hip fracture per 1,000 Medicare beneficiaries (AHR-SR 2016)

Compared to other age groups, teens wear their seatbelts the least and have a greater risk of being involved in a motor vehicle crash. In Wisconsin, approximately one-quarter of adults do not always wear a seat belt when driving or riding in a motor vehicle. Men were significantly less likely to wear a seat belt than women. The number of deaths from motor vehicles crashes was highest among rural populations; however, deaths occurred among residents of all counties but one.

Sexual Assault and Violence

Sexual violence is doing or saying something to another person that is both sexual and unwanted; examples of this behavior range from sexual harassment to unwanted touching to rape. All are done without consent, which means there is no permission given by the person experiencing the abuse. Sexual violence affects women at a much higher rate than men; four out of five victims are female. It is estimated that one in seven or 14% of Wisconsin women over the age of 18 has been raped at some point in her lifetime. Approximately 90% of victims know the person who assaulted them. Two-thirds of victims of assaults are less than 15 years of age.

Suicide

The suicide rate in Wisconsin is four times the homicide rate. Every year, over 700 Wisconsin residents die by suicide. In addition, approximately 5,500 Wisconsin residents are hospitalized due to intentional, self-inflicted injury. More on suicide in Wisconsin can be found in the Mental Health section.

Violence

Wisconsin is ranked 19th for violent crime in America's Health Rankings 2015. The number of violent crimes (murders, rapes, robberies and aggravated assaults) per 100,000 people has remained relatively stable in Wisconsin for the past three years at approximately 280. The national average for violent crime for the same period was 387 offenses per 100,000 people.

Firearms are the third leading cause of injury death for Wisconsin children. Both firearm-related injury and death continue to increase in Wisconsin, despite national rates decreasing, with approximately 1.7 children killed by firearms per 100,000 children based on the 2012-2014 three-year average. In Wisconsin, homicide explains 48% of firearm-related deaths in children, while suicide accounts for 45%.

What Are We Doing?

Wisconsin Falls Prevention Initiative and Wisconsin Fall Prevention Action Plan

Forward Wisconsin: A Plan for the Prevention of Sexual Violence

What Can We Do?

Increase access to information on evidence-based injury prevention programs and policies at the state, regional and local levels

Increase the capacity of professionals in Wisconsin to design, implement and evaluate evidence-based injury and violence prevention programs and policies

Health Profiles: Mental Health



Mental Health

Focus Area	Objectives	Reports
Mental Health	 Reduce smoking and obesity among people with mental disorders Reduce disparities in suicide and mental disorders Reduce depression, anxiety and emotional problems 	Healthiest Wisconsin 2020 Baseline and Health Disparities. Report (2014)The Burden of Suicide in Wisconsin (2014)Mental Health and Substance Abuse Needs Assessment. (2014)Suicide Rates by County (2015)Facts about Youth Suicide in Wisconsin (2015)Behavioral Health Barometer - Wisconsin (2015)

Mental Health	WI 2010	WI 2015	Best State 2015	WI Rank 2010	WI Rank 2015
America's Health Rankings (AHR)					
Poor Mental Health Days (number of days in previous 30 days)	2.8	3.6	2.7	7	22
Suicide	N/A	14.7	8.3	N/A	27

Mental Health

"Mental health is our emotional, psychological and social well-being" and it affects how we think, feel, and act. It is a very important part of a person's overall health from childhood to adulthood because it influences how we interact with others, how we feel about ourselves, and how we move through our everyday lives.

People who struggle with their mental health are more likely to smoke, be physically inactive, be obese and suffer from substance abuse and dependence.

Adult Mental Health in Wisconsin

In 2014, 17% of Wisconsin adults reported being told they had a form of depression. The rate was highest among adults aged 35-64 (about 20%) and lowest (about 12%) among those aged 18-24 and 65 and over.

Frequent mental distress is having 14 or more days of poor mental health in the past 30 days. In Wisconsin, the people who report higher rates of frequent mental distress include females, blacks, Hispanics, low-income people, Milwaukee County residents, people who are obese and smokers. Milwaukee County residents, people with low household incomes and people with a disability also reported higher rates of insufficient sleep and lack of emotional support.

Youth Mental Health in Wisconsin

From 2007 to 2012, the percentage of children receiving medications for ADHD, emotions, concentration or behavior significantly increased both in Wisconsin and nationally. Still, a higher percentage of Wisconsin children receive medications for ADHD, emotions, concentration or behavior, compared to children nationwide.

In Wisconsin, approximately 55,000 adolescents aged 12-17 (12.3% of all adolescents) had at least one major depressive episode within the year before they were surveyed. This rate increased from 2010 through 2014 and was similar to the national average, although it grew at a faster rate. Only a little more than one-third of adolescents in Wisconsin who had a major depressive episode received treatment for depression. This number is similar for the country as a whole. According to national estimates, as many as one in nine Wisconsin kids have a severe emotional disturbance, and as many as one in five has at least one kind of mental health challenge.

Depression

▲ 4th for percentage of adults aged 65 and older who were told by a health professional that they have a depressive disorder (AHR-SR 2016)



Green represents ranking among the top 10 best states

Suicide in Wisconsin

According to the Wisconsin Suicide Prevention Strategy, suicide is a significant health problem in Wisconsin. It is the 10th leading cause of death in the state, and the second leading cause of death due to injury. The number of suicide deaths annually has increased over the last several years. In 2013, the age-adjusted suicide rate was 14.4 per 100,000 population, which is above the national average of 12.6.

- Adults aged 45-54 experience the highest suicide rate by age.
- Nearly four out of five people who die by suicide are male.
- Whites experience the highest suicide rates by race, followed by American Indians/Alaska Natives, Asians/ Pacific Islanders, and Blacks/African Americans.
- Approximately 50% of people who die by suicide have at least one known mental health problem, and more than 40% are receiving mental health treatment at the time of death.
- Personal crises, intimate partner problems, substance abuse problems, physical health issues and job problems are often present in the lives of those who commit suicide.
- From 2001 to 2011, the total number of Wisconsin high school students reporting thinking about suicide went down.

What Are We Doing?

Prevent Suicide Wisconsin

Zero Suicide Movement–creating systemic changes to impact suicide among populations served by health care organizations

Wisconsin Suicide Prevention Strategy

The Wisconsin Council on Mental Health was created to advise the Governor, the Legislature and the Wisconsin Department of Health Services on the allocation of federal funding for mental health services

Peer Respites

What Can We Do?

Build protective factors, including more around trauma-informed care, social emotional development and increased social connections

Increase access to care

Improve use of data and evaluation-based injury prevention programs and policies at the state, regional and local levels

Increase the capacity of professionals in Wisconsin to design, implement and evaluate evidence-based injury and violence prevention programs and policies **Health Profiles:**

Nutrition and Healthy Foods



Nutrition and Healthy Foods

Focus Area	Objectives	Reports and Resources
Nutrition and Healthy Foods	 Increase access to healthy foods and support breastfeeding Make healthy foods available to all Target obesity efforts to address health disparities 	Reports Healthiest Wisconsin 2020 Baseline and Health Disparities Report (2014) Nutrition, Physical Activity and Obesity: Wisconsin Data (2016) Fact Sheets Chronic Disease Prevention Program Fact Sheet - Overweight and Obesity in Wisconsin (2016)

Nutrition and Healthy Foods	WI 2010	WI 2015	Best State 2015	WI Rank 2010	WI Rank 2015
America's Health Rankings (AHR)					
Fruits (times per day)	N/A	1.4	1.67	N/A	19
Vegetables (times per day)	N/A	1.76	2.21	N/A	36
Obesity (percent of adults who are obese by self- report, with a body mass index [BMI] of 30 or higher)	29.2	31.2	21.3	34	36

Nutrition and Healthy Foods

It is very important that people in Wisconsin have access to enough nutritious and safe food throughout life. This not only helps people grow and develop, it also enhances the physical, emotional and social well-being of all communities.

Eating healthy foods can reduce the risk for a number of long-lasting diseases such as type 2 diabetes, cancer, heart disease and stroke, as well as chronic conditions such as obesity. Many cultural, social and individual changes have occurred to make healthy eating more difficult and obesity more likely. In order to help prevent obesity and improve the health of Wisconsinites, there will need to be changes made to different environments and policies to support healthy eating. Red represents ranking among the bottom 10 states

Obesity

 42nd for percentage of adults aged 65 and older estimated to be obese (body mass index of 30.0 or higher) based on self-reported height and weight (AHR-SR 2016)

Obesity

Obesity means a person has a higher amount of body fat in comparison to their lean body mass. In Body Mass Index (BMI) measurements, obesity is defined as a BMI equal to or greater than 30 in adults.

In 2014, about two-thirds (67.4%) of Wisconsin adults were overweight or obese. Just under one in three Wisconsin adults are obese. According to yearly estimates from the CDC, obesity in Wisconsin increased by 35% from 2000 to 2010. If obesity rates keep going up like this, more than 56% of adults will be obese by 2030.

Nearly one-quarter of Wisconsin high school students were overweight or obese in 2014. More low-income and minority children are obese than children in other groups. Children who are obese in their preschool years are more likely to be obese in adolescence and adulthood and to develop chronic diseases such as diabetes, hypertension, hyperlipidemia, asthma and sleep apnea.

Health Behaviors

Breastfeeding in Wisconsin

Research has shown that the best food for a baby's first year of life is breast milk, with health, nutritional, economic and emotional benefits to both the mother and baby. More than one in three infants in Wisconsin is exclusively breastfed initially; however, only 15% are exclusively breastfed until six months, as recommended. About 70% of all low-income children are ever breastfed, the highest percentage is among Hispanic children (81%) and the lowest among Asian children (50%). In 2012, 81% of Wisconsin infants were ever breastfed. In the same year, 31% of Wisconsin infants were only breastfed for the first three months and 17% were only breastfed for the first six months. The national percentage is slightly lower for infants ever breastfed (77%), slightly higher for infants who were exclusively breastfed at three months (36%), and approximately the same for infants who were exclusively breastfeed at six months (16%).

Income and education are known to be associated with the likelihood of a mother to breastfeed. Black mothers are much less likely to start breastfeeding and continue breastfeeding practices three months after birth compared to White and Hispanic mothers. Similar to

What Are We Doing?

Wisconsin Partnership for Activity and Nutrition (WI PAN), including Wisconsin Nutrition and Physical Activity State Plan and Nutrition and Physical Activity Coalitions

Ten Steps to Breastfeeding-Friendly Child Care Centers toolkit

Breastfeeding-Friendly Health Departments

Farm to School

Got Dirt? Garden Initiative

Healthier Wisconsin Worksite Initiative

What Can We Do?

Policy, systems and environmental changes

Long-term tracking of program progress, behavior changes and health outcomes

national trends, the most common reason mothers give for not breastfeeding is "I didn't want to breastfeed" (54%). It has been shown that if a mother knows the benefits of breastfeeding, it is more likely she will start breastfeeding her child.

Fruit and Vegetables

The Dietary Guidelines for Americans recommend that Americans eat more fruits and vegetables as part of a healthy eating pattern throughout their life. Still, more than one-quarter of Wisconsin adults report that they do not eat vegetables every day, and more than one-third report that they do not eat fruit every day.

Access to Healthy Food

A U.S. Department of Agriculture report, based on 2010 U.S. Census data, found that food insecurity affected more than 270,000 households in Wisconsin. A household is food insecure if "access to safe, nutritious foods was limited or uncertain for at least one person at some point during the year." Among households in Wisconsin eligible for Special Supplemental Nutrition for Women, Infants and Children (WIC), more than half report overall food insecurity, and one in five report very low food security.

Wisconsin had fewer census tracts (61%) with healthier food retailers (supermarkets, larger grocery stores, warehouse clubs, and fruit and vegetable markets) within one-half mile of their boundaries than communities nationally (70%).

Health Profiles: Oral Health



Oral Health

Focus Area	Objectives	Reports
Oral Health	 Assure access for better oral health Assure access to services for all population groups 	Healthiest Wisconsin 2020 Baseline and Health Disparities. Report (2014)The Oral Health Of Wisconsin Adults (2015)Healthy Smiles/Healthy Growth - Wisconsin's Third Grade. Children (2013)Wisconsin Healthy Smiles Survey: The Oral Health of. Wisconsin's Older Adults (2012)County Oral Health Wisconsin Surveillance SystemWisconsin Public Water Supply Fluoridation Census (2013)

Physical Activity	WI 2010	WI 2015	Best State 2015	WI Rank 2010	WI Rank 2015
America's Health Rankings (AHR)					
Dentists per 100,000 people	52.6	56	81.2	-	24

Oral Health

Good oral health means being free of mouth pain, tooth decay, tooth loss, oral and throat cancer, gum (periodontal) disease and other diseases that affect the mouth and surrounding structures. Oral health can be achieved by everyone, and is very important to general health throughout life. Many systemic diseases may first start with and be identified through oral symptoms.

State of Wisconsin's Oral Health

Wisconsin ranks 9th in the nation for the percent of the population visiting a dental health professional in the last year and 24th for dentists per 100,000 population.

Youth

- The percentage of third-grade children with untreated tooth decay decreased by 35% from the 2001-2002 school year to the 2007-2008 school year.
- Of children in Head Start (aged 3-5), 26% had untreated decay.

Green represents ranking among the top 10 best states

Oral Health

- 8th for percentage of adults aged 65 and older who self-report visiting the dentist or dental clinic within the past year for any reason (AHR-SR 2016)
- ▲ 9th for annual dental visit (AHR 2015)
- Schools with a higher proportion of students from low income households were considerably more likely to have children with untreated tooth decay than schools with a higher socioeconomic status.
- One in three Asian, Black or Hispanic third-grade children had untreated tooth decay, compared to one in six White children.

Adults

- > Only 25% of Medicaid/Badgercare+ enrollees had a dental service in the past year.
- Emergency department visits for non-traumatic dental complaints increased by 20% from 2006 to 2010.
- > 40% of adults had at least one permanent tooth removed due to tooth decay or gum disease.
- > 30% did not visit a dentist within the past year.
- Compared to Whites and Asians, Black, Hispanic and American Indian adults were significantly more likely to have permanent teeth removed due to tooth decay or gum disease, and not to have visited a dentist, dental hygienist or dental clinic in the past year.
- Permanent tooth removal and lack of dental visits are significantly more common among people who earn less money. More than half of adults with a disability had at least one permanent tooth removed due to tooth decay or gum disease, while more than one-third did not have a dental visit in the past year.

Dental Care Access and Utilization

Among Wisconsin adults, 70.1% self-report a visit to a dental health professional within the last year. Iowa and Minnesota have similar numbers, while only 63.9% of Illinois adults report visiting a dental health professional. In Wisconsin, there is an average of 56 dentists per 100,000 people.

Some of Wisconsin's regional neighbors fare slightly better —Illinois (66.7), Michigan (61.4) and Minnesota (60.6), while Iowa (51.9) and Indiana (47.4) fare worse. Wisconsin's dental workforce has remained relatively stable between 2008 (51.3) and 2003 (56.8).

Disparities

A review of the 2008 National Health Interview Survey data showed that adults with Medicaid were almost five times as likely to have poor oral health as adults with private health insurance. People in the U.S. who reported having an oral health problem reported that cost and lack of dental coverage were the primary reasons they did not get medical attention.

Children and pregnant women enrolled in Wisconsin Medicaid/BadgerCare+ were enrolled in comprehensive dental coverage. Enrollees may still face barriers in finding Medicaid-certified dentists accepting new patients.

Many people who are unable to obtain dental services seek care in emergency departments. From 2006 to 2010, the number of emergency department visits for non-traumatic dental complaints increased by nearly 20%. In 2008, 39% of these emergency department visits listed Medicaid as the primary payer and 33% had selfpay listed as the primary payer. Self-pay typically refers to the uninsured and the underinsured, or those with out-of-network insurance policies. More than 75% of emergency department visits for non-traumatic dental complaints occurred among adults 18 to 44 years of age.



What Are We Doing?

Water Fluoridation—nearly 90% of the population on public water systems had access to fluoridated water in Wisconsin in 2010 (exceeding national target of 80%)

Seal-A-Smile Program—40% of eligible schools were participating in 2010

Dental Medicaid Pilot Program

What Can We Do?

Make it easier for people of all ages, abilities, and identities to access oral health care services, like our elders in nursing homes and people with developmental disabilities

Grow care and services for youth that would help prevent bad oral health problems later in life

Support and grow school and communitybased oral health programs

Continue teaching that oral health affects overall health

Improve oral health literacy

Health Profiles: Physical Activity



Physical Activity

Focus Area	Objectives	Reports and Resources
Physical Activity	 Design communities to encourage activity Provide opportunities to become physically active Provide opportunities in all neighborhoods to reduce health disparities 	ReportsHealthiest Wisconsin 2020 Baseline and Health Disparities Report (2014)Nutrition, Physical Activity and Obesity: Wisconsin Data (2016)Wisconsin Success Stories - Active Schools (2012)Fact SheetsChronic Disease Prevention Program Fact Sheet - Overweight and Obesity in Wisconsin (2016)

Physical Activity	WI 2010	WI 2015	Best State 2015	WI Rank 2010	WI Rank 2015
America's Health Rankings (AHR)					
Physical Inactivity (percent of adult population)	22	21.2	16.4	-	15

Physical Activity

Physical activity means any activity done with the body that helps and maintains physical fitness and overall health. When physical activity is done regularly it can help to reduce the risk of certain chronic diseases, such as high blood pressure, stroke, coronary artery disease, type 2 diabetes, obesity, colon cancer and osteoporosis.

Physical activity recommendations include ways to make physical activity an easy choice. This can happen by creating opportunities for children, adults, and older adults to be active where they live, play, work and learn.

More than half of Wisconsin adults (18 years and older) are not meeting the recommended physical activity level (150+ minutes per week). A growing number—almost 1 in 4—are reporting no amount of physical activity in a week.

According to the Youth Risk Behavior Survey, only 24% of Wisconsin adolescents were physically active for a total of at least 60 minutes per day on each of the seven days before taking the survey. 39.4% of adolescents attended daily physical education classes in an average week (when in school); 12.6% did not participate in at least 60 minutes of physical activity on any day during the seven days prior to the survey.

Disparities in Physical Activity

- Black (35%) and Hispanic (31%) people are less likely to be physically active compared to White people (23%).
- As a person's income increases they are more likely to meet the recommended activity level and less likely to be inactive.
- As a person's education level increases they are more likely to meet the recommended activity level and less likely to engage in no physical activity.

Access to Physical Activity

Having access to opportunities for physical activity plays a role in whether someone will be physically active. There are differences among Wisconsin counties, from as few as 1% of county residents having access to physical activity opportunities (i.e., parks, recreation facilities), to as many as 98% of county residents having access. (Please see the Food and Nutrition section for more information on obesity.)

What Are We Doing?

58 of 72 counties have said physical activity is a priority in their County Health Assessment Report

The Chronic Disease Prevention Program is using several strategies to increase physical activity in different settings that have many associated performance measures.

Local coalitions are working on physical activity initiatives in active communities, schools and worksites.

What Can We Do?

Increase physical activity access and outreach to increase walking and physical activity

Implement physical education and physical activity in early care and education (ECE) and worksites

Health Profiles:

Reproductive and Sexual Health



Reproductive amd Sexual Health

Focus Area	Objectives	Reports and Resources
Reproductive and	Establish a norm of sexual and	Reports
Sexual Health	span	<u>Healthiest Wisconsin 2020 Baseline and Health Disparities</u> <u>Report (2014)</u>
	 Establish the social, economic and health policies to improve equity in sexual health and reproductive justice 	Wisconsin Youth Sexual Behavior and Outcomes 2010-2011 Update (2012)
	 Reduce disparities in sexual and reproductive health 	2013 Wisconsin Youth Risk Behavior Survey Executive Summary (2014)
		Wisconsin PRAMS Data Book 2009-2011 (2014)
		STD Profiles
		Fact Sheets
		What Moms Tell Us: Unintended Pregnancy (2013)

Reproductive and Sexual Health	WI 2010	WI 2015	Best State 2015	WI Rank 2010	WI Rank 2015
America's Health Rankings (AHR)					
Immunization HPV female	N/A	40.9	54.9	N/A	21
Immunization HPV male	N/A	23.6	42.9	N/A	15
Teen Birth Rate	32.2	19.6	12.1	-	11

Reproductive and Sexual Health

Reproductive and sexual health refer to the things that affect physical, emotional, mental, and social well-being related to reproduction and sexual health during a person's entire life. Unintended pregnancies, sexually transmitted diseases (STDs) and HIV for example, all effect reproductive and sexual health.

A woman with an unintended pregnancy is less likely to see a doctor and get care early in her pregnancy. Because she may not realize that she is pregnant immediately, she is also more likely to use tobacco or alcohol during pregnancy. STDs and HIV may have serious health effects including cancers, infertility, ectopic pregnancy, miscarriages, stillbirth, low birth weight, neurologic damage and death.

Unintended Pregnancies

According to the Wisconsin Pregnancy Risk Assessment Monitoring System (PRAMS), 38% of new mothers did not mean to get pregnant. Of those with an unintended pregnancy, 46% reported doing nothing to prevent pregnancy. In the 2009-2010 PRAMS, 78% of pregnancies among those under the age of 20 were unintended.

Teen Births

In 2014, about 5 percent of all live births in Wisconsin were to teen mothers (mother less than 20 years). That is about 3,414 live births. The teen birth rate, 18.1 births per 1,000 females aged 15-19, was below the national rate of 24.2 per 1,000 females.

Adolescents

In Wisconsin, just over one in three high school students has ever had sexual intercourse. This is lower than the national average, which is just under one in two. Among those who

\checkmark Green represents ranking among the top 10 best states

Women's Health

- 4th for percentage of women with a recent live birth who report receiving a postpartum checkup (AHR-HWC 2016)
- 7th for cervical cancer screening (AHR-HWC 2016)
- 10th for maternal mortality (AHR-HWC 2016)
- 10th for percent of women with a dedicated health care provider (AHR-HWC 2016)

have had sexual intercourse in Wisconsin, about one in 10 had sexual intercourse before they turned 13. Approximately one in four are currently sexually active; among those currently sexually active, 37.5% did not use a condom; 65.1% did not use a female form of birth control (birth control pill, a patch, implant, IUD, shot, etc. and 10.7% did not use any method to prevent pregnancy. Among Wisconsin students, 13% report never being taught about AIDS or HIV in school.

Sexually Transmitted Diseases in Wisconsin

There are currently five reportable sexually transmitted diseases (STDs) in Wisconsin: chlamydia, gonorrhea, syphilis, chancroid and pelvic inflammatory disease. The Department of Health Services issues yearly annual profile and surveillance reports with statewide, regional, and county-level data for both adults and youth (aged 15-19). Chlamydia and gonorrhea are the two most reported communicable diseases.

HIV/AIDS in Wisconsin

Over the last several years the average number of new HIV/AIDS cases has remained relatively the same at about 250 new cases each year. Wisconsin has the 11th lowest diagnosis rate in the U.S. While 26 of 72 counties in Wisconsin had at least one HIV diagnosis in 2014, 58% of new diagnoses are in Milwaukee County.

Between 25% and 30% of cases first diagnosed as HIV in Wisconsin during 2011-2014 had already progressed to AIDS by time of diagnosis; 4% - 8% of people diagnosed during 2011-2013 developed AIDS within 12 months of their HIV diagnosis. As of December 2014, 6,899 individuals were reported with HIV or AIDS were presumed to be alive and living in Wisconsin. The CDC estimates 14% of people living with HIV (PLHIV) are unaware of their status because they do not have any symptoms, which equates to an estimated 1,125 additional residents in Wisconsin living with HIV, but unaware of their HIV status.

Disparities in Wisconsin

In Wisconsin, there are big differences in reproductive and sexual health between certain groups of people. What Are We Doing?

Sexually Transmitted Disease Surveillance

Wisconsin HIV/AIDS Strategy

What Can We Do?

Continue to improve early identification of individuals with HIV/AIDS and linkage to care

Continue to target resources to persons disproportionately affected by HIV

Milwaukee ranks second among large cities in the U.S. for the number of people who have chlamydia and gonorrhea. Milwaukee ranks sixth for the percent of teenagers who have given birth. Rates of teen birth, STDs and HIV are significantly higher in Milwaukee than in the rest of Wisconsin. Youth who identify as LGBT have higher rates of sexual risk behaviors compared to youth who do not identify.

In 2014, 67% of new diagnoses of HIV were among racial/ethnic minorities, even though minorities are only 17% of the population in Wisconsin. Males were five times more likely to be diagnosed than females. Rates are stable among young females and older males, are increasing among younger males and are decreasing among older females. Male diagnosis rates were 16-fold higher for Blacks and sevenfold higher for Hispanics compared to whites. Female diagnosis rates were 34-fold higher among Blacks and ninefold higher among Hispanics compared to whites.







Tobacco

Focus Area	Objectives	Reports and Resources
Tobacco Use and Exposure	 Reduce use and exposure among youth Reduce use and exposure among adults Decrease disparities among vulnerable groups 	Reports Healthiest Wisconsin 2020 Baseline and Health Disparities. Report (2014) Burden of Tobacco in Wisconsin Report (2015) Fact Sheets Tobacco Fact Sheet, Wisconsin Behavioral Risk Factor. Surveillance Survey System (2015) Youth Tobacco Survey - Middle School Fact Sheet (2016) Youth Tobacco Survey - High School Fact Sheet (2016)

Tobacco Use and Exposure	WI 2010	WI 2015	Best State 2015	WI Rank 2010	WI Rank 2015
America's Health Rankings (AHR)					
Smoking (percentage of adults who are smokers)	18.7	17.4	9.1	31	21
Youth Smoking (percentage of high school students who self-report smoking cigarettes on at least one day during the past 30 days)	14.6	11.8	-	_	-

Tobacco

Tobacco is Wisconsin's leading cause of preventable death, and costs the state more than \$4.5 billion every year in health care and lost productivity expenses. There are large health differences in who is impacted by tobacco. Some groups have cigarette smoking rates that are double the general population. Programs and policies that help prevent and reduce the number of people who use tobacco are important to stopping the disproportionate burden tobacco has in Wisconsin. We recognize the sacred use of ceremonial tobacco among Native Americans, and use the word "tobacco" to refer to commercial tobacco use.

Early Exposure to Nicotine Leads to Long-Term Addiction

- Over 8 out of 10 smokeless tobacco users first tried smokeless tobacco before turning 21.
- Nearly 9 out of 10 current smokers started smoking before turning 18.
- More than 1 out of 10 adults have ever used e-cigarettes.

Youth Remain Vulnerable to Tobacco

Though fewer Wisconsin youth are smoking, new tobacco products threaten this progress. Smokeless tobacco use among high school students increased 67% from 5.8% in 2012 to 10% in 2014 and the rising popularity of e-cigarettes is a problem.

No Safe Level of Secondhand Smoke Exposure

The majority of secondhand smoke youth experience is in the home. There is no safe level of secondhand smoke exposure. Over 1 in 5 middle and high school youth in Wisconsin live with someone who smokes tobacco products. The CDC has noted that nationally, 7 in 10 black children, compared to 4 in 10 children overall, are exposed to secondhand smoke.



Green represents ranking among the top 10 best states

Tobacco Use and Exposure

 10th for percentage of adults aged 65 and older who are self-reported smokers (smoked at least 100 cigarettes in their lifetime and currently smoke every day or some days) (AHR-SR 2016)

People want to Quit Tobacco

Nicotine is addictive and very hard to quit. There are seven approved nicotine replacement therapies to aid in cessation efforts. Of current adult smokers, 64% have stopped using cigarettes for at least one day in an attempt to quit smoking.

Emerging Issues in Tobacco Use

Nearly 7 out of 10 current cigarette smokers have used e-cigarettes.

Examples of tobacco-related disparities:

- Nationally, a majority of people in treatment for substance abuse addiction programs currently smoke (77%-93%), compared to 18% of the general population.
- African Americans in Wisconsin smoke at a higher rate (32%) than the national African American rate (18%).

What Are We Doing?

Local groups educate, implement and promote best practices in tobacco prevention and control

State programs implement best practices such as the Quit Line, First Breath and Spark

Wisconsin tobacco taxes are at the currently recommended level

What Can We Do?

Education and awareness of ACEs and their connection to smoking

Regulation of other tobacco products, such as e-cigarettes

Increased health equity efforts to address tobacco-related disparities

Health Profiles: Emerging

Issues

HEALTH'Z HWISCO


Adverse Childhood Experiences (ACEs), Trauma, and Resilience

Adverse Childhood Experiences (ACEs) are negative life events or experiences, which occur during childhood (before age 18) and have the potential to impact healthy child development. ACEs can have long-term damaging consequences, and are connected to risk behaviors and poor general health.

Data show that 57% of Wisconsin residents have at least one ACE. The more ACEs someone has, the more likely it is that individual will experience negative health outcomes. The Wisconsin BRFSS asks Wisconsin adults about experiences before they were 18, which is used to determine an ACE score. The score does not capture the severity or frequency of an adverse experience; instead it shows the number of ACE categories experienced.

The Wisconsin Behavioral Risk Factor Surveillance Survey (BRFSS) asks if individuals experienced any of the adverse events or circumstances below prior to the age of 18:

- Physical abuse
- > Emotional abuse
- Sexual abuse
- An alcohol and/or a drug abuser in the household
- > An incarcerated household member
- A household member who was chronically depressed, mentally ill, institutionalized or suicidal
- Violence between adults in the home
- > Parental separation or divorce
- Physical neglect
- > Emotional neglect

While research shows that ACEs impact all populations regardless of identity, there are some populations that have higher ACE prevalence rates than others. Wisconsin BRFSS data (as well as national data) show that black and Native American populations are more likely to have ACEs than their white, Asian and Hispanic/Latino peers. Individuals who have lower incomes and have attained less education are also more likely to have ACEs than those with higher incomes and higher educational attainment. There are many reasons certain populations are disproportionately impacted by adversity in childhood but there is still a need for more in depth research to better understand those correlations. What we do know is there is substantial research that shows ACEs are associated with diminished health and overall life opportunity.

What Are We Doing?

Fostering Futures

Wisconsin School Mental Health Initiative

What Can We Do?

Education and awareness of ACEs

Increased awareness and adoption of trauma informed care

While ACEs are correlated with risk behaviors and negative health outcomes, this is not at all an absolute. The impact of ACEs can be mitigated by the presence of protective factors and coping skills that build resilience, or the ability to overcome adversity and successfully adapt in the face of serious hardship. Protective factors that develop resilience include, but are not limited to:

- Caring relationships with parents, teachers, counselors or other adults actively involved in a child's life
- > Good peer relationships
- Positive disposition
- Positive coping style
- Good social skills

Another evidence-based response to ACEs is trauma-informed care (TIC). TIC provides a shift in perspective from asking "What is wrong with you?" to "What happened to you?" This shift reduces blame and shame that some people experience through stigmatization and labeling.

Adverse childhood experiences (ACEs) were identified by the WI HIPP Steering Committee as a priority issue. Experts from within the Department of Health Services and throughout the state provided input on the issue. The people of Wisconsin are working together to help better understand the impact of trauma and stress in childhood.



Alzheimer's Disease and Related Dementia

The term "dementia" describes a set of symptoms of cognitive decline that result from brain cell death caused by disease and injury to the brain. This can include declines in memory, judgment, perception and reasoning along with other cognitive abilities. Alzheimer's disease is the most common type of dementia in the U.S. today, affecting 1 in 9 people aged 65 and older. The course of Alzheimer's disease is one of progressive decline. Although early onset Alzheimer's

disease occurs, the typical Alzheimer's process begins in middle age but does not progress to the point of interfering with daily activities until people are in their 60s, 70s and 80s. As the population ages, Alzheimer's disease is becoming a more common cause of death.

In 2015, it was estimated that 115,000 Wisconsin residents had Alzheimer's disease or related dementia. Between 2015 and 2040, the population aged 65 and older is expected to grow by 640,000 people—an increase of 72%. Recent studies have indicated that the risk of dementia may have declined in the last 25 years, but it is still expected that the number of individuals with the disease will grow along with the aging population.

In Wisconsin, the Department of Health Services' Dementia Care System Redesign has helped foster a broad commitment to building a Dementia-Capable Wisconsin. Green represents ranking among the top 10 best states

Alzheimer's

 2nd for percentage of adults aged 65 and older who report having cognitive difficulty (AHR-SR 2016)

Older Health Issues

- ▲ 2nd for percentage of adults aged 65 and older with no disability (AHR-SR 2016)
- 10th for percentage of adults aged 65 and older who self-report very good or excellent health (AHR-SR 2016)

What Are We Doing?

- > A <u>Dementia Care Specialist</u> program
- A Toolkit for Building Dementia-Friendly Communities
- A web-based <u>Dementia-Friendly Employers</u> <u>Toolkit</u>
- Implementation of the <u>Wisconsin Music and</u> <u>Memory</u> program
- > <u>Guiding Principles for Dementia Care</u>

What Can We Do?

- Work with medical providers to increase dementia-related screening, diagnosis and care planning
- Enhance dementia-capable crisis response and stabilization
- Expand the proficiency within long-term care facilities to appropriately respond when dementia-related behaviors occur that require enhanced understanding and care

Wisconsin Health Improvement Plan







Wisconsin Health Improvement Plan

An Initiative Built Upon Healthiest Wisconsin 2020

The Wisconsin Health Improvement Plan was developed through collaboration with the help of and participation by representatives from public health, health care systems and payers, employers, academia, state and local government agencies, advocacy organizations, tribal communities and the public.

The Wisconsin Health Improvement Planning Process (WI HIPP) identified five priorities to drive progress on making Wisconsin a healthier state by 2020. The WI HIPP Steering Committee also identified ACEs as an emerging issue that weaves through the five priorities and requires focus and coordination among partners in health across Wisconsin.

As the Health Improvement Plan is implemented, and Priority Action Teams commence their work, the priorities—and the measures, strategies and activities associated with them—will be explored from the perspective of different populations already identified by the WI HIPP Steering Commitee. These include older adults, racial and ethnic minorities, poverty and geographic diversity (e.g., rural and urban).



Wisconsin Health Improvement Plan

Healthy Wisconsin At-A-Glance



Chart continues on next page >>

> Chart continued from previous page

	-	ÖT.		
Alcohol	Nutrition and Physical Activity	Opioids	Suicide	Tobacco
Reduce Binge Drinking From 23% in 2015 to 20% in 2020 among adults From 18% in 2013 to 16% in 2020 among high school students From 25% in 2015 to 20% or less in 2020 among women (18-44)	Increase Consumption of Healthy Foods and Beverages Consumption of 1+ fruit per day by adults from 62% in 2013 to 65% in 2020 Consumption of 1+ vegetable per day by adults from 74% in 2013 to 78% in 2020 Reduce daily consumption of soda by students from 20% in 2013 to 15% in 2020	Reduce the Number of Overdose Deaths, Hospitalizations, and Emergency Department Visits Associated with Nonmedical Opioid Use Reduce rate of opioid overdose deaths from 10.7/100,000 in 2015 to 10.1/100,000 by 2020 Reduce rate of opioid overdose hospital encounters from 52.0/100,000 in 2014 to 49.4/100,000 by 2020	Reduce Suicides From 15.2/100,000 in 2015 to 12.8/100,000 in 2020 Reduce the Rate of Suicide Attempts From 210.47/100,000 in 2014 to 208.37/100,000 in 2020	Reduce Adult Smoking From 17.3% in 2014 to 16.3% in 2020 Reduce Use of Other Tobacco Products by Adults From 15.6% in 2014 to 14% in 2020
Reduce Alcohol-Related Deaths Falls – By 5% from 37% in 2015 to 32% in 2020 Alcohol Poisoning – By 5% from 18% in 2015 to 13% in 2020 Motor Vehicle – By 5% from 15% in 2015 to 10% in 2020	Increase Breastfeeding Initiation from 76.4% in 2015 to 80% in 2020 Duration at six months from 53% in 2015 to 60% in 2020	Increase Outreach, Intervention, and Referral to Treatment and Support Services for Nonmedical Opioid Use Increase number of people served by 5% from 4,015 persons in 2014 to at least 4,210 persons in 2020 Reduce the percentage of adolescents who have used an opioid prescription drug for nonmedical purposes From 14.9% in 2013 to less than 13% by 2020	Increase and Enhance Protective Factors Adults with less than four poor mental health days/ month from 78% in 2015 to 83% in 2020 Adults who report receiving social and emotional support from 63% in 2015 to 68% in 2020 Children with at least one teacher or adult in school they can talk to from 74% in 2013 to 79% in 2020	Reduce Use of Other Tobacco Products by Youth Among middle school youth from 5.2% in 2014 to 4.% in 2020 Among high school youth from 33.7% in 2014 to 31% in 2020



Priority: Alcohol

Wisconsin continues to have a serious problem with heavy drinking. Binge drinking, drinking more than five drinks on one occasion for men and more than four for women, is very common in the state. More adults are binge drinking in Wisconsin now than they were 10 years ago. Adults in the state binge drink at much higher rates than other adults in the U.S.

Drinking too much can lead to death and alcohol-related diseases. Both can be hard on communities and cost a lot of money. Hospital and health care costs and missed time at work are just a few of the areas impacted by drinking too much in Wisconsin, and costs about \$6.8 billion each year.

To make progress on alcohol use, it is important to understand how youth use alcohol. Starting to drink early can make people more likely to misuse prescription medicine and opioids. Keeping Wisconsin youth from starting to drink may help keep them from getting addicted to or misusing other substances.

It is also important to understand how women who are pregnant, or who may want to have a baby, use alcohol. When pregnant women drink, their babies may be born with fetal alcohol spectrum disorders (FASD). Babies with FASD can have a hard time learning or remembering things, staying focused, talking and making decisions. They can also have low IQ and hyperactivity. Because one in three women who are pregnant did not plan to have a baby, they might still drink alcohol when pregnant because they are not looking for the signs of early pregnancy. Women in Wisconsin who are between the ages of 18 and 44 binge drink and drink more heavily than women in the rest of the U.S. Two out of three women in Wisconsin who recently had a baby reported they drank in the three months before pregnancy, and about one in 12 reported drinking in the last three months of pregnancy.

Adverse childhood experiences (ACEs) are connected to risk behaviors that can lead to substance use disorders, and are linked to negative health outcomes in adulthood. While a little over half of Wisconsin adults report having at least one ACE, more than three out of five people who report binge or heavy drinking also report at least one ACE. More work is being done to understand the connection between ACEs and alcohol consumption to help drive down binge and heavy drinking rates in Wisconsin.

The Wisconsin Alcohol Policy Project reports that unlike most other states, "alcohol control is a municipal issue" in Wisconsin. This means local communities "have the authority to improve the community alcohol environment." Wisconsin cities, towns, and villages can focus on alcohol-related problems or populations in their community through local alcohol-related polices or practices without requiring the rest of the state to adopt the policy. In addition, some policy makers are beginning to consider legislation to help reduce excessive drinking in Wisconsin.

Priority: Alcohol

Goal: Reduce Binge and Heavy Drinking

Objective 1

Reduce binge drinking:

- From 25% in 2012 to 23% in 2020 among adults
- From 18% in 2012 to 16% in 2020 among youth
- From 18% in 2009-2011 to 16% in 2020 among women (18-44)

Strategies

Strategy 1: Educate and engage employers, health care systems and providers and the community to promote, cover and provide alcohol screening and treatment, including SBIRT.

Strategy 2: Reduce youth access to alcohol through continued support of municipal ordinances and other evidence-informed policies.

Strategy 3: Increase adoption of NIAAA College Drinking Task Force best practices and policies by colleges, universities and technical schools.

Strategy 4: Engage community coalitions and local leaders in discussions and educational sessions on the evidence-informed policies that prevent and reduce excessive alcohol use.

Strategy 5: Develop and implement municipal policies that prevent and reduce illegal and excessive drinking.

Objective 2

Reduce alcohol-related deaths:

- > By fall by 5%
- > By alcohol poisoning by 5%
- > By motor vehicle by 5%

Strategies

Strategy 1: Engage with the health care community, including pharmacies and pharmacists, to discuss alcohol and drug interactions when dispensing medications, with a focus on those taking multiple medications daily.

Strategy 2: Work with area agencies on aging and others in the community to increase awareness of the lower threshold for impairment and intoxication in older adults.

Strategy 3: Engage health educators, athletic trainers and other youth workers to teach the symptoms of alcohol poisoning to youth and the appropriate steps to take when youth suspect alcohol poisoning.

Strategy 4: Encourage law enforcement to compile and use Place of Last Drink information with the goal of improving serving practices and reducing over-serving. Priority: Nutrition and Physical Activity



Priority: Nutrition and Physical Activity

We need to eat healthy and be active to help ourselves stay healthy throughout our life. That's why it's important to have healthy food and ways to be active where we live, work, learn and play. Good nutritional practices and physical activity can reduce the risk for a number of chronic diseases, such as type 2 diabetes, cancer, heart disease, stroke and obesity. Chronic diseases are among the most common and costly of health problems. These diseases are rarely cured and often get worse over time, resulting in disability later in life.

It is important to start eating healthy from the very beginning. Breastfeeding provides ideal food for optimal growth and development of infants and promotes the health of breastfeeding mothers. In 2013, 80% of Wisconsin infants were ever breastfed. The number of breastfed babies drops dramatically at six months, when only 60% are still breastfeeding and only 27% exclusively. Wisconsin experiences extreme disparities in breastfeeding. Among WIC participants in 2015, 79% of white infants were ever breastfed compared to 60% of African American infants. Only 4% of African American infants are exclusively breastfed at six months, which is well below the Healthy People 2020 goal of 25%.

One in 4 Wisconsin adults report eating vegetables less than one time a day, and more than 1 in 3 reported eating fruits less than one time a day, and more than 1 in 3 reported eating fruits less than one time day. In addition, only 1 in 6 adults meets the recommended five or more fruits and vegetables a day.

While more than half (53%) of Wisconsin adults meet the recommended level of physical activity (150+ minutes per week), Wisconsin ranks 18th nationally for physical activity. A growing number of adults, now one in four, report no physical activity in a given month. Among Wisconsin youth, only half (49.5%) reached the recommended level of physical activity of 60 minutes on five or more days per week and one in eight did not participate in an hour of physical activity on any day during a given week.

Wisconsin has the 14th highest adult obesity rate in the U.S. In 2014, about two in three Wisconsin adults and one in four Wisconsin high school students were overweight or obese. The number of people in Wisconsin who are overweight or obese has been rising and if it continues to rise at the same rate, more than half of Wisconsin adults will be obese by 2030.

Childhood obesity affects low-income and minority children more than others. Children who are obese during preschool are more likely to be obese as teenagers and adults, and to develop chronic diseases and conditions like diabetes, high blood pressure, asthma and sleep apnea. These diseases are starting to appear earlier in childhood too.

We know that as ACEs scores go up, so do rates of obesity and bad physical health days. We also know that eating healthy and increasing physical activity can help those who have experienced trauma in childhood. In Wisconsin, the number of adults with at least one ACE (56%) is very similar to the number of adults who report no exercise in the past 30 days (58%), and eating vegetables (57%) and fruit (59%) less than once per day.

Priority: Nutrition and Physical Activity

Goal: Eat Healthier and Move More

Objective 1

Increase consumption of healthy foods and beverages

- Consumption of 1+ fruit per day by adults from 62% in 2013 to 65% in 2020
- Consumption of 1+ vegetable per day by adults from 74% in 2013 to 78% in 2020
- Reduce daily consumption of soda by students from 20% in 2013 to 15% in 2020

Strategies

Strategy 1: Create healthy options where foods and beverages are available.

Strategy 2: Improve accessibility, affordability and demand for healthy foods and beverages in retail settings.

Strategy 3: Increase alignment and coordination among partners supporting nutrition-related initiatives and implementing key nutrition policies at the state and local level.

Objective 2

Increase breastfeeding

- Initiation from 80% in 2015 to 90% in 2020
- Duration at six months from 53% in 2015 to 60% in 2020

Strategies

Strategy 1: Implement maternity care and postpartum practices that support breastfeeding.

Strategy 2: Provide support for breastfeeding mothers in the workplace, early childhood education settings and throughout the community.

Objective 3

Increase physical activity

- Increase percent of adults physically active at least 150 minutes per week from 53% in 2013 to 58% in 2020
- Increase percent of students physically active for a total of at least 60 minutes per day on five or more of the past seven days from 50% in 2013 to 55% in 2020

Strategies

Strategy 1: Engage communities to increase options for all people to be active—including the ability to safely walk and bike.

Strategy 2: Create opportunities for employees to be active and healthy during the workday.

Strategy 3: Educate and engage schools and early childhood education providers to improve accessibility and opportunities for physical activity throughout the day, including through recess policies.

Strategy 4: Create opportunities for and promote evidence-informed community programs that help adults, including those with chronic conditions, to become and remain active.



Priority: Opioids

Drug overdoses, especially of opioids, are a big problem in Wisconsin. Over the last 10 years, deaths from people overdosing on opioids have more than doubled. In 2014, more than 14,000 hospital visits were because of opioids, and almost 3,000 were for opioid overdoses. The number of people in Wisconsin aged 12 and older who have used opioids nonmedically or illegally is just under the number of people living in the city of Madison, Wisconsin, or 202,770 people. More than 80% of Wisconsin's counties have had opioid-related deaths.

Prescription opioids have been the main cause of drug overdoses. In 2014, prescription medicine was the reason for six out of 10 opioid-related deaths and eight out of 10 hospital visits in Wisconsin. Heroin is also a serious problem, and three out of four people who use heroin started with prescription opioids. Heroin is cheap, easy to get and very strong. In Wisconsin, from 2010 to 2014, the rate of heroin deaths increased by 188% compared to a 21% increase in the rate of prescription drug deaths during the same time period. Individuals often use both heroin and prescription drugs.

Heroin deaths are highest among young adults (20-29 years), and hospital encounters for opioid use disorder are also highest among this group. Prescription drug deaths are highest among middle-aged adults (45-54 years). Men have higher rates of opioid overdose deaths than women.

Mental health issues are associated with substance addiction. At least six out of 10 of those with addiction also have a mental illness, and one in five people having mental health conditions also have an addiction. Individuals with a substance addiction are six times more likely than the general population to attempt suicide.

Studies have shown that toxic stress during childhood, such as ongoing childhood abuse or neglect, impacts the pleasure and reward center of the brain that is involved with substance dependence. With more data being collected and attention being paid to opioid use and misuse in Wisconsin, we will continue to study the connection between ACEs and opioids to better inform policy decisions, prevention and intervention efforts.

Opioid misuse and opioid addiction can lead to poverty, unemployment, not being as productive, not doing as well in school, family problems and abuse, crime and homelessness.

Preventing these problems requires many partners and many strategies, including making it harder to misuse prescription opioids, making it easier to get Naloxone to prevent opioid overdose death and making sure people can get help for substance use and mental health issues.

Priority: Opioids

Goal: Prevent and Reduce Opioid-Related Deaths and Harm

Objective 1

Reduce the number of overdose deaths, hospitalizations, and emergency department visits associated with nonmedical or illicit opioid use by 5% by 2020:

- From 622 deaths in 2014 to fewer than 590 in 2020
- From 12,134 hospitalizations in 2014 to fewer than 11,530 in 2020
- From 8,041 emergency department visits in 2014 to fewer than 7,640 in 2020

Objective 2

Increase people benefiting from outreach, intervention, treatment and support services for nonmedical and illicit opioid addiction by 5% from 4,015 persons in 2014 to at least 4,210 persons in 2020.

Strategies

Strategy 1: Improve pain management practice in Wisconsin in accordance with best practices including widely distributing the CDC's Opioid Prescribing Guideline.

Strategy 2: Improve use of prescription drug monitoring information systems.

Strategy 3: Promote Naloxone distribution and administration and training to prevent overdoses and overdose-related deaths.

Strategy 4: Ensure proper disposal of prescription drugs.

Strategy 5: Develop a community monitoring and early warning system that tracks overdoses associated with prescription drug and heroin use at a local level.

Strategies

Strategy 1: Promote evidence-informed screening and treatment, including SBIRT (screening, brief intervention, referral, treatment) intervention and referral for treatment, among health care, mental health and social service professionals. Encourage physicians to screen their patients for opioid use disorder and provide or connect them with evidence-informed treatment.

Strategy 2: Promote effective models of opioid outreach, intervention, treatment and support that reach out to active drug users; non drug-using friends and family members; pain management clinics; community-based organizations; correction facilities; and hospitals.

Objective 3

Reduce the percentage of a dolescents who have used an opioid prescription drug for nonmedical purposes from 14.9% in 2013 to less than 13% by 2020.

Strategies

Strategy 1: Improve knowledge and adoption of evidence-informed policies and programs that prevent and reduce nonmedical and illicit opioid use among adolescents.

Strategy 2: Promote pharmacist, family physician and parent education about the risks and practices to prevent nonmedical use of opioid prescription medications.

Strategy 3: Educate prescribers and community members on alternatives to opioid pain relievers for acute pain situations such as sports injuries, car accidents and minor medical or dental procedures.



Priority: Suicide

Suicide is a serious problem in Wisconsin. It is the 11th leading cause of death in the state, and the second leading cause of death due to injury. Over the last 10 years, the number of suicides each year continues to increase. Suicide and people thinking about suicide cause a lot of pain for communities, families and individuals. For every death by suicide, there are more than 10 emergency department visits and hospitalizations for self-inflicted injury, and this does not include the number of people in Wisconsin who go to outpatient clinics or do not seek medical treatment following a suicide attempt.

Some populations and communities have a higher risk for suicide and suicide attempts. Men are at a greater risk of dying from suicide at all ages. The age group at greatest risk of suicide for both men and women is 45-54. Another age group with high rates of suicide is men 85 and older. Other groups at higher risk include non-Hispanic Whites, American Indians, people with low educational attainment, veterans, divorced individuals and those living in the northern and western regions of Wisconsin. It is important, especially for those at greater risk of dying from suicide, that everyone can feel comfortable seeking help.

Teens have the highest rates of self-inflicted injuries. Among Wisconsin high school students, one out of seven have seriously considered attempting suicide. High school students of ethnic and racial minority backgrounds are more likely to have suicidal thoughts and behaviors than their classmates.

During the 2007-2011 time period, the three primary means of suicide in Wisconsin were firearms (45.4%); hanging, strangulation, or suffocation (25%); and poisoning (19.5%). The primary reasons people were hospitalized or in the emergency department for self-injury were poisoning (67.1%) and injury from sharp instruments (21.5%).

Six out of 10 people who died from suicide had an indication of a current depressed mood, and more than half had an indication of a current mental health problem. In Wisconsin, nearly one in four adults reported four or more poor mental health days in the last month. Similarly, nearly three in ten high school students reported that their mental health was not good four or more days in the past month.

Adverse childhood experiences (ACEs) considerably increase the risks of suicidal behaviors. In one study it was found that nearly two-thirds (64%) of suicide attempts among adults were attributable to ACEs and 80% of suicide attempts during childhood/adolescence were attributed to ACEs. Researchers have found that toxic stress during childhood, such as ongoing childhood abuse or neglect, impacts how the brain works, which makes it harder to resist impulses and increases the likelihood of engaging in risk behaviors. Data shows that 57% of Wisconsin residents have at least one ACE, which makes it clear that Wisconsin needs to continue exploring the connection between childhood adversity and suicide.

Priority: Suicide

Goal: Prevent Suicide in Wisconsin

Objective 1

Reduce suicides from 13.1 (per 100,000) in 2014 to 12.8 (per 100,000) in 2020

Strategies

Strategy 1: Increase the capacity of communities, families and individuals to create suicide-safe environments.

Strategy 2: Increase use of evidence-informed practices by health organizations—including health departments, health care systems and other partners—to reduce suicide and the impact of suicide.

Strategy 3: Implement methods to reduce access to lethal means.

Objective 2

Reduce the rate of suicide attempts from 210.47 (per 100,000) in 2014 to 208.37 (per 100,000) in 2020

Strategies

Strategy 1: Provide community-wide gatekeeper training.

Strategy 2: Create and support active suicide prevention coalitions.

Strategy 3: Health care organizations and community members use evidence-informed practices for talking about and treating suicidal thoughts and behaviors.

Objective 3

Increase and enhance protective factors

- Increase percentage of adults with less than four poor mental health days/month from 78% in 2015 to 83% in 2020
- Increase percentage of adults who report receiving social and emotional support from 63% in 2015 to 68% in 2020
- Increase percentage of children with at least one teacher or adult in school they can talk to from 74% in 2013 to 79% in 2020

Strategies

Strategy 1: Establish trauma-sensitive schools.

Strategy 2: Support those affected by suicide attempts and suicide loss through support groups and peer support.

Strategy 3: Expand access to services for mental health and substance use disorders, as well as suicidal thoughts and behavior.



Priority: Tobacco

Tobacco use and exposure is the leading cause of preventable death in Wisconsin, linked to 7,700 deaths and \$4.5 billion in health care and lost productivity each year. There is a need for programs and policies to keep people from using tobacco in the first place, and to use less tobacco.

Wisconsin—and the Wisconsin Health Improvement Plan—recognize the sacred use of ceremonial tobacco among Native Americans, and use the word "tobacco" to refer to commercial tobacco use.

Many populations use tobacco at disproportionately higher rates than the general population (17%), such as those impacted by depression (31%), Medicaid recipients (36%) and African Americans (36%).

Additionally, adverse childhood experiences (ACEs) are connected to risk behaviors (like tobacco use) and linked to negative health outcomes in adulthood. Data show that 74% of all smokers in Wisconsin have experienced at least one ACE, compared with 57% of the general population. There are efforts underway in Wisconsin to explore integrating trauma-informed practices into treatment efforts while continuing to focus on the strong connection between smoking and adversity in childhood.

Though fewer Wisconsin youth are smoking, new tobacco products threaten this progress. Smokeless tobacco use among high school students increased 67% from 5.8% in 2012 to 10% 2014, and the rising popularity of e-cigarettes is a concern. Some youth communities are using tobacco much more than others and some are also impacted by tobacco advertising more than others.

Priority: Tobacco

Goal: Prevent and Reduce Smoking and Other Tobacco Products

Objective 1

Reduce adult smoking rate from 17.3% in 2014 to 16.3% in 2020

Strategies

Strategy 1: Improve access to, coverage for and use of evidenceinformed cessation services. Target outreach to pregnant women, their families and health care providers.

Strategy 2: Integrate tobacco cessation into behavioral health care treatment and services and educate tobacco users with behavioral health concerns about benefits of quitting smoking.

Strategy 3: Train stakeholders and professionals working in tobacco intervention about the correlation between and among addictions, and on trauma-informed care practice and motivational interviewing.

Objective 2

Reduce use of other tobacco products by adults from 15.6% in 2014 to 14% in 2020

Strategies

Strategy 1: Implement tobacco-free policies on college campuses.

Strategy 2: Educate and engage at-risk populations, such as behavioral health, low socioeconomic status, racial/ethnic minorities and LGBTQ populations, about the dangers of other tobacco products.

Objective 3

Reduce use of other tobacco products by youth

- Among middle school youth from 5.2% in 2014 to 4.5% in 2020
- Among high school youth from 33.7% in 2014 to 31% in 2020

Strategies

Strategy 1: Educate and engage youth and school officials about the dangers of other tobacco products and implement tobacco-free school policies.

Strategy 2: Increase the number of compliance checks conducted and education and outreach to retailers.

Strategy 3: Identify and implement evidence-informed policies to reduce youth use.

ACEs Intersect with Healthy Wisconsin

The following are examples of how Healthy Wisconsin and ACEs intersect. Research shows that ACEs may be intergenerationally passed down, which can cause a familial cycle of ACE transmission. Adults with high ACE scores may be more likely to struggle with substance use disorder (e.g., misuse of alcohol and/or drugs), mental health diagnoses, depression or suicidality. In turn, these risk behaviors and mental health outcomes expose any children living in the household to those specific ACEs.

ACEs and Alcohol Abuse

ACEs are connected to risk behaviors that can lead to substance use disorders, and are linked to negative health outcomes in adulthood. Researchers have found that toxic stress during childhood, such as ongoing childhood abuse or neglect, impacts the pleasure and reward center of the brain that is involved in substance dependence as well as executive functioning, which compromises impulse control. Wisconsin adults with one or more adverse childhood experience have a significantly higher rate (22%) of binge drinking in the past 30 days compared to adults with no ACEs (16%).

ACEs and Nutrition and Physical Activity

Data show that as ACE scores go up, so do rates of obesity, and bad physical health days. Research also highlights that eating healthy and increasing physical activity are positive coping mechanisms and can serve as a source of resilience for those who have experienced trauma in childhood, and who are, in turn, struggling with risk behaviors and experiencing negative health outcomes.

ACEs and Opioid Use

ACEs are connected to risk behaviors that can lead to multiple addictions and are linked to negative health outcomes in adulthood. Researchers have found that toxic stress during childhood, such as ongoing childhood abuse or neglect, impacts the pleasure and reward center of the brain that is implicated in substance dependence.

ACEs and Suicide

ACEs considerably increase the risks of suicidal behaviors. In one study it was found that nearly two-thirds (64%) of suicide attempts among adults were attributable to ACEs and 80% of suicide attempts during childhood/adolescence were attributed to ACEs. Researchers have found that toxic stress during childhood, such as ongoing childhood abuse or neglect, impacts the brain's executive functioning, which compromises impulse control and increases the likelihood of engaging in risk behaviors.

ACEs and Tobacco

ACEs are connected to risk behaviors (like tobacco use) and linked to negative health outcomes in adulthood. Data show that 74% of all smokers in Wisconsin have experienced at least one ACE, compared to 57% of the general population in Wisconsin. There are efforts underway in Wisconsin to explore integrating trauma-informed practices into treatment efforts while continuing to focus on the strong connection between smoking and adversity in childhood.

References

People of Wisconsin

U.S. Census Bureau, "State Quickfacts: Wisconsin (2015)," [Online]. Available at https://www.census.gov/quickfacts/table/PST045215/55

University of Wisconsin Population Health Institute, "County Health Rankings 2016," [Online] Available at www.countyhealthrankings.org

U.S. Census Bureau, "Quickfacts (2015)," [Online] Available at https://www.census.gov/quickfacts/

Wisconsin Department of Health Services, "Wisconsin Minority Populations and Health Reports," [Online] Available at https://www.dhs.wisconsin.gov/minority-health/report.htm

University of Wisconsin Population Health Institute. "Health of Wisconsin Report Card (2013)," [Online] Available at <u>https://uwphi.pophealth.wisc.edu/programs/match/healthiest-state/</u> report-card/2013/

U.S. Department of Health and Human Services Office of Disease Prevention and Health Promotion, "Healthy People 2020, " [Online]. Available at https://www.healthypeople.gov/2020/about/foundation-health-measures/Disparities [Accessed 3 February 2017].

Wisconsin Department of Health Services, Division of Public Health. Healthiest Wisconsin 2020 Baseline and Health Disparities Report. January 2014. Available at <u>https://www.dhs.wisconsin.gov/hw2020/ baseline.htm</u>

Public Health Infrastructure in Wisconsin

United Health Foundation, "America's Health Ranking (2015)," [Online]. Available at http://www.americashealthrankings.org/

United Health Foundation, "America's Health Ranking - Senior Report (2015)," [Online]. Available at <u>http://www.americashealthrankings.org/</u> <u>learn/reports/2016-senior-report</u>

United Health Foundation, "America's Health Ranking - Health of Women and Children (2016)," [Online]. Available at http://www.americashealthrankings.org/learn/reports/2016-healthof-women-and-children-report/executive-summary

WI-HIPP

Wisconsin Department of Health Services, Division of Public Health, Office of Policy and Practice Alignment. Healthiest Wisconsin 2020: Everyone Living Better, Longer. A State Health Plan to Improve Health Across the Life Span, and Eliminate Health Disparities and Achieve Health Equity. P-00187. July 2010

Health In Wisconsin

Wisconsin Department of Health Services, Division of Public Health, Office of Health Informatics. Wisconsin Interactive Statistics on Health (WISH) data query system, Mortality Module. Available at https://www.dhs.wisconsin.gov/wish/mortality/index.htm

Wisconsin Department of Health Services, Division of Public Health. Healthiest Wisconsin 2020 Baseline and Health Disparities Report. January 2014. Available at <u>https://www.dhs.wisconsin.gov/hw2020/</u> baseline.htm

Alcohol and Drug Abuse

Wisconsin Department of Health Services, Division of Public Health. Healthiest Wisconsin 2020 Baseline and Health Disparities Report. January 2014. Available at <u>https://www.dhs.wisconsin.gov/hw2020/ baseline.htm</u>

Wisconsin Department of Health Services, Division of Public Health and Division of Mental Health and Substance Abuse Services. "Wisconsin Epidemiological Profile on Alcohol and Other Drug Use, 2014 (P-45718-14)". Prepared by the Division of Mental Health and Substance Abuse Services, the University of Wisconsin Population Health Institute and the Office of Health Informatics, Division of Public Health. September 2014.

United Health Foundation, "America's Health Ranking," [Online]. Available at http://www.americashealthrankings.org/

Chronic Disease

United Health Foundation, "America's Health Ranking," [Online]. Available at http://www.americashealthrankings.org/

Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), "National Health and Nutrition Examination Survey Data". Hyattsville, MD: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention. Available at https://wwwn.cdc.gov/nchs/nhanes/default.aspx

American Cancer Society, "Wisconsin Cancer Facts and Figures 2013-2014," [Online] Available at <u>https://wicancer.org/wp-content/uploads/2015/08/WI-FactsFigures-2013_FINAL.pdf</u>

Communicable Disease

United Health Foundation, "America's Health Ranking," [Online]. Available at http://www.americashealthrankings.org/

Wisconsin Department of Health Services, Division of Public Health, Office of Policy and Practice Alignment. Healthiest Wisconsin 2020: Everyone Living Better, Longer. A State Health Plan to Improve Health Across the Life Span, and Eliminate Health Disparities and Achieve Health Equity. P-00187. July 2010

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

Environmental Health

Wisconsin Department of Health Services, Division of Public Health. Healthiest Wisconsin 2020 Baseline and Health Disparities Report. January 2014. Available at <u>https://www.dhs.wisconsin.gov/hw2020/ baseline.htm</u>

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

United Health Foundation, "America's Health Ranking," [Online]. Available at <u>http://www.americashealthrankings.org/</u>

Healthy Growth and Development

Wisconsin Department of Health Services, Division of Public Health, Office of Health Informatics. Annual Wisconsin Birth and Infant Mortality Report, 2015 (P-01161-16). August 2016.

March of Dimes "Premature Birth Report Card (2016)," [Online] Available at <u>http://www.marchofdimes.org/materials/</u> premature-birth-report-card-wisconsin.pdf

United Health Foundation, "America's Health Ranking," [Online]. Available at <u>http://www.americashealthrankings.org/</u>

Injury and Violence

Wisconsin Department of Health Services, Division of Public Health, Office of Policy and Practice Alignment. Healthiest Wisconsin 2020: Everyone Living Better, Longer. A State Health Plan to Improve Health Across the Life Span, and Eliminate Health Disparities and Achieve Health Equity. P-00187. July 2010

Wisconsin Department of Health Services, Division of Public Health, Office of Health Informatics. Wisconsin Interactive Statistics on Health (WISH) data query system, Injury Mortality Module. Available at https://www.dhs.wisconsin.gov/wish/mortality/index.htm

Wisconsin Department of Transportation, 2013 Wisconsin Traffic Crash Facts. [Online] Available at <u>http://wisconsindot.gov/Pages/safety/education/crash-data/crashfacts.aspx</u> Centers for Disease Control and Prevention (CDC). Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention

United Health Foundation, "America's Health Ranking," [Online]. Available at <u>http://www.americashealthrankings.org/</u>

Mental Health

United Health Foundation, "America's Health Ranking," [Online]. Available at http://www.americashealthrankings.org/

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

Wisconsin Department of Health Services, Division of Public Health. Healthiest Wisconsin 2020 Baseline and Health Disparities Report. January 2014. Available at <u>https://www.dhs.wisconsin.gov/hw2020/</u> baseline.htm

Center for Behavioral Health Statistics and Quality. (2015). Behavioral health trends in the United States: Results from the 2014 National Survey on Drug Use and Health (HHS Publication No. SMA 15-4927, NSDUH Series H-50). Available at <u>http://www.samhsa.gov/data/</u>

Nutrition and Healthy Foods

United Health Foundation, "America's Health Ranking," [Online]. Available at <u>http://www.americashealthrankings.org/</u>

The Centers for Disease Control and Prevention, Division of Population Health, National Center for Chronic Disease Prevention and Health Promotion. Healthy Schools – Obesity Prevention. "Childhood Obesity Facts". 2016.

U.S. Department of Health and Human Services and U.S. Department of Agriculture 2015 - 2020 Dietary Guidelines for Americans 8th Edition. December 2015. Available at http://health.gov/dietaryguidelines/2015/ guidelines/

Wisconsin Department of Health Services, Division of Public Health, Office of Health Informatics. Wisconsins PRAMS Data Book 2009-2011: Key Findings from the Wisconsin Pregnancy Risk Assessment Monitoring System (P-00740). July 2014

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

Wisconsin Department of Health Services, Division of Public Health, Bureau of Community Health Promotion. Food Insecurity in the Wisconsin WIC Population, January 2012.

Oral Health

Wisconsin Department of Health Services, Division of Public Health, Office of Policy and Practice Alignment. Healthiest Wisconsin 2020: Everyone Living Better, Longer. A State Health Plan to Improve Health Across the Life Span, and Eliminate Health Disparities and Achieve Health Equity. P-00187. July 2010

United Health Foundation, "America's Health Ranking," [Online]. Available at <u>http://www.americashealthrankings.org/</u>

Physical Activity

United Health Foundation, "America's Health Ranking," [Online]. Available at http://www.americashealthrankings.org/

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

Centers for Disease Control and Prevention. [2013] Youth Risk Behavior Survey Questionnaire. Available at: <u>www.cdc.gov/yrbs</u>

Reproductive and Sexual Health

United Health Foundation, "America's Health Ranking," [Online]. Available at <u>http://www.americashealthrankings.org/</u>

Wisconsin Department of Health Services, Division of Public Health. Healthiest Wisconsin 2020 Baseline and Health Disparities Report. January 2014. Available at <u>https://www.dhs.wisconsin.gov/hw2020/</u> baseline.htm

Wisconsin Department of Health Services, Division of Public Health, Office of Health Informatics. Wisconsins PRAMS Data Book 2009-2011: Key Findings from the Wisconsin Pregnancy Risk Assessment Monitoring System (P-00740). July 2014

Tobacco

United Health Foundation, "America's Health Ranking," [Online]. Available at http://www.americashealthrankings.org/

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

Palmersheim KA, Prosser EC. Burden of Tobacco in Wisconsin: 2015 Edition. University of Wisconsin-Milwaukee, Center for Urban Initiatives and Research, Milwaukee, WI: 2015

Centers for Disease Control and Prevention. [2013] Youth Risk Behavior Survey Questionnaire. Available at: <u>www.cdc.gov/yrbs</u>

ACEs

The Influence of Adverse Childhood Experiences on the Health of Wisconsin Citizens in Adulthood. (2015). Madison, WI: Child Abuse and Neglect Prevention Board.

Fostering Futures Website 2015 [Online] Available at: http://www.fosteringfutureswisconsin.org/

Alzheimer's Disease and Related Dementia

Alzheimer's Association, "2016 Alzheimer's Facts and Figures," [Online] Available at: <u>https://www.alz.org/documents_custom/2016-facts-and-fig-ures.pdf</u>

Wisconsin Department of Health Services, Division of Long Term Care. Wisconsin Dementia Care System Redesign. February 2014. Available at https://www.dhs.wisconsin.gov/publications/p0/p00586.pdf

United Health Foundation, "America's Health Ranking - Senior Report (2015)," [Online]. Available at <u>http://www.americashealthrankings.org/</u> <u>learn/reports/2016-senior-report</u>

American Cancer Society, "Wisconsin Cancer Facts and Figures 2013-2014," [Online] Available at <u>https://wicancer.org/wp-content/</u> <u>uploads/2015/08/WI-FactsFigures-2013_FINAL.pdf</u>

Alcohol

United Health Foundation, "America's Health Ranking," [Online]. Available at http://www.americashealthrankings.org/

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

Centers for Disease Control and Prevention. [2013] Youth Risk Behavior Survey Questionnaire. Available at: <u>www.cdc.gov/yrbs</u>

Wisconsin Department of Health Services, Division of Public Health and Division of Mental Health and Substance Abuse Services. "Wisconsin Epidemiological Profile on Alcohol and Other Drug Use, 2014 (P-45718-14)". Prepared by the Division of Mental Health and Substance Abuse Services, the University of Wisconsin Population Health Institute and the Office of Health Informatics, Division of Public Health. September 2014.

Nutrition - Physical Activity

United Health Foundation, "America's Health Ranking," [Online]. Available at <u>http://www.americashealthrankings.org/</u>

Centers for Disease Control and Prevention (CDC). Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention Centers for Disease Control and Prevention. [2013] Youth Risk Behavior Survey Questionnaire. Available at: <u>www.cdc.gov/yrbs</u>

Centers for Disease Control and Prevention. National Immunization Survey. Available at: <u>https://www.cdc.gov/vaccines/imz-managers/</u> <u>nis/datasets.html</u>

University of Wisconsin Population Health Institute, "County Health Rankings 2016," [Online] Available at www.countyhealthrankings.org

Opioids

United Health Foundation, "America's Health Ranking," [Online]. Available at http://www.americashealthrankings.org/

University of Wisconsin Population Health Institute, "County Health Rankings 2016," [Online] Available at <u>http://www.countyhealthrankings.org/</u> reports/key-findings-2016

U.S. Census Bureau, "Quickfacts (2015)," [Online] Available at https://www.census.gov/quickfacts/

Division of Care and Treatment Services. Program Participation Services Utilization Reporting System.

Centers for Disease Control and Prevention. [2013] Youth Risk Behavior Survey Questionnaire. Available at: <u>www.cdc.gov/yrbs</u>

Suicide

Wisconsin Department of Health Services, Division of Public Health, Office of Policy and Practice Alignment. Healthiest Wisconsin 2020: Everyone Living Better, Longer. A State Health Plan to Improve Health Across the Life Span, and Eliminate Health Disparities and Achieve Health Equity. P-00187. July 2010

U.S. Department of Health and Human Services Office of Disease Prevention and Health Promotion, "Healthy People 2020," [Online]. Available at <u>https://www.healthypeople.gov/2020/about/foundation-health-measures/Disparities</u>.[Accessed 3 February 2017].

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

Centers for Disease Control and Prevention. [2013] Youth Risk Behavior Survey Questionnaire. Available at: www.cdc.gov/yrbs.

Tobacco

United Health Foundation, "America's Health Ranking," [Online]. Available at <u>http://www.americashealthrankings.org/</u>

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

Centers for Disease Control and Prevention. [2013] Youth Risk Behavior Survey Questionnaire. Available at: <u>www.cdc.gov/yrbs</u>

Priority: Alcohol

Black, PD, Paltzer, JT., The Burden of Excessive Alcohol Use in Wisconsin University of Wisconsin Population Health Institute, February 2013

Centers for Disease Control and Prevention (CDC), "Alcohol Use in Pregnancy," [Online]. Available at <u>https://www.cdc.gov/ncbddd/fasd/</u> alcohol-use.html

Wisconsin Department of Health Services, Division of Public Health, Office of Health Informatics. Wisconsins PRAMS Data

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

Priority: Nutrition and Physical Activity

United Health Foundation, "America's Health Ranking," [Online]. Available at http://www.americashealthrankings.org/

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

Priority: Opioids

United Health Foundation, "America's Health Ranking," [Online]. Available at http://www.americashealthrankings.org/

University of Wisconsin Population Health Institute, "County Health Rankings 2016," [Online] Available at <u>http://www.countyhealthrankings.org/</u> reports/key-findings-2016

U.S. Census Bureau, "Quickfacts (2015)," [Online] Available at https://www.census.gov/quickfacts/

Centers for Disease Control and Prevention. [2013] Youth Risk Behavior Survey Questionnaire. Available at: <u>www.cdc.gov/yrbs</u>

Priority: Suicide

Wisconsin Department of Health Services, Division of Mental Health and Substance Abuse Services. Wisconsin Suicide Prevention Strategy. 2015. Available at <u>http://www.sprc.org/sites/default/files/</u> <u>Wisconsin%202015.pdf</u>

Wisconsin Department of Health Services, Division of Public Health, Office of Health Informatics. Wisconsin Interactive Statistics on Health (WISH) data query system, Injury Mortality Module. Available at https://www.dhs.wisconsin.gov/wish/mortality/index.htm

Centers for Disease Control and Prevention. [2013] Youth Risk Behavior Survey Questionnaire. Available at: <u>www.cdc.gov/yrbs</u>

Wisconsin Department of Health Services, the Injury Research Center at the Medical College of Wisconsin, and Mental Health America of Wisconsin. The Burden of Suicide in Wisconsin. 2014. Available at: https://www.dhs.wisconsin.gov/publications/p0/p00648-2014.pdf

Dube, S. R., Anda, R. F., Felitti, V. J., Chapman, D. P., Williamson, D. F., & Giles, W. H. (2001). Childhood abuse, household dysfunction, and the risk of attempted suicide throughout the life span: findings from the Adverse Childhood Experiences Study. Jama, 286(24), 3089-3096.

Priority: Tobacco

United Health Foundation, "America's Health Ranking," [Online]. Available at http://www.americashealthrankings.org/

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

Centers for Disease Control and Prevention. [2013] Youth Risk Behavior Survey Questionnaire. Available at: <u>www.cdc.gov/yrbs</u>.

ACEs

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

Centers for Disease Control and Prevention. State Indicator Report on Fruits and Vegetables. Atlanta, GA: 2009. Available from <u>http://files.eric.</u> ed.gov/fulltext/ED507768.pdf

Dube, S. R., Anda, R. F., Felitti, V. J., Chapman, D. P., Williamson, D. F., & Giles, W. H. (2001). Childhood abuse, household dysfunction, and the risk of attempted suicide throughout the life span: findings from the Adverse Childhood Experiences Study. Jama, 286(24), 3089-3096. All photos used in this publication are credited to the Wisconsin Department of Tourism's Digital Asset Library.

"Travel Wisconsin." Travel Wisconsin, Wisconsin Department of Tourism Digital Asset Library, <u>images.travelwisconsin.com/</u> Accessed 26 Apr. 2017.

Appendix

Age-adjusted Death Rate

2011-2015



Map created by the Bureau of Information Technology Services, GIS Program February 2017

Non-Hispanic Black Population

2015





Map created by the Bureau of Information Technology Services, GIS Program February 2017

Source: Office of Health Informatics, Division of Public Health, Department of Health Services

Non-Hispanic American Indian Population

2015



Map created by the Bureau of Information Technology Services, GIS Program February 2017

Non-Hispanic Asian Population

2015





Map created by the Bureau of Information Technology Services, GIS Program February 2017

Source: Office of Health Informatics, Division of Public Health, Department of Health Services

Hispanic Population

2015





Map created by the Bureau of Information Technology Services, GIS Program February 2017

Age-adjusted Diabetes Death Rate

2011-2015





Map created by the Bureau of Information Technology Services, CIS Program February 2017

Source: Office of Health Informatics, Division of Public Health, Department of Health Services
Age-adjusted Heart Disease Death Rate

2011-2015



Map created by the Bureau of Information Technology Services, CIS Program February 2017

Age-adjusted Stroke Death Rate

2011-2015





Map created by the Bureau of Information Technology Services, GIS Program February 2017

Age-adjusted Suicide Death Rate

2011-2015





Map created by the Bureau of Information Technology Services, CIS Program February 2017

Mothers Who Smoke During Pregnancy

2011-2015



Map created by the Bureau of Information Technology Services, GIS Program February 2017



All references include sources for data and information and are categorized by section.

Wisconsin Department of Health Services, Division of Public Health, Office of Policy and Practice Alignment.

February 2017

This publication was supported by the Grant or Cooperative Agreement Number, BO1 OT009070, funded by the Centers for Disease Control and Prevention. Its contents are solely the responsibility of the authors and do not necessarily represent the official views of the Centers for Disease Control and Prevention or the Department of Health and Human Services.

