CRCHD

Central Racine County Health Department

Community Health Assessment

2017

Central Racine County Health Department
10005 Northwestern Avenue, Suite A
Franksville, WI 53126

THIS PAGE IS INTENTIONALLY LEFT BLANK

TABLE OF CONTENTS

SUMMARY AND ACKNOWLEDGEMENTS

Local health departments in Wisconsin conduct Community Health Assessments (CHAs). According to the National Association of County & City Health Officials, a CHA allows for a systematic examination of the health status indicators for a given population and is used to identify key problems and assets in a community. The ultimate goal of a CHA is to develop strategies to address the community's health needs and identified issues. Central Racine County Health Department (CRCHD) collected assessments of our community themes and strengths, our local public health system, our community health status, and forces of change to develop a CHA. From this process, we elucidated some opportunities and some challenges faced by our community. These findings are summarized below and explored throughout the CHA. The findings provide a launching pad for determining priority health issues in our community that we might want to address.

OPPORTUNITIES	CHALLENGES
• Health/quality of life good or excellent	• Income inequality/economically disadvantaged
• Health/quality of life same or getting better	• Educational attainment gap
• Many schools perceived as good	• Aging population
• Good place to raise children	• Lack of health insurance for Hispanics and Blacks
• Decrease in unhealthy days for asthma/lung disease	• High number of preventable hospitalizations
• Decrease in violent crime	• Low number of health care providers per capita
• Increase in owner-occupied homes	• Increase in fear for personal safety
• Increase in median income	• Rise in binge drinking
• More adults receiving health insurance	• Increase in opioid use
• Decrease in adult smoking	• Decrease in youth use of contraception
• Decrease in smoking during pregnancy	• Increase in obesity
• Increase in adult moderate physical activity	• Increase in suicides
• Decrease in youth sexual activity	• Infant mortality disparities
• Increase purchase of radon test kits	• Falls across all age groups
• Decrease in number of kids bullied (parent report)	• Elevated levels of trauma for pregnant women
• Decrease in teen (15-19) birth rate	• Increase in number of STDs
• Overall decrease in infant mortality	• Increase in Hepatitis C
• High number of 2-year-olds immunized	• High rates of chronic disease
• Schools, community centers, non-profit organizations, local businesses, and government	• Preventable injuries and deaths
	• Lack of family support and individual effort

Central Racine County Health Department would like to thank the following community partners who helped with data collection, survey input, and data analyses to help make this CHA a reality:

- *CHA-CHIP Partner Group:* Racine Family YMCA; Racine Unified School District; SC Johnson; Burlington Police Department; WIC; Health Care Network; Racine County Fetal, Infant & Child Death Review representative; and, CRCHD staff.
- *CHA-CHIP Survey Respondents:* Board officials, municipal officials and staff, health care agencies, public health, businesses, non-profit agencies (representing health, mental health, behavioral health, student well-being, violence prevention, elder care), and school districts.
- *Racine County Community Health Data Committee*: Aurora Healthcare, Ascension, Children's Hospital of Wisconsin (funders); City of Racine Health Department; Health Care Network; Racine County Human Services; and, United Way of Racine County.
- *Resident Survey Respondents*: 800 adult residents statistically representing the jurisdiction.
- *Key-Informant Interview Respondents*: Schools and colleges, law enforcement, government, non-profits, healthcare, public health, faith community, homeless population.

A special thanks to CRCHD staff Silviano Garcia and Pa Chang for all the data compilation and analyses for the CHA.

OVERVIEW AND BACKGROUND

INTRODUCTION

Central Racine County Health Department is a multijurisdictional health department in Racine County, Wisconsin and includes the municipalities of City of Burlington, Town of Burlington, Village of Caledonia, Town of Dover, Village of Mount Pleasant, Village of North Bay, Town of Norway, Town of Raymond, Village of Rochester, Village of Sturtevant, Village of Union Grove, Town of Waterford, Village of Waterford, and Town of Yorkville. CRCHD provides programs and services according Wisconsin State Statutes and Administrative Codes.

Local health departments are required to conduct a community health assessment (CHA) every five years, per Wisconsin Administrative Code. The goal of the CHA is to collect, review, and analyze health data in the community. This report helps us understand the health status of our community and the factors that impact health. Data are gathered from a variety of sources and through various methods of data collection. Essential to the CHA is the input of many community sectors to provide various perspectives in the analysis of data and determination of assets, resources and health challenges. Central Racine County Health Department conducted a CHA in 2014 and this 2017 plan includes substantial updates to reflect all 14 communities in the jurisdiction.

The CHA process included putting together teams of community partners to discuss the CHA process, develop questions for a community partner/stakeholder survey, identify other possible data sources and methods, and review questions for both a resident survey and key-informant interviews. CHA partners collaborated to develop the CHA by considering new data sources, reviewing newly collected data, considering assets and resources that are changing, and conducting data review/analyses. CHA meetings were held in March, April, June, November, December of 2017. Using primary data sources as well as information from other sources, a preliminary CHA was developed. Preliminary findings were communicated to the public, partners, stakeholders, other agencies, associations and organizations for feedback and input.

Information from the CHA will be used to develop a community health improvement plan (CHIP), per Wisconsin Statutes. For the CHIP, partners will use CHA data to identify themes and issues, define health and a healthy community, identify community assets and resources, and develop a set of priority health issues. Partners will identify measurable outcomes or indicators of health improvement and priorities for action, identify needed policy changes (including those adopted to alleviate the identified causes of health inequities), designate individual and organizations that are responsible for implementing strategies, and consider where local priorities fit with state and national priorities. The goal of the CHIP will be to take information gathered in the CHA, combined with additional input from community members, Board of Health, and governmental, business and community agency stakeholders, and translate it into a meaningful roadmap to and vision to improve our community's health together.

The information found in this CHA describes CRCHD's journey to develop this plan, including our processes for organizing, partnership development, and visioning. In addition, the CHA reveals assessments of our community themes and strengths, our local public health system, our community health status, and forces of change.

MAPP

To develop the CHA, Central Racine County Health Department used the Mobilizing for Action through Planning and Partnerships (MAPP) framework to isolate and collect data, determine health issues, and identify existing assets and resources. The MAPP tool was developed by NACCHO in cooperation with the Public Health Practice Program Office, Centers for Disease Control and Prevention (CDC). A work group composed of local health officials, CDC representatives, community representatives, and academicians developed MAPP between 1997 and 2000. The framework is a community-driven strategic planning process for improving community health. It facilitates strategic thinking to prioritize public health issues and identify resources to address them. Using MAPP, communities seek to achieve optimal health by identifying and using their resources wisely, considering their unique circumstances and needs, and forming effective partnerships for strategic action. In the **MAPP model**, the "phases" of the MAPP process are shown in the center of the model, while the four MAPP Assessments—the key content areas that drive the process—are shown in four outer arrows. This report is organized by the MAPP process and corresponds to all portions of the MAPP process. Data sources for this report come from a variety of primary and secondary sources which are delineated in the document.

OVERVIEW: DEMOGRAPHIC FINDINGS

Table OB1

	CRCHD Jurisdiction	Racine County	Disparity (Racine County)
Population	114,938	194,865	N/A
Race	White = 104,920 Black = 3,934 Other = 5,474	White = 157,544 Black = 21,574 Other = 15,747	N/A
Ethnicity	Hispanic = 6,172 Non-Hispanic = 108,156	Hispanic = 23,900 Non-Hispanic = 170,965	N/A
Median Age		40	Non-Hispanic White = 45; Non-Hispanic Black = 30; Hispanic (any race) = 25
Born in US / English Spoken at Home	97% / 95.4%	95% / 92%	N/A
Median Income		$55,584	**Household** *Non-Hispanic White* = $62,368 *Non-Hispanic Black* = $26,472 *Hispanic (any race)* = $36,852 **Individual** *Male* = $40,317 *Female* = $26,842
Unemployment Rate	N/A	8%	Non-Hispanic White = 7% Non-Hispanic Black = 21%; Hispanic (any race) = 10%
Home Ownership	79%	70%	Non-Hispanic White = 78% Non-Hispanic Black = 30%; Hispanic (any race) = 44%
High School Education	92%	88%	**Race/Ethnicity** *Non-Hispanic White* = 88% *Non-Hispanic Black* =75% *Hispanic (any race)* = 64% **Gender/Ethnicity** *Hispanic Males* = 61% *Hispanic Females* = 68% *Non-Hispanic Black Males* = 73% *Non-Hispanic Black Females* = 77%
Disabilities	11%	12%	Non-Hispanic White = 12% Non-Hispanic Black = 18% Hispanic (any race) = 8 %

OVERVIEW: IDENTIFIED HEALTH ISSUES

A description of population health issues and their distribution is enumerated below. Table OB2 includes specific health issues as ranked by survey respondents as well as associated health disparities for the top five health issues. Table OB3 describes the contributing causes of health issues as well as assets and resources that can be mobilized to address the health issues.

Table OB2

Ranked Identified Health Issues (Top 10)	Partner Survey	Resident Survey	Key-Informant Survey	Disparity (Racine County)
Other Drug Use / Illegal Drug Use	1	1	2	**General Population (2016)** Opioid Related Hospital Discharge Rate (Per 100,000) By Ethnicity *Non-Hispanic:*517 *Hispanic:* 205 By Age Groups *0-17*: 44 *18-24*: 654 *25-34*: 1202 *35-44*: 731 *45-54*: 479 *55-64*: 345 *65-74*: 323 *75+*: 150
Rx / OTC Drug Use	2	8	2	
Mental Health Issues	2	6	1	**Student Percentage (2016)** **General Population (2010-2014)** Depression Suicide Rate (Per 100,000) *Male*: 13% *White*: 14 *Female*: 30% *Black*: 6 Attempted Suicide *Male*: 12% *Female*: 25%
Alcohol Use / Abuse	3	5	3	**Adult Respondent % (2017)** Binge-Drinking Self-Reporting By Gender *Male*: 36% *Female*: 24% By Age Groups *18-34*: 45% *35-44*: 40% *45-54*: 33% *55-64*: 28% *65+*: 8%
Access to Healthcare / Affordable Healthcare	4	2	5	**General Population (2011-2015)** Uninsured Percentage *Non-Hispanic White*: 6 *Non-Hispanic Black*: 13 *Hispanic or Latino (any race):* 22
Nutrition	7	-	6	
Physical Activity	5	-	7	
Overweight / Obesity	-	3	-	**Adult Respondent % (2017)** Obese/Overweight Self-Reporting *Male* : 81% *Female*: 64%
Chronic Diseases	-	4 / 9	4	**Incidence (per 100,000)** Overall Cancer (2010-2014) *Male*: 566 *Female*: 461 *Racine County*: 505 *WI*: 459 Colorectal (2010-2014) *Male*: 49 *Female*: 36 Lung (2010-2014) *Male*: 72 *Female*: 62 Prostate (2010-2014) *Racine County*: 130 *WI: 100* **Mortality Rate (Per 100,000)** Overall Cancer (2015) *Male*: 208 *Female*: 138 Coronary Heart Disease (2016) *Male*: 133 *Female*: 66 Chronic Lower Respiratory Diseases (2015) *Male*: 60 *Female*: 45 Alzheimer's Disease (2015) *Male*: 18 *Female*: 29 Diabetes mellitus (2015) *Male*: 25 *Female*: 14
Education Level	3	-	-	N/A
Tobacco Use	-	7	-	N/A
Injury/Violence/Crime	-	10	8	N/A
Adverse Childhood Experiences	8	-	-	N/A
Environment/Jobs/Income	6	-	9	N/A
Oral Health		-	10	N/A
Healthy Growth & Development	9	-	-	N/A

Table OB3

Identified Health Issues	Communities Impacted	Contributing Causes	Assets and Resources	Needed Strategies
Other Drug Use / Illegal Drug Use	Those without insurance / unable to pay Parents Youth and their peers Whole community Low-income High-crime neighborhoods Veterans Homeless	Lack of detox and rehab facilities Lack of care following rehab Lack of prescribing providers Multiples rehab stints Co-morbidity – substance and MH Increased access Over-prescribing Cost of treatment Lack of insurance	Discussion about the issue Police/healthcare partnerships Education in schools PDMP website for providers Counseling / treatment agencies Non-profits support groups Behavioral health services Medication drop boxes Narcan use / Narcan providers Some business supports Health care/public health Legislators Churches, student groups, community centers, senior grps. Drug/Substance Abuse Courts	More providers More treatment options More community supports Availability of treatment for those unable to pay Team approach/whole family Stiffer penalties for drug dealers More focus on prevention More family supports Increased understanding of science of addiction Community-based research Shared services/work together Focus on root causes
Rx/OTC Drugs	See above	See above	See above	See above
Mental Health Issues	Children Those with least access to care Low income Parents Homeless Youth Incarcerated Trauma/ACEs	Too few providers Lack of referral resources, beds Stigma Lack of community / family support Lack of awareness Overuse of law enforcement Lack of training Lack of education Lack of funds / pay for workers Lack of individual effort Lack of adequate reimbursement	Large employers with resources Senior & Community Centers Recruitment of providers Increased awareness Non-profit services VA programs/services Racine County: SAIL Hope Center free counseling Schools Healthcare systems Behavioral health services NAMI	More group homes More resource guides Employer, provider, community and mental health training Focus on schools: teach about mental health, bullying, suicide prevention; include parents Hire more providers, including for schools Increase public awareness Medication assistance Outreach teams Social media campaigns Multi-agency collaboration
Alcohol Use	Urban Boys of color Those without access to care Youth Adults People with disabilities Low income	Lack of providers, treatment options and detox facilities Lack of early education and prevention Lack of supportive community and family approaches to treatment Community perception (choice versus disease) Social norms, acceptability, and ease of access	Education in schools MADD Behavioral Health Services AA Non-profit agencies Rehab facilities Medical systems Public health, non-profits, healthcare providers Employers Churches Penalties for selling to minors and hosting minors	Partnerships with bars and restaurants Increase severity of DUI penalties Expand Uber and public transportation Develop a coordinated approach Provide education early on with kids Develop a detox facility Create job opportunities Work with medical systems Ability to restrict liquor licenses
Access to Healthcare	Uninsured Medicaid / Medicare recipients Low-income Undocumented immigrants Those without access to transportation Rural communities People with a felony	Cost to access care: insurance, time off work, co-payments, medication costs, transportation Lack of providers / lack of specialty providers in some areas Lack of robust transportation system Low wages for healthcare workers Not accessible to all due to background checks	90% have PCP Two healthcare systems in county Free healthcare for uninsured / Health Care Network Aging and Disability Resources Center School nurse resources MIH Two health departments Planned Parenthood Community collaborations	Transportation access Assistance/education in healthcare enrollment Loan forgiveness (healthcare) Access to volunteer, free care Mobile medical units Appointments outside of normal business hours Program advertising Public/private partnerships Free health screenings Increased access to providers Increase in urgent care options (versus ED)

Table OB3 Continued

Identified Health Issues	Communities Impacted	Contributing Causes	Assets and Resources	Needed Strategies
Nutrition	Elderly Low-income Families with young children	Under-funded programs Lack of transportation Lack of stores with healthy options in high-poverty areas High stress and lack of time for healthy meal prep	Food pantries Meals on Wheels Supplemental Nutrition Assistance Program (SNAP) Home visiting education UW-Extension programs WIC Classes at health care agencies Grocery stores	More nutrition education opportunities, including schools Neighborhood gardens Free cooking classes Expanded transportation Increase awareness of obesity Work together
Physical Activity / Lack of	Single parents Youth Low-income Minority Rehab clients	Stress Lack of time Lack of community center status Sedentary lives Technology use / time Cost of wellness programs or fitness memberships School funding cuts for physical activity Lack of motivation Injuries	YMCA Healthcare and HMOs Local businesses Community centers Childcare providers Schools Fitness / recreation centers Non-profits Bike trails, gyms, beaches insurance incentives Youth sports/activities Churches, home health agencies, businesses, govt	Employers: workplace wellness to incentivize physical activity Social media: market programs Revitalize community centers Focus on childcare centers and food they serve Implement policies re: activity in school and childcare Open school pools to public Increase awareness of obesity Utilize preventive strategies insurance will pay for Community activities /outreach
Overweight/Obesity	See above	See above	See above	See above
Chronic Diseases e.g. diabetes, hypertension, asthma, heart disease, cancer	Middle-age Children Low-income Homeless People of color Aging	Unhealthy lifestyles Transportation issues Inability to afford medications Lack of investment in prevention Lack of knowledge of resources Expense of healthy eating and gym memberships Lack of motivation	Wellness programs Support groups National Night Out programs Farmer's Markets Head Start Community Messaging Preventive medical visits / healthcare Mobile Integrated Health (MIH) Churches, home health agencies, businesses, govt.	Health education Food pantries, farmer's markets Church programs Community education Medication delivery services Enroll more clients in MIH Expand affordable transport Expand RX assistance programs Increase access to affordable, healthy food Taylor messages and education by racial and cultural groups
Educational Attainment	Low-income Minority children	Lack of support for children Lack of personal motivation Lack of family units Lack of support for ed.	Gateway Academies of Racine Neighborhood schools Higher Expectations YMCA initiatives Home visiting	Head Start programs 4-K all day Connect to parents Collaborative efforts between business, government, community organizations
Tobacco Use	Veterans Young adults People over 50 School age children	Stress Addictive nature Ease of access to products	Healthcare providers Smoking cessation support We Card program Health departments/healthcare Senior living centers, church groups, civic groups	Low-cost cessation support Additional marketing on effects Public advertising campaigns
Injury and Violence/Crime	Elderly Minority communities Men Young adults Inner city	Lack of community resources Repeat DV offenders Family barriers to report Adjudication barriers	Shelters Sexual Assault Nurse Examiner Police / gang task force Assisted Living Facilities EMS, LE, juvenile justice	Fall injury prevention Harsher crime penalties ID of root causes of crime Additional law enforcement Hospital policies
Adverse Childhood Experiences (ACEs)	Students Single parents Parents / extended family	Lack of support for children	WIC Home visiting programs Racine County programs Non-profits	Improve MH access, funding More services related to trauma Training Community-wide change
Environmental Issues/Jobs/Income	Low income Unemployed	Pay Affordable childcare Poor economy	Rent assistance, childcare benefits, W-2 Landlord responsibility Jobs, decrease in violence	Landlord consequences Safe housing codes School partnerships Job training

ORGANIZING FOR SUCCESS, PARTNERSHIP DEVELOPMENT, AND VISIONING

To achieve a comprehensive community health assessment, the CHA organizing and development process included participation of partners representing various sectors of the community. Community citizens, agencies and workgroups contributed to the planning and development of the community health assessment.

To begin, in 2017 Central Racine County Health Department created a CHA-CHIP Partner Group whose members included: Racine Family YMCA (non-profit), Racine Unified School District (schools), SC Johnson (business), Burlington Police Department (law enforcement), WIC (non-profit), Health Care Network (health non-profit), Racine County Fetal, Infant & Child Death Review (local government), CRCHD (local government). The CHA-CHIP partnership communicated on a regular basis using an email Listserv, and meetings were held in March, June and December of 2017. This was done throughout the process to consider new data sources, review newly collected data, consider assets and resources, and conduct additional data analysis. The CHA-CHIP Partner group worked on and implemented a 10-question CHA-CHIP Community Partner Survey that went to local government, for-profits, not-for-profits, community foundations and philanthropists, voluntary organizations, health care providers, academia, etc. There were 64 responses from local agencies.

Second, CRCHD participated in the Racine County Community Health Data Committee organized by Aurora Healthcare. Data Committee members included Aurora, Ascension – All Saints, Children's Hospital of Wisconsin, City of Racine Health Department, Health Care Network, Racine County Human Services, and United Way of Racine County. This Data Committee met in April, June and November of 2017 and vetted survey questions for a community health survey for residents and a key-informant survey. Aurora Healthcare used a vendor to conduct the anonymous resident survey and about 800 area residents were interviewed by telephone and cell phone. The survey focused on issues such as access to health care, alcohol and tobacco use, cancer prevention, heart health, injury prevention, children's health, mental health, and chronic disease. CRCHD sent out a press release prior to the resident survey being conducted. The resident survey and reports were paid for by Aurora Healthcare, Ascension – All Saints and Children's Hospital of Wisconsin.

For the key-informant interview, agencies that were not part of the CHA-CHIP Partner Agency Survey were interviewed by Data Committee members about focus areas from the WI State Health Plan. These interviews were conducted in July and August 2017 and interviewers used a standard interview script. Respondents ranked the top 3 to 5 major health-related issues in their community and then delineated strategies, barriers, and subgroups. Twenty-five key informant surveys were compiled into a report by the Center for Urban Population Health.

Last, CRCHD staff compiled other primary and secondary data to put together a picture of the health status of the community. The result of all these aforementioned processes provided pivotal data that informed our community themes and strengths, our local public health system, our forces of change, our community health status, and our overall vision.

COMMUNITY THEMES AND STRENGTHS ASSESSMENT

The MAPP process defines community themes and strengths as the issues residents feel are important. The following questions were answered through surveys and key-informants.

How is our quality of life? The majority of respondents to the CHA Partner Survey rated the health and quality of the life in the CRCHD community as "Good" (62%) or "Excellent" (9%). This was followed by 28% giving a "Fair" rating; 9; and 2% giving a "Poor" rating. The response from residents is like that of agencies, with resident survey results showing 56% of residents rated their health as "Excellent" or "Very Good."

Over half (53%) of CHA Partner Survey agencies answered that over the past few years the health and quality of life in the CRCHD community has "Stayed the Same." This was followed by 34% indicating that it has "Gotten Better" and 13% stating it has "Gotten Worse."

What is important to our community? Respondents to the CHA Partner Survey noted that the five most important community strengths (i.e. factors which most improve the health and quality of the health and quality of life in their community) were: 1) Low crime, safe neighborhoods; 2) Able to get health services and Good schools; 3) Good and healthy economy; 4) Good place to raise children; and 5) Affordable housing. Also important is collaboration and good use of funds.

What assets do we have? The CHA Partner Survey respondents said that potential community assets/resources identified for use on health issues included: 1) Schools; 2) Community Centers; 3) Non-Profit Organizations; 4) Government agencies/officials; and 5) Local businesses. Further, CHA Partner Survey respondents reported that target areas to build upon the existing strengths, included: 1) Providing more education/training activities; 2) Increasing community building activities/events; and 3) Increasing funding for local resources (e.g. schools, public safety, etc.). Key informants identified the same assets as well as specific assets by health issue.

FORCES OF CHANGE
LOCAL PUBLIC HEALTH SYSTEM ASSESSMENT

The public health system is made up of organization's and entities that contribute to the health of the public. The MAPP process asks the following questions.

What are the activities, competencies, and capacities of our local public health system?
For CHA-CHIP Partner Survey respondents, they perceived public health outlook for the CRCHD community in the next 5-10 years to be as follows: 1) Better – 57%; 2) Uncertain – 27%; 3) Worse – 13%; and 4) Same – 3%.

The primary issue facing local public health is funding. According to the most recent local public health department survey in Wisconsin, CRCHD ranked 76/88 in per capita levy funding (less than ½ the state average for all local health departments). At the State level, Wisconsin often ranks at the bottom of general purpose revenue funding when compared to the other 49

states. According to the Trust for America's Health by the Robert Wood Johnson Foundation, Wisconsin ranked 47th in funding from Centers for Disease Control and Prevention in 2012.

To maintain competencies, Central Racine County Health Department staff complete the Competency Assessment for Public Health Professionals. The Core Competencies for Public Health Professionals are a set of skills desirable for the broad practice of public health. They address the following key dimensions of public health practice: 1) Analytic/Assessment; 2) Policy Development & Program Planning; 3) Communication; 4) Cultural Competency; 4) Community Dimensions of Practice; 5) Public Health Sciences; 6) Financial Planning and Management; and 7) Leadership and Systems Thinking.

For the broader public health community, many partnerships and linkages exist. In 2016, CRCHD partnered with 14 municipalities to enact ordinances and implement other public health strategies. CRCHD also partnered with the following:

- School systems – immunizations, home visiting, communicable diseases
- Long-term care facilities – prevention and surveillance of outbreaks
- Daycares – immunization compliance and communicable disease prevention
- Healthcare systems – home visiting, childhood injury prevention, communicable diseases
- Other local health departments – emergency preparedness, childhood injury prevention
- Racine County government – home visiting, childhood injury prevention
- Home Visiting Continuous Quality Improvement (CQI) Committee
- Home Visiting Collaborative Improvement and Innovation Network (HVCoIIN)
- Racine County CDR/FIMR team - law enforcement, Emergency Medical Services, District Attorney's office, Medical Examiner's office, Child Protective Services, Healthcare (pediatrician and neonatologist), Public Health and other partners
- United Way of Racine County – home visiting
- Medication Collection events – municipalities and law enforcement
- DATCP and DSPS - contract for licensing and inspections and DNR for well testing
- WI Department of Health Services – immunization, maternal child health, emergency preparedness, cities readiness initiative, prevention, lead grant work, workgroups
- Alverno College, University of Massachusetts, Medical College of Wisconsin – students
- UW Milwaukee – evaluation and research
- Racine County Youth Coalition
- Racine County Immunization Coalition
- Greater Racine Collaborative for Healthy Birth Outcomes
- Safe Kids Kenosha/Racine Coalition
- SE WI Association of Local Health Departments and Boards (WALHDAB)
- Racine County Home Visiting Stakeholder's group
- Racine County Family Resource Network group
- Family Preservation West
- Racine Collaborative for Children's Mental Health

COMMUNITY HEALTH STATUS ASSESSMENT

Data for the community health status assessment were collected from a variety of primary and secondary data sources and were compiled according to the *NACCHO Core Indicator List* and organized around the following questions: Who are we and what do we bring to the table? What are the strengths and risks in our community that contribute to health? What is our health status? When available, data was reviewed and analyzed at the municipal and jurisdiction level. However, data at these levels is not always available, and when it was not available, Racine County level data was used. Terms used throughout section include CRCHD Jurisdiction ("the Jurisdiction"), Racine County ("the County"), Wisconsin ("the State"), and City of Racine Health Department jurisdiction ("RHD"). Healthy People 2020 (HP 2020) refers to established federal benchmarks.

SOURCES OF INFORMATION

Data and information used to create the CHA came from a variety of sources. Sources are cited in the report as they are used, and described below. Primary data is denoted as (1), secondary is denoted as (2), qualitative is denoted by an asterisk*.

- Aurora Healthcare Community Health Survey (1) and Key-Informant Survey*(1)
- CRCHD Community Partner Survey* (1)
- CDC: Foodborne Outbreak Online Database (FOOD Tool) (2)
- CRCHD, Annual Report (1)(2)
- CRCHD, Communicable Disease Surveillance Reports (1)
- CRCHD, Maternal ACEs in Racine County (1)
- 2011-2016 Racine County Fetal, Infant & Child Death Review Report* (1)(2)
- Child Protective Services, WI Child Abuse and Neglect Annual Report (2)
- CRCHD Animal Bites Database (1)
- Racine County Medical Examiner's Office (2)
- Search Institute, RUSD/WASD Developmental Assets: Profile of Your Youth (1)
- State of Wisconsin Department of Transportation, Crash Facts (2)
- U.S. Census Bureau (2), U.S. Census Bureau, American Community Health Survey (2), and U.S. Census Bureau, American Community Health Survey (2)
- U.S. Census Bureau, General Population and Housing Characteristics (2)
- United Way of Racine County Indicators Report (2)
- University of Wisconsin Population Health Institute, County Health Rankings (2)
- US Environmental Protection Agency, AirNow/AirCompare (2)
- WI Department of Administration (2)
- WI Department of Children and Families, Child Abuse and Neglect Report (2)
- WI Department of Health Services, Reported Induced Abortions (2)
- WI Department of Health Services, County Alcohol Outlet Density Reports (2)
- WI Department of Health Services, Environmental Public Health Tracking (2)
- WI Department of Health Services, Public Health Profiles (2)
- WI Department of Health Services, HIV/AIDS Surveillance Annual Review (2)
- WI Department of Health Services, Wisconsin Interactive Statistics on Health (2)
- Wisconsin Immunization Registry, Benchmark Reports (2)
- Wisconsin's Worknet, Local Area Unemployment Statistics (2)

CATEGORY 1. DEMOGRAPHICS OF THE COMMUNITY

NACCHO Definition: Demographic characteristics include measures of total population as well as percent of total population by age group, gender, race and ethnicity, where these populations and subpopulations are located, and the rate of change in population density over time, due to births, deaths and migration patterns.

For this report demographics of the community, include data on: population, nativity, and language.

Key Findings

- From 1990 to 2016, the population for the Jurisdiction grew by 30.2%.
- Between the 2000 and 2010 US Census years, the Jurisdiction saw increases within the older age (≥45) group populations compared to an observed decrease for younger age (≤44) groups.
- The population of the Jurisdiction is primarily comprised of English-only speaking households with native-born, non-Hispanic White individuals.

THE JURISDICTIONAL POPULATION

Table 1.1 compares populations at the Jurisdictional, the County, and the State levels. At the level of race, the table illustrates the Jurisdiction as having a higher percentage of Whites compared to the County and the State. When comparing the percentage of individuals identified as Hispanic, the Jurisdiction had the lowest percentage relative to the County and the State. When comparing median age, non-Whites and Hispanics had a lower median age compared to their White counterparts. This was true at the County and State level. The median age was not available at the Jurisdictional level and was not reported.

Table 1.1 Population Snapshot[1,2]

		CRCHD			Racine County			Wisconsin		
		Number	*%*	*Median Age*	*Number*	*%*	*Median Age*	*Number*	*%*	*Median Age*
Total Population		114,328	-	-	194,865	-	40	5,742,117	-	39
Race	White	104,920	92	-	157,544	81	43	4,967,124	87	42
	Black	3,934	3	-	21,574	11	30	360,792	6	29
	Other	5,474	5	-	15,747	8		414,201	7	
Ethnicity	Hispanic Latino	6,172	5	-	23,900	12	25	364,558	6	24

As illustrated in Figure 1.1, the Jurisdiction has seen a 30.2% growth in population since 1990. Compared to the County and the State, the observed growth for the Jurisdiction was 2.6 and 1.6 times greater, respectively.

When assessing population change over the US Census time intervals, the populations depicted in Figure 1.1 experienced the greatest change between the 1990 and 2000 census interval. Additionally, since 1990 13 out of the 14 municipalities that comprise the Jurisdiction have seen growth.[3] Over the timespan between 1990 and 2016, the Village of Waterford experienced the highest population growth (121.2%) while the Village of North Bay, in contrast, experienced a decline in population (-5.7%).[3] S*ee appendices.*

Figure 1.1 Population Change by Area Over Time[3]

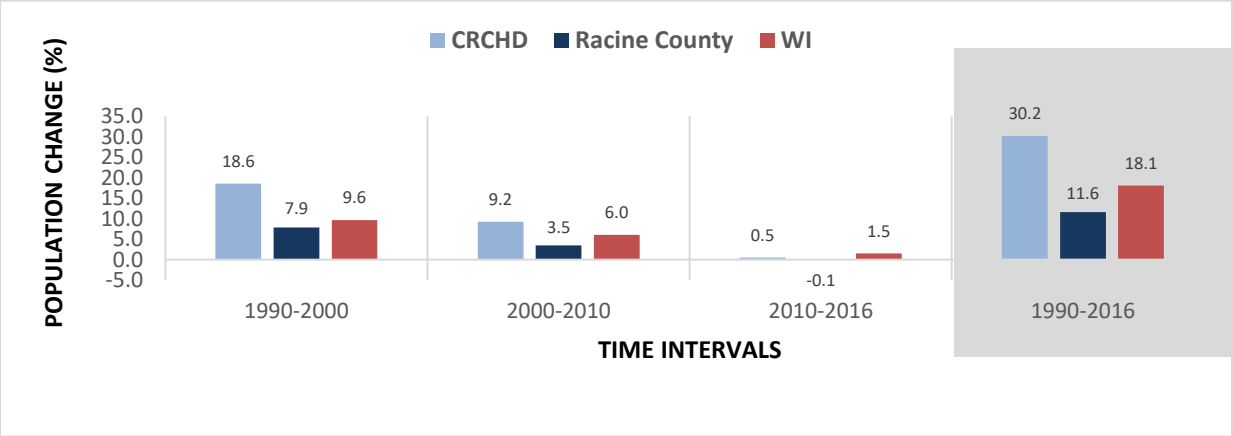


Figure 1.2 portrays a decennial shift in the age of the population in the Jurisdiction with declines in the younger age (≤44) groups and increases in the older age (≥45) groups.

Figure 1.2 Population Change within the Jurisdiction by Age Group and Census Year[4,5]

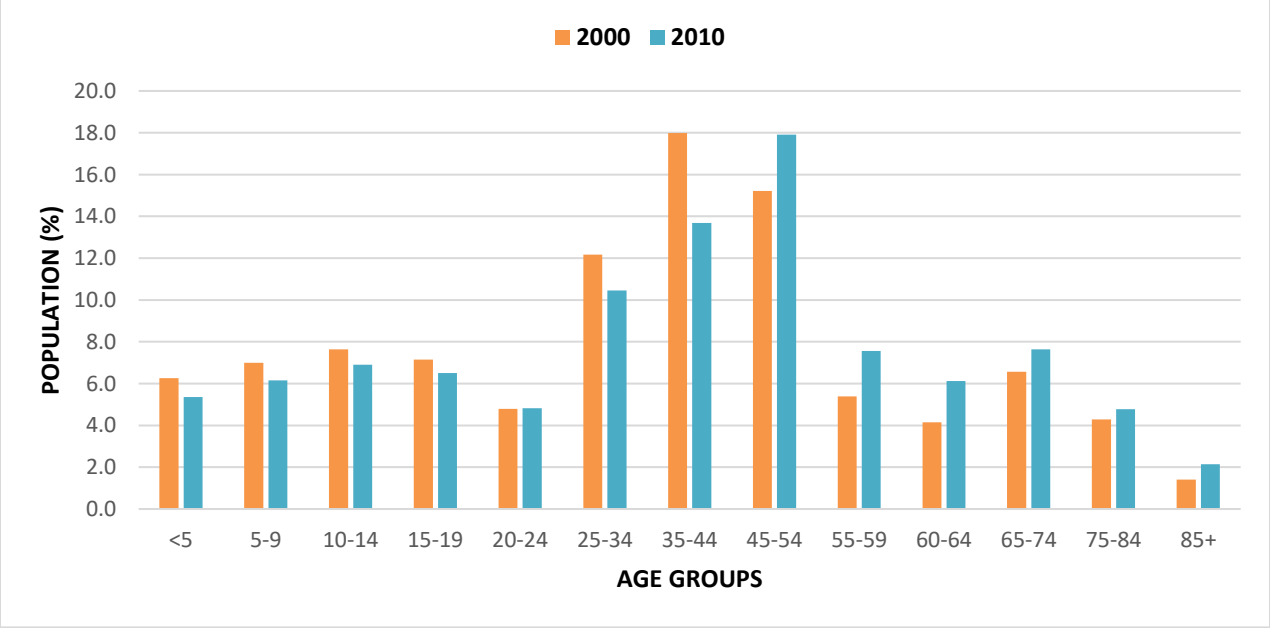
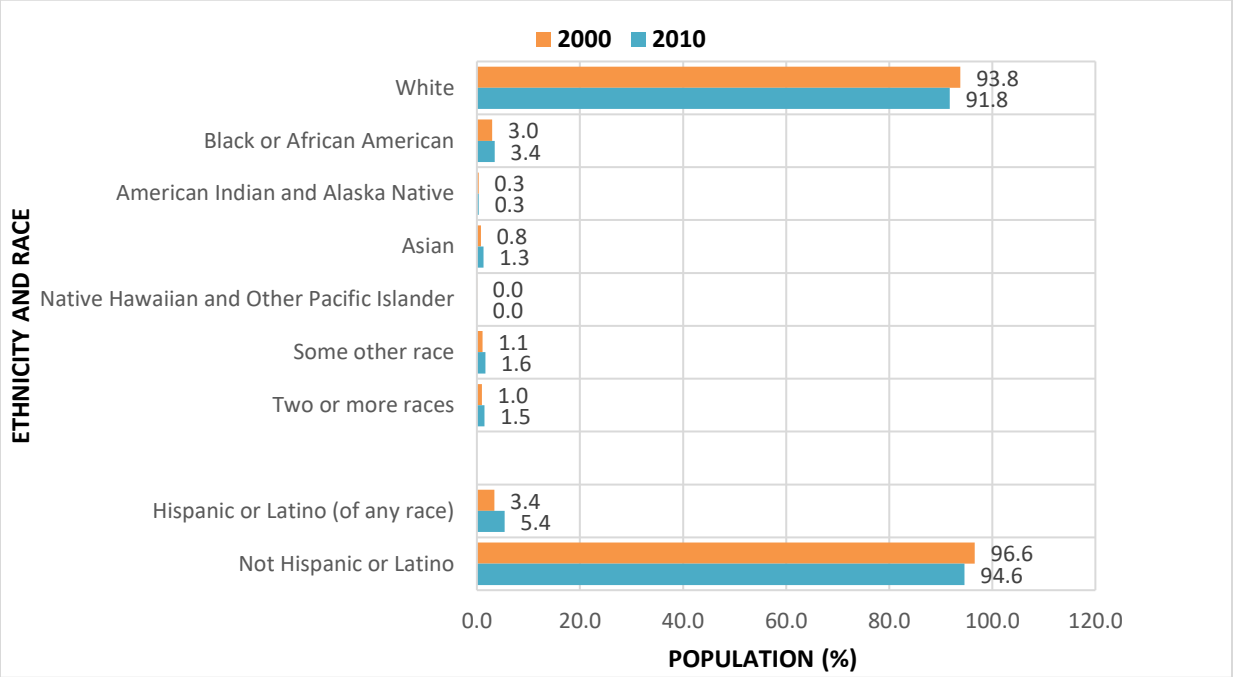


Figure 1.3 depicts the racial and ethnic composition of the Jurisdiction between the 2000 and 2010 US Census years. It illustrates that the Jurisdiction is mostly comprised of individuals identified as non-Hispanic White.

Figure 1.3 Composition of the Jurisdictional Population by Race, Ethnicity and Decennial U.S. Census Year[4,5]



Figures 1.4 and 1.5 illustrate the number of births within Racine County and Wisconsin by race/ethnicity over a 16-year timespan. For both the County and the State, the number of births among non-Hispanic Whites has declined since 2000, while the birth number for non-Hispanic Blacks and Hispanics has increased over the same timeframe.

Figure 1.4 Number of Births in Racine County by Year and Race/Ethnicity[12]

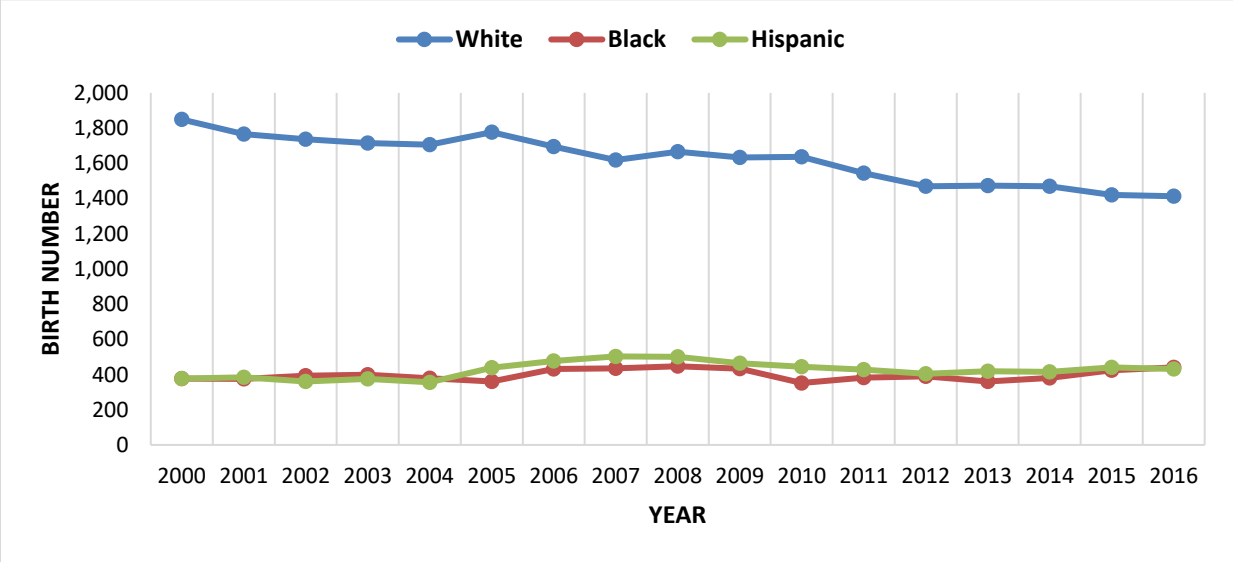
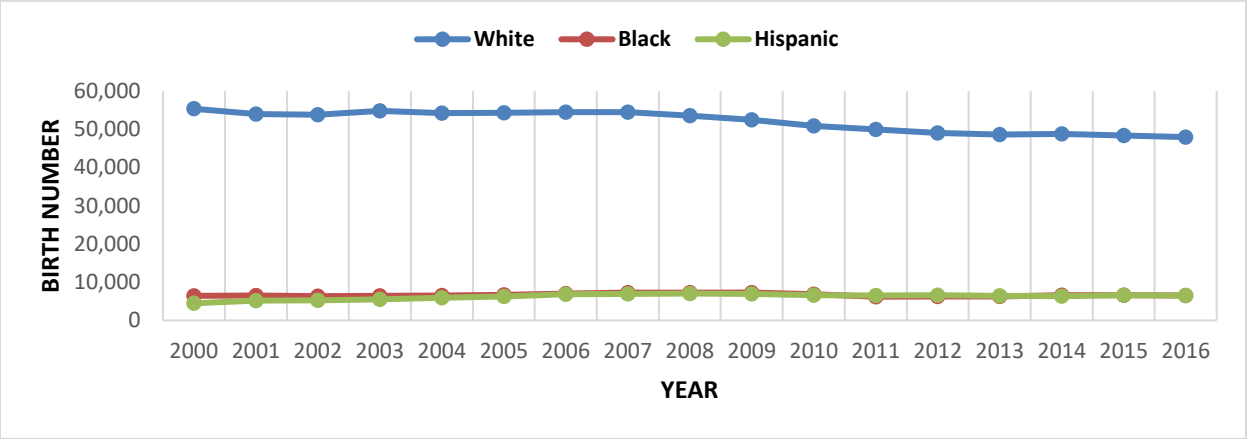


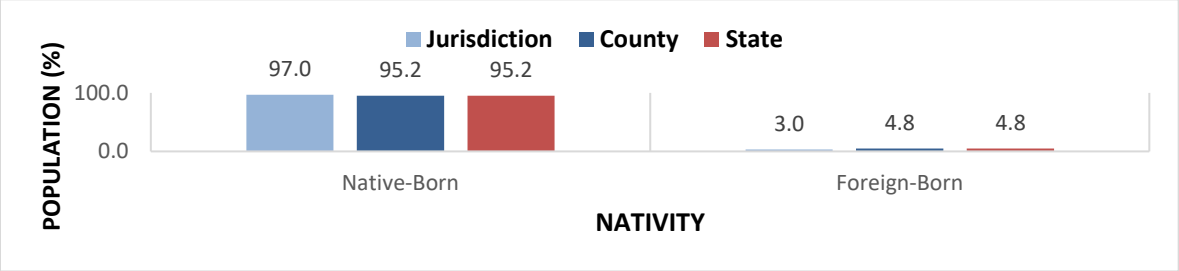
Figure 1.5 Number of Births in Wisconsin by Year and Race/Ethnicity[12]



NATIVITY AND LANGUAGE

Figure 1.6 shows that for the areas depicted, the native-born population is estimated to account for over 95% of the total population. Compared to the County and the State, the estimated proportion of foreign-born individuals is lower within the Jurisdiction.

Figure 1.6 Estimated Percentage of Native and Foreign-Born Populations, 2011-2015[6]



Regarding languages spoken at home, Figure 1.7 illustrates that English-speaking households far exceed the proportion of non-English speaking homes. The Jurisdiction has a lower percentage of non-English speaking homes compared to the County and the State. At the municipal level, the non-English percentage ranged from 1.0% (Dover) to 7.8% (North Bay) [5]. *See appendices.*

Figure 1.7 Estimated Percentage of Language Spoken at Home by Area, 2011-2015[7]

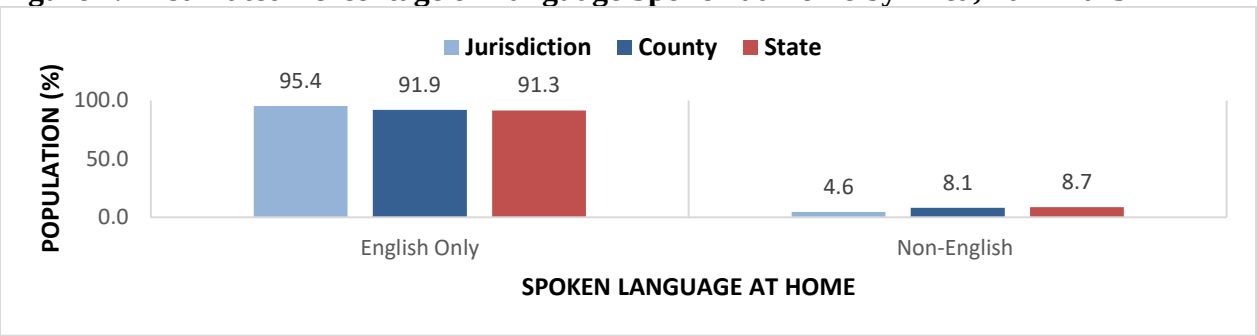
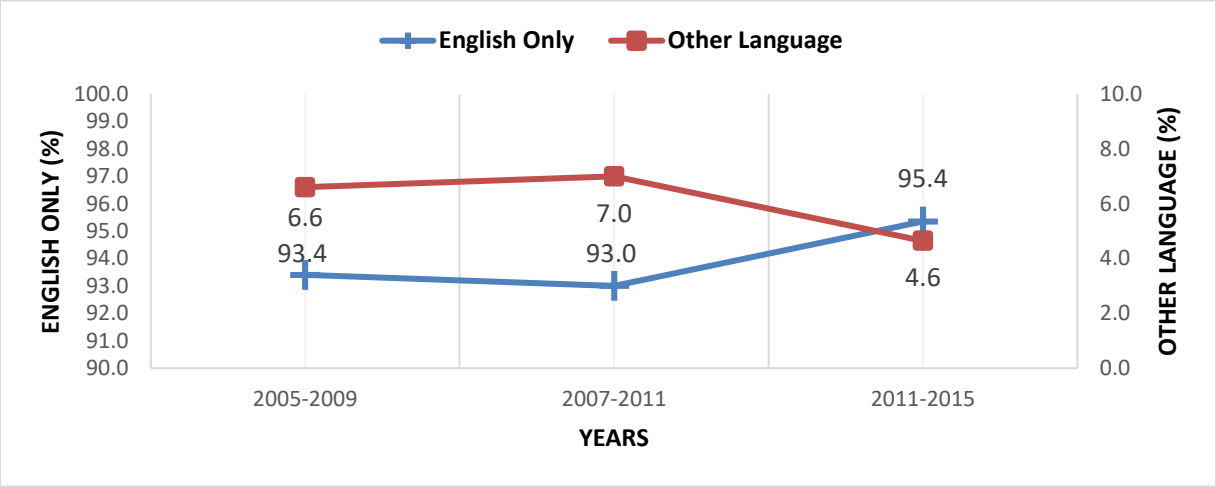


Figure 1.8 illustrates trends in the languages spoken at home for the population in the Jurisdiction over five years of age. The most recent survey year depicts an increase in the percentage of *English Only* homes and a decrease in the percentage of *Other Language* households.

Figure 1.8 Language Spoken at Home for the Population (≥5 Yrs) in the Jurisdiction by Survey Years[7]



Regarding specific languages spoken within homes of the Jurisdiction, Figure 1.9 reaffirms English as the predominate language, while Spanish accounted for over half of homes where a language other than English was spoken.

Figure 1.9 Estimated Percentage of Spoken Languages in Households within the Jurisdiction, 2011-2015[7]

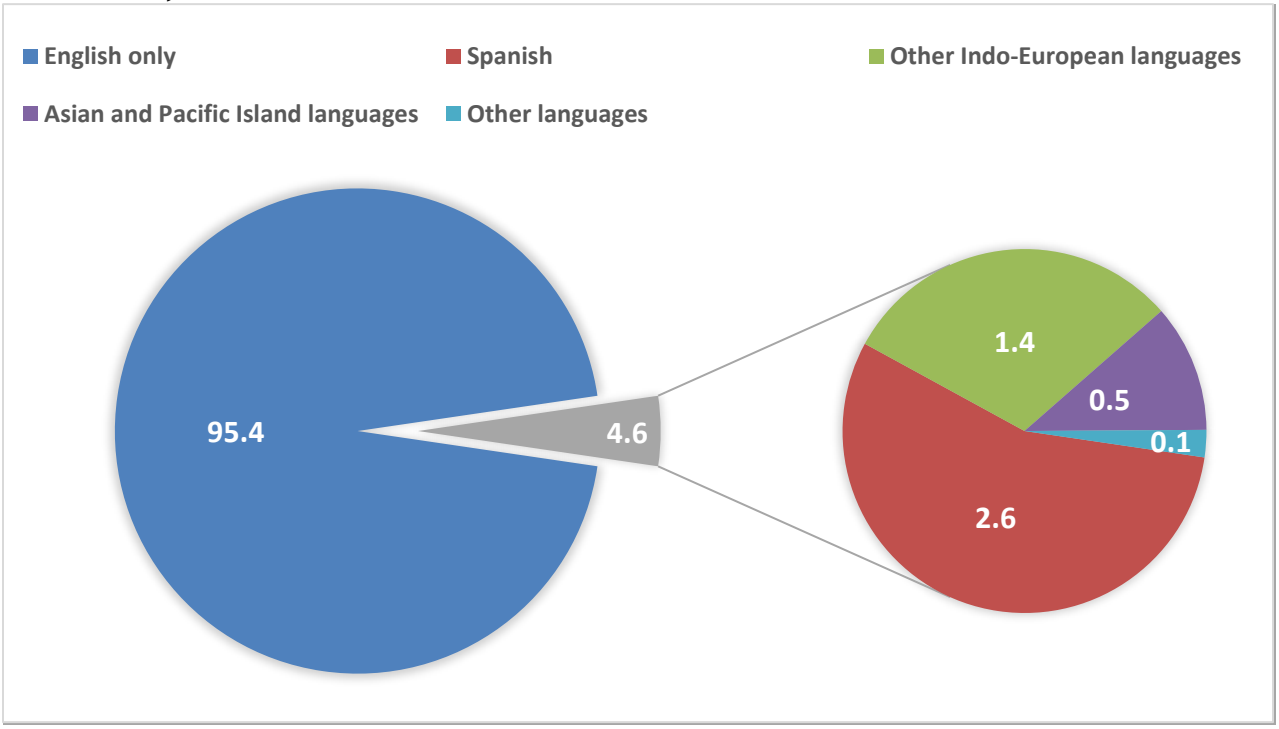
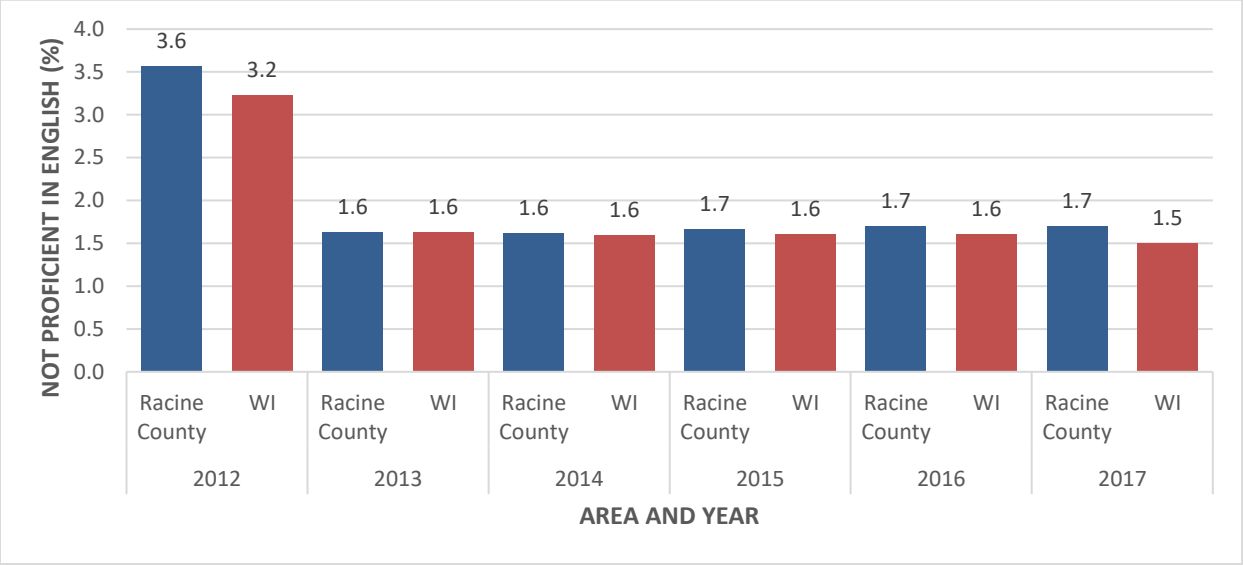


Figure 1.10 shows that the non-English proficiency trend has been similar for both Racine County and the State with a decline occurring in 2013 and remaining flat at approximately 1.6% for most of the years listed.

Figure 1.10 Estimated Percentage of Individuals Not Proficient in English by Area and Report Year[8]



REFERENCES

1. U.S. Census Bureau, American Community Survey. 2011-2015. American Community Survey 5-Year Estimates, Table B01003. Retrieved from: https://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml

2. U.S. Census Bureau, American Community Survey. 2011-2015. American Community Survey 5-Year Estimates, Table B01002. Retrieved from: https://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml

3. Wisconsin Department of Administration. Population Estimates – Time Series (1970-2016): Minor Civil Divisions within Counties. Retrieved from: http://doa.wi.gov/Divisions/Intergovernmental-Relations/Demographic-Services-Center/Wisconsin-Population-Housing-Estimates/

4. U.S. Census Bureau, American Community Survey. 2011-2015. American Community Survey 5-Year Estimates, Table B01003. Retrieved from: https://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml

5. U.S. Census Bureau, American Community Survey. 2011-2015. American Community Survey 5-Year Estimates, Table B01002. Retrieved from: https://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml

6. Wisconsin Department of Administration. Population Estimates – Time Series (1970-2016): Minor Civil Divisions within Counties. Retrieved from: http://doa.wi.gov/Divisions/Intergovernmental-Relations/Demographic-Services-Center/Wisconsin-Population-Housing-Estimates/

7. U.S. Census Bureau. DP-1: Profile of General Demographic Census 2000 Summary File (SF 1). Retrieved from: https://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml

8. U.S. Census Bureau. DP-1: Profile of General Demographic Census 2010 Summary File (SF 1). Retrieved from: https://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml

9. U.S. Census Bureau, American Community Survey. 2011-2015. American Community Survey 5-Year Estimates, Table B05002. Retrieved from: https://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml

10. U.S. Census Bureau, American Community Survey. 2011-2015. American Community Survey 5-Year Estimates, Table S1601. Retrieved from: https://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml

11. County Health Rankings. 2012-2017. Racine County and Wisconsin Ranking Data. Retrieved from: http://www.countyhealthrankings.org/app/wisconsin/2011/downloads

12. Wisconsin Dept. of Health Services, Division of Public Health, Office of Health Informatics. Wisconsin Interactive Statistics on Health (WISH) data query system: Birth Counts Module. Retrieved from: https://www.dhs.wisconsin.gov/wish/birth/form.htm

CATEGORY 2: SOCIOECONOMIC CHARACTERISTICS

NACCHO Definition: Socioeconomic characteristics include measures that have been shown to affect health status, such as income, education, and employment, and the proportion of the population represented by various levels of these variables.

For this report socioeconomic characteristics include data on: income, education, employment, and homeownership.

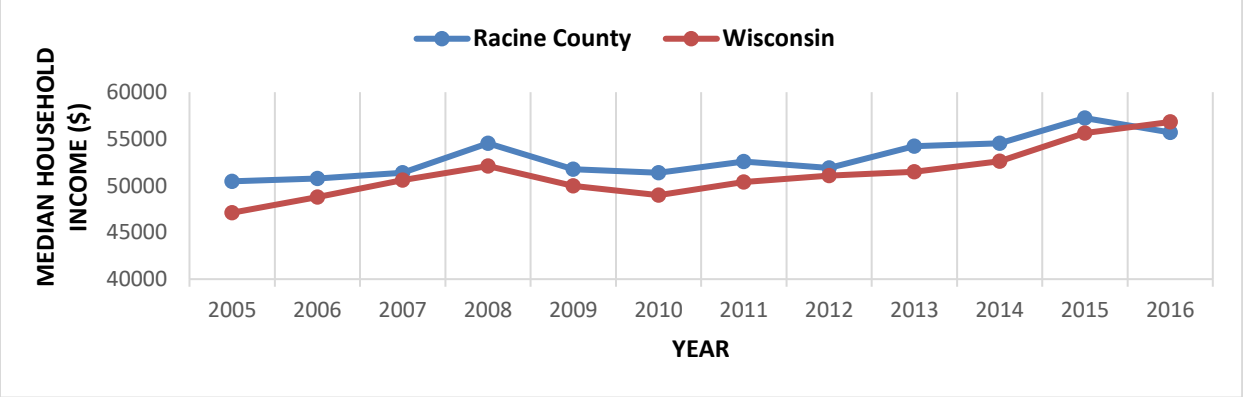
Key Findings

- From 2005 to 2016, the estimated median household income for the County and the State has increased by 18% and 13%, respectively.
- From 2005 to 2016, the median household income has been consistently higher for Whites compared to Blacks in Racine County.
- From 2005 to 2016, the median household income has been higher for non-Hispanic Whites compared to their Hispanic (any race) counterparts in Racine County.
- An estimated 92% of the CRCHD jurisdiction has attained a high school diploma or better. This is higher than the County and State estimates.
- An estimated 27% of CRCHD residents have attained a bachelor's degree or higher. This is higher than the County estimate, but slightly lower than the State.
- Based on 2016 estimates, the percentage of White residents in Racine County attaining a bachelor's degree or higher was 3.5 times greater compared their Black counterparts.
- From 2005 to 2016, Racine County annual unemployment rates have consistently been higher compared to State and US levels. For 2016, Blacks in Racine County had an estimated unemployment rate that was two times greater compared to Whites. Hispanics (any race) had the lowest unemployment rate in the County.
- The Jurisdiction had a higher percentage of owner-occupied homes.

INCOME

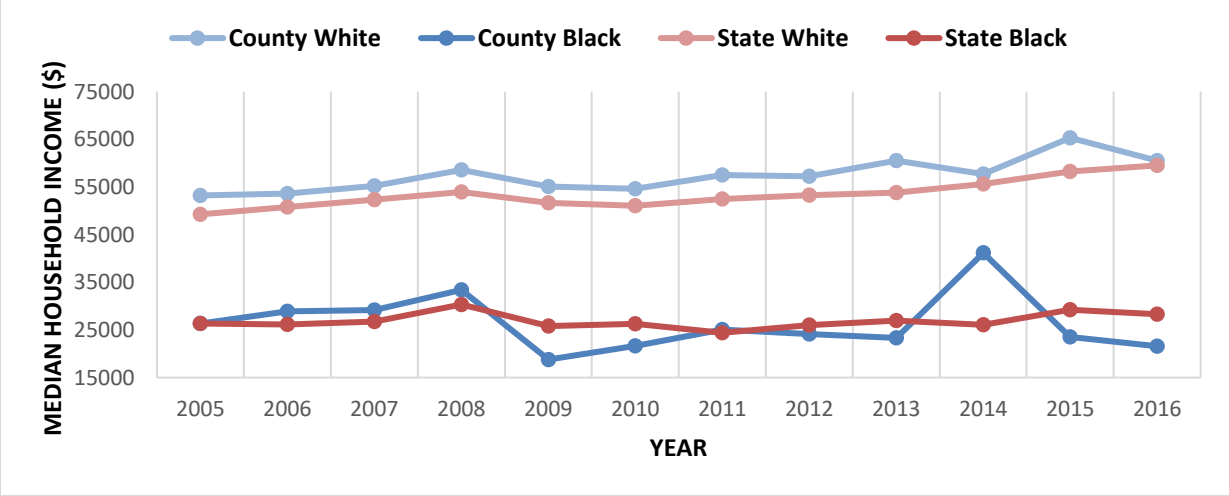
Figure 2.1 compares median household income between the County and the State over an 11-year time span. Since 2005 median household income has seen an upward trend at both the County and State level. Except for 2016, the County median household income has been consistently higher relative to the State.

Figure 2.1 Median Household Income in the Past 12 Months (In Inflation-Adjusted Dollars for Each Reported Year Dollars) by Area[1]



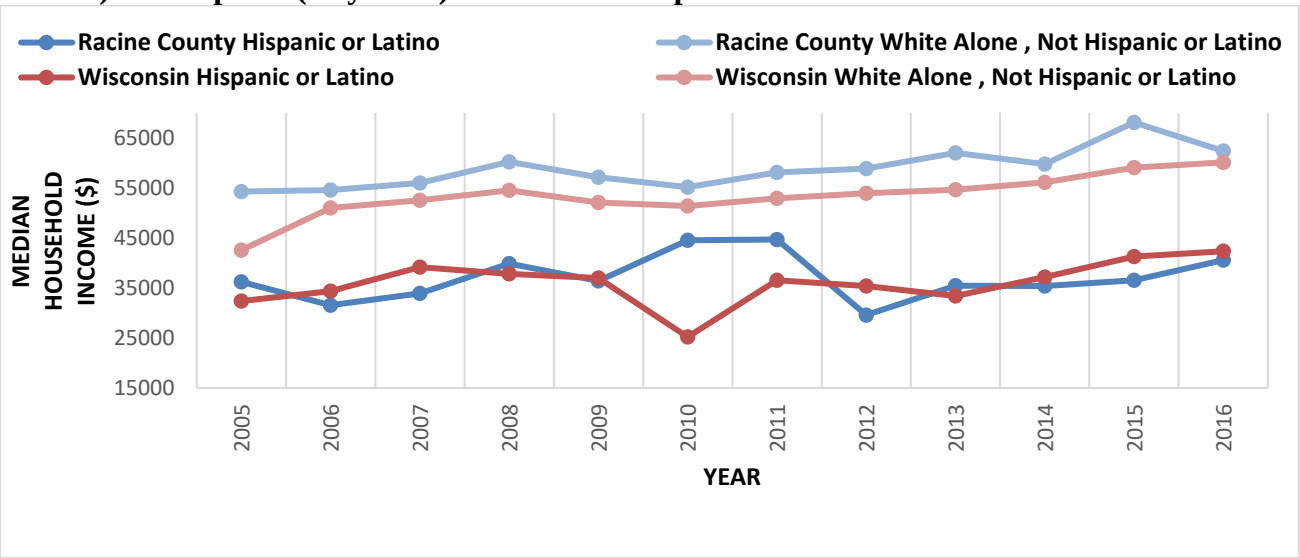
As it relates to race, Figure 2.2 illustrates that the median household income for Whites in the County and the State has consistently been higher compared to their Black counterparts. For example, in 2016, the median household income for County Whites was over two and half times greater compared to County Blacks.

Figure 2.2 Median Household Income in the Past 12 Months (In Annual Inflation-Adjusted Dollars) by Race[1]



When factoring ethnicity, Figure 2.3 illustrates median household income differences for the County and the State. It depicts Non-Hispanic Whites as having consistently higher median household incomes relative to their Hispanic (any race) counterparts at both the County and State levels. For example, in 2016, County non-Hispanic White households had incomes that were one and a half times more compared to Hispanic (any race) households.

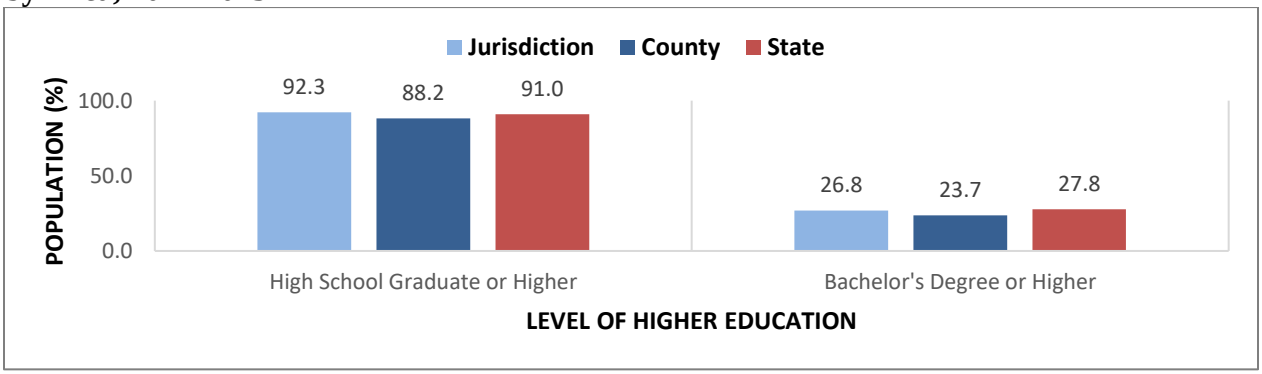
Figure 2.3 Median Household Income in the Past 12 Months (In Annual Inflation-Adjusted Dollars) for Hispanic (Any Race) Versus Non-Hispanic White[1]



EDUCATION

Figure 2.4 compares the level of higher education for populations over 25 years old. Overall, the figure shows that over 92% of the Jurisdiction residents attain at least a high school diploma. Relative to the County and State, the Jurisdiction has a higher percentage of individuals with a high school diploma or better. However, when comparing the percentage of individuals with a bachelor's degree or higher the Jurisdiction falls in between the levels observed for the County and State.

Figure 2.4 Estimated Percentage of Higher Education Among the ≥ 25 Year Old Population by Area, 2011-2015[2]



When assessing more specific educational attainments, Table 2.1 shows the Jurisdiction as having a higher percentage of residents attaining one of the following: high school diploma, Associate's degree, Bachelor's degree, Graduate or Professional degree, compared to the County. In contrast, when compared to the State the Jurisdiction has a lower educational attainment percentage for all the categories depicted except for the "some college, no degree" category.

Table 2.1 Estimated Percentage of Higher Educational Attainment Among the ≥ 25 Year Old Population by Area, 2011-2015[2]

	Less than 9th grade	9th to 12th grade, no diploma	High School Graduate	Some college, no degree	Associate's degree	Bachelor's Degree	Graduate or Professional degree
The Jurisdiction	2.38	5.30	31.24	24.42	9.85	17.63	9.18
The County	3.96	7.88	30.69	24.44	9.32	15.75	7.96
The State	3.12	5.85	32.00	21.12	10.08	18.43	9.39

When factoring race and ethnicity, Figure 2.5 depicts that across all the areas depicted a higher percentage of non-Hispanic Whites obtained a high school diploma and/or a bachelor's degree relative to their non-Hispanic Black and Hispanic (any race) counterparts. This is most notable when comparing County individuals with a Bachelor's degree or higher, where the percentage of Whites is 3 times greater than non-Hispanic Blacks and Hispanics (any race).

Figure 2.5 Educational Attainment by Race and Area, 2011-2015[3]

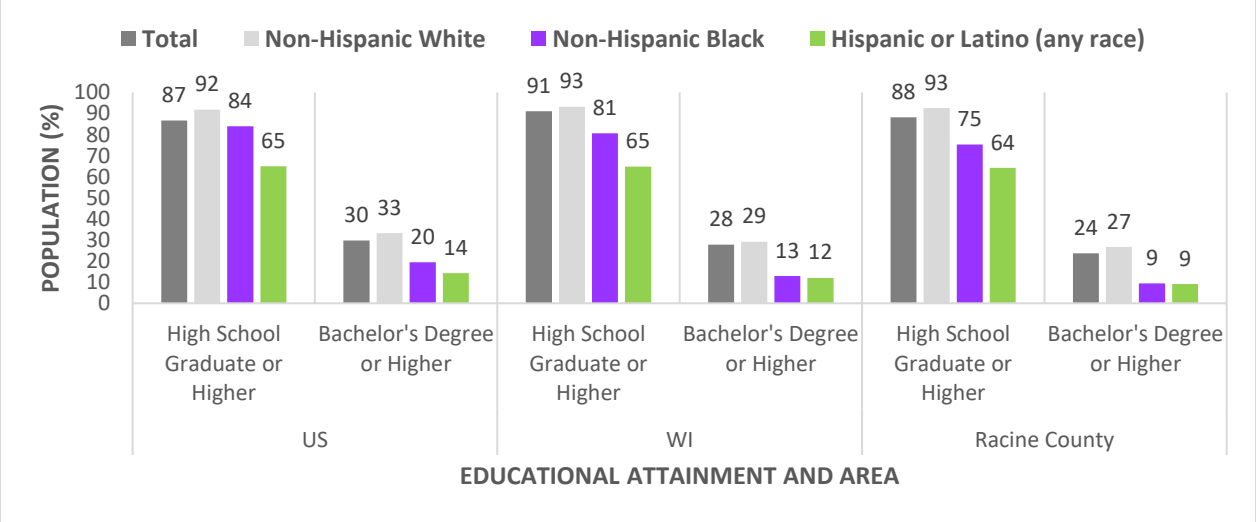


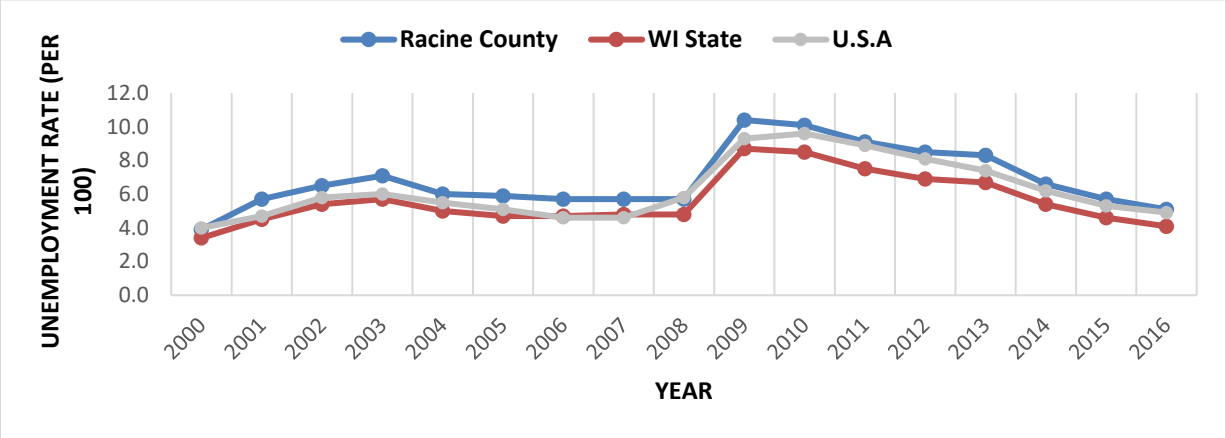
Table 2.2 Estimated Percentage of the ≥ 25 Year Population with a High School Diploma or Higher by Gender and Race/Ethnicity[3]

	WI		Racine County	
	Male	Female	Male	Female
Total Population	90	92	87	90
Non-Hispanic White	93	94	92	93
Non-Hispanic Black	80	81	73	77
Hispanic or Latino (any race)	62	68	61	68

EMPLOYMENT

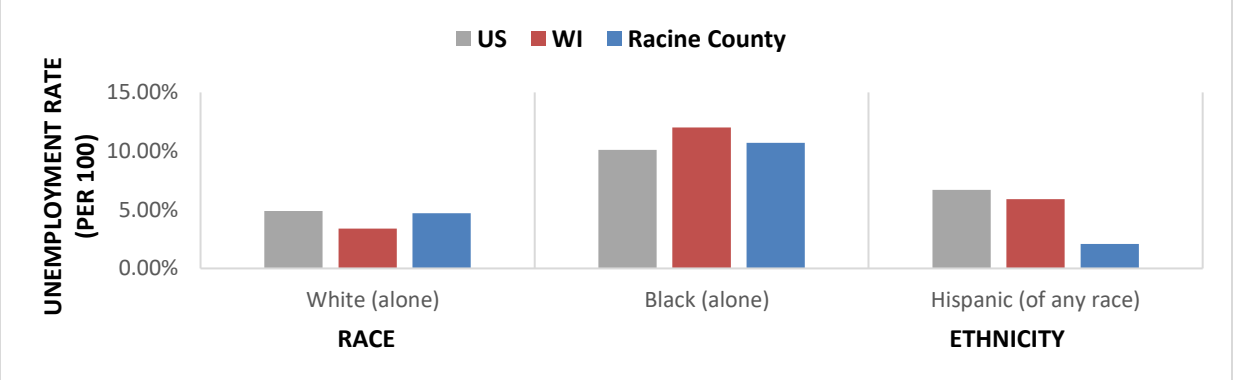
For most of the years depicted in Figure 2.6, the unemployment rate for Racine County has been relatively higher compared to the State and the United States. When comparing unemployment trends, rates for the depicted areas saw a sharp increase between 2008-2009 years followed by a gradual decline from 2010 to 2016.

Figure 2.6 Unemployment Rate by Area and Year[4]



Based on race and ethnicity, Figure 2.7 illustrates the 2016 unemployment rates for the County, the State, and the United Sates. Across all the listed geographies, Blacks have consistently reported higher rates of unemployment compared to their White counterparts. Additionally, County Hispanics had the lowest level of unemployment compared to all depicted areas/races/ethnicities.

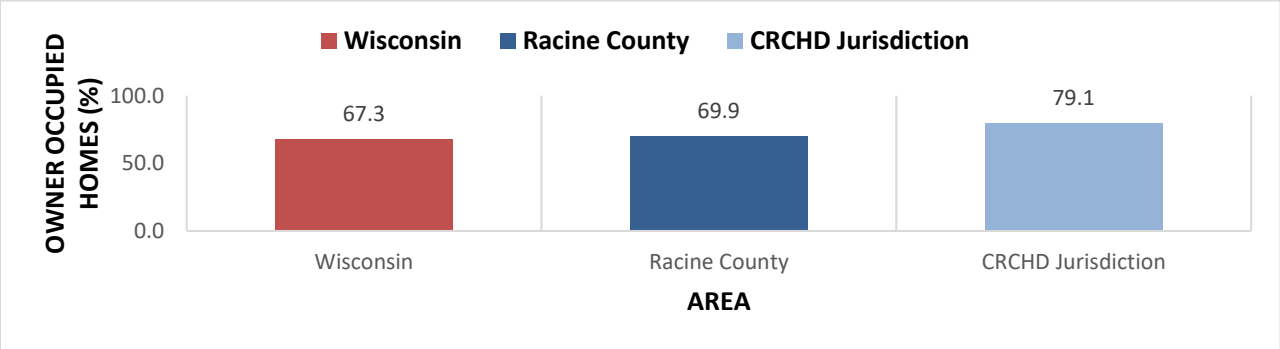
Figure 2.7 Unemployment Rate by Area, Race, and Ethnicity, 2016[5]



HOMEOWNERSHIP

As shown in Figure 2.8, the Jurisdiction has a higher percentage of owner occupied homes compared to the County and the State.

Figure 2.8. Percentage of Owner Occupied Homes by Area[6]



POVERTY

Table 2.2 illustrates racial and ethnic differences in the number and percentage of individuals reporting a below poverty status in the past 12 months. Relative to the other racial and ethnic groups, Blacks have consistently had the highest proportion of individuals below poverty for all the areas listed.

Table 2.2 Below Poverty Status in the Past 12 Months[7]

		CRCHD		Racine County		Wisconsin	
		N	*%*	*N*	*%*	*N*	*%*
	Total Population	7,129	6.4	23,768	12.5	724,348	13.0
Race	White	5,972	5.8	13,915	9.0	500,832	10.3
	Black	446	14.8	5,964	30.3	127,332	37.4
	Other	334	10.2	2,444	25.3	66,237	23.4
Ethnicity	Hispanic/Latino	783	12.6	6,089	26.0	96,335	27.1

REFERENCES

1. U.S. Census Bureau. American Community Survey, 1-Year Estimates, Table S1903. Retrieved from https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_16_1YR_S1903&prodType=table

2. U.S. Census Bureau. American Community Survey, 2011-2015 American Community Survey 5-Year Estimates, Table S1501. Retrieved from https://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml

3. U.S. Census Bureau. American Community Survey, 2011-2015 American Community Survey 5-Year Estimates, Table S15002. Retrieved from https://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml

4. Wisconsin's Worknet. Local Area Unemployment Statistics. Retrieved from: http://worknet.wisconsin.gov/worknet/dalaus.aspx?menuselection=da

5. U.S. Census Bureau. American Community Survey. 2011-2015. American Community Survey 5-Year Estimates, Table DP02. Retrieved from https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_16_1YR_S2301&prodType=table

6. U.S. Census Bureau, American Community Survey. 2011-2015. Selected Housing Characteristics, Table DP04. Retrieved from https://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml

7. U.S. Census Bureau, American Community Survey. 2011-2015. Poverty Status in the Past 12 Months 5-Year Estimates, Table S1701. Retrieved from https://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml

CATEGORY 3. HEALTH RESOURCE AVAILABILITY

NACCHO Definition: This domain represents factors associated with health system capacity, which may include both the number of licensed and credentialed health personnel and the physical capacity of facilities. In addition, the category of health resources includes measures of access, utilization, cost and quality of health care and prevention services. Service delivery patterns and roles of public and private sectors may also be relevant.

For this report indicators of health resource availability, include: sources of care, health care providers, health insurance coverage, and preventable hospitalizations.

Key Findings

- Over survey years spanning 2005 to 2017, CRCHD residents continue to report the doctor/nurse practitioner's office as their top primary source for health services. However, in the most recent years (2015-2017) respondents have reported a more than 7-fold increase in the use of urgent care centers as a primary source of care when compared to 2005.
- From 2011 to 2016 Racine County has less health care providers (e.g. primary care physician, dentist, mental health provider) per capita compared to the State.
- From 2015 to 2016, the lack of health insurance coverage in Racine County has been highest for individuals who are either an adult or male or between ages 25-34 or Hispanic.
- Over the 2008-2014 timespan, the rate of preventable hospitalizations for Racine County has been consistently higher relative to the Wisconsin rate.
- In Racine County, the average cost per preventable hospitalization has increased by 63% since 2008.

SOURCE OF CARE

For the years reported in Table 3.1, a doctor/nurse practitioner's office has been the top primary source of health services among adults surveyed in the Jurisdiction. However, between 2005 to 2017 a decline of 20% was observed for this primary source of care while health services from urgent care centers reported an increase of 15% over the same time span.

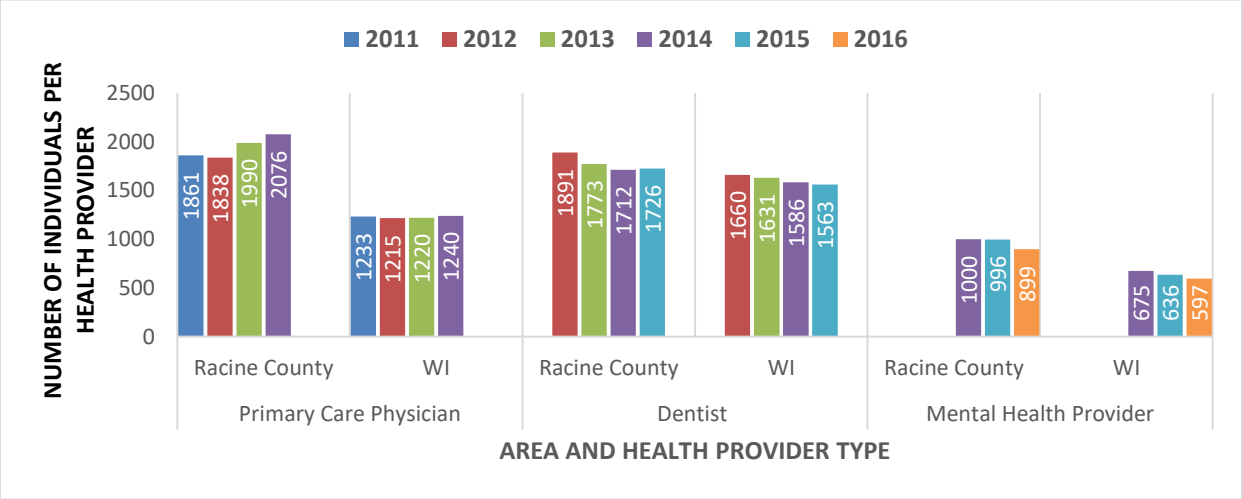
Table 3.1. Primary Source of Health Services for Individuals within the Jurisdiction[1]

Provider	2005	2009	2012	2015	2017
Doctor/nurse practitioner's office	84%	78%	75%	68%	64%
Urgent care center	2%	7%	9%	17%	17%
Public health clinic/ com. health center	3%	4%	5%	4%	<1%
Worksite clinic	-	-	-	-	1%
Quickcare clinic/fastcare clinic	-	-	-	-	6%
Hospital emergency room	1%	2%	3%	3%	2%
Hospital outpatient	2%	3%	<1%	3%	2%
No usual place	4%	4%	7%	5%	6%

HEALTH PROVIDERS

From 2011 to 2016, Figure 3.1 shows that the annual ratio of residents to health care provider has been consistently higher in the County compared the State. This was most evident for primary care physicians (PCP) where the County saw annual increases in the number of individuals per PCP. For the most recent year with available data (2014), this increase has been 1.7 times higher for the County relative to the State. In contrast, the County has been experiencing a decrease in the number of residents per dentist or mental health provider. Overall, the County has less health care providers per capita than the State.

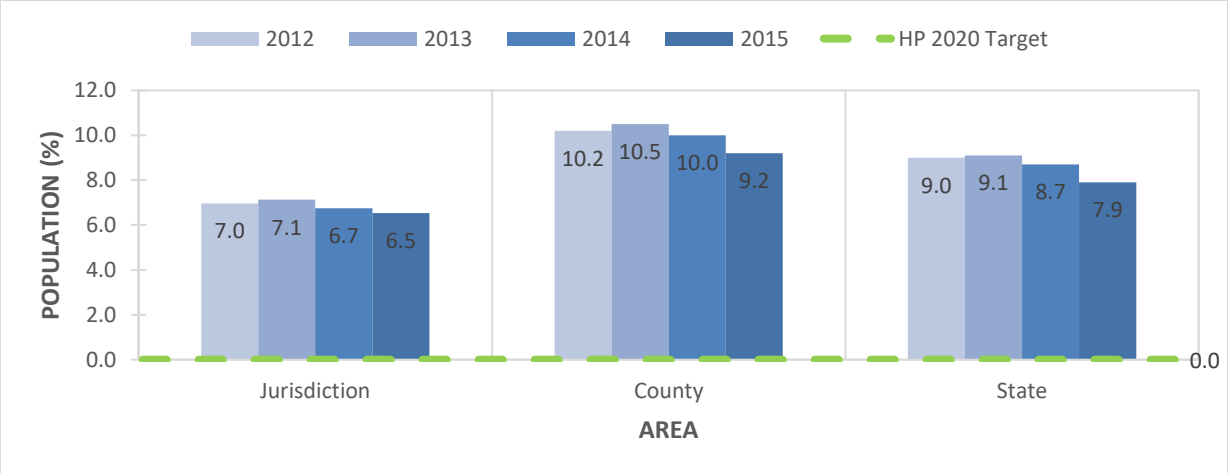
Figure 3.1 Number of Individuals Per Health Provider by Area and Health Provider Type[2]



HEALTH INSURANCE COVERAGE

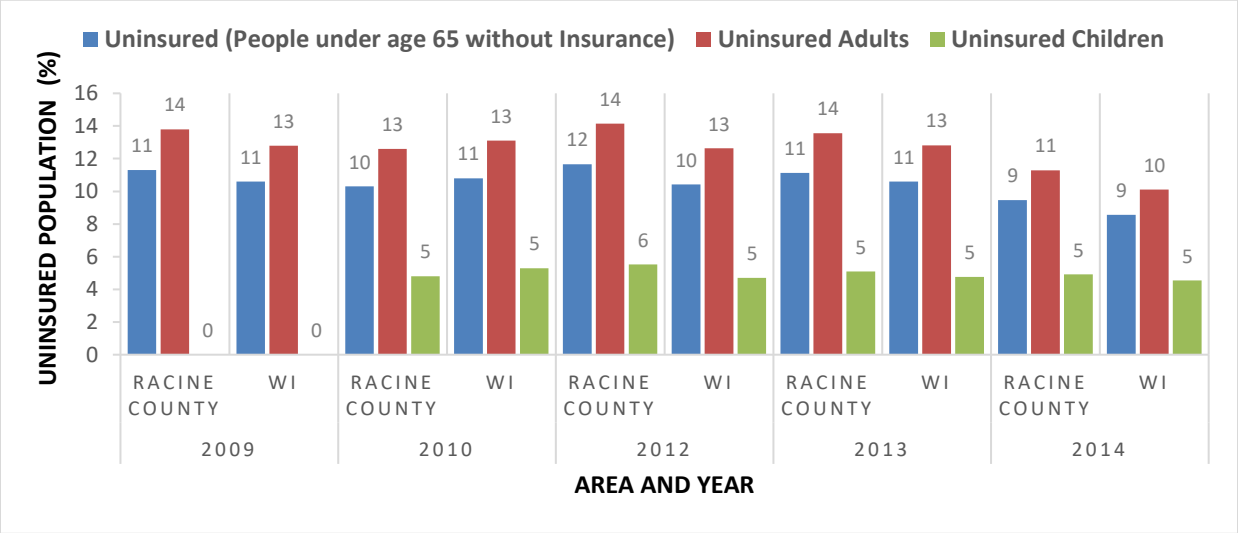
Figure 3.2 suggests a lower medically uninsured population within the Jurisdiction as compared to the County and the State. Over time, the figure portrays a decreasing trend for all the areas depicted. When compared to the HP 2020 target of 0% for the medically uninsured population, the Jurisdiction along with the County and the State appear to be well above this goal.

Figure 3.2 Estimated Percentage of Individuals without Health Insurance by Year and Area[3]



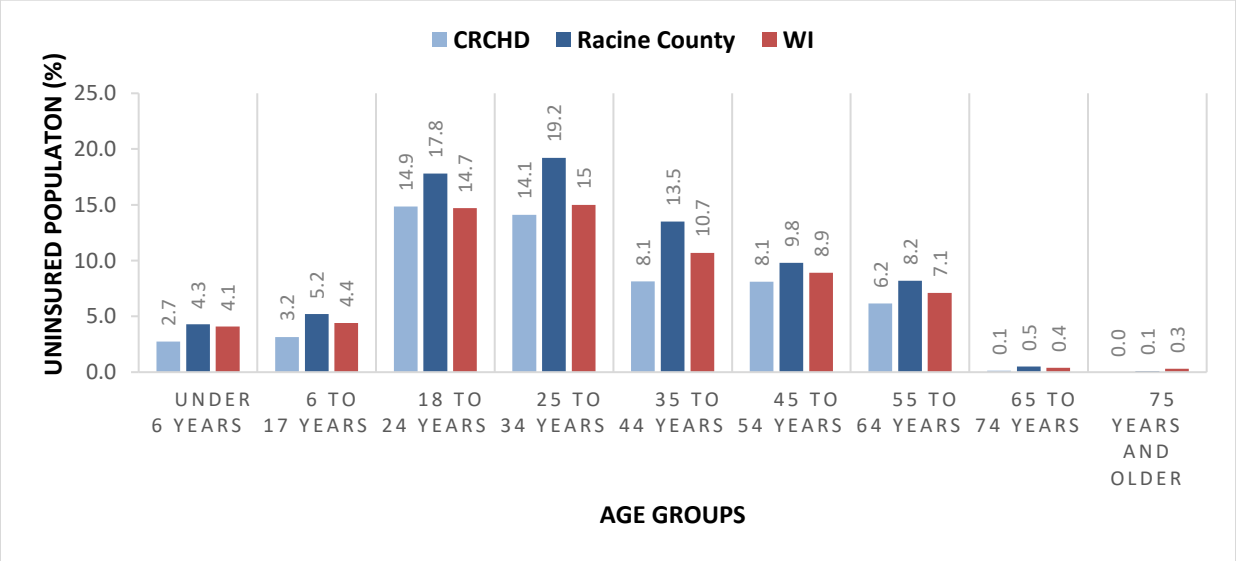
From 2009 to 2014, Figure 3.2 illustrates that the percentage of uninsured for the County and the State has declined by 2%. As suggested by Figure 3.2, this decrease may be reflective of the decline observed for the uninsured adult population as the percentage of uninsured children has remained flat at approximately 5%.

Figure 3.3 Percentage of Uninsured in Racine County and Wisconsin by Year[3]



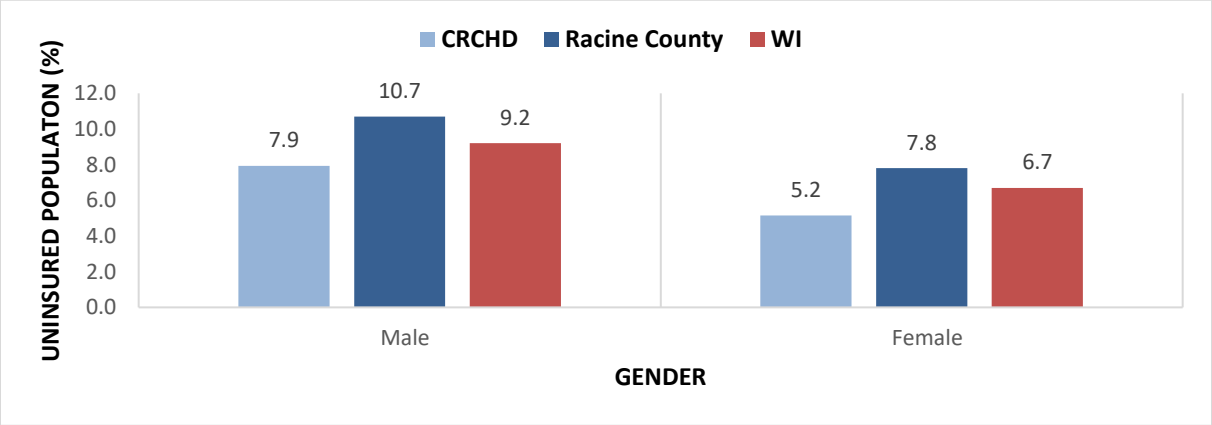
As shown in Figure 3.4, differences were observed between the estimated percentage of uninsured by area when accounting for age. The County reported the highest percentage of uninsured across all age groups compared to the Jurisdiction and the State, while the Jurisdiction had the lowest estimated percentage of uninsured across the age groups listed with the 18 to 24-year age group being the notable exception. The 25 to 34-year age group had the highest estimated percentage of uninsured at the County and State levels. The 18 to 24-year age group had the highest estimated percentage of uninsured at the level of the Jurisdiction.

Figure 3.4 Estimated Percentage of Uninsured by Area and Age Groups[4]



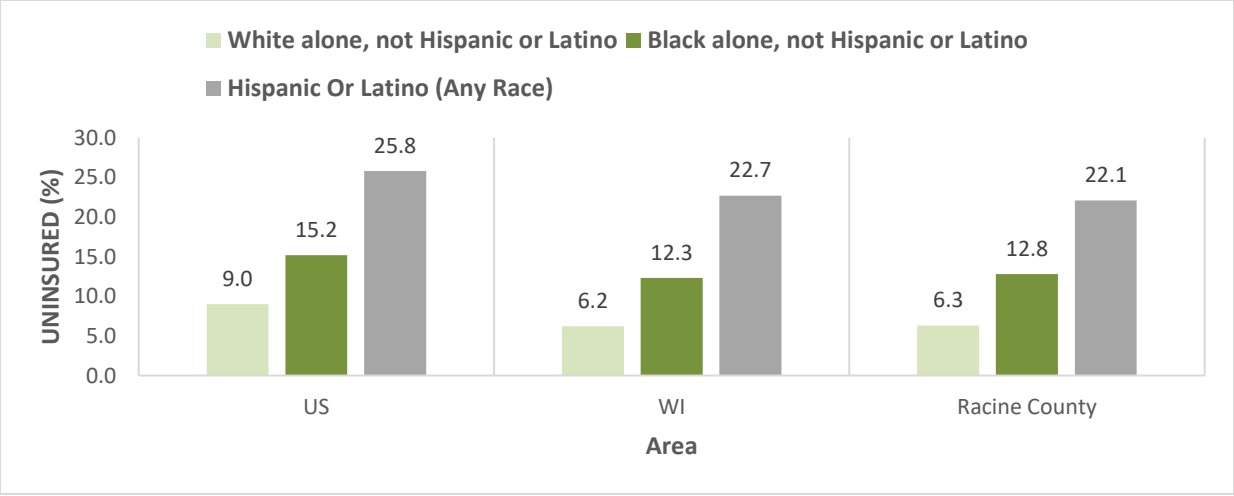
When comparing genders, Figure 3.5 suggests that females have a higher percentage of health insurance compared to their male counterparts. This difference was observed at the Jurisdictional, County, and State levels.

Figure 3.5 Estimated Percentage of Uninsured by Area and Gender[4]



Across the three areas depicted, Figure 3.6 shows the lack of insurance to be highest at the ethnic level (Hispanic) compared to individual races (e.g. Blacks and Whites). Additionally, when focusing on race, a higher proportion of Blacks are uninsured compared to Whites. Furthermore, in the County the racial differences observed between the 2015 and 2016 survey years has increased e.g. in 2015 the White and Black difference was 1.5%; in 2016 it was 8.3%.

Figure 3.6 Estimated Percentage of Uninsured by Area and Race and Ethnicity, 2011-2015[5]



PREVENTABLE HOSPITALIZATIONS

Hospitalizations are considered preventable hospitalizations when they are for conditions where timely and effective ambulatory care can reduce the likelihood of hospitalization. Preventable hospitalizations are used in this report as indicator for the availability of health resources.

Figure 3.7 illustrates the rate (per 1,000) and the average hospital stay in days for preventable hospitalizations for the County and the State. From 2008 to 2014, the preventable hospitalization rate has been higher for the County compared to the State. In contrast, average hospital stays for the County and State have been similar with lengths ranging from 4.2 to 4.6 days.

Figure 3.7 Preventable Hospitalization Rate and Average Hospital Stay in Racine County and Wisconsin by Year[6]

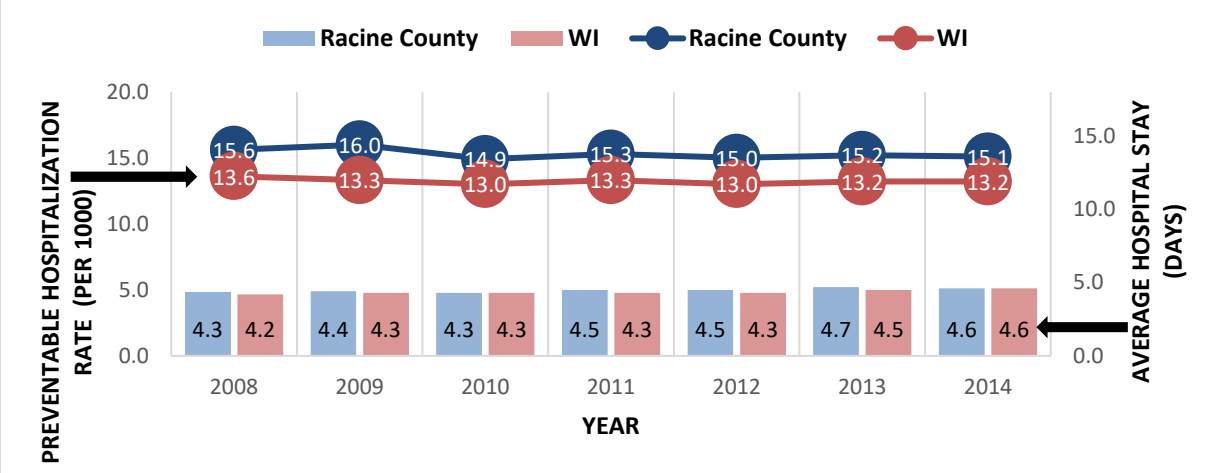
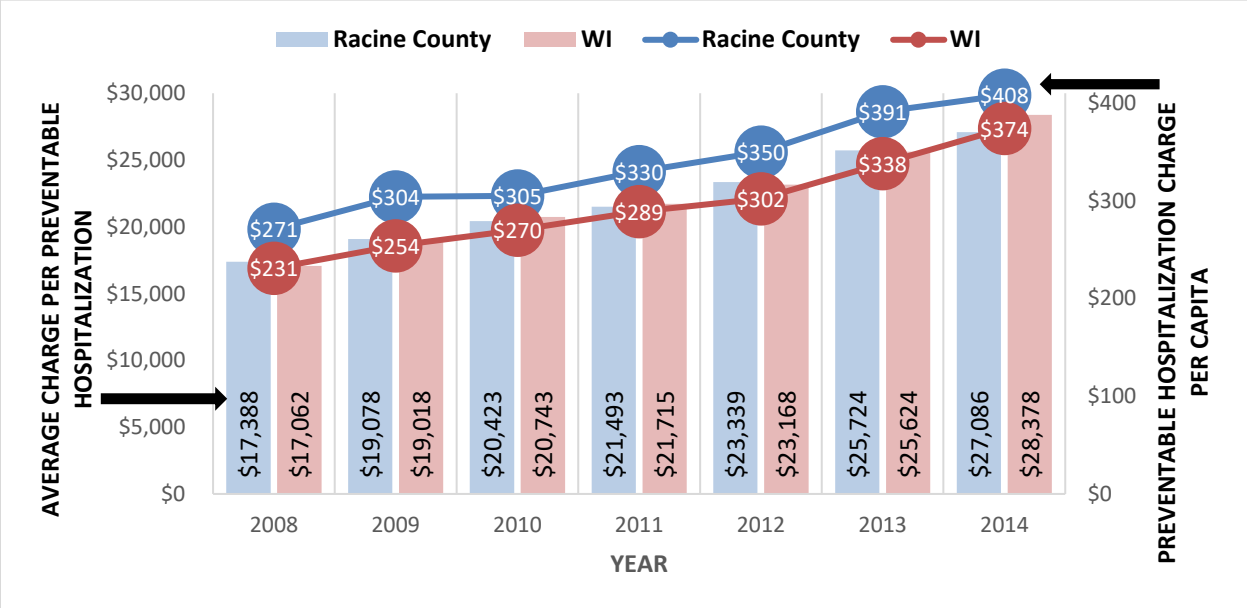


Figure 3.8 depicts the costs associated with preventable hospitalizations. Over the 2008 to 2014 timeframe, the per hospitalization and per capita cost associated with preventable hospitalizations has risen for the County and State.

Figure 3.8 Cost Per Preventable Hospitalization and Per Capita for Racine County and Wisconsin by Year[6]



REFERENCES

1. Aurora Health Care. 2017. Central Racine County Community Health Survey Summary - 2017.
2. University of Wisconsin Population Health Institute, County Health Rankings. 2014-2017. Wisconsin Ranking Data. Retrieved from: http://www.countyhealthrankings.org/app/wisconsin/2011/downloads
3. U.S. Census Bureau, American Community Survey. 2011-2015. American Community Survey 5-Year Estimates, Table S2701. Retrieved from: https://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml
4. University of Wisconsin Population Health Institute, County Health Rankings. 2012-2017. Wisconsin Ranking Data. Retrieved from: http://www.countyhealthrankings.org/app/wisconsin/2011/downloads
5. Source: U.S. Census Bureau, American Community Survey. 2011-2015. American Community Survey 5-Year Estimates, Table S2701. Retrieved from: https://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml
6. U.S. Census Bureau, American Community Survey. 2011-2015. American Community Survey 5-Year Estimates, DP03. Retrieved from: https://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml
7. WI DHS. 2008-2016. Public Health Profiles: Racine County and WI.

CATEGORY 4: QUALITY OF LIFE

NACCHO Definition: Quality of Life (QOL) is a construct that "connotes an overall sense of well-being when applied to an individual" and a "supportive environment when applied to a community" (Moriarty, 1996). While some dimensions of QOL can be quantified using indicators, research has shown to be related to determinants of health and community well-being, other valid dimensions of QOL include perceptions of community residents about aspects of their neighborhoods and communities that either enhance or diminish their quality of life

For this report indicators of quality of life, include: alcohol licenses, adult violent crime, social support and safety.

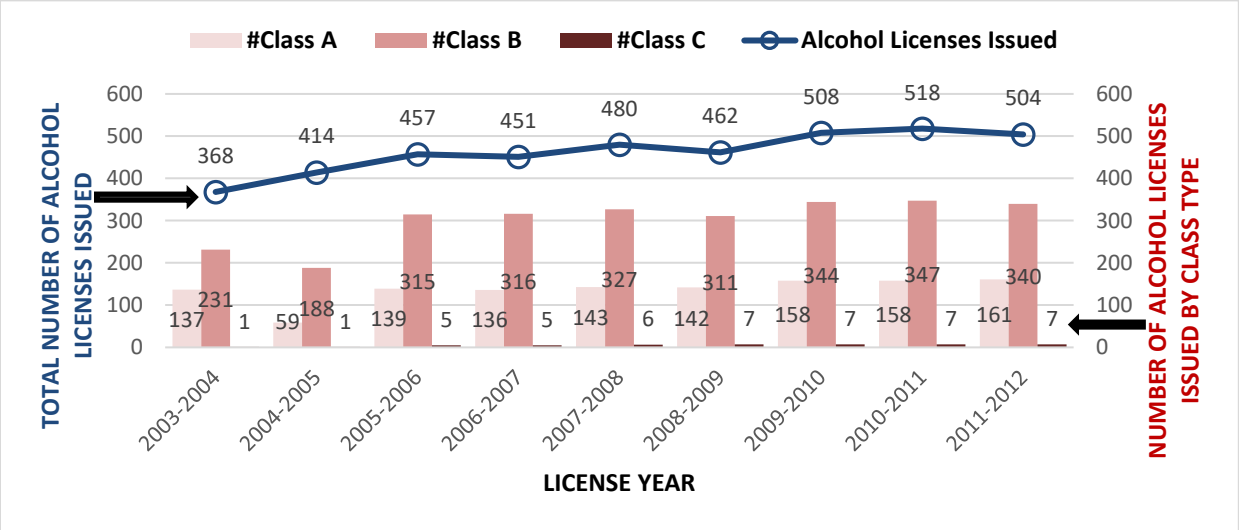
Key Findings

- Over the 2003-2011 licensing years, alcohol licenses issued in Racine County has increased by 37%.
- Over 2001-2012, the combined number of violent and property crimes has declined by 26% in Racine County.
- From 2015 to 2017, the percentage of adults in the Jurisdiction reporting personal safety issues has increased.

ALCOHOL LICENSES

Figure 4.1 displays the number of alcohol licenses issued in Racine County. For licensing years spanning from 2003 to 2011 the total number of alcohol licenses issued has increased by 37%. For the most recent license year (2011-2012), class A licenses accounted for 67% of the total, followed by class B (32%) and class C (1%). *See Glossary*.

Figure 4.1. Number of Alcohol Licenses Issued in Racine County by Total and Class Type (A,B,C)[1]



ADULT VIOLENT CRIME

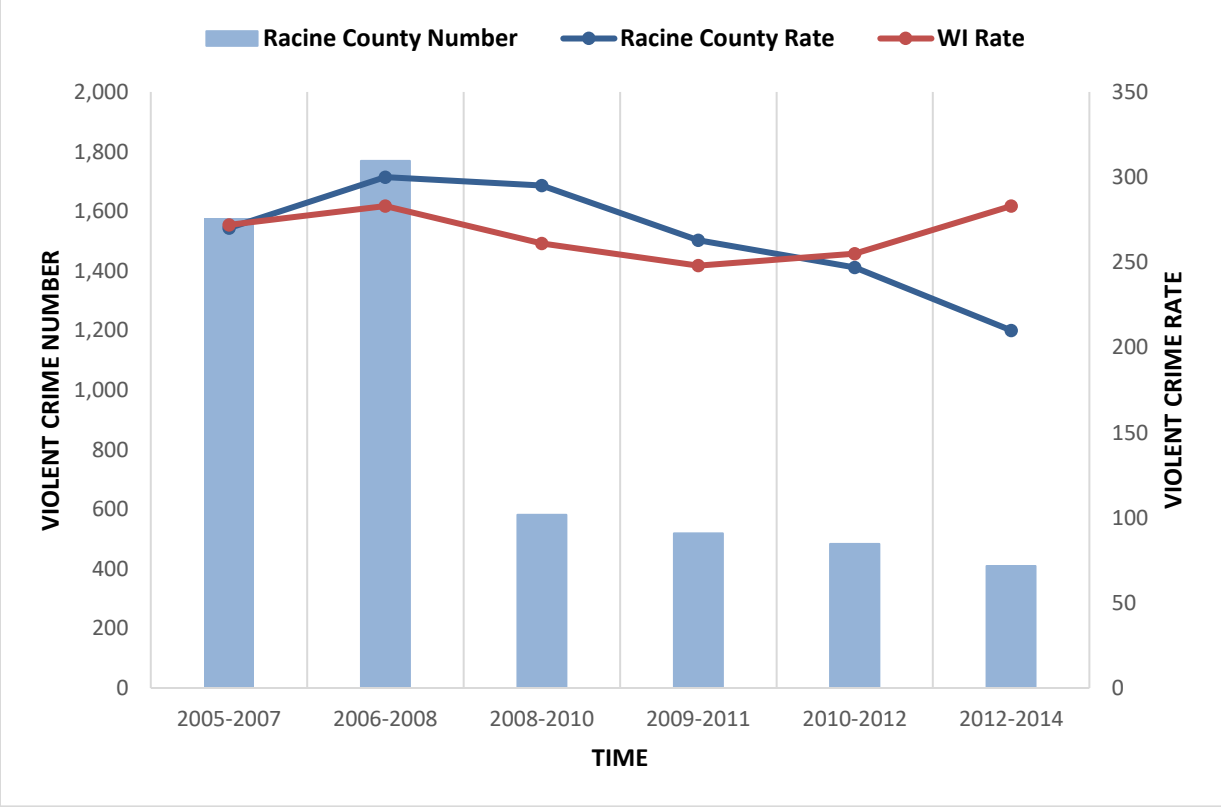
As indicated in Figure 4.2, the number of incidents related to violent and property crime in Racine County has declined by 26% from 2001 to 2012.

Figure 4.2 Combined Number of Violent and Property Crime Incidents* in Racine County, 2001-2012[2]

*Excludes Vandalism

As shown in Figure 4.3, the downward trend in violent crimes observed for Racine County contrasts with the increasing trend in violent crimes observed for the State.

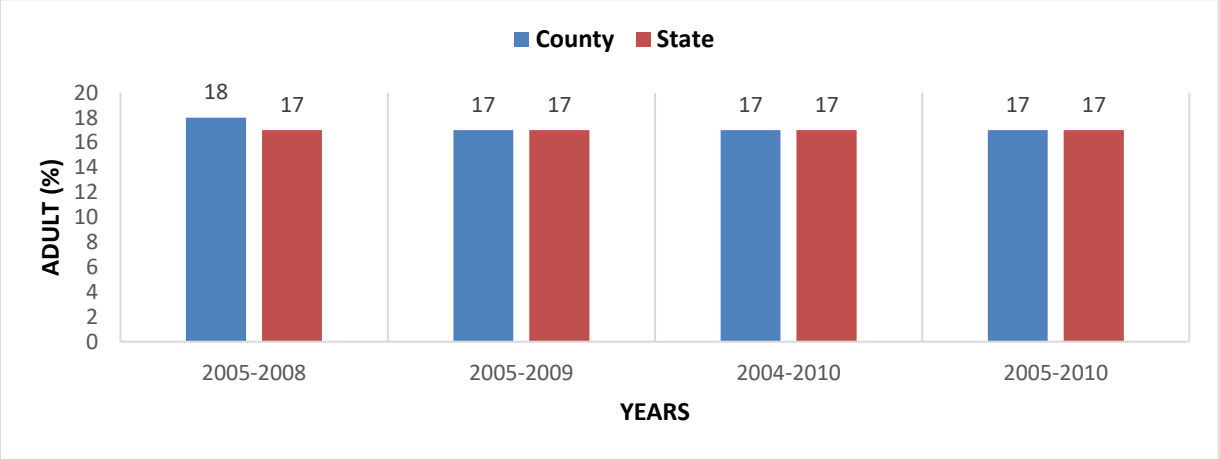
Figure 4.3 Number and Rate of Violent Crimes in Racine County[3]



SOCIAL SUPPORT & SAFETY

The percent of adults with no social-emotional support in the County and the State has remained flat at 17% for most of the indicated time points in Figure 4.4.

Figure 4.4. Percentage of Adults with No Social-Emotional Support in the County and the State by Year and Area[4]



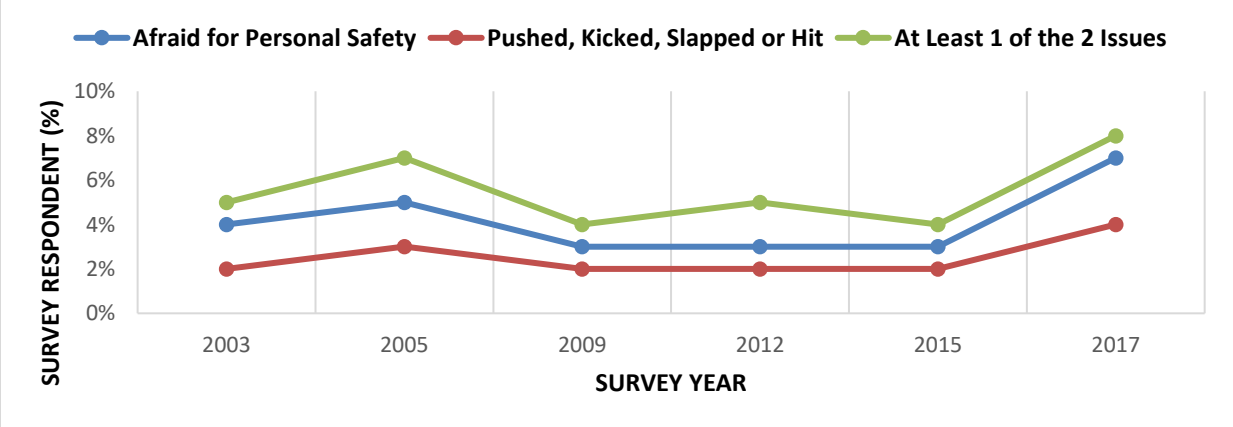
An additional measure of social support is the rate of membership associations within a specified area. As Table 4.1 depicts this measure has been lower for the County compared to the State.

Table 4.1 Number of Membership Associations Per 10,000 population[5]

	County	State
2015	9.9	11.8
2016	9.9	11.8
2017	10.1	11.7

As displayed in Figure 4.5, 2017 saw an increase in the percentage of adults in the Jurisdiction reporting personal safety issues relative to the previous three survey years.

Figure 4.5. Percentage of Surveyed Adults in the Jurisdiction Reporting Personal Safety Issues in The Past Year[6]



REFERENCES

1. Wisconsin Department of Health Services. County Alcohol Outlet Density Reports. Racine County (2012). Retrieved from: https://www.dhs.wisconsin.gov/publications/p0/p00778-racine.pdf
2. United Way of Racine. 2014. County Community Indicators Report. Retrieved from: http://www.unitedwayracine.org/sites/unitedwayracine.org/files/2014%20Community%20Indicators%20Report%2012-3-14%20reduced.pdf
3. University of Wisconsin Population Health Institute, County Health Rankings. 2010-2017. Wisconsin Ranking Data. Retrieved from: http://www.countyhealthrankings.org/app/wisconsin/2011/downloads
4. County Health Rankings. 2010-2014. Racine County Ranking Data. Retrieved from: http://www.countyhealthrankings.org/app/wisconsin/2011/rankings/racine/county/factors/4/snapshot
5. County Health Rankings. 2015-2017. Racine County Ranking Data. Retrieved from: http://www.countyhealthrankings.org/app/wisconsin/2015/rankings/racine/county/outcomes/overall/snapshot
6. Aurora Healthcare. 2017. Community Survey: Racine County. Retrieved from: https://ahc.aurorahealthcare.org/aboutus/community-benefits/community-health-research/index.asp

CATEGORY 5: BEHAVIORAL RISK FACTORS

NACCHO Definition: Risk factors in this category include behaviors which are believed to cause, or to be contributing factors to, injuries, disease, and death during youth and adolescence and significant morbidity and mortality in later life.

For this report behavioral risk factors, included: alcohol use, tobacco use, drug use, healthy eating, physical activity and weight, screenings, and youth sexual activity.

Key Findings

- Over the 2005-2017 timeframe, the percentage of surveyed adults in the Jurisdiction reporting binge drinking increased by 43%. A higher percentage of males reported binge drinking compared to females.
- The percentage of current smokers in the Jurisdiction decreased from 2005 to 2017.
- Between 2009-2014, prescription opioid related death accounted for the highest proportion of drug related deaths in the County. Over this timeframe, prescription opioid and heroin deaths in the County increased by 38% and 217%, respectively. Heroin deaths were highest among the 30-39 age group while prescription opioid deaths were highest among the 50-59 age group. The majority of drug related deaths was accidental.
- For survey years spanning 2005 to 2017, a higher percentage of CRCHD male residents reported a status of overweight and/or obesity compared to females. The combined gender percentage for overweight and/or obesity has been higher than the HP 2020 Goal.
- Over survey years 2005 to 2017, the percentage of County and Jurisdictional residents reporting a Pap smear within the past 3 years has been trending downward, below the Healthy People 2020 goal of 93%.
- Surveyed youth in the County reported less sexual activity and less use of contraception from 2006 to 2016.

ALCOHOL USE

Figure 5.1 shows that the combined percentage of reported binge drinking in the Jurisdiction has increased by 43% from 2005 to 2017 survey years. The upward trend has been observed for both genders with a higher percentage of males reporting binge drinking compared to females. When compared to the HP 2020 target, the combined percentage for the Jurisdiction has been over this national benchmark for the three most recent survey years. At the gender level, males in the Jurisdiction have consistently been at or above the HP 2020 target, while females have only been at or above the target until the most recent survey years (2015, 2017).

Figure 5.1 Percentage of Surveyed Adults in the Jurisdiction Who Reported Binge Drinking in the Past Month by Gender, 2003-2017[1]

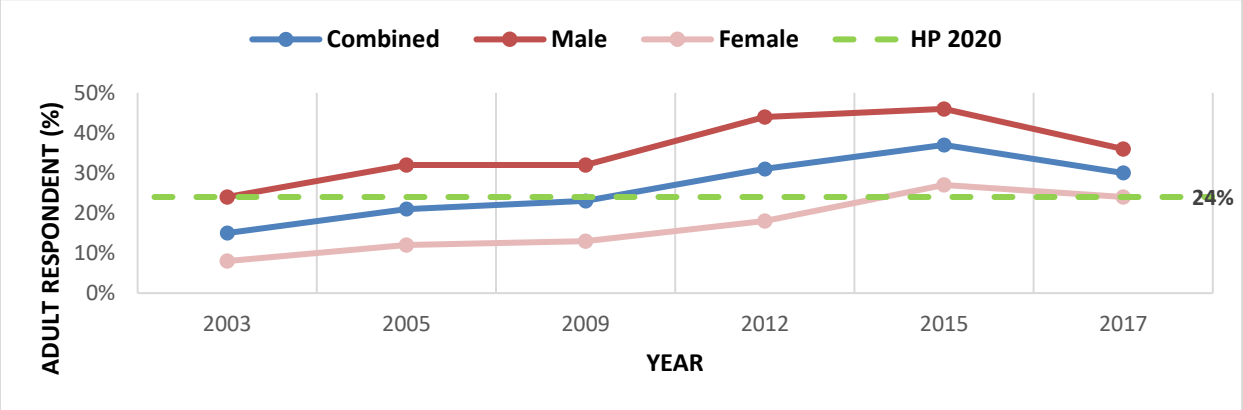
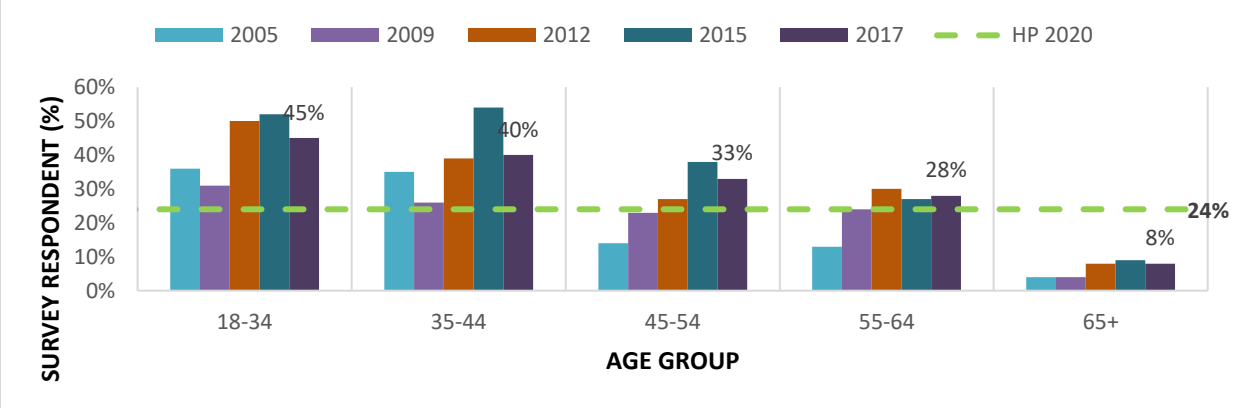


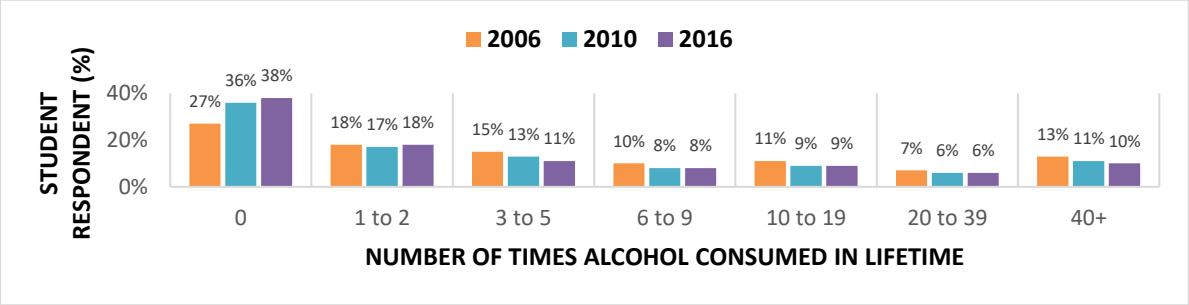
Figure 5.2 reports on binge drinking behavior in the Jurisdiction by age group. Based on the survey reports, all age groups saw an increase in binge drinking from the 2005 to the 2017 survey years with the 45-54 age group seeing the largest percentage change (+19%) and the 65+ age group seeing the smallest change (+4%). Additionally, the 18-34 age group has reported the highest percentage of binge drinking compared to the other age groups for four of the five survey years depicted. Furthermore, when compared to the HP 2020 benchmark, the 18-34 and 35-44 age groups consistently reported percentages above the target.

Figure 5.2. Percentage of Surveyed Adults in the Jurisdiction Who Reported Binge Drinking in the Past Month by Age Group[1]



As shown in Figure 5.3, the percentage of students reporting no alcohol consumption in their lifetime has increased by 11% from 2006 to 2016.

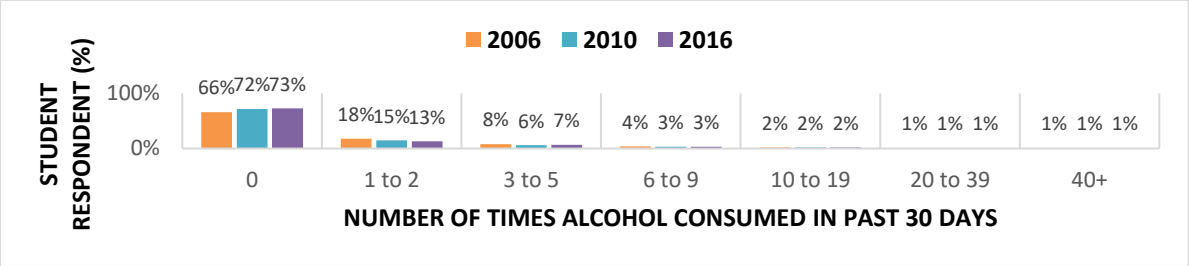
Figure 5.3. Reported Number of Times Alcohol Consumed in Lifetime by Racine County Student Survey Respondents (2006, 2010, 2016) * [2]



*Survey sample does not include students from all Racine County schools.

Figure 5.4, shows that across three survey years (2006, 2010, 2016) most student respondents in Racine County have consistently reported having no alcohol consumption in the past 30 days. Additionally, this proportion has increased by 7% since 2006.

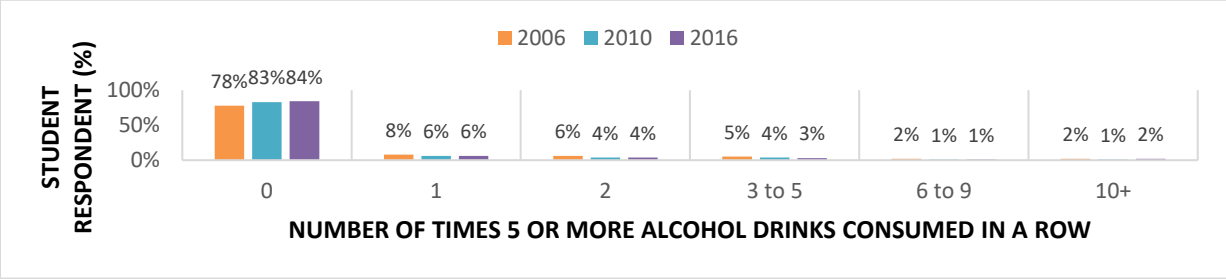
Figure 5.4. Reported Number of Times Alcohol Consumed in Past 30 Days by Students, Racine County 2006-2016* [2]



*Survey sample does not include students from all Racine County schools.

Figure 5.5 attempts to illustrate the issue of binge drinking within the student population in Racine County. It suggests that most students (82% on average) do not report acts of binge drinking, and that this proportion of non-binge drinkers has seen a 6% increase from the 2006 to the 2016 survey years.

Figure 5.5 Reported Lifetime Number of Times Five or More Alcohol Drinks Were Consumed in a Row by Students, Racine County 2006-2016* [2]

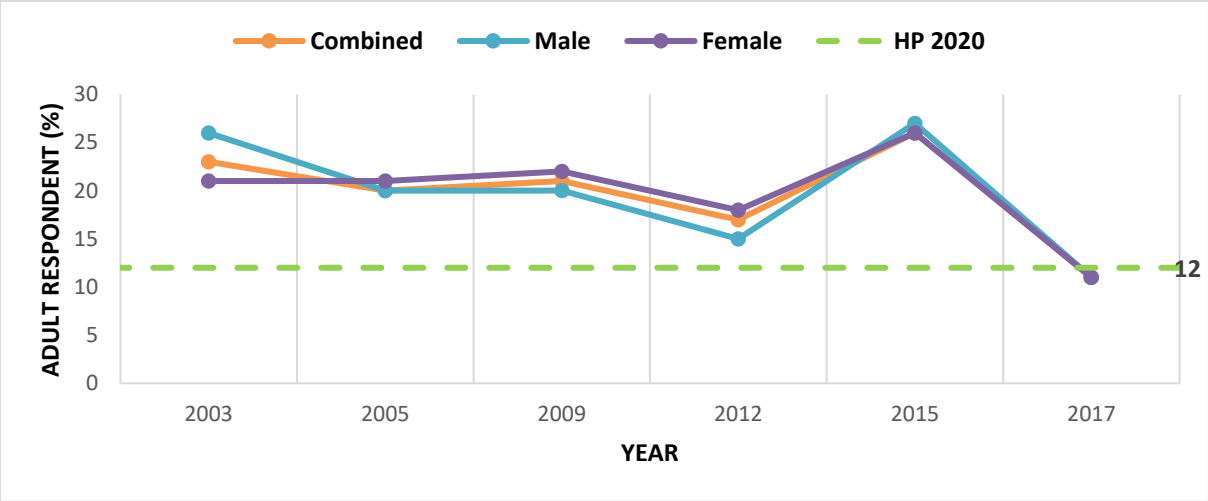


*Survey sample does not include students from all Racine County schools

TOBACCO USE

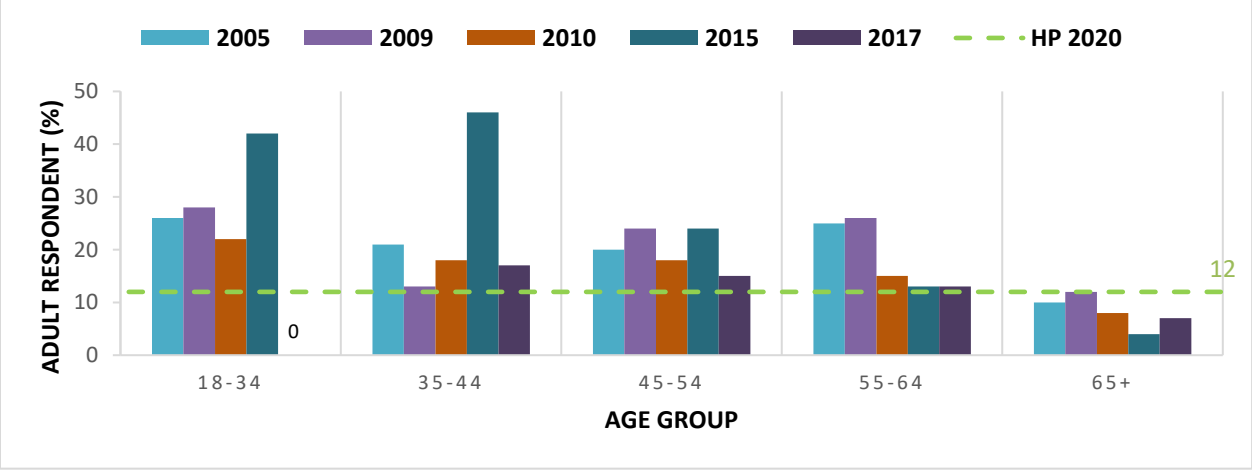
Among adults surveyed in the Jurisdiction, the percentage of respondents reporting as current tobacco cigarette smokers has averaged 19% over the survey years spanning 2005 to 2017. When compared to the HP 2020 target, there appears to be a downward trend for this measure with the combined and gender specific percentages falling below the HP 2020 target of 12% in 2017.

Figure 5.6 Percentage of Surveyed Adults in the Jurisdiction Who Reported as a Current Tobacco Cigarette Smoker by Year[1]



Based on age, figure 5.7 reflects the reported findings from figure 5.6 showing that for the survey years depicted most of the age groups (specifically adults within the 35-64 age groups) have consistently remained above the HP 2020 target of 12%. Of note is the reported finding within the 18-34 age group where 0% of adults in this age group reported as a current smoker in the 2017 survey. This was a 42% decrease from the prior survey year.

Figure 5.7 Percentage of Surveyed Adults in the Jurisdiction Who Reported as a Current Tobacco Cigarette Smoker by Age Group and Year[1]



OTHER DRUG USE

As shown in Figure 5.8, the age-adjusted rate of opioid related hospital discharges has been trending upward since 2005 for both the County and the State. From 2005 to 2016, the rate has increased by over two and a half times for both the County and the State.

FIGURE 5.8 Age-Adjusted Rate of Opioid Related Hospital Discharges by Year and Area, 2005-2016[3]

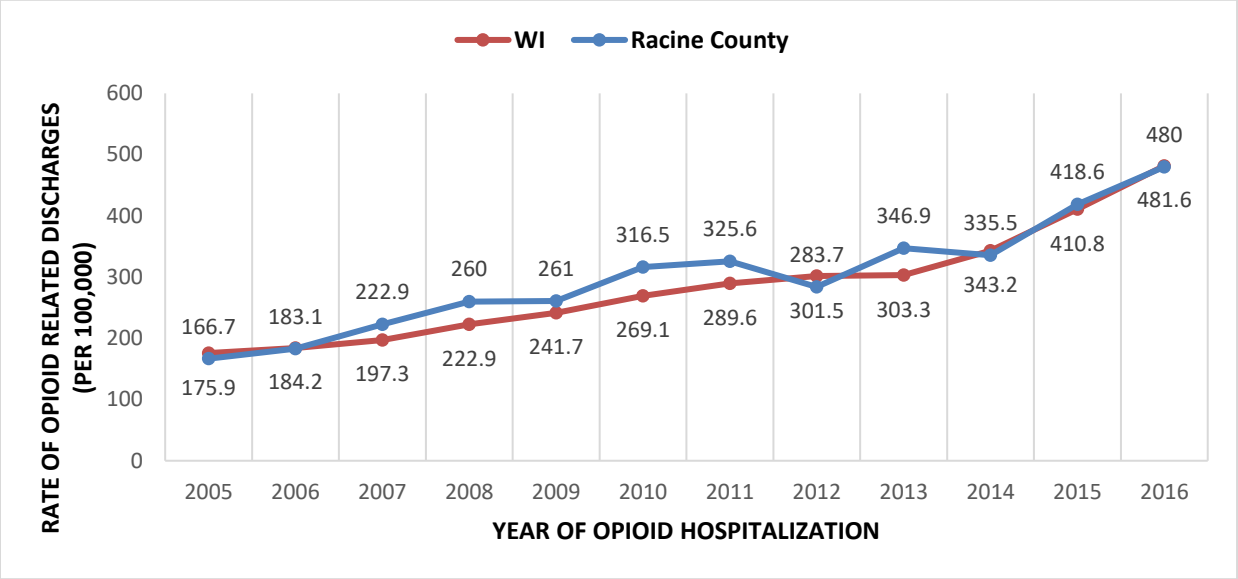
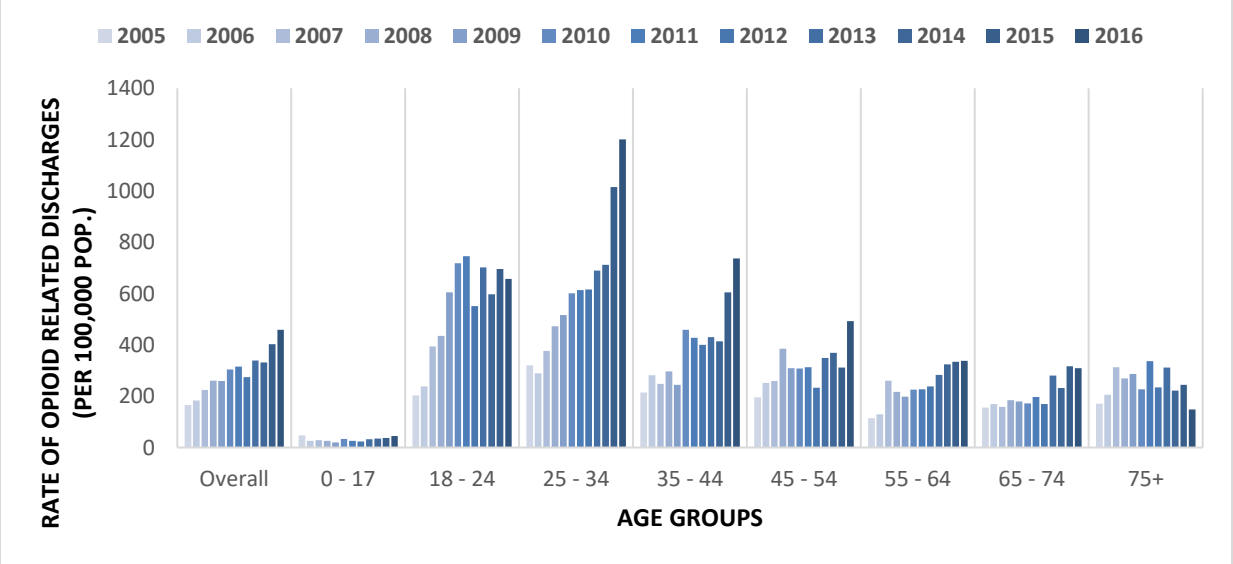


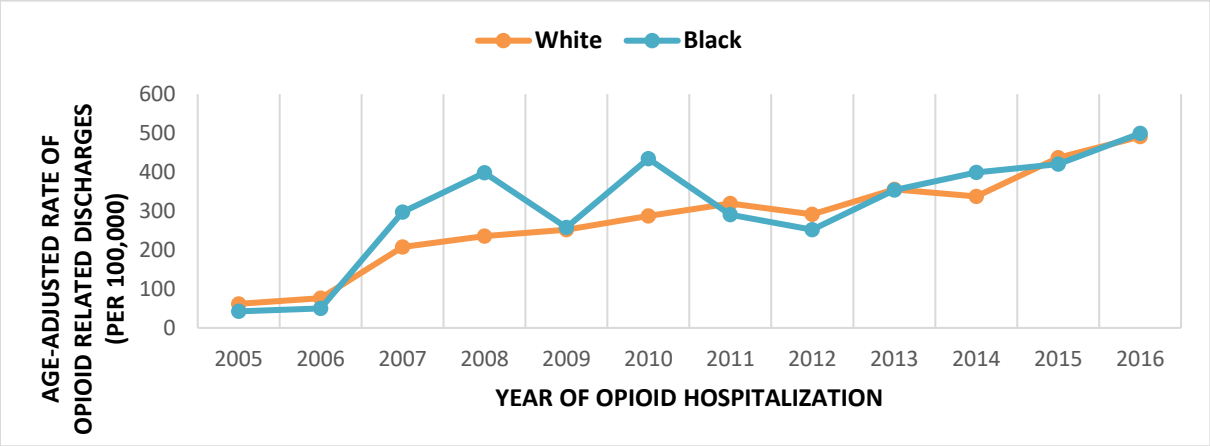
Figure 5.9 portrays the 25-34 age group as having the highest rate of opioid related discharges in the last 3 reported years. This age group also had the highest rate change of any age group with a 2016 rate that was over 3.5 times greater than the rate in 2005.

FIGURE 5.9 Rate of Opioid Related Hospital Discharges by Year and Age Group in Racine County, 2005-2016[3]



When factoring race, Figure 5.10 reflects an increasing trend for both County Whites and Blacks.

FIGURE 5.10 Age-Adjusted Rate of Opioid Related Hospital Discharges by Year and Race in Racine County, 2005-2016[3]



When factoring Hispanic ethnicity, the non-Hispanic population in Racine County has had a consistently higher age-adjusted rate of opioid related discharges relative to their Hispanic counterparts. Over time the age-adjusted rate has increased for both groups. However, the difference observed between the two groups has widened over time. In 2016, the rate for non-Hispanics was 2.5 times greater compared Hispanics in Racine County.

Figure 5.11 Age-Adjusted Rate of Opioid Related Hospital Discharges by Year and Hispanic Ethnicity in Racine County, 2005-2016[3]

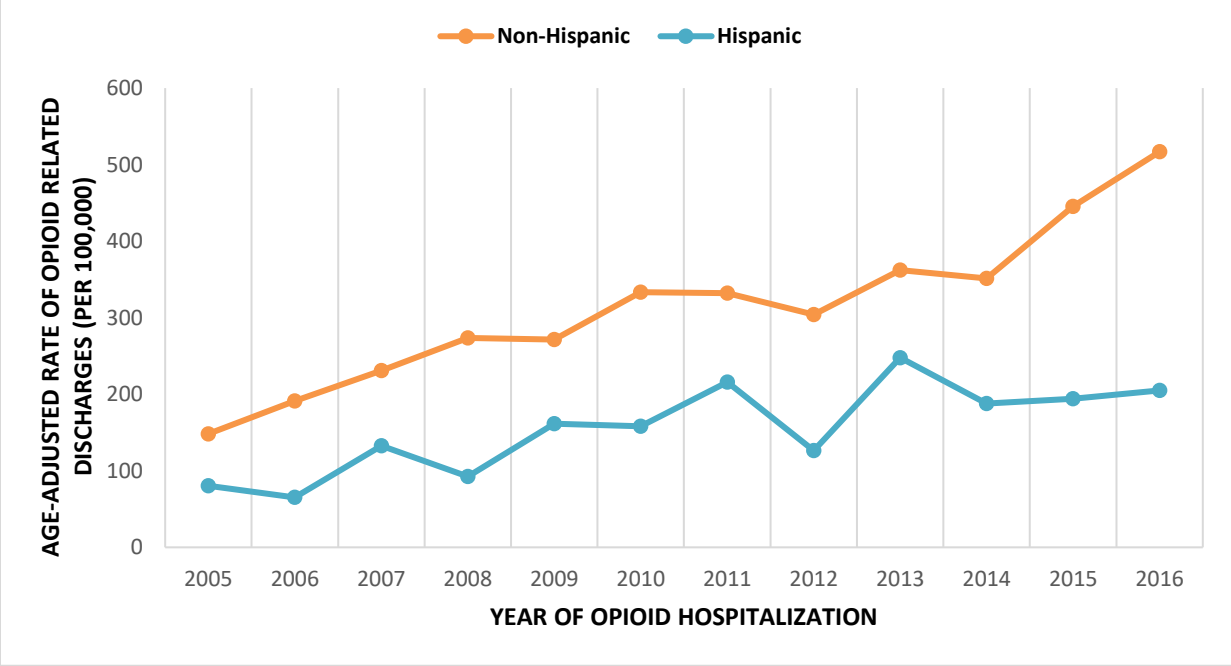
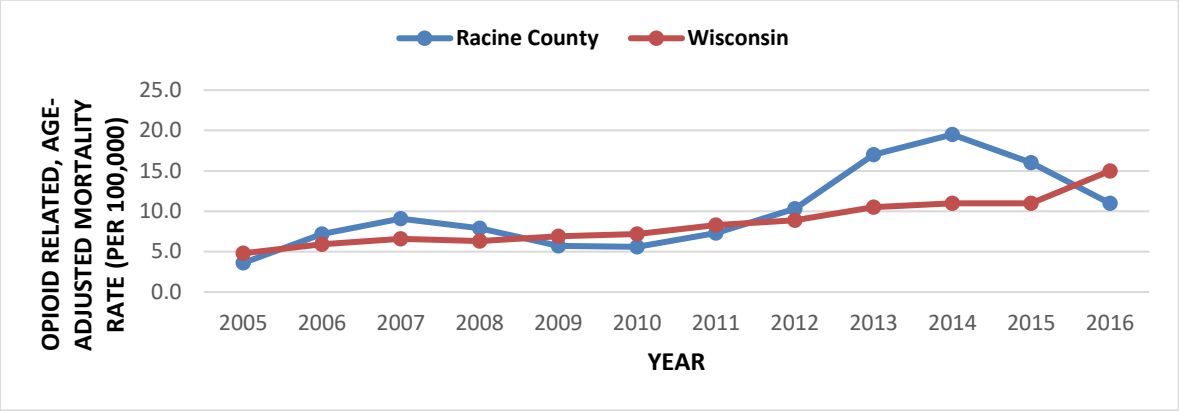


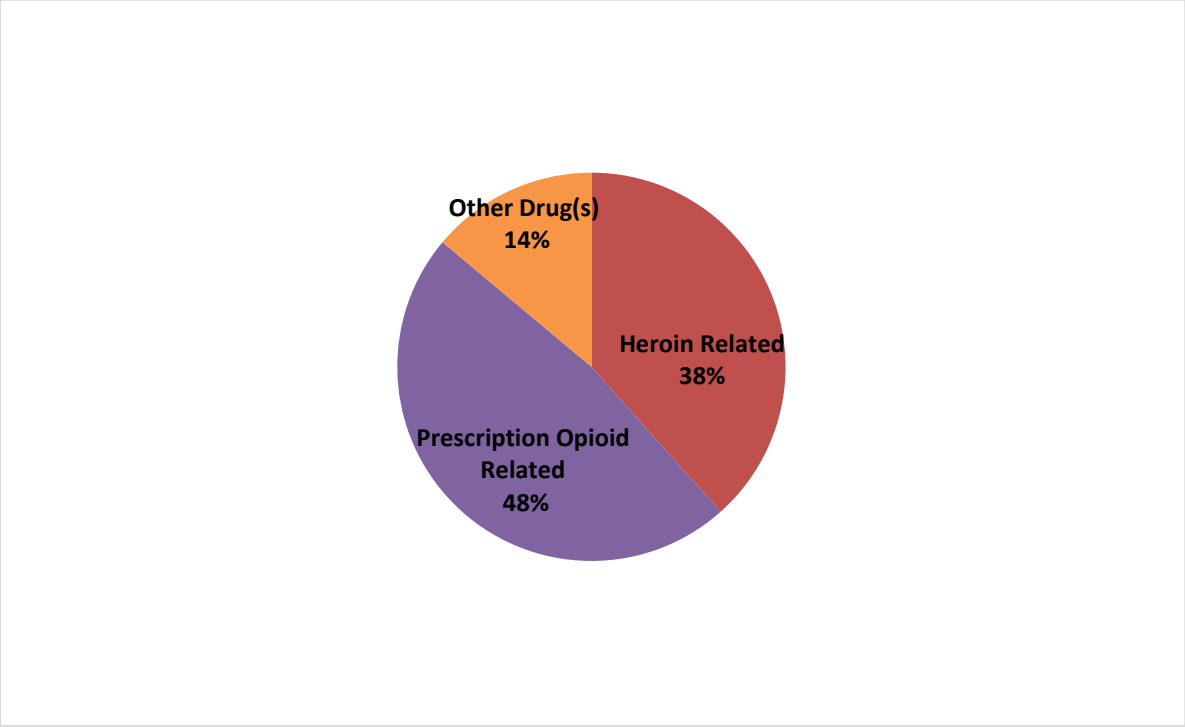
Figure 5.12 illustrates an overall increase at the County and State level in relation to the opioid related mortality rate over the 12-year timespan depicted. However, as shown the State rate is more stable and less varied compared to the County rate. This may be attributed to the lower number of deaths in the County as compared to the State[3] (*data not shown*).

Figure 5.12 Age-adjusted opioid related mortality rate by Year and Area, 2005-2016



As shown in Figure 5.13, between 2009-2014, the largest proportion of drug related deaths in Racine County were related to prescription opioids.

Figure 5.13 Percentages of Drug Related Deaths in Racine County, 2009-2014[4]



As shown in Figure 5.14, the number of prescription and heroin related drug deaths have increased in Racine County by 38% and 217%, respectively.

Figure 5.14 Drug Related Deaths by Drug Group and Year in Racine County, 2009-2014[4]

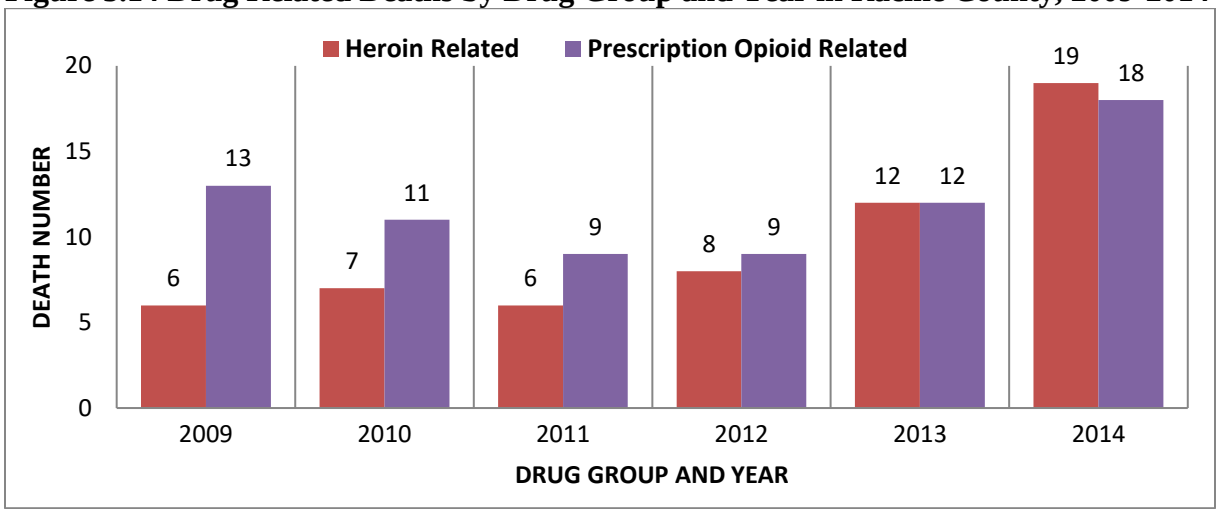
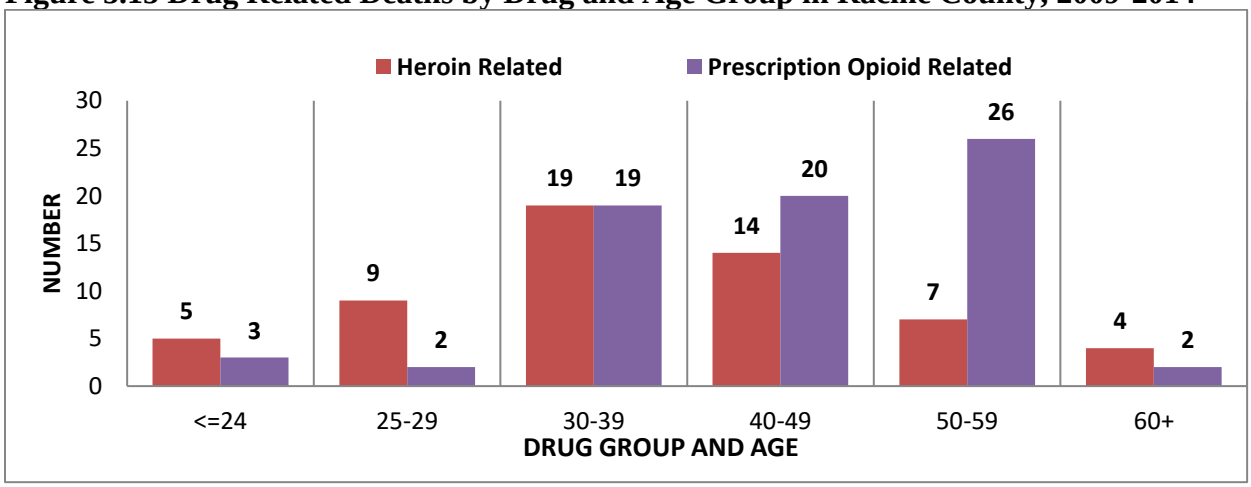


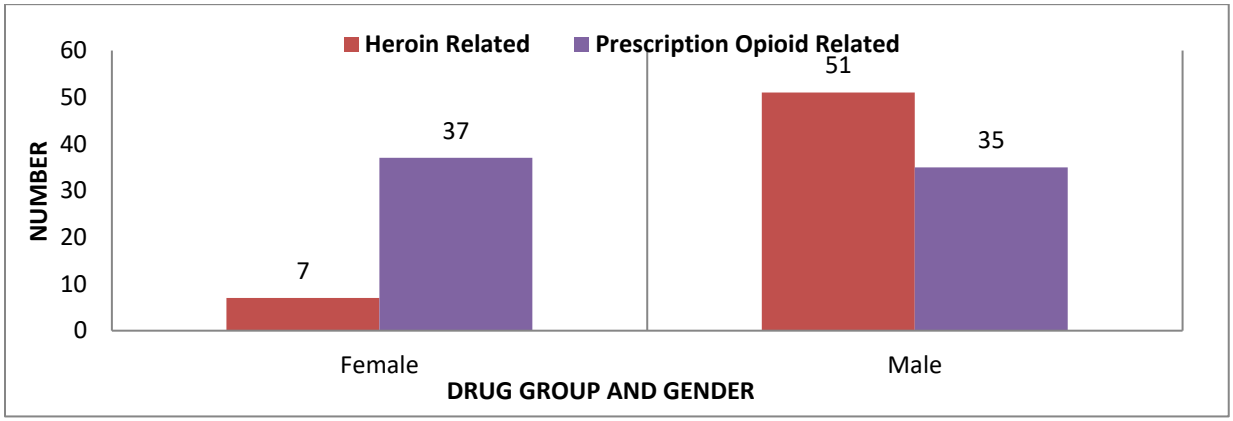
Figure 5.15 illustrates that over the specified 6-year timespan, the 30-39 age group had the highest number of heroin related drug deaths, while the number of prescription related drug deaths was highest among 50-59 year old. When assessing the combined totals for both drug groups, the 30-39 age group had the most deaths compared to the other age groups.

Figure 5.15 Drug Related Deaths by Drug and Age Group in Racine County, 2009-2014[4]



As depicted in Figure 5.16, males experienced approximately 2 times more total drug related deaths in Racine County compared to females. When examining the female gender, prescription opioid deaths were over 5 times higher compared to heroin related deaths and accounted for 84% of their drug related death total. For males, the opposite was true; heroin related deaths were approximately 1.5 times greater relative to prescription opioid deaths accounting for almost 60% of their drug related death total.

Figure 5.16 Drug Related Deaths by Drug Group and Gender in Racine County, 2009-2014[4]



When factoring the manner of death Figure 5.17 illustrates that there is nearly an equal proportion of accidental deaths related to heroin and prescription opioids (53% vs 47%, respectively). In contrast, prescription opioid related deaths accounted for all suicide and undetermined drug related deaths in Racine County.

Figure 5.17 Drug Related Deaths by Drug Group and Manner of Death in Racine County, 2009-2014[4]

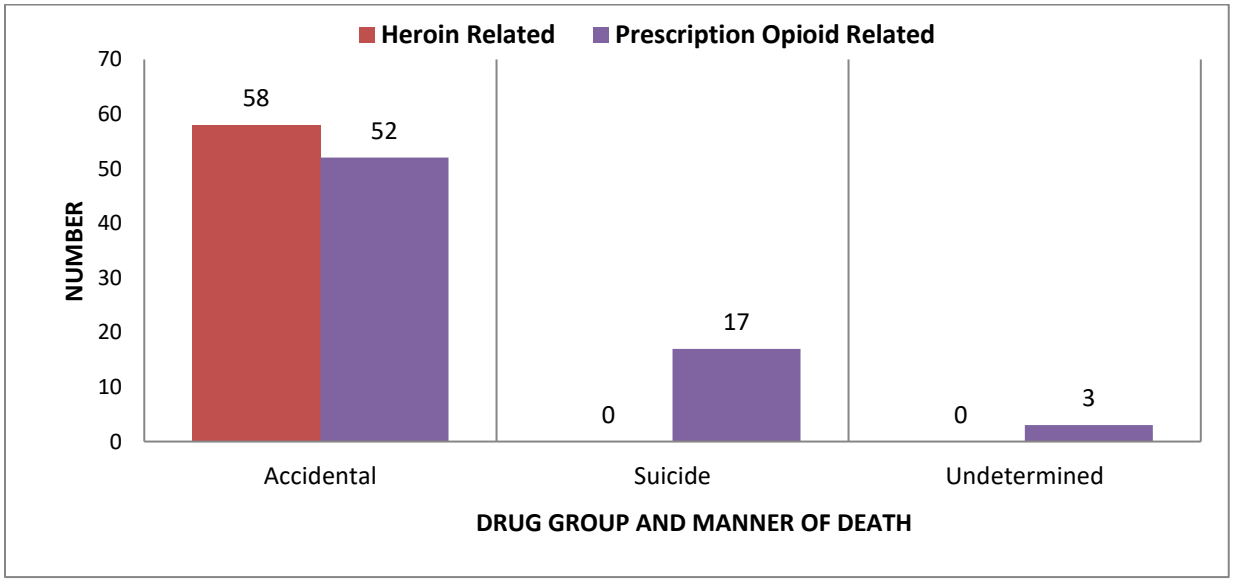
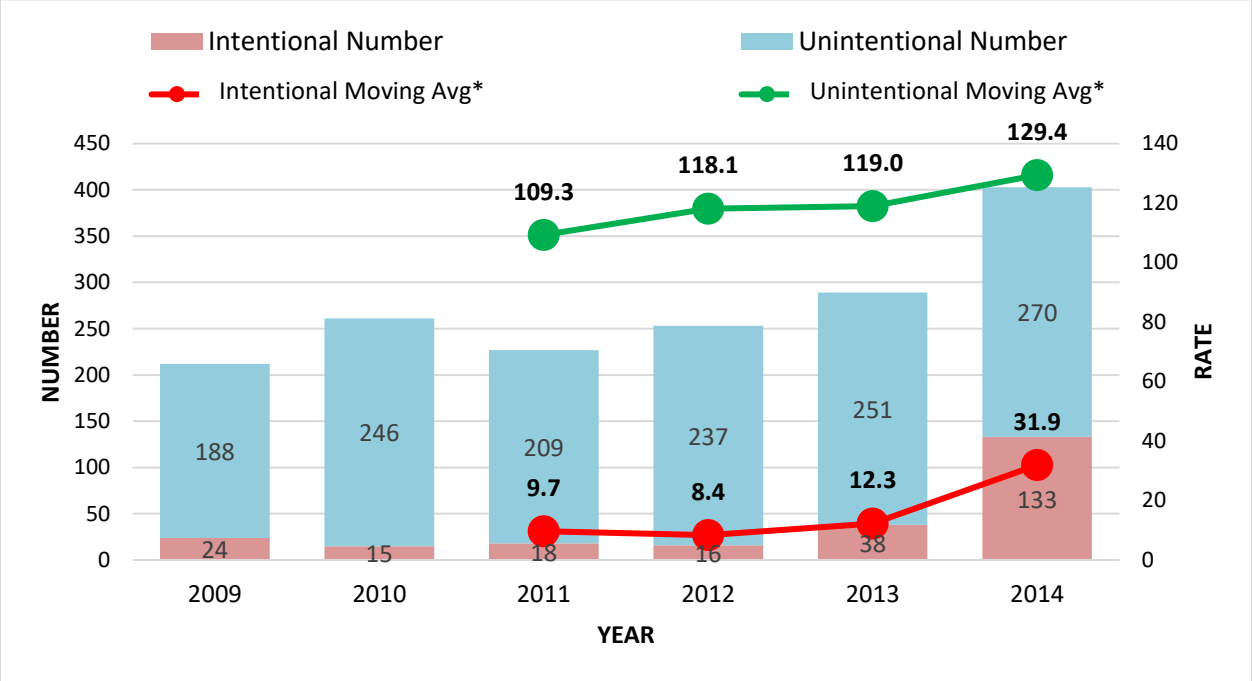


Figure 5.18 indicates an upward trend in both the number and rate of ED visits related to unintentional and intentional poisonings in Racine County. Over the indicated timeframe, the number and rate of ED visits related to unintentional poisonings has risen by 43% and 18%, respectively. More dramatically, the number and rate of ED visits related to intentional poisonings over the same time frame has increased by 454% and 229%.

Figure 5.18 Number and Rate of ED Visits Related to Unintentional and Intentional Poisoning by Year in Racine County, 2009-2014[5]

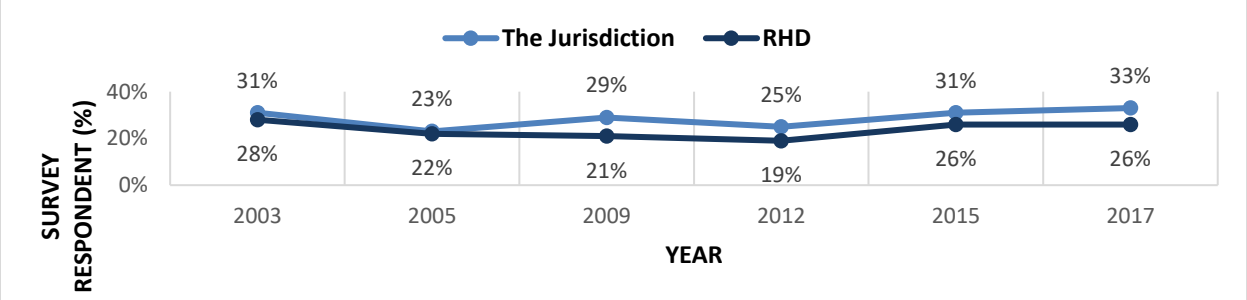


*Moving Average= 3 Year Rolling Average for the following E codes: 850-869.9 (Unintentional) and 950.9-952.9 (Intentional). Data represents ED visits, which includes deaths.

HEALTHY EATING

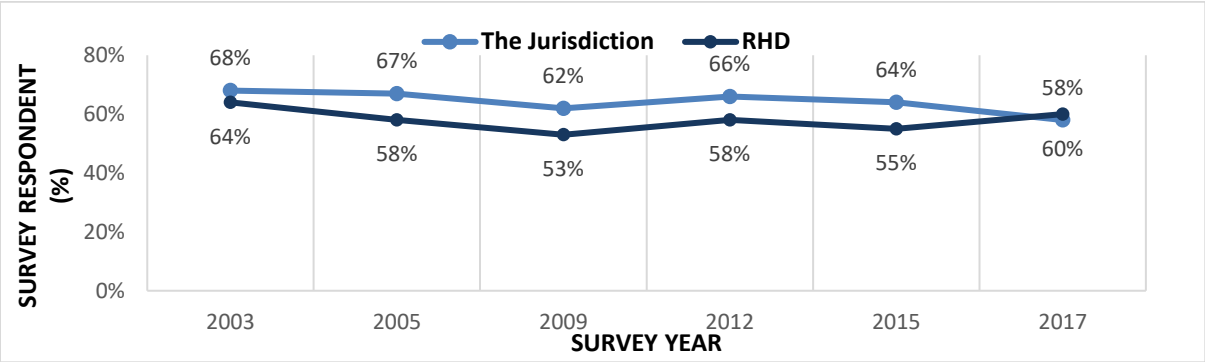
Based on Figure 5.19, a higher percentage of adults within the Jurisdiction have consistently consumed 3 or more servings of vegetables on average per day compared to RHD adult respondents.

Figure 5.19 Average daily consumption of 3 or more vegetables by Survey Area and Year[1,7]



Based on Figure 5.20, a higher percentage (≈64%), on average, of surveyed adults in the Jurisdiction have consistently consumed 2 or more servings of fruits on average per day compared to respondents from municipalities outside of the Jurisdiction (≈58%).

Figure 5.20 Average daily consumption of 2 or more fruits by Survey Area and Year[1,7]



PHYSICAL ACTIVITY AND WEIGHT

Figure 5.21 illustrates the self-reported level of weekly physical activity by surveyed adults in the Jurisdiction from 2009 to 2017. Over this timeframe, the percentage for this measurement of physical activity has increased by 17% with the 2017 percentage (57%) moving above the HP 2020 target of 48%.

Figure 5.21 Percentage of Surveyed Adults in the Jurisdiction and Their Reported Level of Physical Activity Per Week by Year[1]

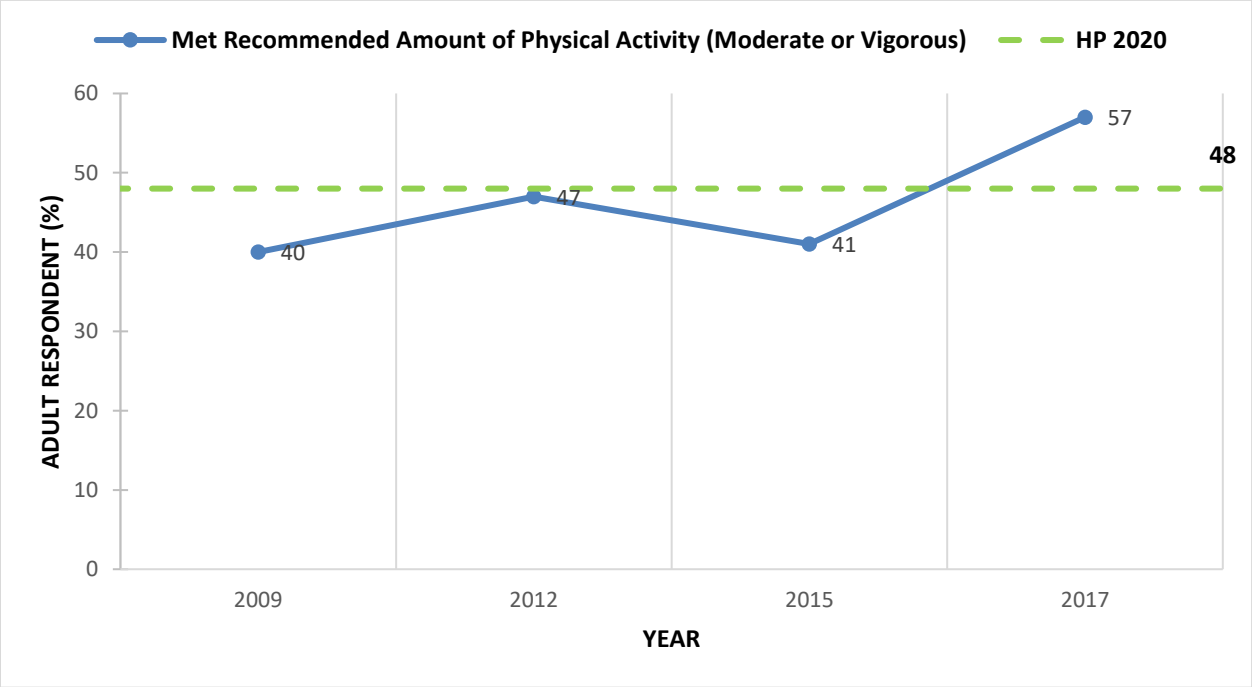


Figure 5.22 reports on physical activity among children (5-17 years old) in the Jurisdiction. From 2012 to 2017, the percentage of adults reporting on their children meeting the indicated physical activity regimen dropped by 10%.

Figure 5.22 Percentage of Surveyed Children (5-17-year-old) in the Jurisdiction with a Physical Activity Regimen of 60min for 5 or more days[1]

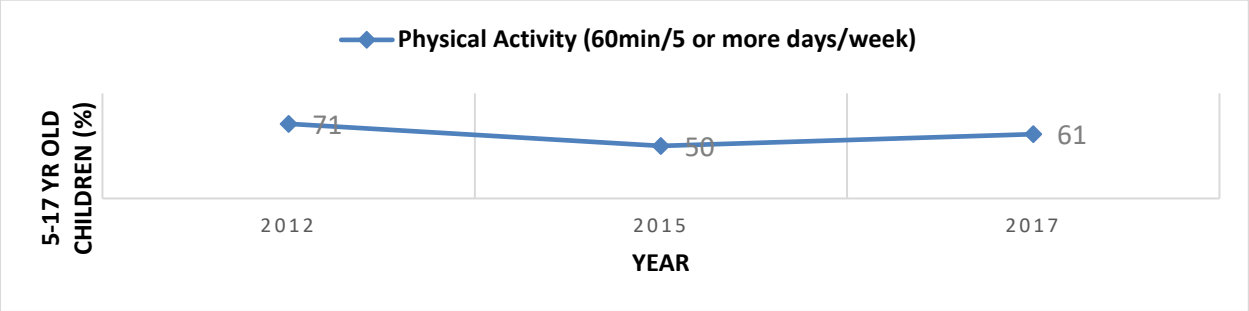


Figure 5.23 illustrates the percentage of overweight or obese adult survey respondents within the Jurisdiction. The overall percentage of survey respondents reporting a status of overweight or obese increased from 66% in 2005 to 73% in 2017. This has resulted in a percentage that has been consistently above the HP 2020 target (66%) for the past 3 survey years. Based on gender, males have consistently been above both the percentages reported by females and the HP 2020 target.

Figure 5.23 Percentage of Surveyed Adults in the Jurisdiction Who Reported as Overweight or Obese (BMI≥25) by Gender and Year[1]

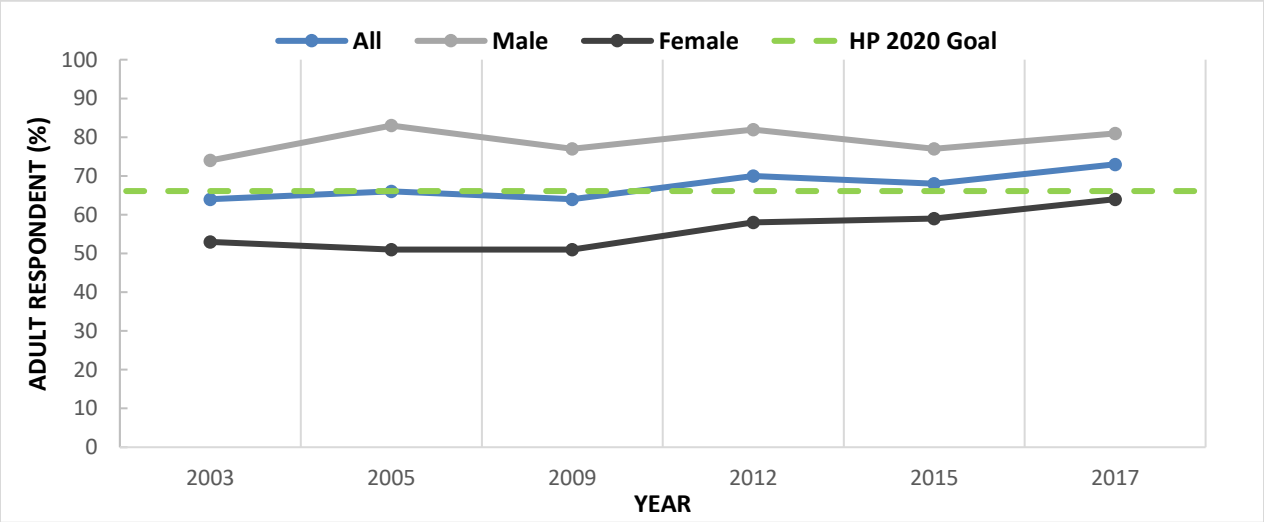
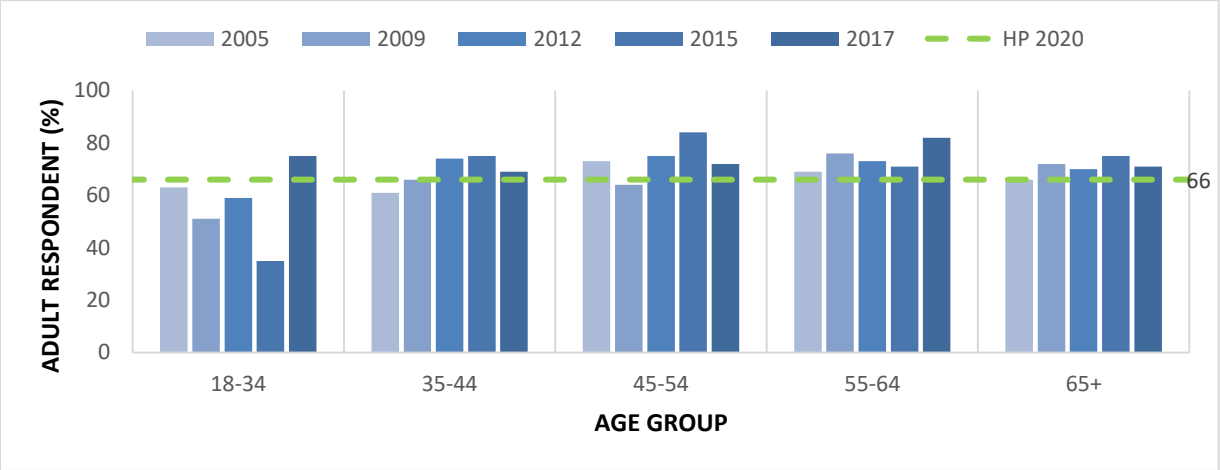


Figure 5.24 illustrates self-reporting of overweight or obese status by age group for the adult community in the Jurisdiction. As shown, most of the age groups depicted have consistently reported overweight or obesity levels that were at or above the HP 2020 target benchmark of 66%. Interestingly, the levels reported for the 18-34 were 40% higher in 2017 compared to the 2015 survey year. 2017 was the first time that the reported percentage (75%) was higher than the HP 2020 target.

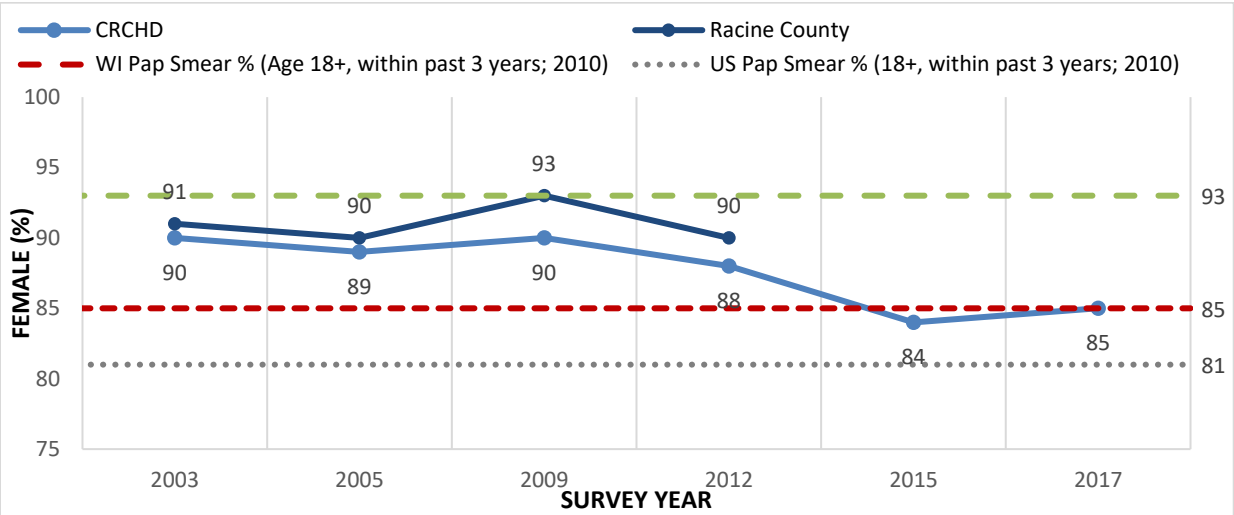
Figure 5.24 Percentage of Surveyed Adults in the Jurisdiction Reported as Overweight or Obese (BMI≥25) by Survey Year and Age Group[1]



SCREENING

Figure 5.25 illustrates Pap smear screening information over five survey years. As shown, a downward trend in the percentage of women reporting a Pap smear within the past 3 years has been indicated for both the County and the Jurisdiction. The most recent reported percentages for both the county and jurisdiction were above the 2010 national level average of 81%, but below the Healthy People 2020 goal of 93%.

Figure 5.25 Percentage of Women Surveyed Reporting a Pap Smear Within the Past 3 Years[1,6]



As depicted in Figure 5.26, the percentage of women surveyed reporting a mammogram within the past 2 years has remained relatively unchanged for Racine County over the 2003 to 2012 survey years. These reported County percentages were above the 2012 national percentage (77%), but below the 2012 percentages (82%) reported for the State as well as the HP 2020 goal of 81%. In contrast, the Jurisdiction has seen change in this measure over the specified survey years. This was most evident between the 2012 and 2017 survey years where, from 2012 to 2015 the percentage increased above the state, national, and HP 2020 reference lines, but was then followed by a drop from 2015 to 2017 to the level previously reported in 2012.

Figure 5.26 Percentage of Women Surveyed Reporting a Mammogram Within the Past 2 Years[1,6]

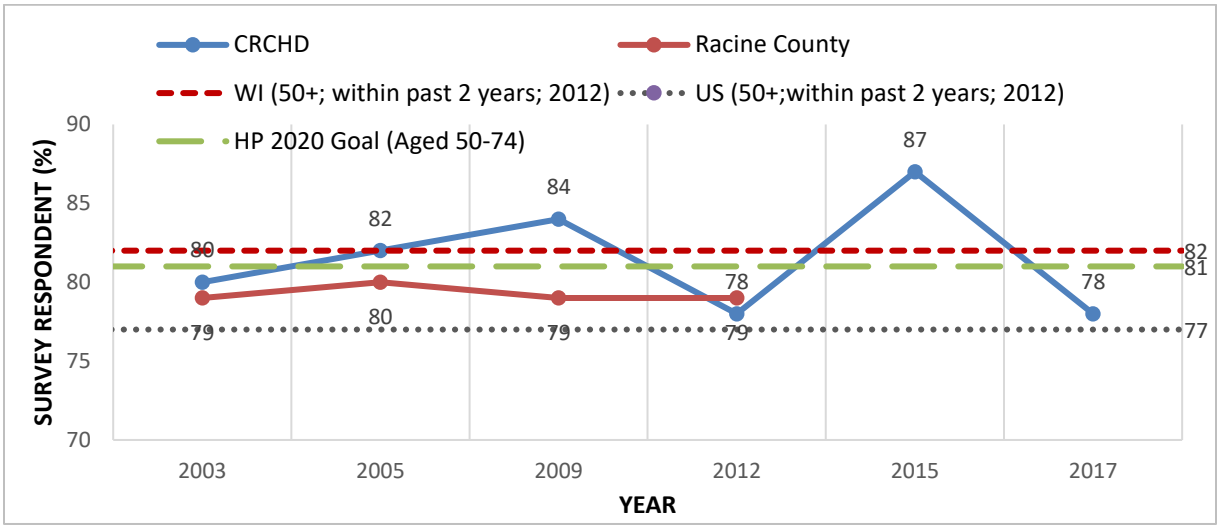


Table 5.1 depicts the reported percentages for other screening and routine procedures by surveyed adults at the Jurisdiction. As depicted, the procedure with the highest reported percentage was consistently a routine checkup, while the least was consistently an eye exam.

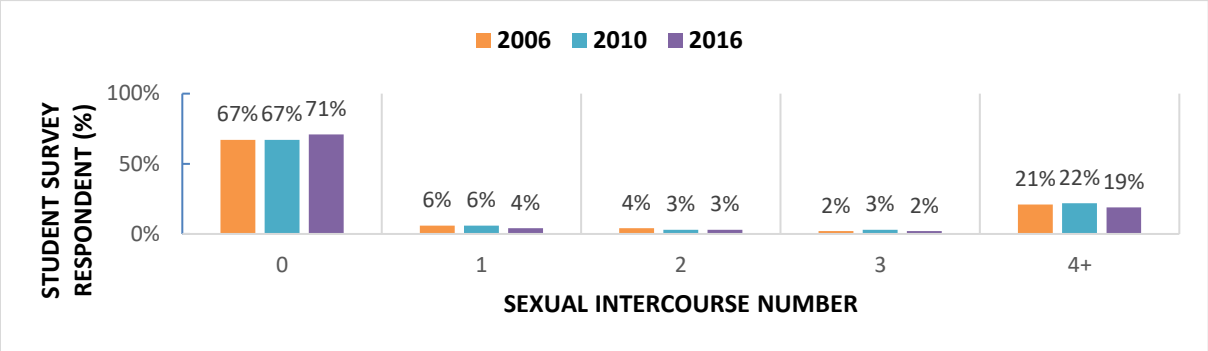
Table 5.1 Percentage of Surveyed Adults in the Jurisdiction Who Reported Screening and Routine Procedures by Survey Year[1]

Routine Procedures	2005	2009	2012	2015	2017	HP 2020 Target
Routine Checkup (2 yrs or less)	83	81	83	82	87	
Cholesterol Test (4 yrs or less)	79	76	77	75	84	82
Dental Checkup (past year)	73	73	71	72	73	49
Eye Exam (past year)	45	45	45	43	55	

SEX

Among student youth in Racine County, Figure 5.30 illustrates that most (>65%) have consistently reported having had no sex. However, of those that report as being sexually active the highest proportion (>19%) have consistently reported having had sex 4 or more times.

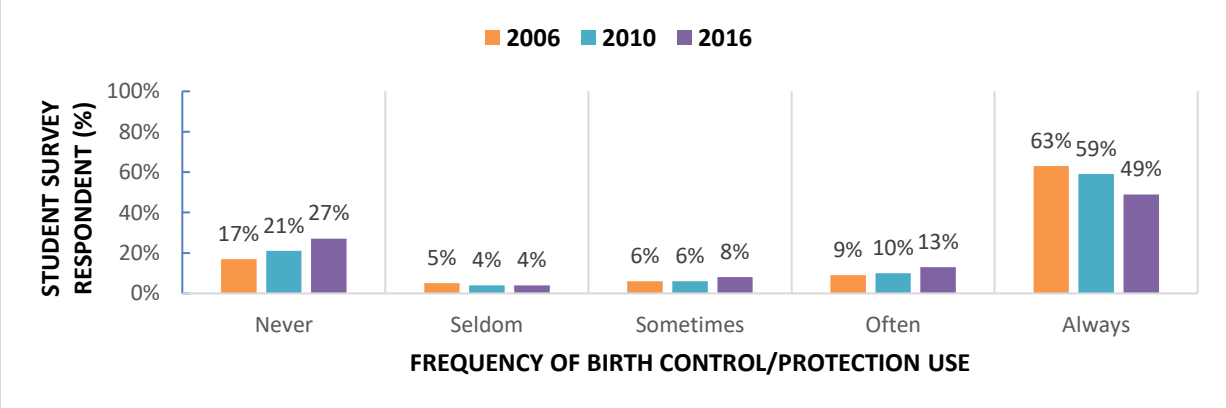
Figure 5.30 Sexual Intercourse Number Reported by Students in Racine County, 2006-2016[2]



*Survey sample does not include students from all Racine County schools.

Figure 5.31 shows most sexually active students in Racine County as reporting having "always" used a method of birth control/protection. However, since 2006 this proportion has seen a 14% decrease, while a 10% increase has been observed among students who report "never" to the use of birth control/protection.

Figure 5.31. Frequency of Birth Control/Protection Use Among Sexually Active Youth in Racine County, 2006-2016[2]



REFERENCES

1. Aurora Healthcare. 2017. Community Health Survey: Central Racine County Health Department.
2. Search Institute. Racine County Reports, 2006, 2010, 2016.
3. Wisconsin Dept. of Health Services, Division of Public Health, Office of Health Informatics. Wisconsin Interactive Statistics on Health (WISH) data query system, https://www.dhs.wisconsin.gov/wish/index.htm, Opioid Module.
4. Source: Racine County Medical Examiner's Office. Prescription/Street Opioid-Related Deaths Data. 2009-2014
5. Wisconsin Dept. of Health Services, Division of Public Health, Office of Health Informatics. Wisconsin Interactive Statistics on Health (WISH) data query system, https://www.dhs.wisconsin.gov/wish/index.htm, Injury-Related Emergency Department Visits Module.
6. Aurora Healthcare. (2012). Community Health Survey: Racine County. Retrieved from: https://ahc.aurorahealthcare.org/aboutus/community-benefits/community-health-research/index.asp
7. Aurora Healthcare. 2017. Community Health Survey: Racine City.

CATEGORY 6: ENVIRONMENTAL HEALTH INDICATORS

NACCHO Definition: The physical environment directly impacts health and quality of life. Clean air and water, as well as safely prepared food, are essential to physical health. Exposure to environmental substances such as lead or hazardous waste increases risk for preventable disease. Unintentional home, workplace, or recreational injuries affect all age groups and may result in premature disability or mortality.

Environmental health indicators as part of this report, include the following: air quality and asthma, ozone, carbon monoxide poisoning, foodborne illness and food safety, lead poisoning, rabies, and radon.

Key Findings

- From 2001 to 2016, the County's number of unhealthy days for asthma and other lung diseases decreased by 60%.
- From 2009 to 2014, emergency department visits related to carbon monoxide poisoning have been higher at the County level compared to the State.
- Norovirus is the principal infectious agent associated with foodborne outbreaks at the level of the Jurisdiction and the State.
- In 2014, the County had 133 children tested positive for lead poisoning, a decrease of 39% from 2008.
- In 2016, the Jurisdiction had 182 rabies investigations (a 5% decrease from the previous year) of which sixty-eight were from dog bites.

AIR QUALITY AND ASTHMA

Figure 6.1 illustrates the number of unhealthy days for asthma and other lung diseases. The number of unhealthy days for asthma or other lung disease in the County is lower than Milwaukee and Kenosha[1]. Additionally, the County saw an over 60% reduction in the average number of unhealthy days between 2001 and 2016.[1] In the last five years, June had the highest average number of unhealthy days for asthma and other lung diseases.[1]

Figure 6.1. Number of Unhealthy Days for Asthma or Other Lung Disease (3 Year Rolling Average)[1]

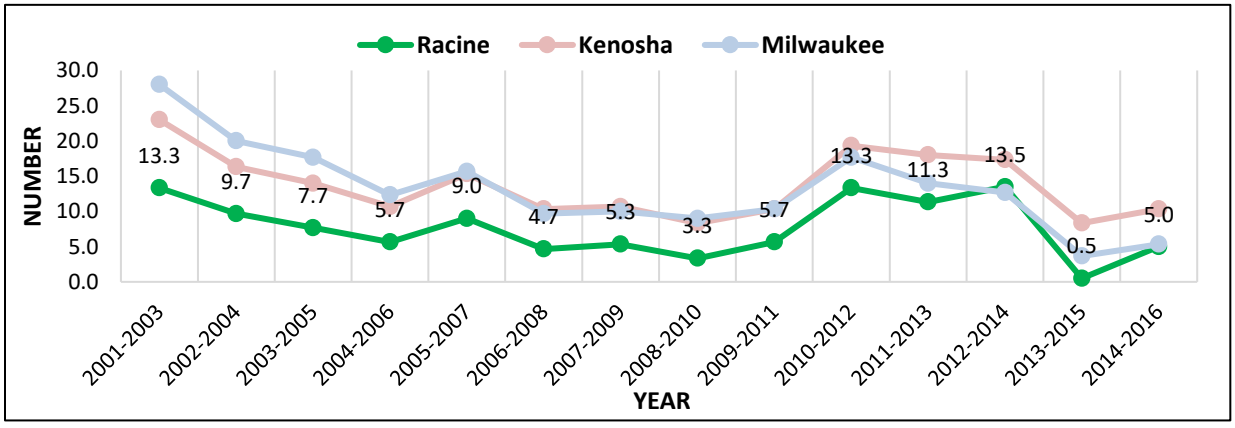


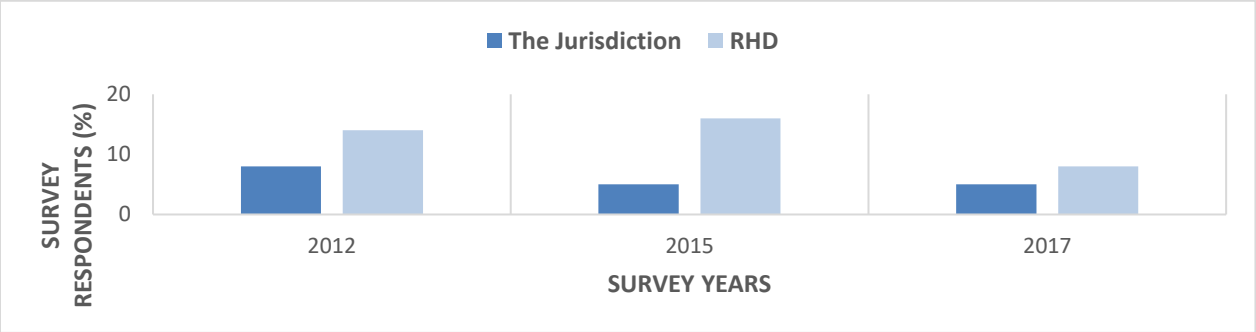
Table 6.1 shows the percent of survey respondents aged 18 and over who reported currently having asthma. From 2003 to 2017, there was no statistical change in the percent of respondents who reported current asthma for the Jurisdiction or RHD. [2] Additionally, female respondents from either the Jurisdiction or RHD were more likely to report asthma compared to males.[2, 3]

Table 6.1. Asthma Percentages for the Jurisdiction and RHD[2]

	The Jurisdiction						RHD					
	2003	2005	2009	2012	2015	2017	2003	2005	2009	2012	2015	2017
Total	10%	8%	7%	7%	11%	12%	12%	12%	12%	14%	9%	17%
Male	8%	5%	4%	3%	11%	7%	6%	6%	8%	10%	5%	15%
Female	12%	11%	11%	11%	10%	18%	16%	17%	15%	17%	12%	19%

When assessing local levels of asthma in children, Figure 6.2 shows that the percentage of survey respondents reporting a child with current asthma declined since 2012, and has remained at 5% for the previous two survey years (2015, 2017). In comparison to the RHD, the percentages reported for the Jurisdiction have consistently been lower for all the survey years depicted.

Figure 6.2. Percentage of Survey Respondents Reporting a Child with Current Asthma by Area and Year[2]



An additional measurement of local asthma levels relates to emergency department (ED) visits and hospitalizations. From 2002 to 2014, rates for asthma related ED visits and hospitalizations have consistently been higher for Racine County compared to the State.[3] Over this time frame Racine County went from having 65 asthma ED visits per 10,000 population to 46, a 29% decrease.[3] Furthermore, Racine County went from having 14 asthma hospitalizations per 10,000 population to 11, a 21% decrease.[3]

OZONE

Similar to Figure 6.1, the number of days exceeding the ozone standard are generally lower in the County than its neighboring counties. Air quality fluctuated in all communities from year to year, dependent on emission sources, weather and other factors, so no one year is completely representative. The number of days exceeding the standard decreased over the years. The County went from having 14 days exceeding the ozone standard in 2001 to 4 days exceeding the ozone standard in 2011, a 71% decrease.[4] *See appendices.*

CANCER RISK ESTIMATES BASED ON ENVIRONMENTAL EXPOSURES

The most recent available data on inhalation cancer risk estimates are available in Table 6.2. It lists the top pollutants known or suspected of causing cancer or other health issues and birth defects.[6]

Based on the reported 2011 pollutant emission concentrations for Racine County, approximately 4 out of 100,000 residents are predicted to contract cancer from inhalation if exposed for 24 hours a day, over 70 years (estimated life expectancy).[5]

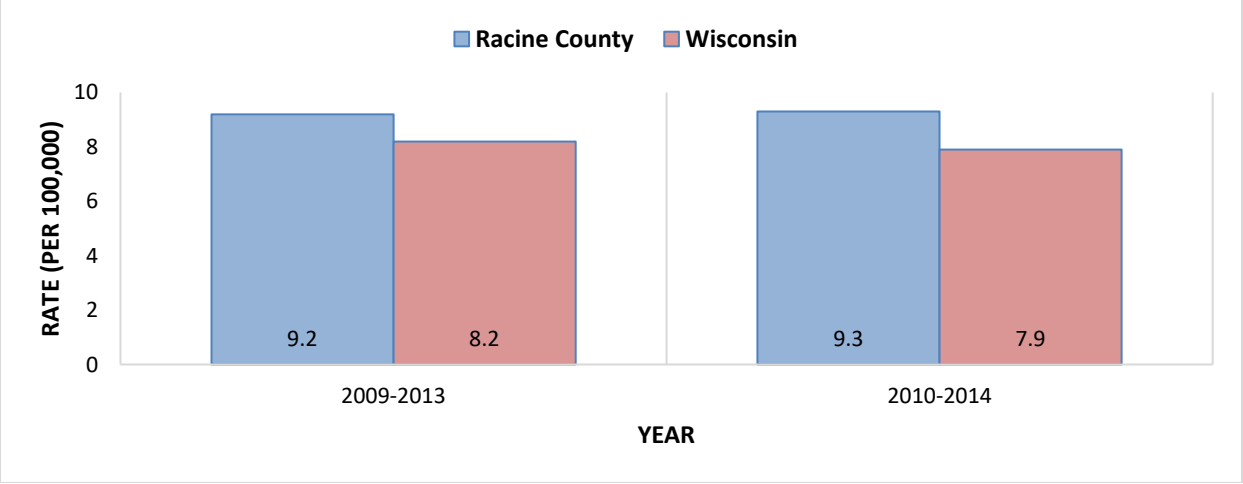
Table 6.2. Cancer Risk Estimates (Inhalation), Racine County, 2005, 2011[5]

*Found in tobacco products and tobacco smoke **Top Pollutant Contributions to Risk**	**2005** **% emissions**	**2011** **% emissions**
Formaldehyde*	38.15%	42.49%
Benzene*	16.42%	22.22%
Carbon tetrachloride	6.90%	8.66%
Acetaldehyde*	6.04%	8.71%
PAHPOM (Polycyclic organic matter)	5.41%	0.77%
Naphthalene*	4.98%	5.01%
1,3-Butadiene*	3.65%	7.10%
Ethylene oxide*	3.21%	0.35%
Arsenic compounds*	2.48%	0.75%
Tetrachloroethylene	2.34%	0.09%
Total cancer risk per 100,000	4.1	3.8

CARBON MONOXIDE POISONING

As shown in Figure 6.3, emergency department (ED) rates for carbon monoxide poisoning are higher in Racine County than Wisconsin.

Figure 6.3. Carbon Monoxide Poisoning Emergency Department Visit Rates (per 100,000)[6]



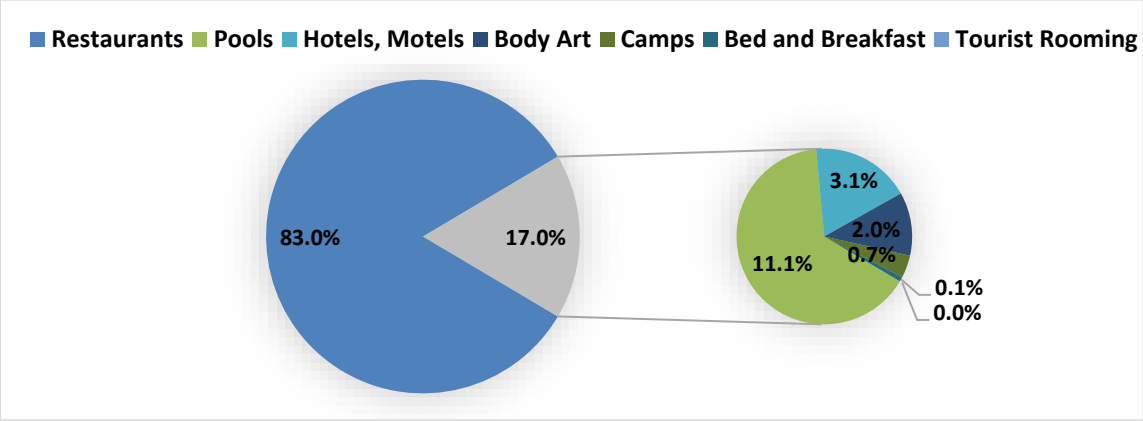
FOODBORNE ILLNESS & FOOD SAFETY

According to the Foodborne Outbreak Online Database (FOOD) from the Centers for Disease Control and Prevention, in 2016 there were 32 foodborne outbreaks that affected Wisconsin, 7 of which were multi-state outbreaks. Forty-four percent of outbreaks were caused by Norovirus.[7] Furthermore, the multi-state outbreaks reported by the CDC that affected Wisconsin resulted in 218 individuals becoming ill, 80 individuals being hospitalized and 0 deaths.[8] Of the 25 Wisconsin-only outbreaks, 440 people became ill which resulted in 8 hospitalizations in Wisconsin.[7]

At the jurisdictional level, a variety of local foodborne outbreaks have been investigated, including a 2016 fish fry event impacting over 30 individuals and a 2011, multi-event food catering outbreak where over 800 were exposed and 200 attendees became ill. In both instances, norovirus was the suspected infectious agent.

Understanding the potential sources of foodborne illnesses is vital to reducing and eliminating their spread. As illustrated by figure 6.4 most of the licensed establishments in the County are restaurants, a principal source associated with foodborne outbreaks.

Figure 6.4. Licensed Establishment Percentages in Racine County, 2014[8]



LEAD POISONING

Table 6.3 presents data on lead poisoning in Racine County for children <6 years of age. It shows that from 2008 to 2014, that the issue of lead poisoning within this population has been decreasing.

Table 6.3. Lead Poisoning, County[9]

Measure	2008	2009	2010	2011	2012	2013	2014
Total children tested for lead poison	5,560	5,441	5,287	4,908	3,735	3,326	2,570
Total children lead poisoned (BBL >=5ug/dL)	583	475	377	319	273	219	133
% Children Lead Poisoned (BBL >=5ug/dL)	10.49	8.73	7.13	6.50	7.31	6.58	5.18

RABIES

In 2015 the Jurisdiction expanded from 6 to 14 municipalities. Prior to 2015, data on rabies investigations was unavailable for 8 of the 14 municipalities. For this report, only data from 2015 and after was used to reflect the Jurisdiction. From 2015 to 2016 the number of rabies investigations in the Jurisdiction declined by approximately 5%. During these two years the municipalities with the highest number/percentage of rabies investigations were: Mount Pleasant, Caledonia, and City of Burlington. [10] *See Appendices*. This finding was unsurprising as it coincided with the municipalities with the highest populations.

Rabies investigations are categorized by the type of bite. As reported in Table 6.5, dog bites account for the largest proportion of annual investigations conducted by the Jurisdiction, followed by cat bites. Additionally, from 2010 to 2014, animal bite investigations resulted in less than five positive tests for rabies in the County.[10]

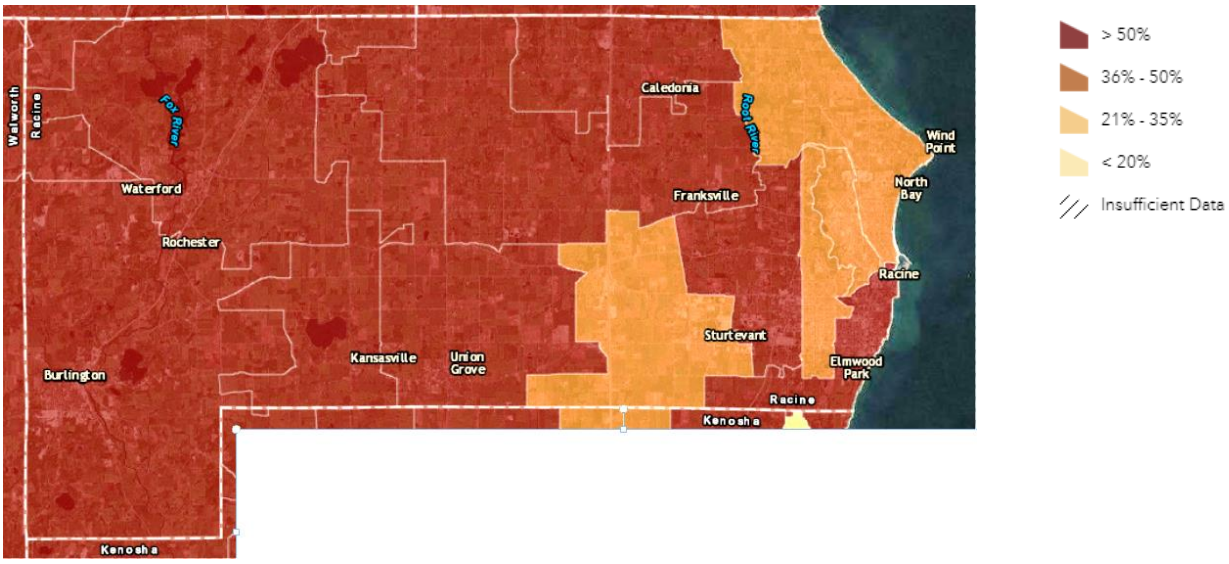
Table 6.5. Animal Bite Investigations in the Jurisdiction by Type of Animal[10]

	Number of bites						
Animal	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**
Dog	37	58	60	61	37	135	124
Cat	26	16	13	14	26	43	44
Other	1	3	7	2	1	2	7
Bat	2	1	3	5	2	9	4
Raccoon	1	0	2	1	1	2	3
Total	67	78	85	83	67	191	182

RADON

Figure 6.4 illustrates the County percentage of indoor radon tests resulting in a reading of 4.0 pCi/L or greater, the suggested threshold for mitigation action. The map includes tests conducted from 1995 to 2016. As indicated by the key most of the County fell into the category where greater than 50% of the tests completed resulted in a reading of 4.0 pCi/L.[11]

Figure 6.4. Percent of Indoor Radon Tests Greater than or Equal to 4.0 pCi/L in the County[11]



REFERENCES

1. U.S. EPA. 2016. AirNow, AirCompare—County Comparisons, Historical Profiles. Retrieved from: https://www3.epa.gov/aircompare/
2. Aurora Healthcare. 2017. Community Health Survey Report, Central Racine County Health Department and RHD.
3. WI DHS. Wisconsin Public Health Tracker. Racine County Environmental Health Profile, 2015-2017. Retrieved from: http://gis.wi.gov/DHS/tracking/.
4. WI DHS. 2011. EPHT Air Quality Data Query: Ozone, 2001-2011. Retrieved from: http://gis.wi.gov/DHS/tracking/.
5. U.S. EPA. MyEnvironment, MyHealth, Racine County, WI, 2005, 2011 Cancer Risk Estimates. Retrieved from: https://www3.epa.gov/enviro/myenviro/.
6. WI DHS. Public Health Profiles: Racine County and WI, 2008-2012, 2015-2016.
7. Centers for Disease Control and Prevention. 2017. Foodborne Outbreak Online Database: FOOD, Wisconsin Data for 2016. Retrieved from: https://wwwn.cdc.gov/foodborneoutbreaks/.
8. WI DHS. 2016. Public Health Profiles, Racine County and Wisconsin.
9. WI DHS—EPHT Lead Poisoning Data Query, 2008-2014. Retrieved from: http://gis.wi.gov/DHS/tracking/.
10. CRCHD Animal Bites Database: 2012-2016.
11. WI DHS. 2017. Wisconsin Indoor Radon Test Results. Retrieved from: http://wi-dhs.maps.arcgis.com/apps/webappviewer/index.html?id=68f3a3e068854810b626d002ce47aff4

CATEGORY 7: SOCIAL AND MENTAL HEALTH

NACCHO Definition: This category represents social and mental factors and conditions which directly or indirectly influence overall health status and individual and community quality of life. Mental health conditions and overall psychological well-being and safety may be influenced by substance abuse and violence within the home and within the community.

For this report, indicators of social and mental health include: community surveillance, homicide and suicide rates, child abuse and neglect, and domestic violence.

Key Findings

- In 2016, 23% of County students reported as suffering from depression, while 20% reported having attempted suicide.
- From 2000 to 2015, Black residents in the County and the State had a higher rate of homicide and a lower rate of suicide compared to Whites.
- From 2000 to 2015, males in the County and the State had a higher rate of successful suicide attempts, but their female counterparts had a higher rate of hospitalizations from self-inflicted injuries.
- The County's child victimization rate has increased from 2011 to 2015, however, it remained lower than the HP 2020 target.

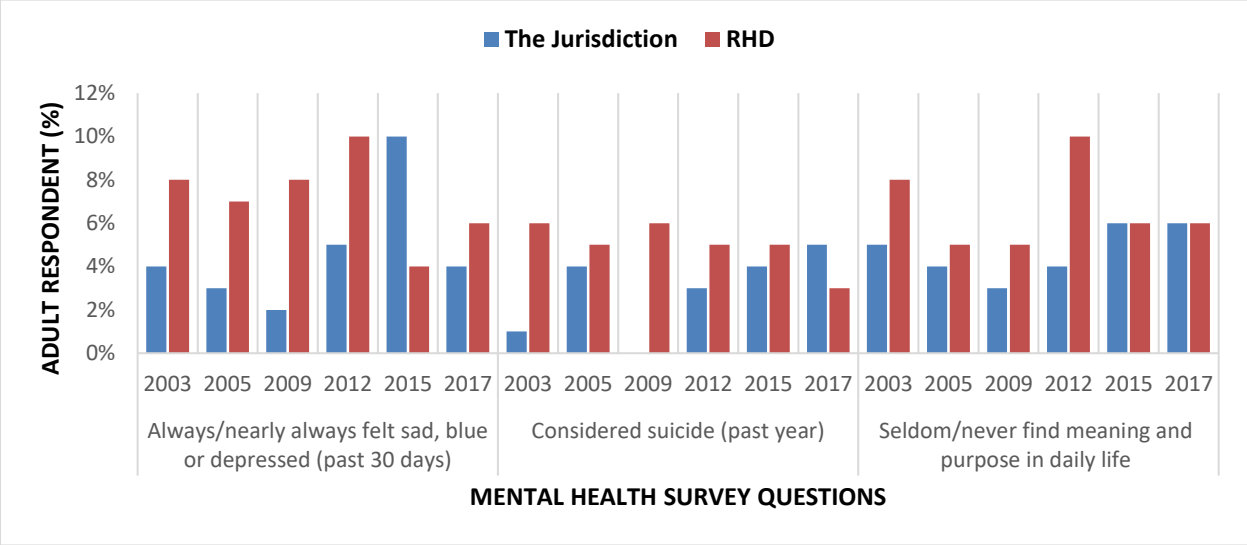
COMMUNITY SURVEILLANCE

Figure 7.1 displays the responses of adult respondents from the Jurisdiction or RHD related to questions on mental health. In regard to the measurement of sadness/depression, there appeared to be an increase in the percentage of adults reporting as sad/depressed. As indicated by the figure, from 2003 to 2017, there was an increase in the percent of respondents in the Jurisdiction and a statistical decrease in RHD residents who reported they "always or nearly always felt sad, blue or depressed". Data not shown, but when this measure was assessed by age group, adults 55 to 64 were more likely to report "always or nearly always feeling sad, blue or depressed".[1, 2]

On the topic of suicide, Figure 7.1 depicts 4% of surveyed adults in the Jurisdiction reported having considered suicide in the past year. Additionally (data not shown), adults 45 to 54 were most likely to report that they considered suicide compared to other age groups in the Jurisdiction, while unmarried respondents were more likely to report that they considered suicide compared to respondents who were married.[1, 2]

Regarding the question on the finding meaning and purpose in daily life, there was no statistical difference among the survey years reported. Furthermore, unmarried respondents were more likely to report seldom or never finding meaning and purpose in life (data not shown).[1, 2]

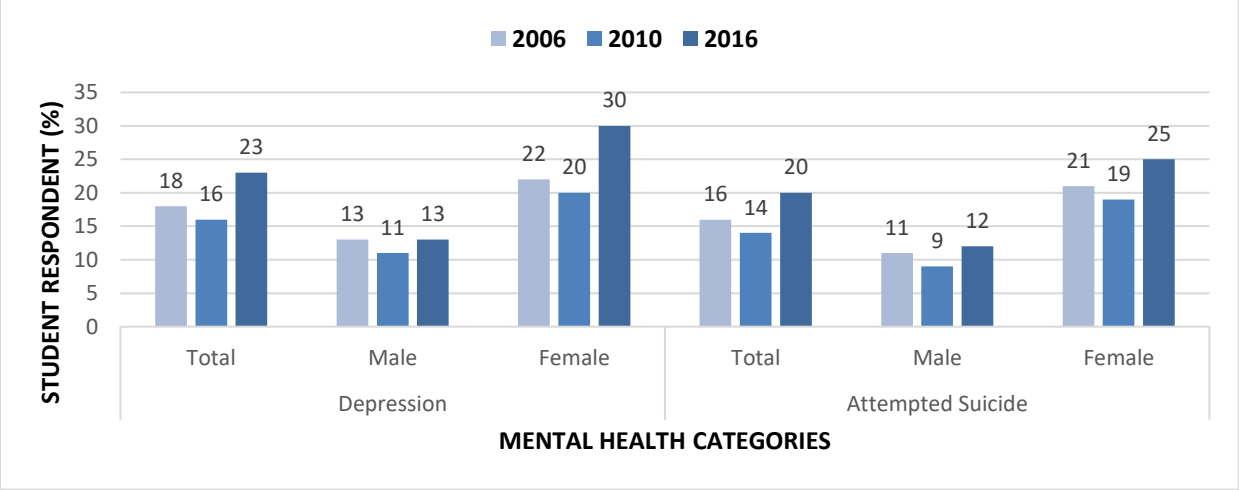
Figure 7.1. Percentage of surveyed adults in the Jurisdiction and RHD reporting on questions related to mental health[1]



Another indicator of mental health and well-being is the number of poor mental health days experienced in the last 30 days as reported by adult survey respondents. From 2002 to 2012, the County had a slightly higher rate of poor mental health days than the State. The County and the State rates were similar in 2014 and 2015.[2] *See appendices.* Additionally, from 2002 to 2015, the County averaged 3.5 poor mental health days while the State averaged 3.2.[2]

When assessing mental health amongst youth (grades 7-12) in the County, Figure 7.2 illustrates an increase in the total percentage of students reporting depression or attempted suicide from the 2006 to the 2016 survey year. Additionally, the figure depicts a higher percentage of female students reporting depression or attempted suicide compared to their male counterparts. This gender difference has been consistent over time with the 2016 survey reporting percentages of depression and attempted suicide as 2 times greater in females compared to males.

Figure 7.2 Percentage of Students in the County Reporting Mental Health Related Issues by Gender, Year, and Mental Health Category[3]

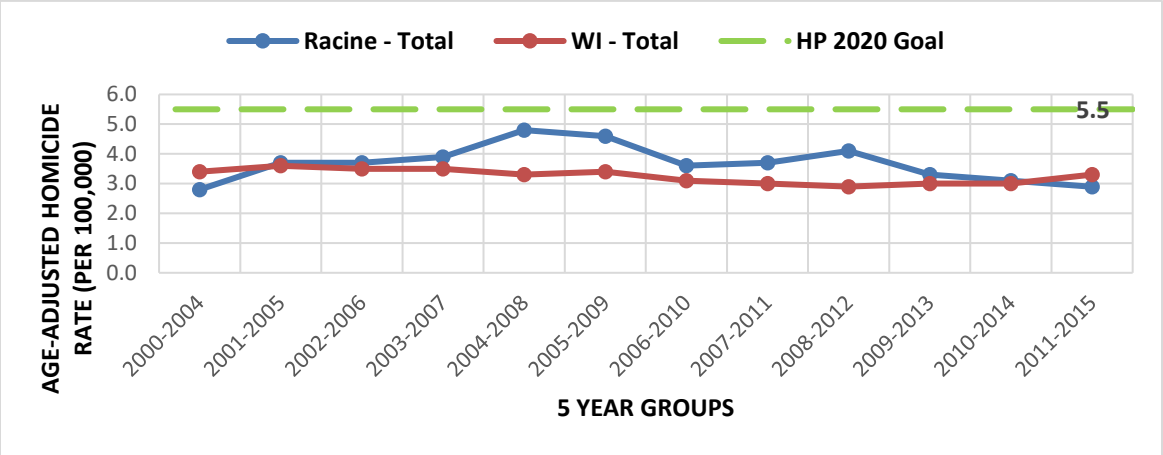


*Survey sample does not include students from all Racine County schools.

HOMICIDE & SUICIDE RATES

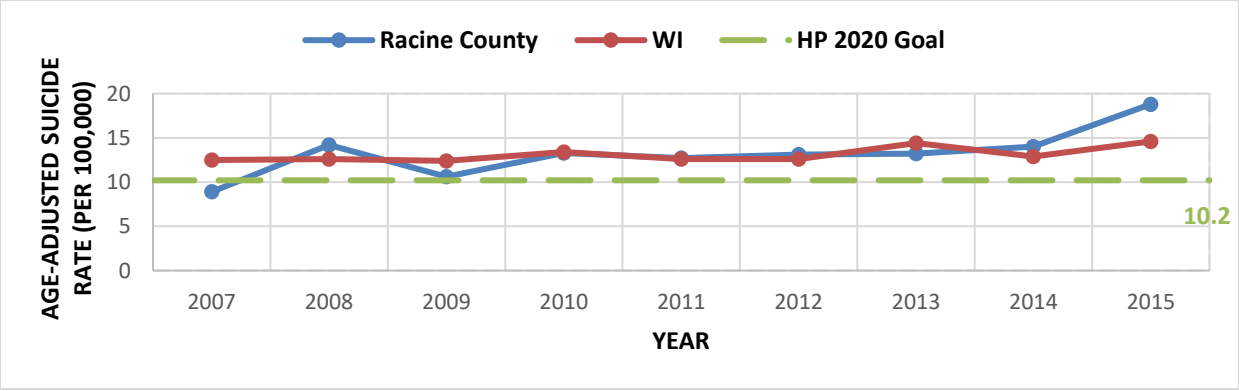
As indicated by Figure 7.3, the homicide rate for both the County and the State has been consistently below the Healthy People 2020 goal of 5.5 homicides per 100,000. Relative to the homicide rate of the State, the County has had a higher rate for most of the included years. However, over the most recent five-year period the homicide rate for the County has continued a downward trajectory, falling below a State homicide rate that appears to be on the rise.

Figure 7.3. Age-Adjusted Homicide Rate by Area[4]



Compared to homicides, Figure 7.4 illustrates that overall suicide rates for the County and the State have been higher. It shows that relative to the HP 2020 target rate of 10.2 suicide rates per 100,000, the County and State rates have consistently been higher. It also depicts an increase in the County and State suicide rates over the 9-year time frame spanning from 2007 to 2015. This increase has been most evident for the County as the rate has seen a two-fold increase over the specified time span.

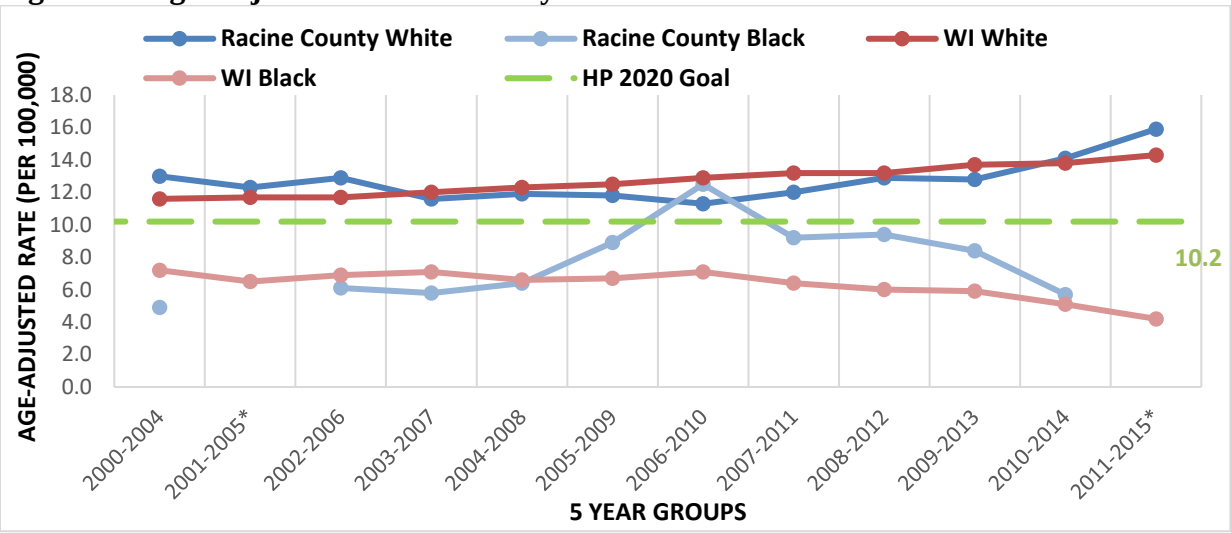
Figure 7.4 Age-Adjusted Suicide Rate by Area[4]



When looking at the issue of suicides at the level of race, Figure 7.5 illustrates that Whites have generally had a higher rate of suicides compared to their Black counterparts. It should be noted that the suicide rate observed for the Racine County Black population is a product of very low annual counts and may not accurately reflect the true County rate for this population. The State

rates may be a better indicator of the racial difference observed as the underlying counts have consistently been higher (>20) per five-year group. When compared to the HP 2020 target of 10.2 suicides per 100,000, the suicide rate for Whites has consistently been above this mark at the County and State level. From a trend perspective, the County and State suicide rates for Whites have been increasing over time, while the rate for Blacks has suggested a downward trajectory.

Figure 7.5 Age-Adjusted Suicide Rate by Race and Area[4]



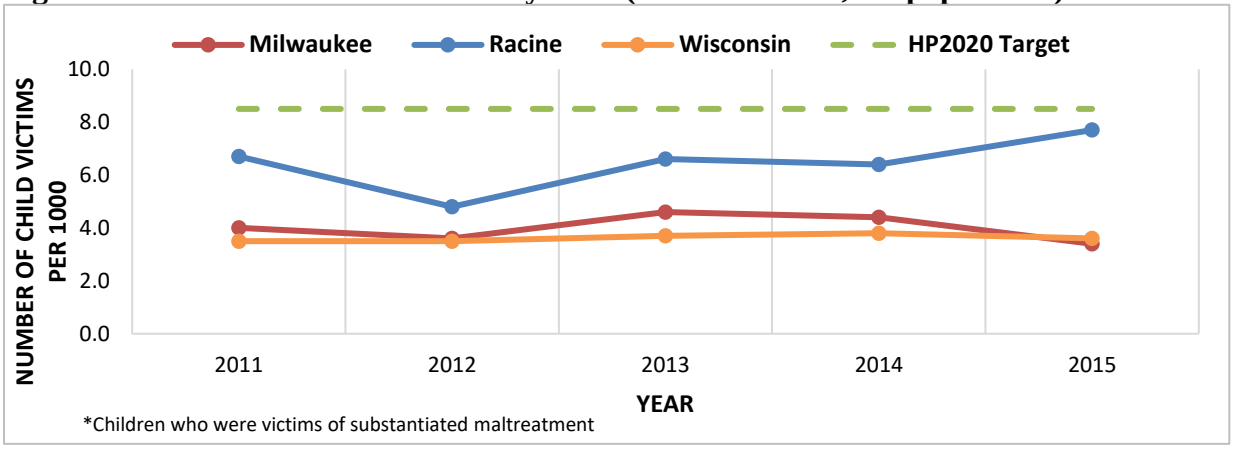
*Black County suicide numbers were too small (less than 5 deaths) to generate an age adjusted suicide rate for 2011-2015 and 2001-2005

Additionally, over a fourteen-year time spanning from 2002 to 2015 the 50-59 age group had the highest rate of suicide in the County relative to the other five subgroups ranging in age from 10 to 60 and older (data not shown).[4] The 10-19 age group had the lowest suicide rate over the same timespan (data not shown). On the basis of gender, the County and State suicide rate for males has consistently been higher compared to females (data not shown).[4] Over the 3-year time group spanning 2013 to 2015 the County and State suicide rate for males compared to females was 2 and 3.5 times greater, respectively (data not shown).[4]

CHILD ABUSE AND NEGLECT

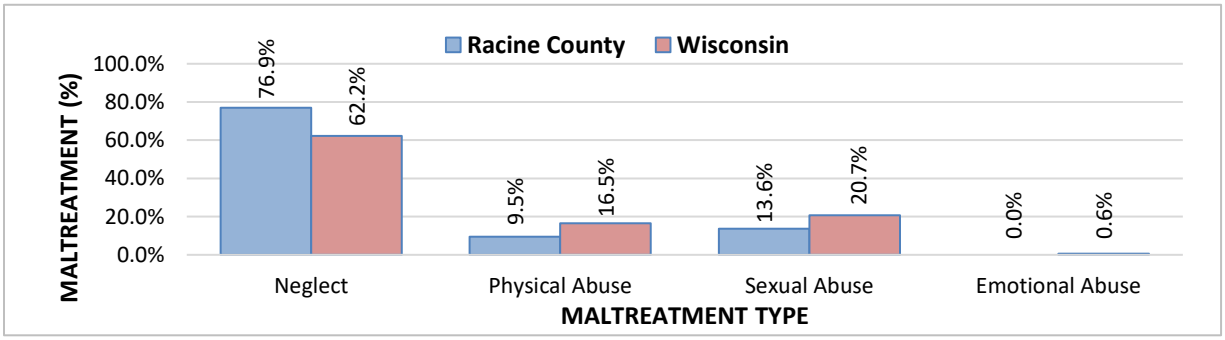
In 2015, Racine County had the 6th highest child victimization rate in Wisconsin.[8] As seen in Figure 7.6, the rate of child victims per 1,000 was higher in Racine County compared to the State and the city of Milwaukee.[8] Though the County rate has remained below the indicated HP 2020 target of 8.6 child victims per 1,000, it has been increasing over the 2012 to 2015 timeframe. This contrasts with the State and City of Milwaukee rates, which have either been on the decline or remained flat.

Figure 7.6. Child Victimization Rate by Area (child victims/ 1,000 population) *[5]



In 2015, Racine County had 357 confirmed or substantiated victims of child maltreatment. As indicated in figure 7.7, neglect accounted for the highest percentage (over 60%) of confirmed cases of child maltreatment for both the County and the State. This was followed by child maltreatment associated with sexual abuse.

Figure 7.7 Maltreatment Allegation Substantiation by Maltreatment Type, 2015[5]

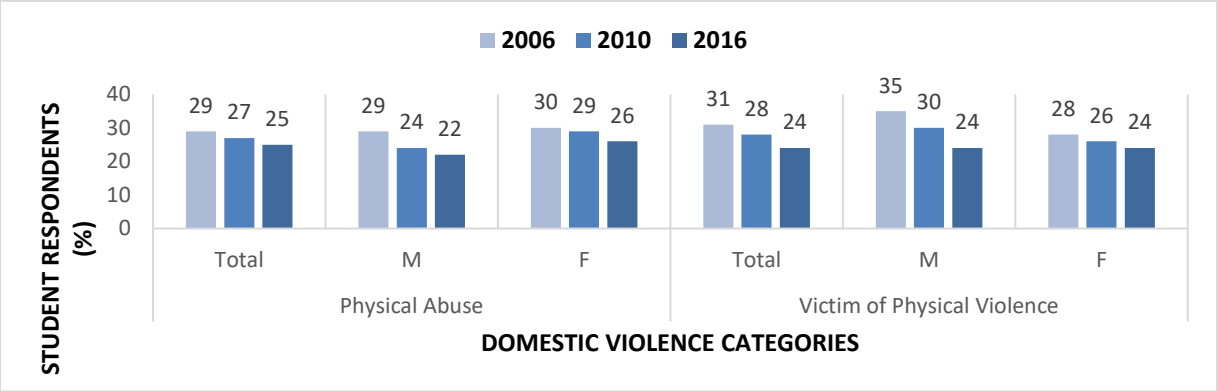


Regarding data trends, from 2011 to 2015 the number of confirmed cases of child maltreatment associated with neglect have increased for both the County and the State; while cases associated with sexual or physical abuse have declined over the same time frame for both the County and the State (data not shown). [8]

DOMESTIC VIOLENCE

Figure 7.8 suggests an overall decline in the percentage of Racine County students (grades 7-12) reporting physical abuse or violence. Over the span of three survey years (2006, 2010, 2016) the observed declines have been 4% for physical abuse and 7% for physical violence. Based on gender, the data suggests that a higher percentage of female students reported physical abuse compared to their male student counterparts, while the opposite was true for physical violence. Additionally, the observed declines over time for both categories were greater among male students compared to female students.

Figure 7.8 Domestic Violence Against Youth in the County, Grades 7-12[3]



*Survey sample does not include students from all Racine County schools.

REFERENCES

1. Aurora Healthcare. 2017. Community Health Survey Summary – Central Racine County and City of Racine.
2. County Health Rankings, Racine County. Retrieved from: http://www.countyhealthrankings.org/app/wisconsin/2017/rankings/racine/county/outcomes/overall/snapshot.
3. Search Institute. 2006, 2010, 2016. Developmental Assets: A Profile of Your Youth – Racine County.
4. WI DHS. 2016. WISH Query, Mortality Module. Retrieved from: https://www.dhs.wisconsin.gov/wish/mortality/index.htm.
5. Wisconsin Department of Children and Families. Wisconsin Child Abuse and Neglect Annual Report, Appendices, 2009, 2011-2015. Retrieved from: https://dcf.wisconsin.gov/reports?accactive=1.

CATEGORY 8: MATERNAL AND CHILD HEALTH

NACCHO Definition: One of the most significant areas for monitoring and comparison relates to the health of a vulnerable population: infants and children. This category focuses on birth data and outcomes as well as mortality data for infants and children. Because maternal care is correlated with birth outcomes, measures of maternal access to, and/or utilization of, care is included. The number of births to teens is a critical indicator of increased risk for both mother and child.

For this report, indicators of maternal and child health include: adverse childhood experience, births, abortion, and infant and child mortality.

Key Findings

- From 2006 to 2016, the percent of births to non-Hispanic Whites decreased 6%.
- From 2000 to 2015, the percent of low birth weight, Black infants was doubled that of White infants in the County and the State.
- Abortions are declining in Racine County.
- Even though a higher percentage of abortions were obtained by White women aged 15 to 44 from 2000 to 2016, a higher proportion of Black women obtained abortions.
- From 2000 to 2015, the County Black infant mortality rate was more than double the HP2020 target.

ADVERSE CHILDHOOD EXPERIENCES

Adverse Childhood Experiences (ACEs) have been shown to play a role in outcomes related to maternal and child health. Examples of ACEs include: physical/sexual/emotional abuse, physical/emotional neglect, domestic violence, divorce, and incarceration. Some of the suggested associations between ACEs and health outcomes include: pregnancy loss, alcohol/tobacco use during pregnancy, postpartum depression, domestic abuse, and child development.

Table 8.1 shows the prevalence of maternal ACEs in the Racine County home visiting population, with alcohol and other drug abuse listed as the top reported ACE.

Table 8.1 List of Reported Maternal ACEs in Racine County

	Adverse Childhood Experiences	Respondent %
1	Household Alcohol and Other Drug Abuse Problem	45.8%
2	Parent Divorce/ Separation	38.1%
3	Household Domestic Violence	37.6%
4	Household Mental Health Problem	36.0%
5	Physical Abuse	34.7%
6	Incarcerated Household Member	33.0%
7	Sexual Abuse	29.2%
8	Emotional Abuse	23.9%
9	Emotional Neglect	15.3%
10	Physical Neglect	7.0%

Table 8.2 conveys the cumulative number of maternal ACEs as a percentage of the Racine County home visiting participants surveyed. Previous studies have shown a dose response relationship between the number of ACEs and poor health outcomes (e.g. domestic abuse, delays in child development). It shows that most county participants reported as having 4 or more ACEs, which suggests an increased risk for poor health outcomes within the County population.

Table 8.2 Cumulative Number of Maternal ACEs

Number of Adverse Childhood Experiences	
1	15.8%
2	15.3%
3	12.1%
4 or more	38.2%

BIRTHS

Figure 8.1 displays the annual number of births in the Jurisdiction from 2006 to 2016. It conveys two upward trends; one occurring between 2006 to 2010 and another from 2011 to 2016.

Figure 8.1 Number of Total Births in the Jurisdiction, 2006-2016[1]

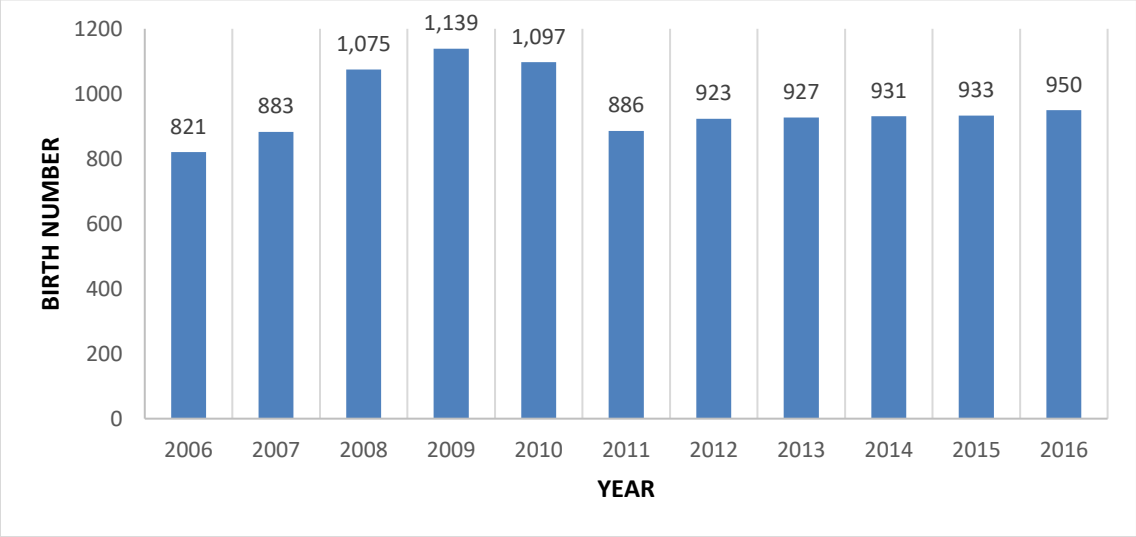
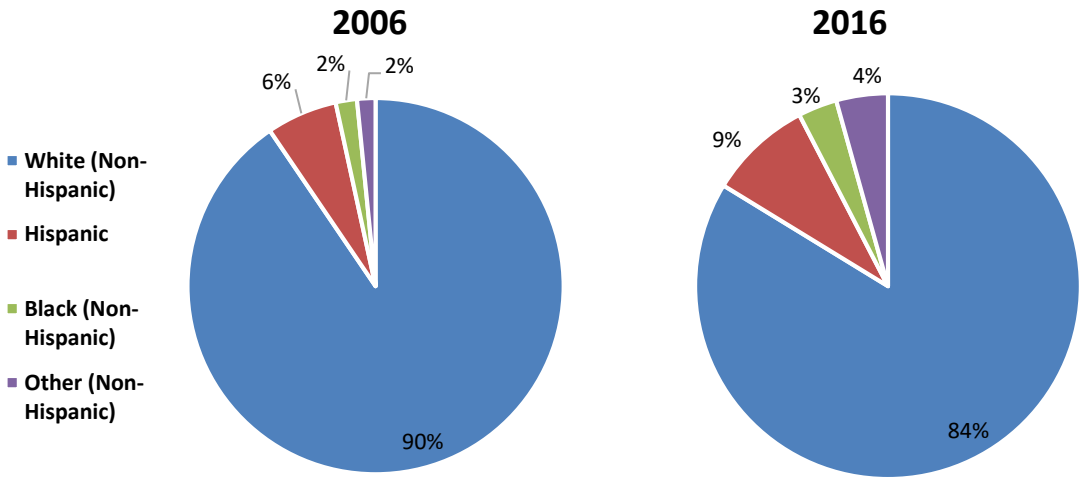


Figure 8.2 depicts variations in the percentages of births among the racial/ethnic groups within the Jurisdiction. For 2006 and 2016 non-Hispanic Whites accounted for the largest proportion (>80%) of all births in the Jurisdiction. However, the observed proportion for non-Hispanic Whites has declined by 6% over the ten-year timespan, while increases were observed for the other races/ethnicities.

Figure 8.2 Proportion of Total Births by Race/Ethnicity in the Jurisdiction, 2006 and 2016[1]



*Missing category not included (on average, accounted for 0.1% of total)

Table 8.1 reports on three key indicators related to maternal and child health. It shows that from 2006 to 2016, the percentage of births related to each of the key indicators has, on average, been better than the HP 2020 target at both the Jurisdiction and State levels. In contrast, the County has, on average, been worse than the HP 2020 targets.

Table 8.1 Mean Percentage of Births by Key Indicator and Area, 2006-2016[1]

Key Birth Indicator	CRCHD	Racine County	WI	Healthy People 2020 Target
Preterm Birth (≤ 36 weeks)	8.9	10.1	8.9	9.4
Low Birthweight (<2500g)	6.6	8.1	7.1	7.8
Prenatal Care Started in First Trimester	83.7	75.4	79.2	77.9

Figure 8.3 illustrates that from 2000 to 2015 Blacks have consistently had a percentage of low birthweight births that has been twice what has been reported for their White counterparts. This observation has been consistent at both the County and State level. Additionally, the percentages reported for Blacks has consistently been above the HP 2020 target of 7.8%.

Figure 8.3 Percentage of Low Birth Weight Births (<2,500 grams) by Race (3 Year Rolling Average)[2]

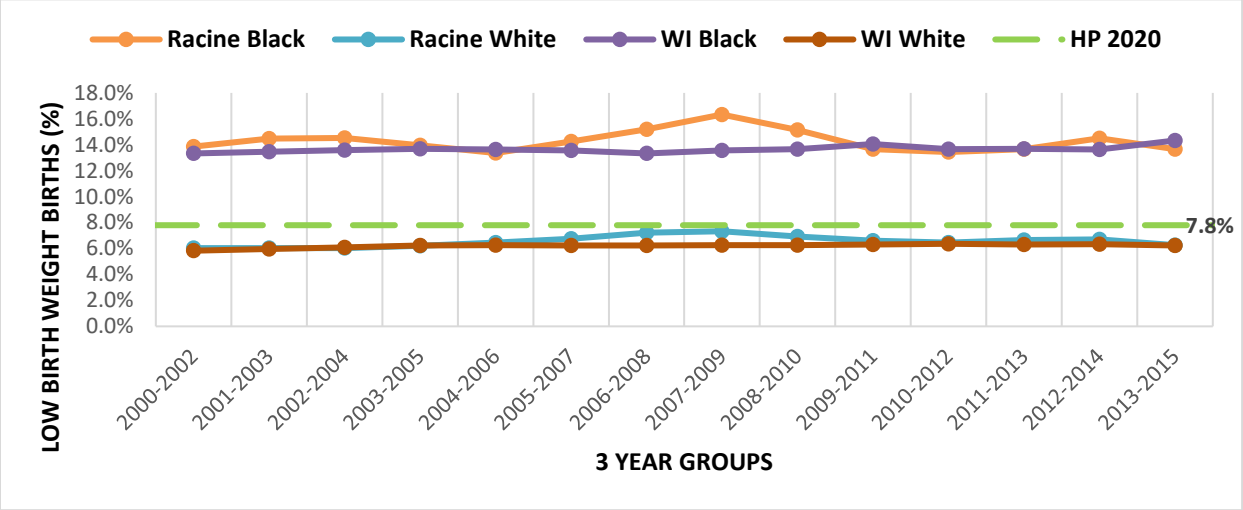
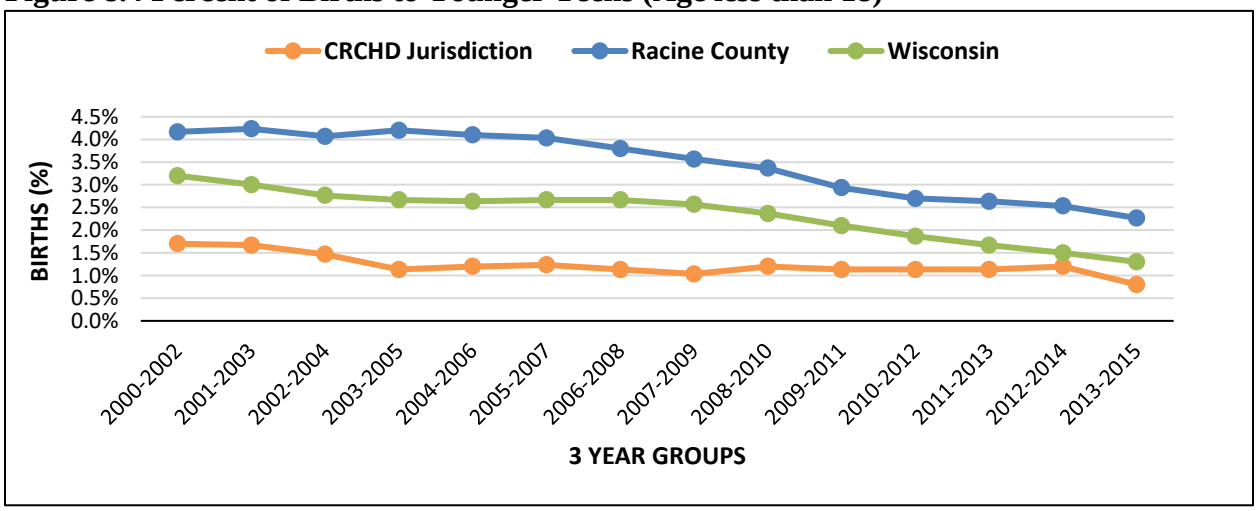


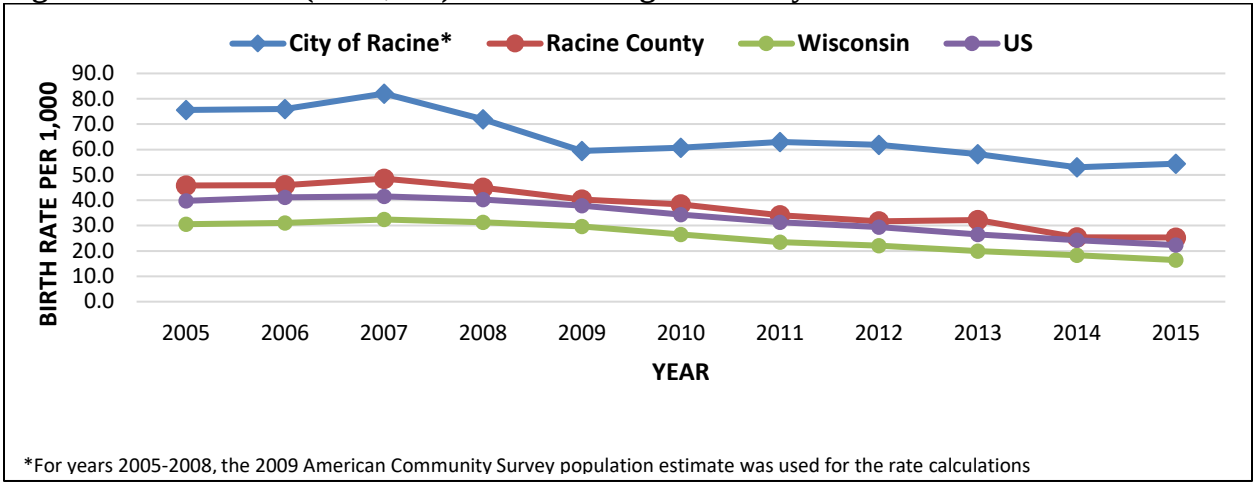
Figure 8.4 illustrates that the percent of births to individuals aged 18 years or younger has declined in the Jurisdiction, County, and State.[3] It shows the Jurisdiction as consistently having a lower teen birth rate than the County and the State.[2] Additionally, the County has had the highest birth rate for this age group relative among the areas depicted.

Figure 8.4 Percent of Births to Younger Teens (Age less than 18)[3]



When the age range is narrowed to include only births from females aged 15 to 19 Figure 8.5 displays the City of Racine as having the highest rate of births to younger teens (age 15-19) over a time spanning 2005 to 2015.

Figure 8.5 Birth Rate (Per 1,000) for Female Ages 15-19 by Area and Year[3,4,5,6]



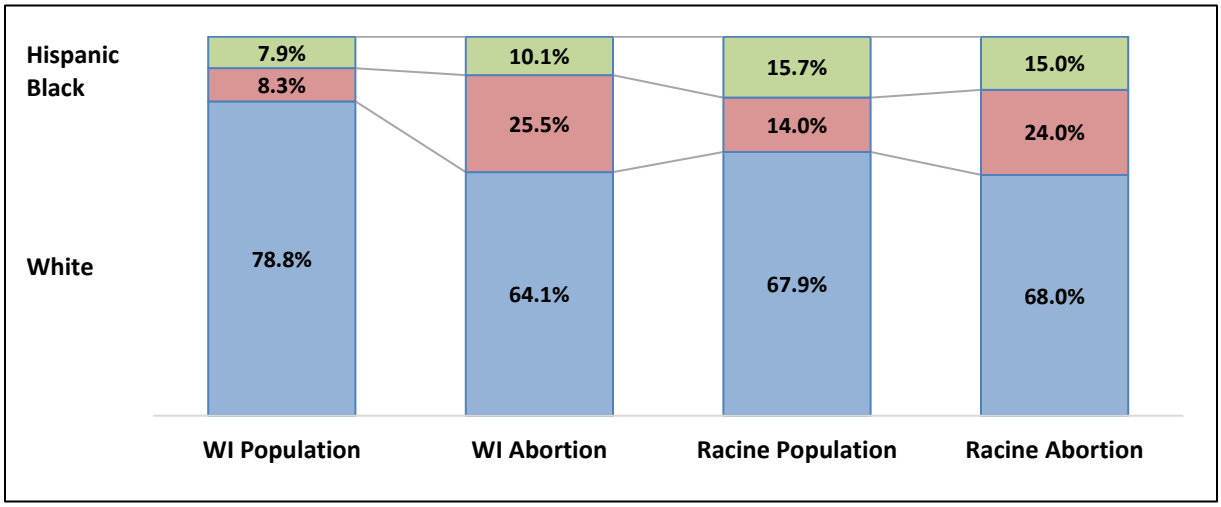
*For years 2005-2008, the 2009 American Community Survey population estimate was used for the rate calculations

ABORTION

Abortion rates for the County have been slightly higher than the State rates. As a trend, the rate of reported induced abortions for the County declined by 44% from 10 abortions per 1,000 women (aged 15 to 44) in 2000 to 6 abortions in 2016. Similarly, the State's rates declined by 46% from 9 to 5.0.[7,8] *See Appendices.*

Figure 8.6 illustrates that over a three-year period (2013-2015) non-Hispanic Blacks aged 15-44 have disproportionately had more abortions relative to their population size compared to non-Hispanic White or Hispanic women.[7,8]

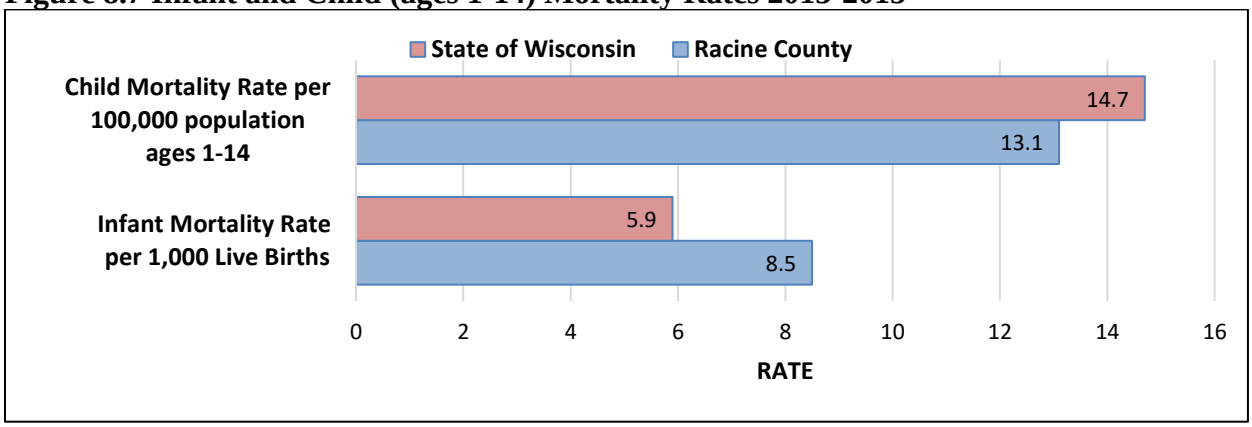
Figure 8.6 Percentage of Induced Abortions Among County and State Women Aged 15-44 by Race, 2013-2015[7,8]



INFANT AND CHILD MORTALITY

From Figure 8.7, the County's infant mortality rates exceeded that of the State. From 2013 to 2015, there were 61 infants (<1 year old) deaths and 14 child (ages 1-14) deaths (data not shown).[9,10] At the jurisdictional level there were 14 infants and 8 child deaths (data not shown).[9,10]

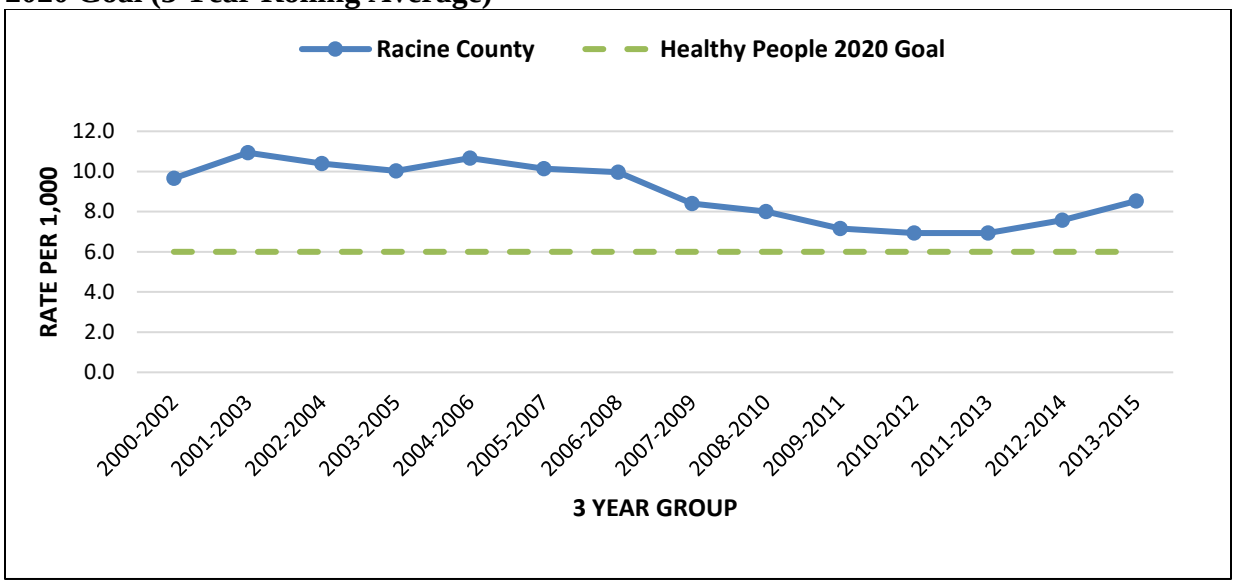
Figure 8.7 Infant and Child (ages 1-14) Mortality Rates 2013-2015[9,10]



The Healthy People 2020 goal is an infant mortality rate of 6 per 1,000 live births. As Figure 8.8 illustrates the infant mortality trend for the County has been consistently higher compared to the HP 2020 target, and has been on the rise since the 2010-2012 time period.[9] At the jurisdictional

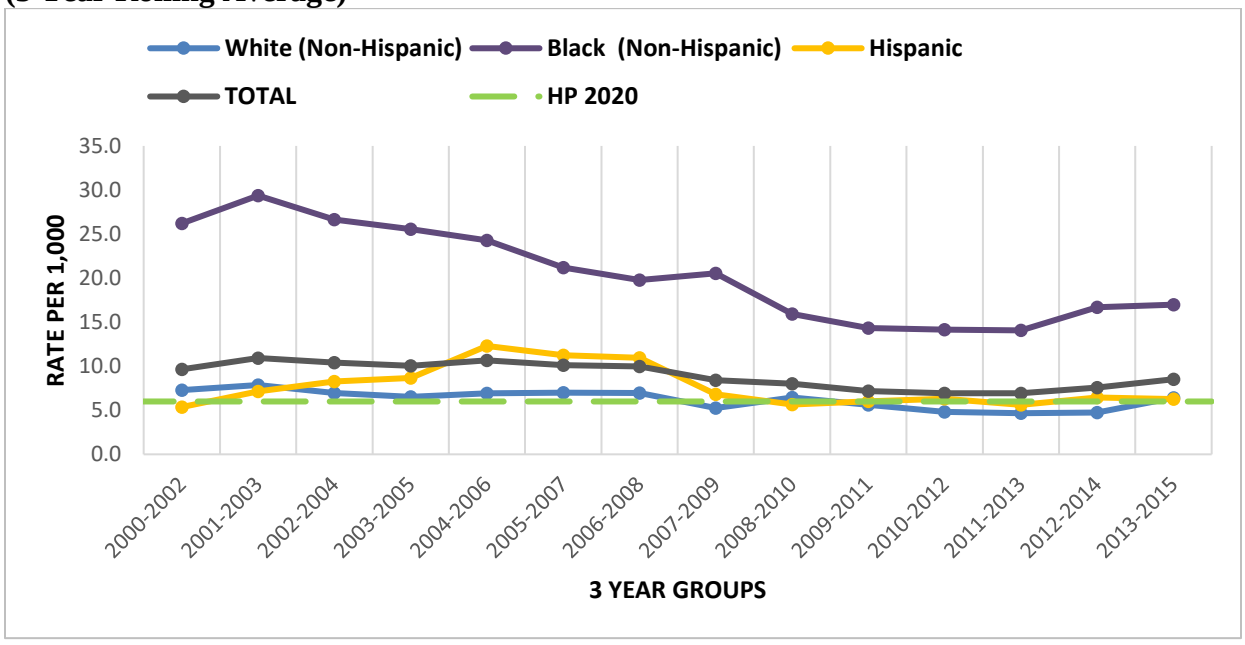
level, CRCHD had nine infant deaths reported over the time span from 2000 to 2015. [9] Due to this low count, the annual infant mortality rate for the Jurisdiction was not captured.

Figure 8.8 Infant Mortality Rates per 1,000 Live Births, 2000-2015 and Healthy People 2020 Goal (3 Year Rolling Average)[9]



When the infant mortality rates in the County are delineated by race and ethnicity, the stark differences in the rates by subgroup are illuminated (Figure 8.9).[9] From 2000 to 2015, Black infants had a higher rate of mortality compared to White and Hispanic infants.[9] The Black infant mortality rate has consistently been more than double the Healthy People 2020 target of 6 deaths per 100,000.[8]

Figure 8.9 Infant Mortality Rate per 1,000 Live Births in the County by Race and Ethnicity (3 Year Rolling Average)[9]



REFERENCES

1. WI DHS. 2016. WISH Query, Birth Counts Module. Retrieved from: https://www.dhs.wisconsin.gov/wish/birth/form.htm
2. WI DHS. 2016. WISH Query, Low Birthweight Module. Retrieved from: https://www.dhs.wisconsin .gov/wish/lbw/index.htm
3. WI DHS. 2016. WISH Query, Teen Births Module. Retrieved from: https://www.dhs.wisconsin.gov/wish /teen-birth/index.htm
4. 2009-2015 American Community Survey
5. U.S. Department of Health & Human Services, Trends in Teen Pregnancy and Childbearing. Retrieved from: https://www.hhs.gov/ash/oah/adolescent-development/reproductive-health-and-teen-pregnancy/teen-pregnancy-and-childbearing/trends/index.html.
6. U.S. Department of Health and Human Services, National Vital Statistics Reports. Births: Final Data. Retrieved from: https://www.cdc.gov/nchs/nvss/births.htm.
7. Source: WI DHS. 2017. Reported Induced Abortions in WI, 2000-2016. Retrieved from: https://www.dhs.wisconsin.gov/stats/itop.htm.
8. WI DHS. 2016. WISH Query, Population Module. Retrieved from: https://www.dhs.wisconsin.gov/wish/population/index.htm.
9. WI DHS. 2016. WISH Query, Infant Mortality Module. Retrieved from: https://www.dhs.wisconsin.gov/wish/infant-mortality/index.htm.
10. WI DHS. 2016. WISH Query, Mortality Module. Retrieved from: https://www.dhs.wisconsin.gov/wish/mortality/index.htm.
11. Maternal ACEs in Racine County. Central Racine County Health Department.
12. 2011-2016 Racine County Fetal, Infant & Child Death Review Report. Central Racine County Health Department.

CATEGORY 9: ILLNESS, INJURY, DISABILITY, & DEATH

NACCHO Definition: Health status in a community is measured in terms of mortality (rates of death within a population) and morbidity (rates of the incidence and prevalence of disease). Mortality may be represented by mortality rates; by degree of premature death (Years of Productive Life Lost or YPLL); and by cause (disease - cancer and non-cancer or injury - intentional, unintentional). Morbidity may be represented by age-adjusted (AA) incidence of cancer and chronic disease.

For this section, topics covered include: chronic illness, injury, disability, overall mortality, causes of death, and years of potential life lost.

Key Findings

- CRCHD female residents were estimated to be disproportionately impacted by issues of mobility (i.e. ambulatory difficulty) compared to their male counterparts.
- Of disabled individuals in the Jurisdiction, the 35 to 64 age group is estimated to make up the highest proportion.
- Falls were the leading cause of emergency department (ED) for injuries.
- In 2015, heart disease was the leading cause of death for Hispanic and White County residents, while cancer was the leading cause of death for Black residents in the County.
- In 2015, the County's three leading causes of cancer mortality were lung, breast, and prostate cancer. The County had a higher incidence rate of these cancers than the State.
- From 2013 to 2015, unintentional injuries were the number one cause of injury deaths.
- From 2000 to 2015, unintentional poisoning by drugs increased in the County by 342%.
- From 2002 to 2014, the County averaged 1,443.8 more emergency department (ED) visits per 100,000 than the State, a rate that was higher than HP2020 target.
- From 2000 to 2015, Black residents in the County consistently had a higher YPPL rate.

ILLNESS (CHRONIC)

Coronary Heart Disease

From 2005 to 2017, an average of 8% of the surveyed adults in the Jurisdiction reported that they had heart disease or a heart condition in the last three years. In 2017, 98% of the Jurisdiction reported that they have their condition controlled through medication, therapy, or lifestyle changes.[1]

From 2005 to 2014, the coronary heart disease hospitalization rates have steadily declined. Over this timespan the hospitalization rates for the County declined by 48.3%.[5] Similarly, the rates for the State declined by 50.0%.[5] Hospitalization rates were not available at the Jurisdictional level.

Cancer

From 2005 to 2014, the cancer hospitalization rates remained steady for the County and the State. The County hospitalization rates were consistently higher than the State. From 2005 to 2014, the County averaged 4.1 hospitalizations while the State averaged 3.5.[5] Hospitalization rates were not available at the Jurisdictional level.

Cerebrovascular Disease

From 2005 to 2014, the cerebrovascular disease hospitalization rates for the County and the State have remained steady. The County hospitalization rates were consistently higher than rates for the State. From 2005 to 2014, the County averaged 3.3 hospitalizations per 1,000 residents while the State averaged 2.9.[5] Hospitalization rates were not available at the Jurisdictional level.

Diabetes

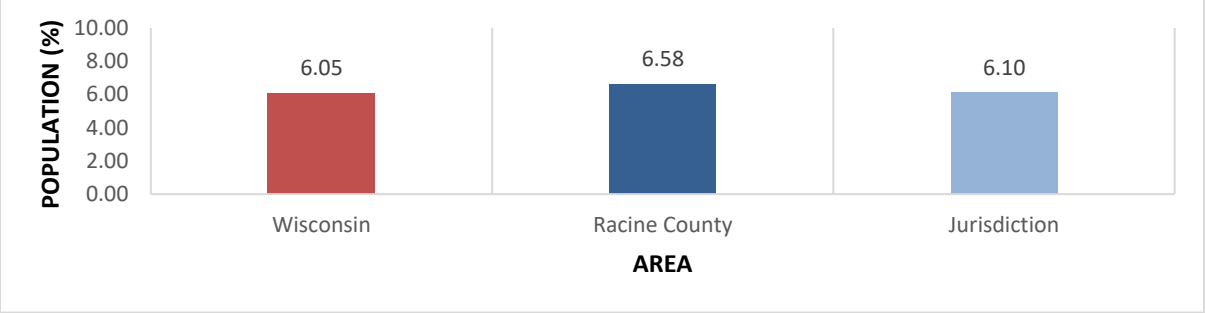
From 2005 to 2017, an average of 8% of the surveyed adults in the Jurisdiction reported that they had diabetes in the past three years. Additionally, in 2017, 81% of the Jurisdiction reported that their diabetes is controlled through medication, therapy, or lifestyle changes.[1]

From 2005 to 2014, the diabetes hospitalization rates for the County and the State remained steady. However, the County diabetes hospitalization rates were consistently higher than the State. From 2005 to 2014, the County averaged 1.58 hospitalizations per 1,000 residents while the State averaged 1.25.[5] Hospitalization rates are not available at the Jurisdictional level.

Mobility

Ambulatory difficulty is defined as having serious difficulty in walking or climbing stairs. As part of this report, this measure is used as a proxy for the issue of mobility. As illustrated in Figure 9.1, the percentage of individuals with ambulatory difficulty in the Jurisdiction is relatively similar (less than 1% difference) compared to the County and State. At the municipal level, the percentage ranged from 2.5% in the Village of North Bay to 7.5% in the Town of Burlington. *See Appendices.*

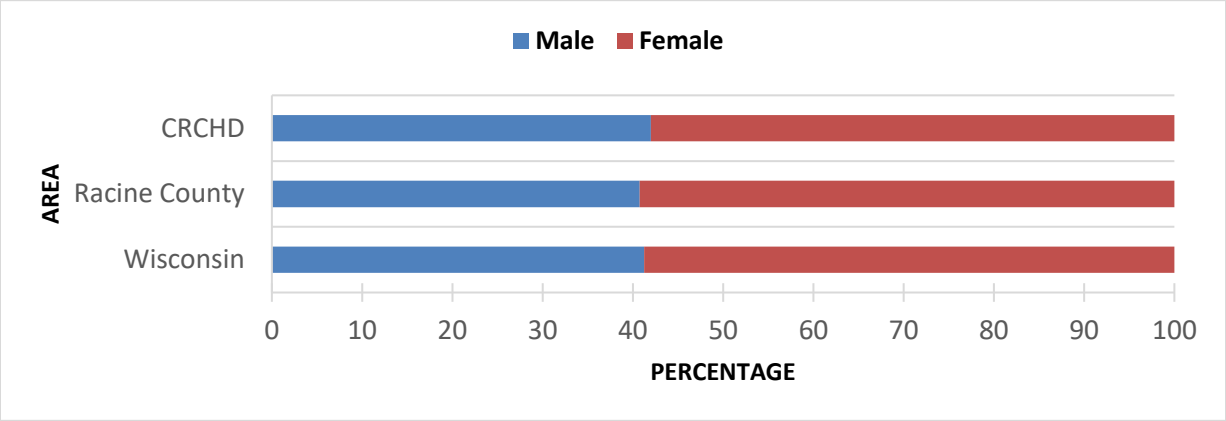
Figure 9.1 Estimated Percentage of the Total Civilian Noninstitutionalized Population (≥5 Yrs) with an Ambulatory Difficulty* by Area[3]



*Having serious difficulty walking or climbing stairs

Figure 9.2 depicts the issue of mobility in association with gender. Across all geographies shown, the issue of mobility tends to impact more females than males in relatively similar proportions. In the Jurisdiction, the proportion of males and females having difficulty with mobility was estimated at 42% and 58%, respectively. In contrast, the City of Burlington, Town of Waterford, and Town of Yorkville had a higher proportion of males having mobility difficulty relative to their female counterparts. *See Appendices.*

Figure 9.2. Estimated Percentage of the Total Civilian Noninstitutionalized Population (≥5 Yrs) with an Ambulatory Difficulty* by Gender and Area[3]



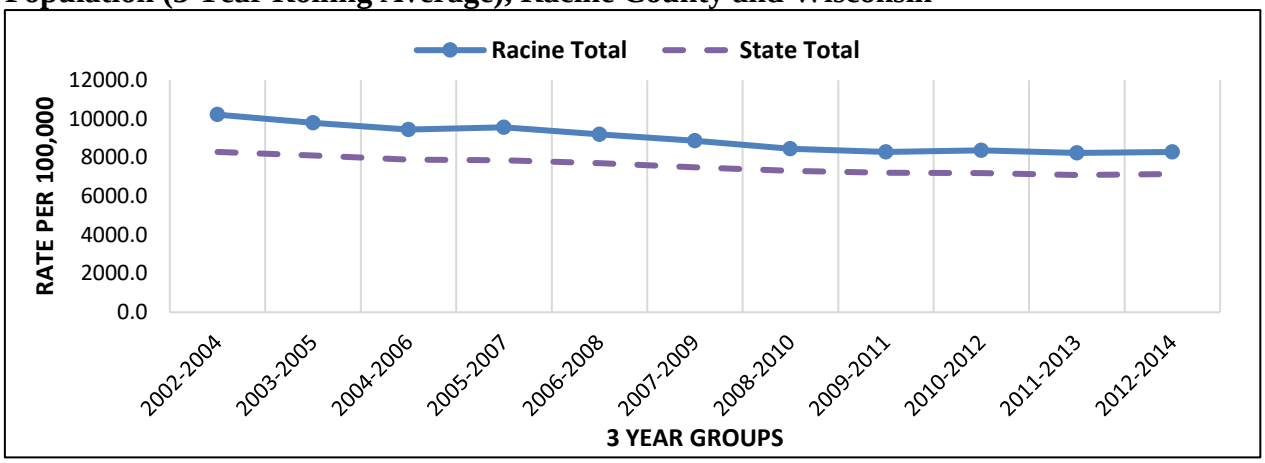
*Having serious difficulty walking or climbing stairs

INJURY

Emergency Department Visits

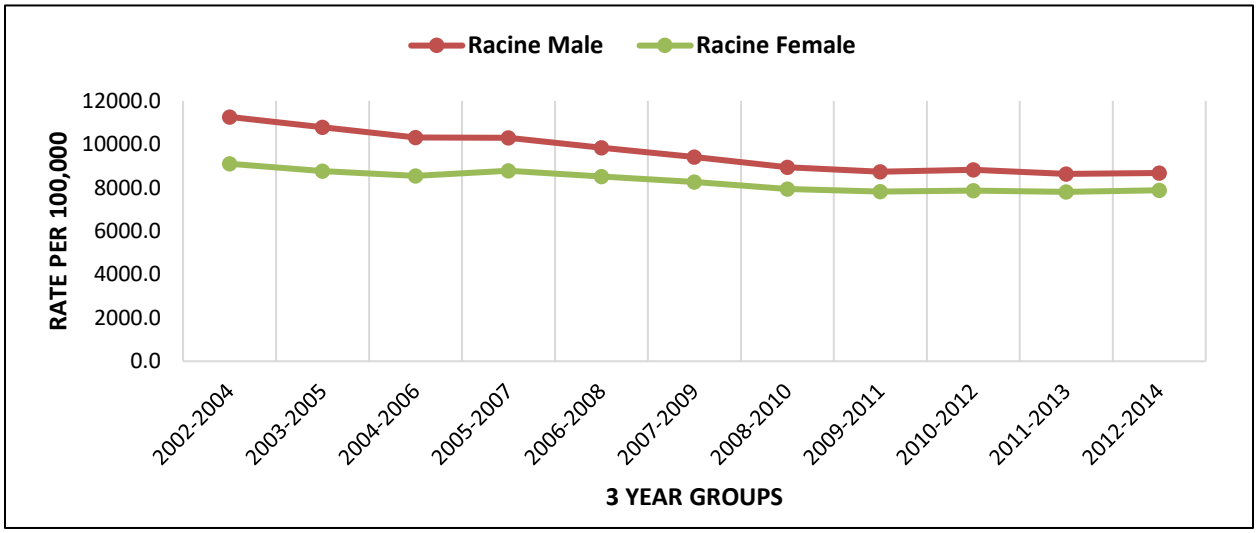
Figure 9.3 illustrates the age-adjusted injury-related emergency department (ED) visit rate for the County and the State. Overall, the County has a higher rate of injury-related ED visits compared to the State. Additionally, over a 13-year timespan depicted in the figure, the County averaged over 1,400 more ED visits per 100,000 than the State. Compared to the HP 2020 target of 7,534 per 100,000, the observed County injury-related ED visit rate (8,295 per 100,000) for the most recent three-year timespan (2012-2014) was higher by approximately 10%.

Figure 9.3 Age-Adjusted Injury-Related Emergency Department Visits per 100,000 Population (3 Year Rolling Average), Racine County and Wisconsin[4]



Based on gender, figure 9.4 shows that County males have a higher rate of ED visits than County females. On average, males had 1,322 more ED visits per 100,000 people than females. However, the observed gender difference for this measure has been on the decline since 2002.

Figure 9.4 Age-Adjusted Injury-Related Emergency Department Visits per 100,000 by Gender, Racine County[4]



As shown in Table 9.1, falls were the number one cause of ED visits for each age group in the County and the State.

Table 9.1. Top Causes of ED Use for Each Age Group, Racine County 2014[4]

	Ages 0 - 14	Ages 15 - 44	Ages 45 - 64	Ages 65+
1	Falls	Falls	Falls	Falls
2	Struck by or against object or person	Struck by or against object or person	Motor vehicle traffic crash - Occupant	Unspecified cause of injury
3	Other specified classifiable cause of injury	Motor vehicle traffic crash - Occupant	Struck by or against object or person	Cutting or piercing objects
4	Cutting or piercing objects	Overexertion	Cutting or piercing objects	Struck by or against object or person
5	Natural or environmental factors	Cutting or piercing objects	Unspecified cause of injury	Motor vehicle traffic crash - Occupant

Hospitalizations

Figure 9.5 shows the age-adjusted injury related hospitalization rate for the County and the State. Similarly, to what was observed for the injury-related rate for ED visits, the County has a higher hospitalization rate than the State. Compared to the HP 2020 target of 556 hospitalizations for non-fatal injuries per 100,000, the rates observed for the County and the State were consistently higher. Based on gender, County males have a slightly higher hospitalization rate than females (data not shown). [5] From 2002 to 2014, males averaged 1,008 and females averaged 743 hospitalizations per 100,000 (data not shown).[5]

Figure 9.5 Age-Adjusted Injury-Related Hospitalization Rate per 100,000 Population (3 Year Rolling Average), Racine County and Wisconsin[5]

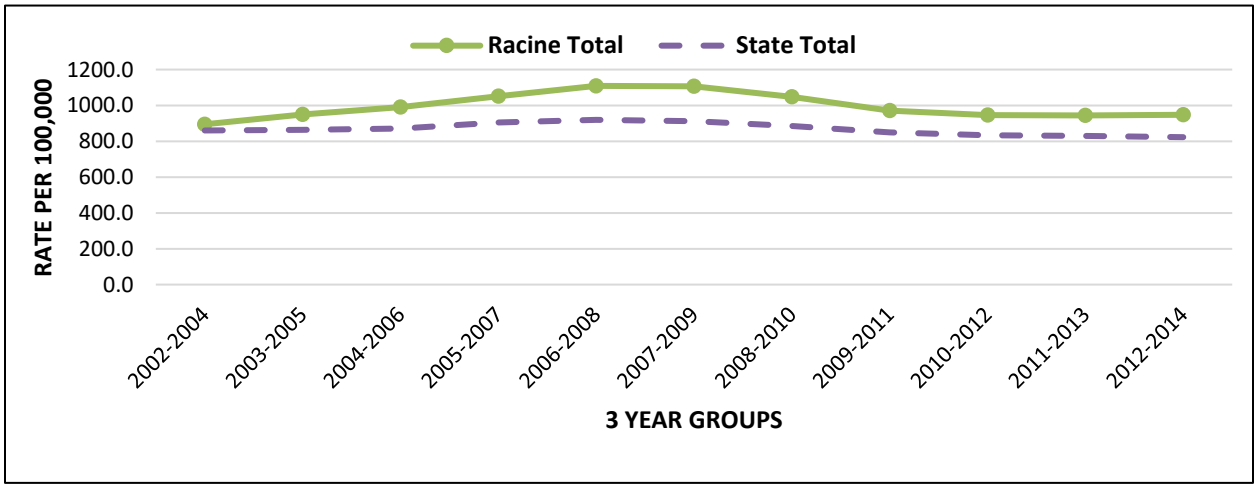


Table 9.2 lists the 2014 top causes of injury hospitalizations for each age group. The top cause of hospitalizations related to injuries were: cutting or piercing objects (0 to 14 age group), poisoning (15-44 age group), and falls (≥45 age groups).

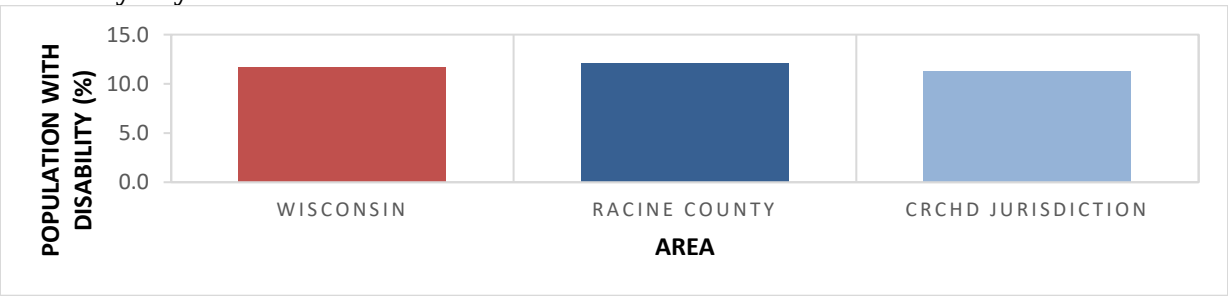
Table 9.2. Top Causes of Injury Hospitalizations for Each Age Group, Racine County 2014[5]

	Ages 0 - 14	Ages 15 - 44	Ages 45 - 64	Ages 65+
1	Cutting or piercing objects	Poisoning	Falls	Falls
2	Poisoning	Cutting or piercing objects	Unspecified cause of injury	Unspecified cause of injury
3	Falls	Falls	Poisoning	Other specified classifiable cause of injury
4	Other specified cause of injury, not elsewhere classifiable	Unspecified cause of injury	Other specified classifiable cause of injury	Poisoning
5	Unspecified cause of injury	Other specified classifiable cause of injury	Motor vehicle traffic crash - Occupant	Natural or environmental factors

DISABILITY

Figure 9.6 depicts disability percentages at the Jurisdictional, County, and State levels. The Jurisdiction has a relatively similar (<1% difference) disabled population compared to the County and State. At the municipal level, the disabled percentage ranged from 8.6% for the Town of Waterford to 13.5% for the Village of Union Grove. *See appendices.*

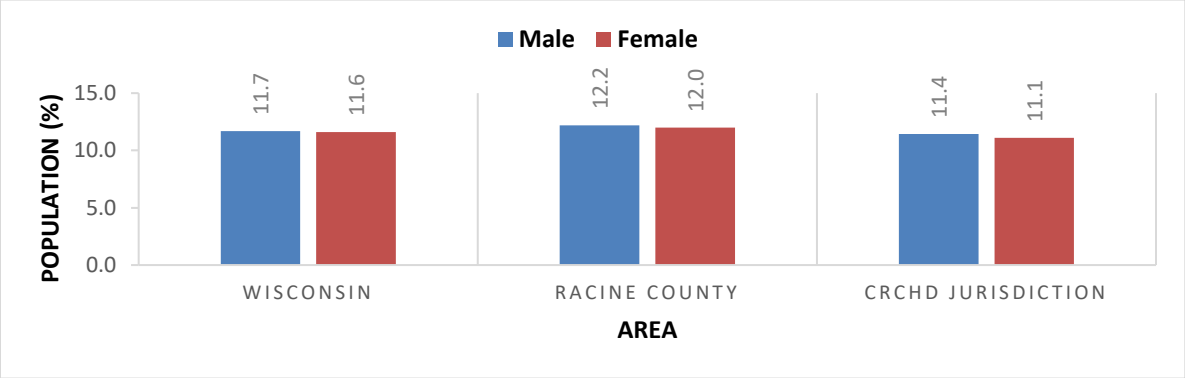
Figure 21: Estimated Percentage of the Total Noninstitutionalized Population with a Disability* by Area[3]



*Includes hearing, vision, cognitive, ambulatory, self-care, independent living difficulties

Figure 9.7 illustrates that for most of the areas depicted the proportion of the population disabled is similar for both genders. At the municipal level, notable exceptions to this finding were: City of Burlington, Village of Caledonia, Village of North Bay, Town of Waterford, and Town of Yorkville. *See appendices.*

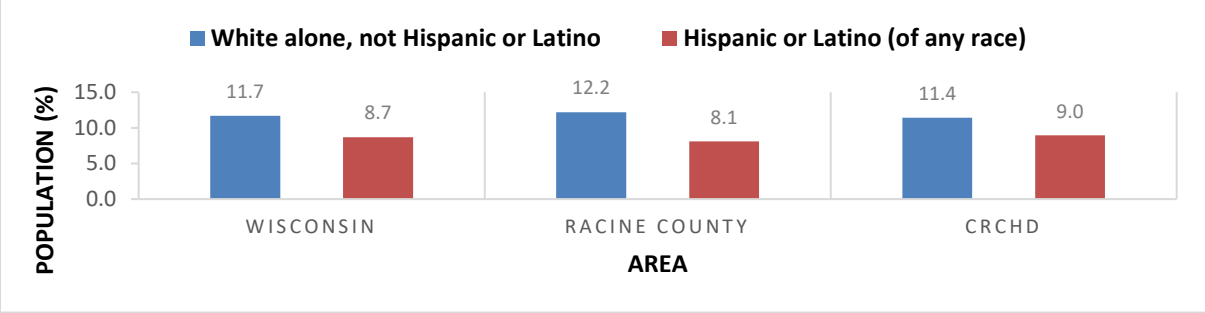
Figure 9.7 Estimated Percentage of the Total Noninstitutionalized Population with a Disability* by Gender and Area (2011-2015)[3]



*Includes hearing, vision, cognitive, ambulatory, self-care, independent living difficulties

Figure 9.8 shows a higher estimated proportion of disabled non-Hispanic Whites compared to their Hispanic (any race) counterparts. This finding was consistent at the Jurisdictional, County, and State level.

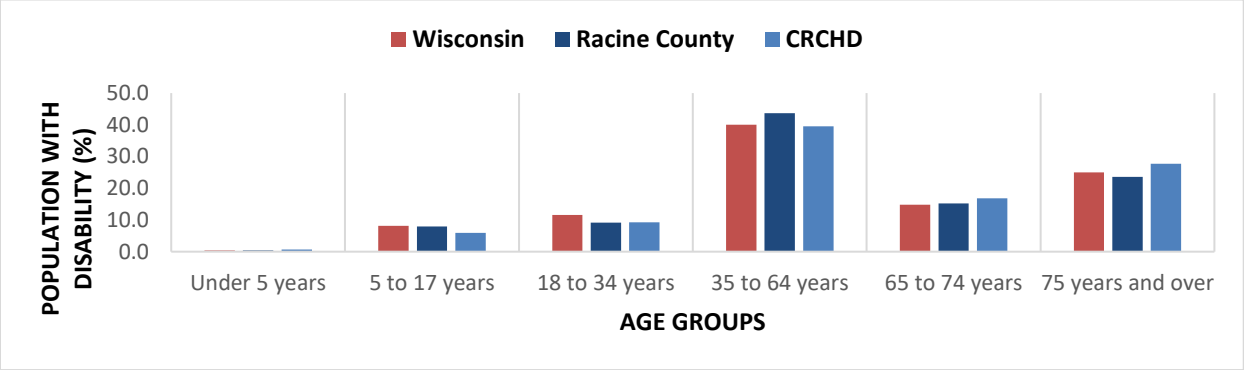
Figure 9.8 Estimate Percentage of the Total Noninstitutionalized Population with a Disability*, Hispanic Versus Non-Hispanic Whites (2011-2015)[3]



*Includes hearing, vision, cognitive, ambulatory, self-care, independent living difficulties

Figure 9.9 illustrates the disabled population within each area broken down by age groups. It depicts that among individuals with a disability, the majority tend to fall within the 35-64 age group. This finding was consistent at the State, County, and Jurisdictional level.

Figure 9.9 Estimate Percentage of the Disabled* Noninstitutionalized Population by Age Group[3]

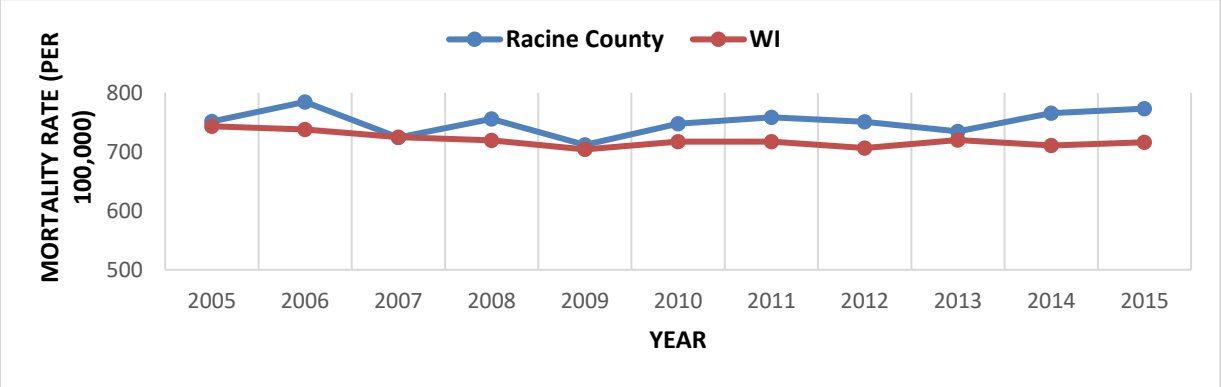


*Includes hearing, vision, cognitive, ambulatory, self-care, independent living difficulties

OVERALL MORTALITY

Figure 9.10 provides the mortality rates for the County and the State. It depicts a consistently higher mortality rate for the County relative to the State.

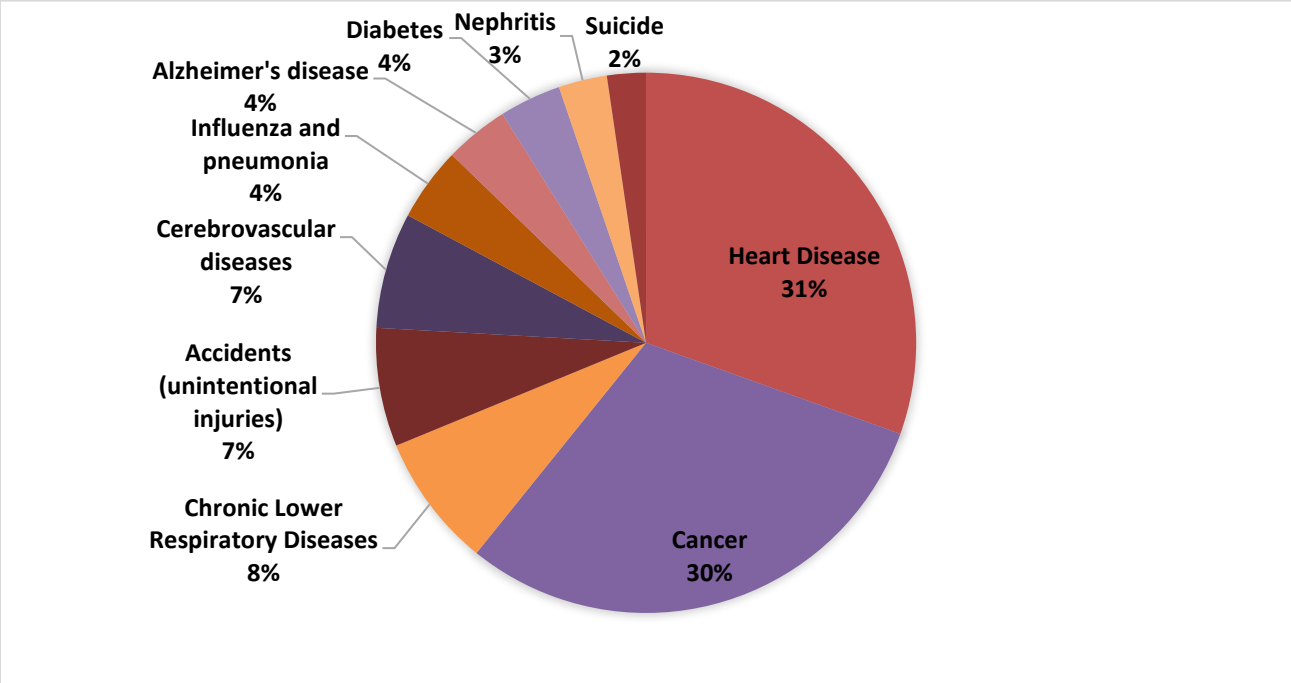
Figure 9.10 Age-Adjusted Mortality Rate Per 100,000 by Area and Year[6]



CAUSES OF DEATH

Over a five-year period spanning 2011 to 2015, Figure 9.11 shows that cancer and heart disease were the leading causes of death in Racine County.[6]

Figure 9.11 Leading Causes of Death in Racine County, 2011-2015



For the 2015-year, Table 9.3 shows that cancer and heart disease remain as the top causes of death in the County. Based on gender, a higher rate of males died from each of these causes compared to their female counterparts, with Alzheimer's disease being the single exception.

Table 9.3 Age-Adjusted Mortality Rates per 100,000 Population by Cause of Death and Gender, Racine County 2015[6]

CAUSE OF DEATH	TOTAL	MALE	FEMALE
Malignant neoplasms (cancer)	166.9	207.7	137.5
Diseases of heart	161.0	205.4	126.7
Chronic lower respiratory diseases	50.8	60.3	45.4
Accidents (unintentional injuries)	45.2	71.3	20.7
Cerebrovascular diseases	38.5	38.9	36.1
Alzheimer's disease	25.0	17.5	29.1
Diabetes mellitus	19.2	25.4	14.2
Intentional self-harm (suicide)	18.8	23.8	13.6
Influenza and pneumonia	15.6	24.3	9.2
Nephritis, nephrotic syndrome and nephrosis	13.9	18.9	10.1

Based on age, accidents were the leading cause of death in the 18 to 44 age group in the County for 2015 (data not shown).[6] Additionally, malignant neoplasm (cancer) was the leading cause for residents aged 45 to 74, and heart disease was the top cause of death for County residents 75 and over (data not shown). [6]

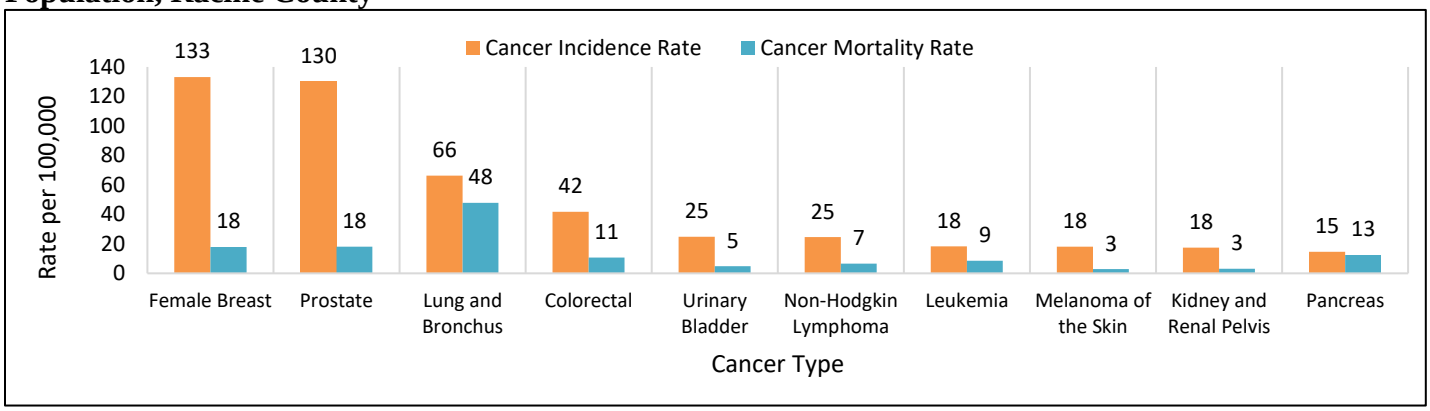
When assessing death by race and ethnicity, heart disease was the top cause of death among Hispanics and Whites in the County for 2015. Cancer was the leading cause of death for Black county residents.[6]

Cancer

As reported in figure 9.11 cancer is one of the top leading causes of death in the County. Figure 9.12 illustrates cancer incidence and mortality rates for the County over a 5-year time frame spanning from 2010 to 2014. Based on the reported county incidence rates, the top three cancers in descending order were: breast, prostate, and lung. However, when assessing cancer mortality rates, lung cancer has the highest rate compared to all the other cancers listed.

Compared to the State, the incidence rate of the County's top three cancers was observed to be higher (data not shown).[7] When comparing mortality rates for the County's three top cancers, the mortality rates for breast and prostate are lower compared to the State; while the County lung cancer mortality rate was higher compared to the State (data not shown).[7]

Figure 9.12 2010-2014 Age-Adjusted Cancer Incidence and Mortality Rates per 100,000 Population, Racine County[7]

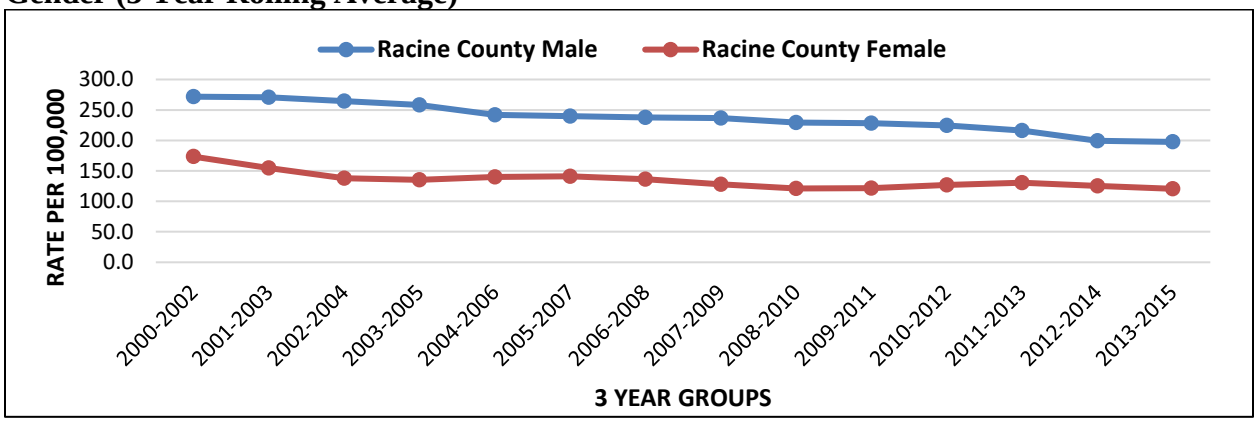


One of the Healthy People (HP) 2020 goals is to reduce the number of deaths caused by cancer. When the top three cancer mortality rates for the County were compared to the HP 2020 targets, the County prostate and breast cancer mortality rates (both 18 per 100,000) were lower relative to the HP 2020 targets (22 and 21 per 100,000, respectively); while the County lung cancer rate (48 per 100,000) was higher compared to the HP target (46 per 100,000), (data not shown).[7]

Heart Disease

As previously reported heart disease accounts for the highest proportion of deaths in the County. However, as a trend, the mortality rate for heart disease has declined by 30% in the County over a 15-year time spanning from 2000 to 2015 (data not shown).[6] This is comparable to an observed 34% decrease at the State level for heart disease over the same time frame (data not shown). [6] When race is factored, the mortality rate for heart disease in the County is higher for Black residents compared to their White counterparts (data not shown).[6] Furthermore, figure 9.13 illustrates the disproportionate impact of death by heart disease for County males.

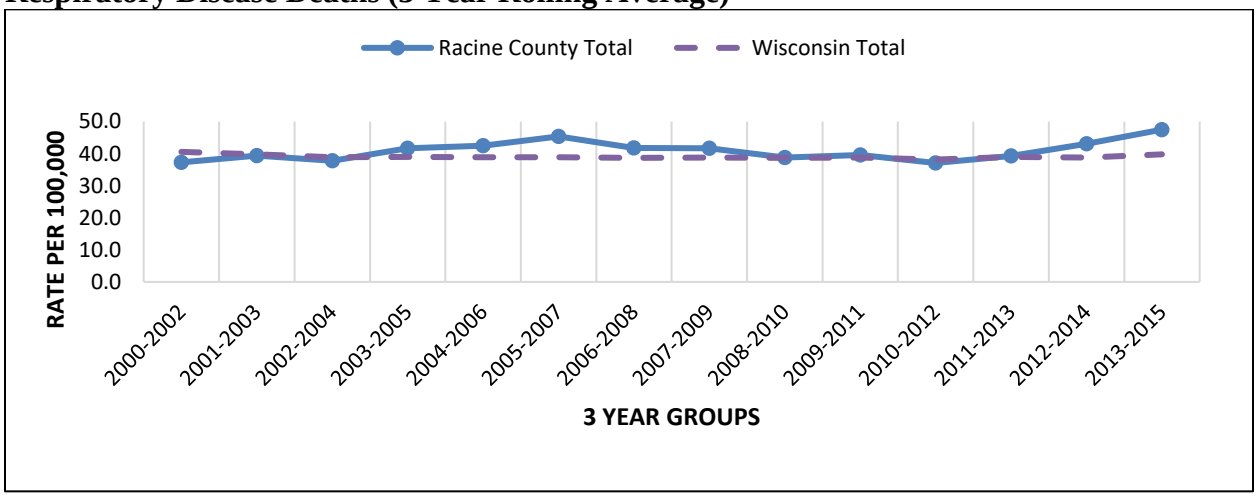
Figure 9.13 Age-Adjusted Mortality Rate per 100,000 Population: Diseases of the Heart by Gender (3 Year Rolling Average)[6]



Chronic Lower Respiratory Disease

Chronic lower respiratory diseases include: chronic obstructed pulmonary disease (COPD), emphysema, and chronic bronchitis. From 2011 to 2015, chronic lower respiratory diseases accounted for the third highest number of deaths in the County. As illustrated in Figure 9.14, mortality rates for chronic lower respiratory diseases have remained steady over the years in the State. Rates fluctuated in the County and increased slightly. From 2000 to 2015, chronic lower respiratory disease mortality rates increased by 40%. Additionally, males in the County and the State have a higher chronic lower respiratory disease mortality rate than females (data not shown).[6]

Figure 9.14 Age-Adjusted Mortality Rate per 100,000 Population: Chronic Lower Respiratory Disease Deaths (3 Year Rolling Average)[6]



Cerebrovascular Disease

As previously shown, cerebrovascular disease ranked in the top five causes of death in the County from 2011 to 2015. From 2000 to 2015, Racine County mortality rates decreased by 41.2%, while the rates for the State decreased by 42.5% (data not shown).[6] In the County most of cerebrovascular disease deaths are individuals 75 years and older (data not shown).[6]

Unintentional Injury

Unintentional injuries (accidents) accounted for one of the leading causes of death in the County and the number one cause of injury related deaths. Table 9.4 lists the top five specific causes of unintentional injury-related deaths in the County by age group from 2013 to 2015. As indicated by the table, the top forms of injury-related deaths are: suffocation (0-14 age group), poisoning (15-64 age group), and falls (ages ≥65).

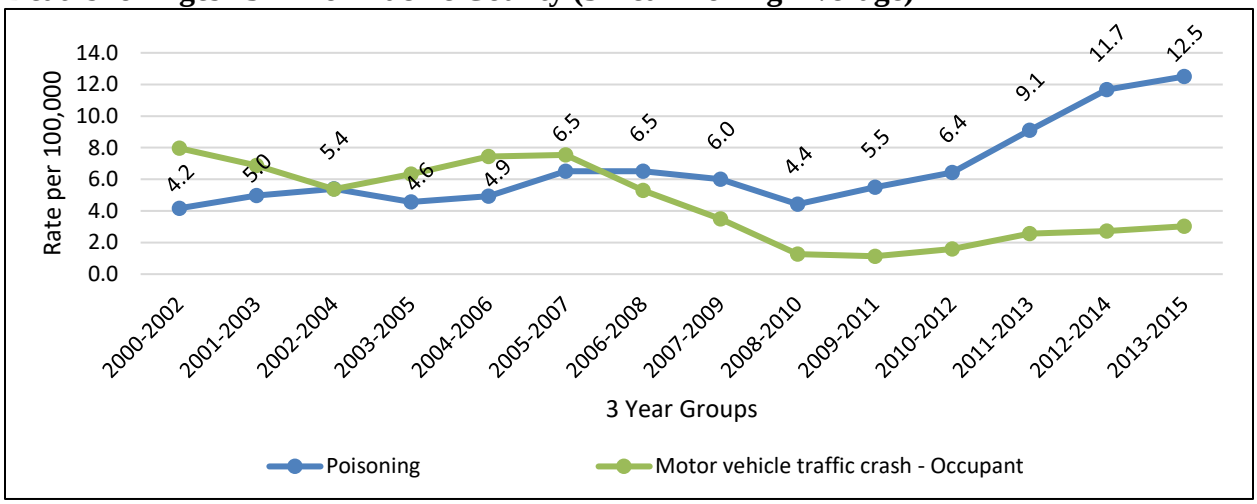
Table 9.4 Top Causes of Unintentional Injury-Related Mortality for Each Age Group, Racine County 2013-2015[8]

	Ages 0 - 14	**Ages 15 - 44**	**Ages 45 - 64**	**Ages 65+**
1	Suffocation	Poisoning	Poisoning	Falls
2	Motor vehicle traffic crash – pedestrian (tie)	Motor vehicle traffic crash - occupant	Falls	Motor vehicle traffic crash - pedestrian
3	Drowning (tie)	Motor vehicle traffic crash - motorcyclist	Motor vehicle traffic crash - occupant	Other specified cause of injury not elsewhere classified
4	Nontraffic land transport (tie)	Falls	Suffocation	Motor vehicle traffic crash – Occupant & Other (tie)
5	Other specified cause of injury not elsewhere classified (tie)	Other specified cause of injury not elsewhere classified	Fire, heat, chemical burns & Motor vehicle traffic crash - Pedestrian (tie)	Poisoning & Suffocation (tie)

When comparing unintentional injury mortality rates in the County among the age groups depicted in Table 9.2 over a 16-year time span (2000 to 2015), the 15 to 44 age group had the highest average annual rate of 15.6 deaths per 100,000 (data not shown).[8] As a trend, the unintentional injury mortality rate for this age group increased by 49% from 2011 to 2015.[8] *See appendices.*

Based on this reported increase in the unintentional injury mortality rate for the 15 to 44 age group, figure 9.15 suggests that this increase may be due to unintentional injury-related deaths from poisoning. From 2000 to 2015, the mortality rate from unintentional injury-related deaths among the 15 to 44 age group increased by 281% in Racine County.

Figure 9.15 Age-Adjusted Mortality Rate per 100,000 Population: Unintentional Injury Deaths for Ages 15-44 for Racine County (3 Year Rolling Average)[8]

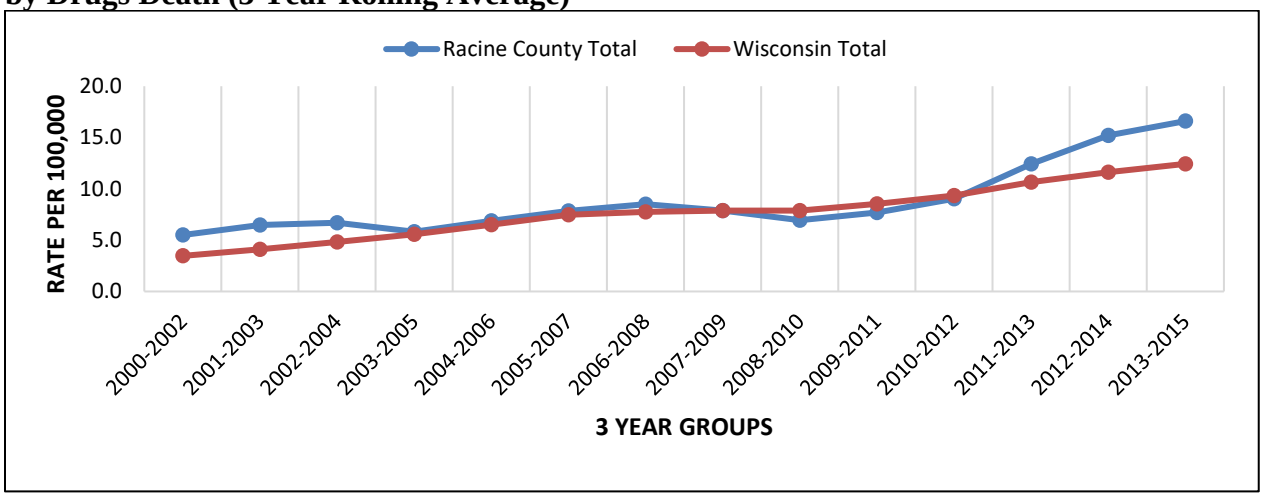


Additionally, it is worth noting that the over the 16-year (2000 to 2015) timespan, the unintentional injury-related mortality rate from poisoning for all age groups increased by 356% in Racine County.[8]

Unintentional Injury-Related Deaths from Drugs

An explanation for the observed increase in unintentional injury-related deaths from poisoning in the County may be found within figure 9.16, which illustrates a 342% increase in the rate of deaths related to drugs (e.g. prescription opioids, heroin, benzodiazepines, cocaine, and psychostimulants). Also, when comparing this measure by gender, more County males died from unintentional injury-related drug poisoning than their female counterparts (data not shown).[9] As an example, in 2015, the death rate for County males was over three and a half times more compared to females (data not shown).[9] Furthermore, the County rate for males was greater than the observed rate for State males by 34% (data not shown).[9] When factoring race, unintentional poisoning deaths by drugs increased for both White and Black residents in the County and the State (data not shown).[9]

Figure 9.16 Age-Adjusted Mortality Rate per 100,000 Population: Unintentional Poisoning by Drugs Death (3 Year Rolling Average)[9]



YEARS OF POTENTIAL LIFE LOST

Years of Potential Life Lost (YPLL) is the sum of the differences between age 75 and the age at death for everyone who died before age 75.

As shown in Figure 9.17, the County has consistently had a higher rate of YPLL than the State.

Figure 9.17 Rate per 100,000 Population of Years of Potential Life Lost (YPLL) before age 75 (3 Year Rolling Average)[6]

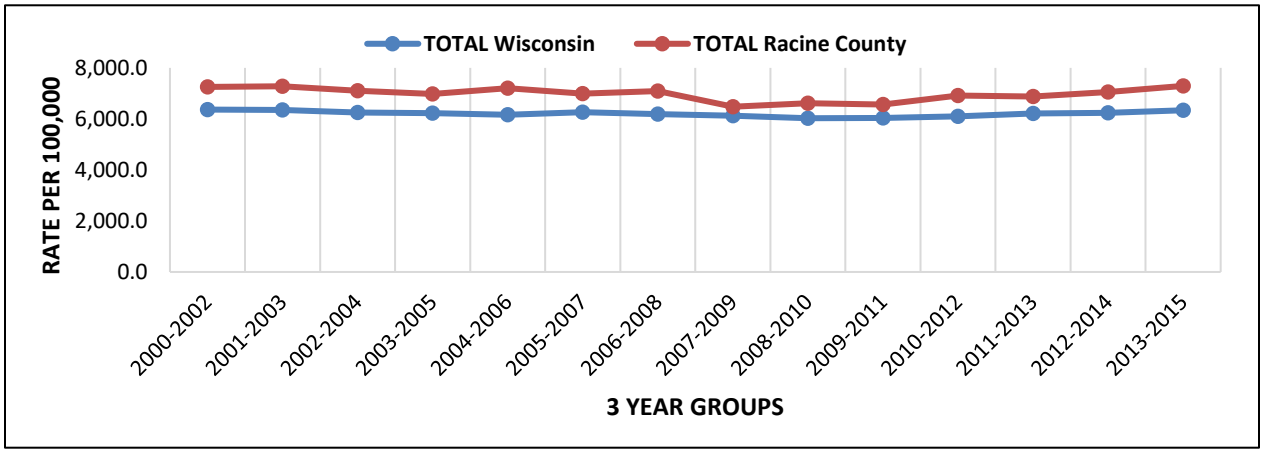


Figure 9.18 displays the YPLL by race and ethnicity for the County. As observed, Black residents in the County consistently have a higher YPPL rate than White and Hispanics. Included in this figure is the YPLL for WI, which is used as a County target measure for improvement.

Figure 9.18 Rate per 100,000 Population of Years of Potential Life Lost (YPLL) before age 75 by Race (3 Year Rolling Average)[6]

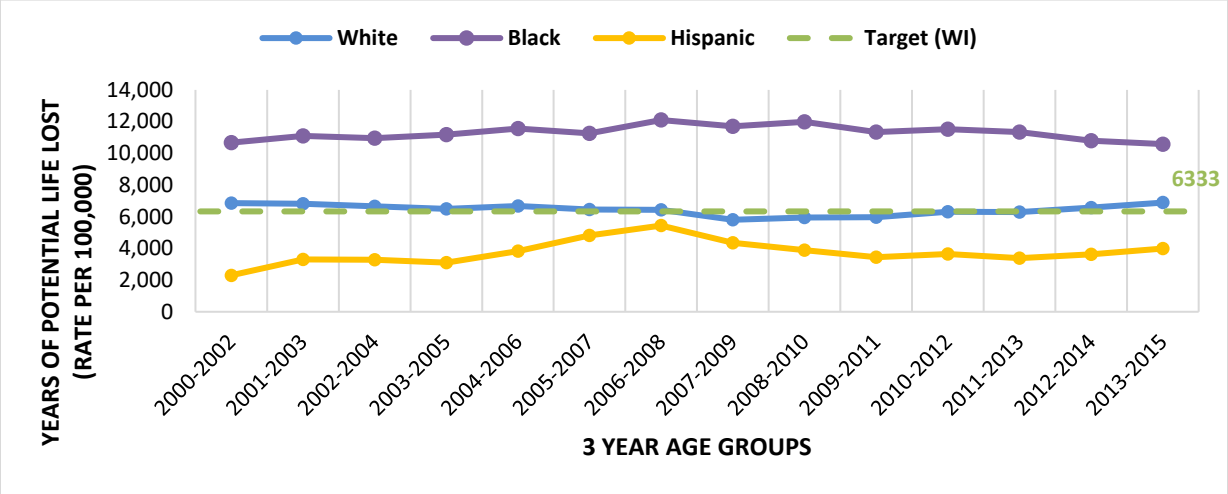
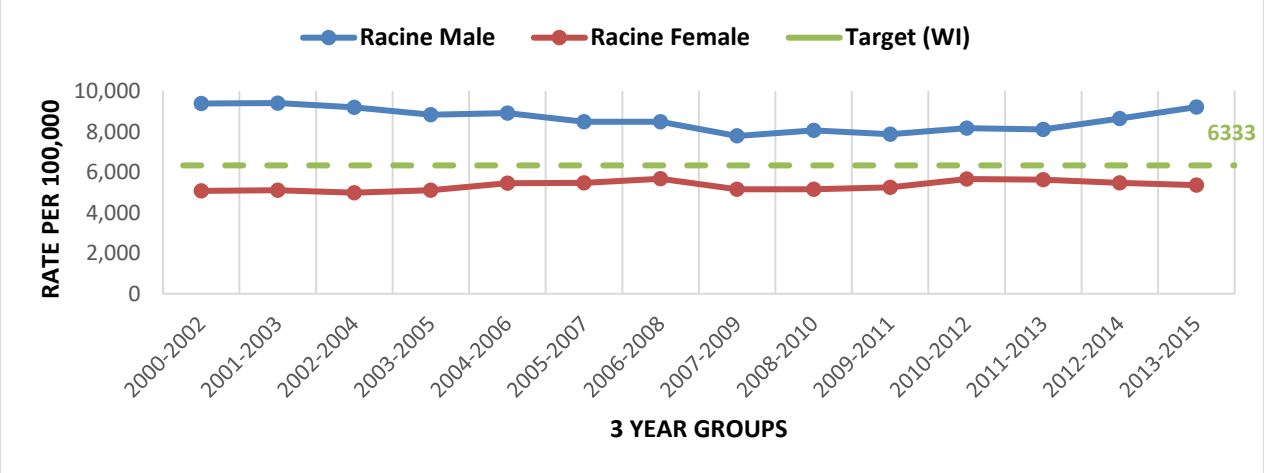


Figure 9.19 displays the YPPL by gender for the County. As shown, males have a higher YPPL rate compared to females. Included in this figure is the YPLL for WI, which is used as a County target measure for improvement.

Figure 9.19 Rate per 100,000 Population of Years of Potential Life Lost (YPLL) before age 75 (3 Year Rolling Average)[6]



REFERENCES

1. Aurora Healthcare. 2017. Community Health Survey Summary – Central Racine County. Retrieved from: https://ahc.aurorahealthcare.org/aboutus/community-benefits/community-health-research/index.asp.
2. WI DHS. Wisconsin Public Health Profiles: Racine County and Wisconsin, 2005-2016. Retrieved from: https://www.dhs.wisconsin.gov/stats/pubhealth-profiles.htm.
3. U.S. Census Bureau, American Community Survey. 2011-2015. American Community Survey 5-Year Estimates, Table S1810. Retrieved from: https://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml
4. WI DHS. 2015.WISH Query, Injury-Related Emergency Department Visits Rate Module. Retrieved from: https://www.dhs.wisconsin.gov/wish/injury-ed/index.htm.
5. WI DHS. 2015. WISH Query, Injury Hospitalization Rate Module. Retrieved from: https://www.dhs.wisconsin.gov/wish/injury-hosp/index.htm.
6. WI DHS. 2016. WISH Query, Mortality Module. Retrieved from: https://www.dhs.wisconsin.gov/wish/mortality/index.htm.
7. WI DHS. 2017. WISH Query, Cancer Module. Retrieved from: https://www.dhs.wisconsin.gov/wish/cancer/index.htm
8. WI DHS. 2016. WISH Query, Injury-Related Mortality Module. Retrieved from: https://www.dhs.wisconsin.gov/wish/injury-mortality/index.htm.
9. WI DHS. 2017. WISH Query, Opioids Module. Retrieved from: https://www.dhs.wisconsin.gov/wish/opioid/mortality.htm

CATEGORY 10: COMMUNICABLE DISEASE

NACCHO Definition: Measures within this category include diseases which are usually transmitted through person-to-person contact or shared use of contaminated instruments or materials. Many of these diseases can be prevented through a high level of vaccine coverage of vulnerable populations, or through the use of protective measures, such as condoms for the prevention of sexually-transmitted diseases.

For this section, topics covered include: sexually transmitted diseases (STDs), tuberculosis (TB), Hepatitis A, B, C, vaccine preventable diseases (VPD), vector-borne diseases, enteric (gastrointestinal) diseases.

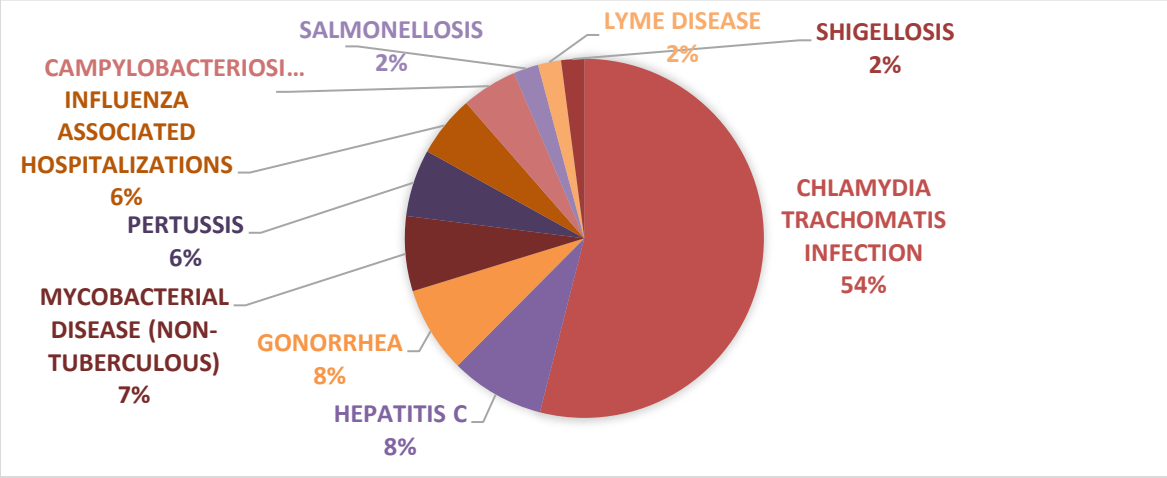
Key Findings

- In 2016, infections related to chlamydia accounted for over half of the reportable communicable diseases in the Jurisdiction.
- STD (chlamydia, gonorrhea, syphilis) rates are increasing in the Jurisdiction.
- The number of Hepatitis C cases in 2016 was more than two times the observed cases in 2012.
- From 2012 to 2016, pertussis and influenza accounted for over 75% of the vaccine preventable disease cases in the Jurisdiction.
- Even though the percent of Racine County residents receiving an annual flu vaccine increased from 2005 to 2015, only 42% of residents were up to date in 2015.

COMMUNICABLE DISEASE OVERVIEW

In 2016, Figure 10.1 shows that chlamydia accounted for over half of the reportable communicable disease cases for the Jurisdiction in 2016.

Figure 10.1 CRCHD Top Ten Reportable Communicable Diseases, 2016[1]



SEXUALLY TRANSMITTED DISEASES

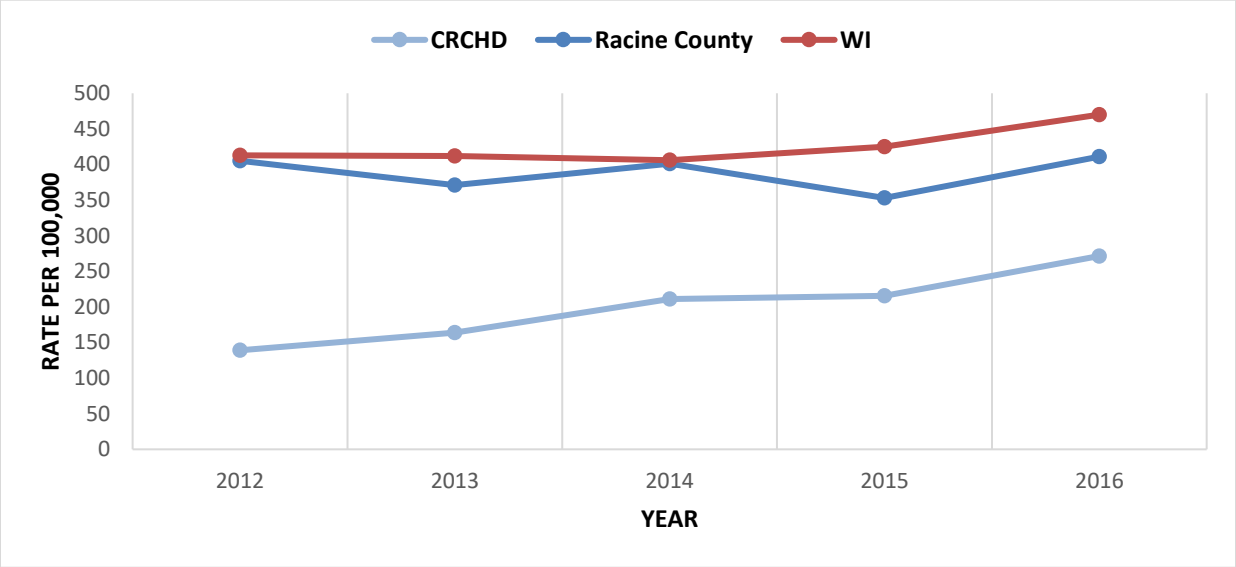
In 2016, the Jurisdiction conducted 357 sexually transmitted disease (STD) investigations, 87% of which were related to chlamydia infections.[1] From 2012 to 2016 the number of STD cases reported to CRCHD has increased by almost two-fold.

Table 10.1 Total Chlamydia, Gonorrhea, and Syphilis Cases (Probable/Suspected) for the Jurisdiction, 2012-2016[1]

	2012	2013	2014	2015	2016
Chlamydia	159	187	242	248	312
Gonorrhea	24	23	35	35	45
Syphilis	0	0	1	1	0
Total	183	210	278	358	357

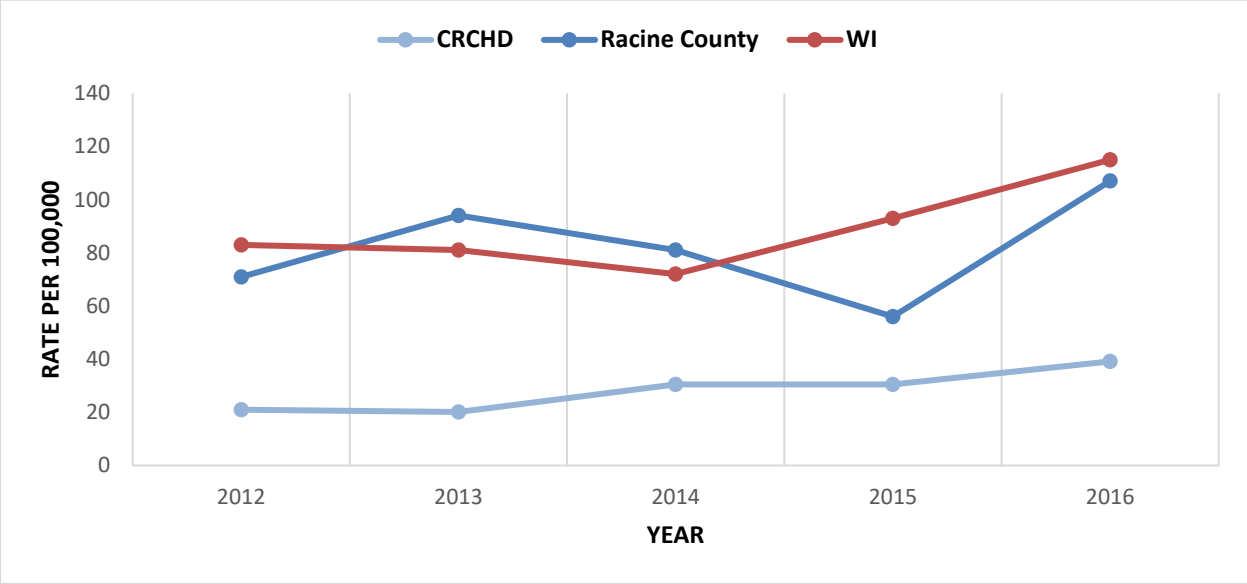
As previously shown in Table 10.1 the number of chlamydia infections has consistently been the highest among all STDs within the Jurisdiction. When converted to rates, Figure 10.2 illustrates how CRCHD has compared to the County and the State over the years from 2012 to 2016. It shows that the rate of infections related to chlamydia have been lower in the Jurisdiction relative to the County and the State. However, since 2012 the rate of chlamydia infections has increased by approximately 95% within the Jurisdiction, while the County and the State has seen rate increases of approximately 1% and 14%, respectively.

Figure 10.2 Rates of Chlamydia Cases (per 100,000 population)[1,2]



Similar to the rate of chlamydia infections, the rate gonorrhea infections in the Jurisdiction have been lower compared to the County and the State as depicted in figure 10.3. Since 2012, the rate of infections in the Jurisdiction has increased by 85%, while the infection rates observed for the County and the State have increased by approximately 51% and 39%, respectively.

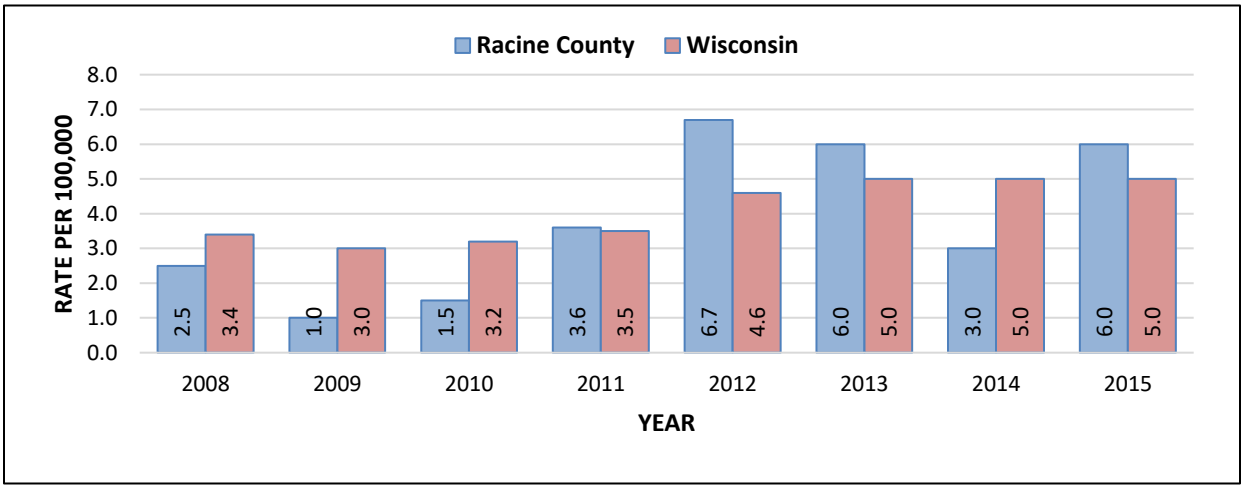
Figure 10.3 Rates of Gonorrhea Cases (per 100,000 population)[1,2]



Relative to the number of chlamydia and gonorrhea infections, the Jurisdiction has averaged <1 case of syphilis infection per year over the 2012 to 2016 timespan, with the total number of cases over the five-year period of two.[1]

Figure 10.4 illustrates the syphilis trend for the County and the State. County rates fluctuated over the years. This is most likely due to small numbers.[2]

Figure 10.4 Rates of Syphilis Cases (per 100,000 population)[2]



TUBERCULOSIS

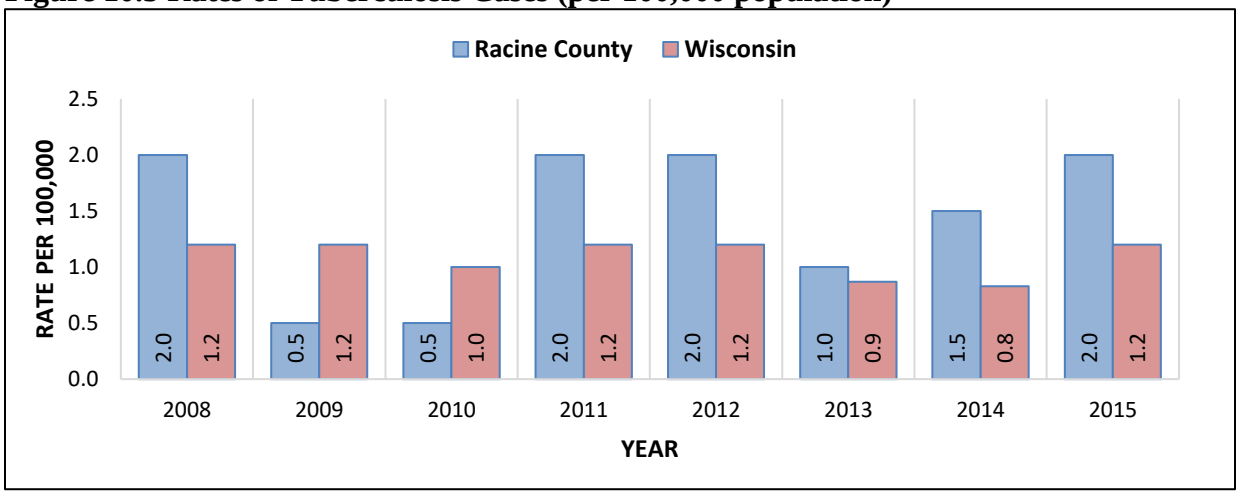
Table 10.3 lists the total number of Tuberculosis (TB), latent TB, and non-tuberculosis mycobacterial disease cases in the Jurisdiction from 2012 to 2016.

Table 10.3 Total Tuberculosis Cases for the Jurisdiction, 2012-2016[3]

	2012	2013	2014	2015	2016
Tuberculosis	1	1	1	1	1
Tuberculosis, Latent Infection (LTBI)	1	6	10	3	10
Mycobacterial Disease (Non-Tuberculous)	21	25	58	32	39
Total	23	32	69	36	50

As shown in Figure 10.5, the County rate for TB fluctuated over the years due to the small numbers.

Figure 10.5 Rates of Tuberculosis Cases (per 100,000 population)[3]



HEPATITIS A, B, C

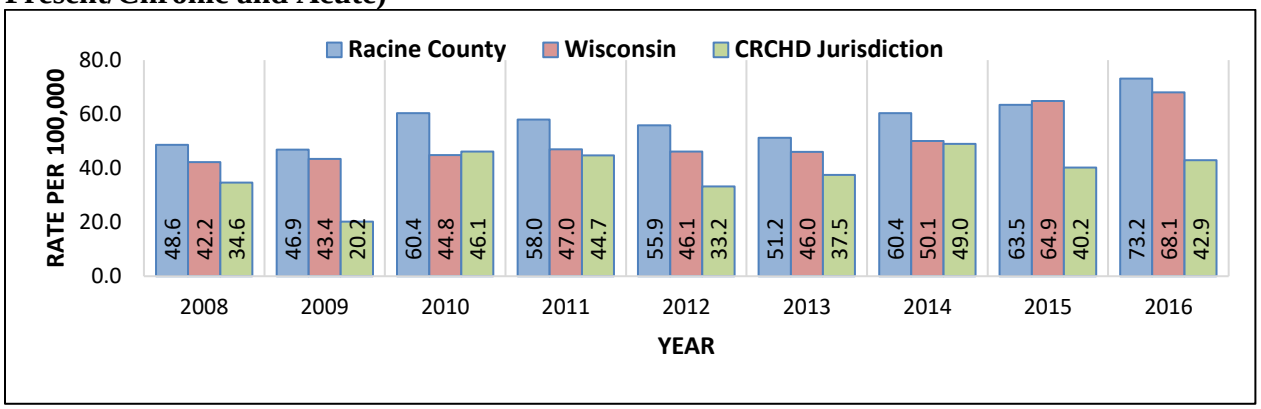
As portrayed in Table 10.3, Hepatitis C has consistently been the predominate type of hepatitis in the Jurisdiction from 2012 to 2016. The number of Hepatitis C cases in 2016 was more than two times the observed cases in 2012.

Table 10.3 Total Hepatitis (A, B, C) Cases for the Jurisdiction, 2012-2016[1]

	2012	2013	2014	2015	2016
Hepatitis A	1	0	0	0	0
Hepatitis B, (Acute, Chronic, Unspecified)	4	4	4	4	5
Hepatitis C	23	25	51	35	49

Relative to the Hepatitis C rates observed for the County and the State, the rates of the Jurisdiction have been lower. Since 2008, that rates for all areas depicted have increased.

Figure 10.6 Probable/Confirmed Rates (per 100,000 population) of Hepatitis C (Past/ Present/Chronic and Acute)[4]



VACCINE PREVENTABLE DISEASES

Table 10.4 illustrates that over the 2012 to 2016 timespan influenza and pertussis have accounted for over 75% of the cases related to the listed vaccine preventable diseases (VPD).

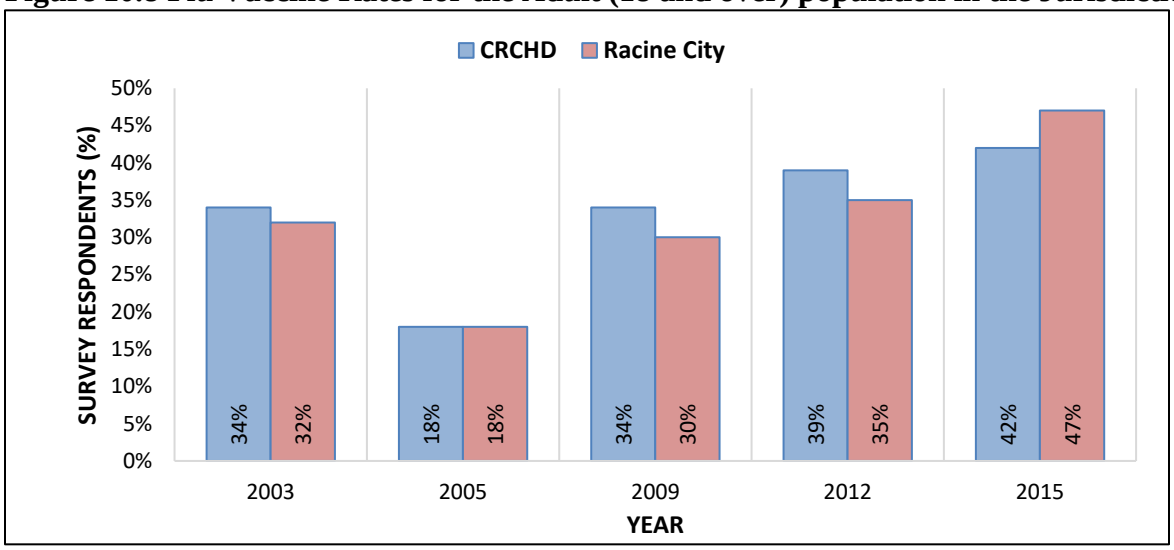
Table 10.4 Total Number of Cases Related to Selected Vaccine Preventable Diseases in the Jurisdiction, 2012-2016[1]

Vaccine Preventable Disease	2012	2013	2014	2015	2016
Bacterial Meningitis*	0	0	0	0	0
Haemophilus Influenzae	0	2	2	4	5
Influenza	12	17	55	55	32
Mumps	-	0	1	0	2
Pertussis	20	29	19	10	35
Streptococcus Pneumoniae	6	6	10	6	9
Varicella (Chickenpox)	2	4	8	5	12

*Includes bacterial agents with no currently available vaccine protection

As a means of reducing the spread of VPDs, vaccines have played a vital role. Figure 10.7 illustrates that on average 33% of adults (18 years and over) in the Jurisdiction reported having received a flu vaccine in the past year.[5] This is well below the HP 2020 target of 70%. It is of note that the decrease observed in 2005 may have be due to a flu vaccine shortage where only high-risk residents were offered a flu vaccine.[5]

Figure 10.8 Flu Vaccine Rates for the Adult (18 and over) population in the Jurisdiction[5]



As

Additionally, as seen in Table 10.5, the Jurisdiction has a higher rate of adult (age 65 and over) influenza and pneumonia immunizations than RHD.[5] The HP2020 goal is for 90% of adults age 65 and over to be vaccinated against pneumococcal disease. In 2015, 79% of adults in CRCHD jurisdiction and 68% in RHD were vaccinated against pneumonia.[5]

Table 10.5 Flu and Pneumonia Vaccine Rates for residents 65 and older[5]

	The Jurisdiction					RHD				
Vaccine	**2003**	**2005**	**2009**	**2012**	**2015**	**2003**	**2005**	**2009**	**2012**	**2015**
Flu vaccination (past year)	73%	40%	59%	70%	75%	80%	42%	61%	56%	69%
Pneumonia (ever)	57%	66%	74%	74%	79%	64%	65%	65%	71%	68%

VECTOR-BORNE DISEASES

Table 10.6 reports on cases of vector-borne diseases within the Jurisdiction. As shown Lyme disease has accounted for 89% of the listed vector-borne disease cases over the 2012 to 2016 timespan.

Table 10.6 Total Number of Cases Related to Vector-borne Diseases in the Jurisdiction, 2012-2016[1]

Vector-borne Disease	2012	2013	2014	2015	2016
Lyme	6	5	7	9	12
Chikungunya	-	0	1	0	0
Malaria	-	0	1	0	0
West Nile Virus	1	-	1	1	0

ENTERIC (GASTROINTESTINAL) DISEASES

Table 10.7 illustrates that over a 5-year timespan (2012-2016), cases related to Campylobacteriosis accounted for the highest proportion of all cases related to enteric (gastrointestinal) diseases in the Jurisdiction. Additionally, from 2012 to 2016, the number of cases related to Campylobacteriosis has increased seven-fold.

Table 10.7 Total Number of Cases Related to Enteric (Gastrointestinal) Diseases in the Jurisdiction, 2012-2016[1]

Enteric Diseases	2012	2013	2014	2015	2016
Campylobacteriosis	4	10	22	32	29
E. Coli (STEC)	2	1	4	2	10
Giardiasis	4	1	2	8	8
Listeriosis	0	0	0	1	0
Salmonellosis	13	6	13	19	13
Shigellosis	0	3	2	4	12
Typhoid Fever	0	0	0	0	0

SUMMARY OF COMMUNICABLE DISEASES

In 2016, the Jurisdiction conducted 309 investigations of reportable confirmed/probable communicable diseases (CDs) and 433 investigations of reportable suspect CDs.[1]

Table 10.8 lists the communicable diseases and number of cases investigated by the Jurisdiction. The arrows in the trend column illustrates the overall change from 2014 to 2016. STDs remain the number one reportable communicable disease locally.[1]

Table 10.8 Summary of Communicable Diseases in the Jurisdiction, 2014-2016 [1]

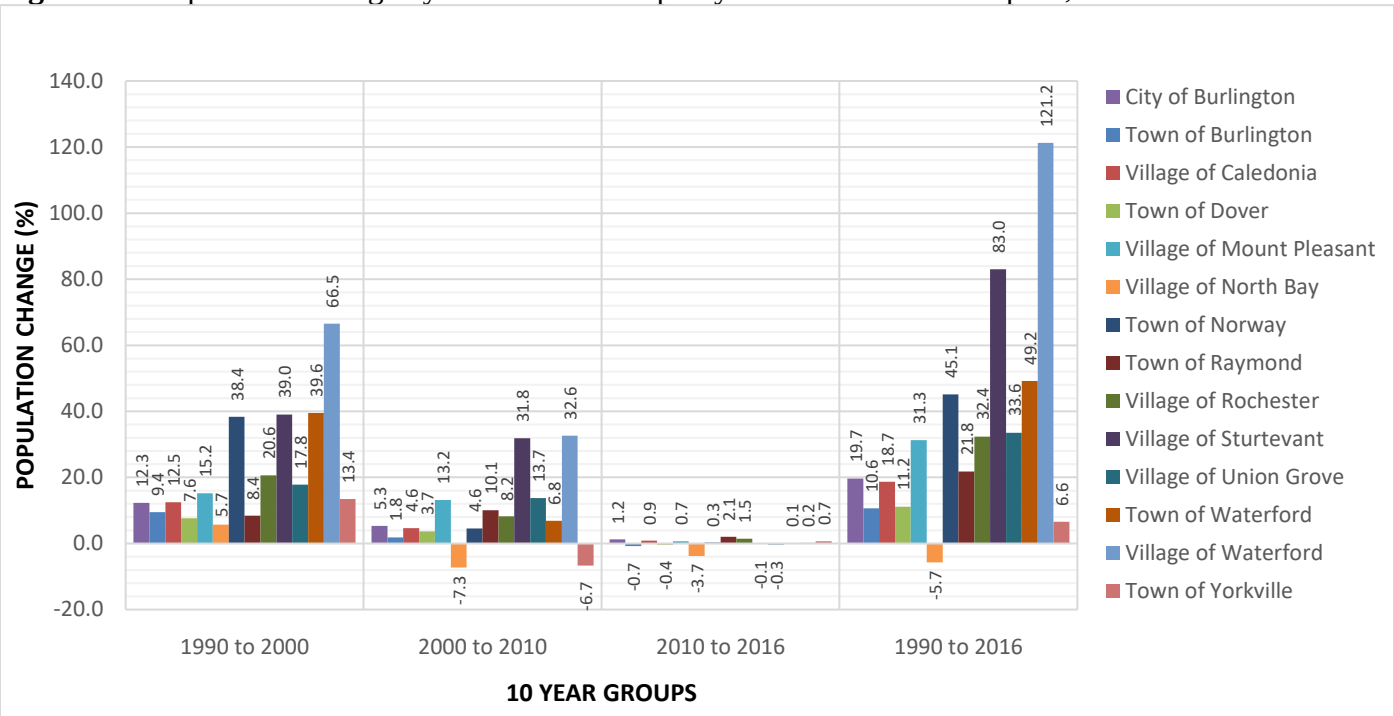
Diseases	Cases	Trend
Blastomycosis	< 5	↓
Campylobacteriosis	29	↑
Cryptospordiosis	< 5	No change
E. Coli STEC	10	↑
Ehrlichiosis/ Anaplasmosis	< 5	No change
Elizabethkingemia	< 5	n/a
Giardiasis	8	↑
Haemophilus Influenzae	5	↑
Hepatitis B (Chronic)	5	↑
Hepatitis C	49	↓
Influenza Hospitalizations	32	↓
Legionellosis	< 5	↓
Lyme Disease	12	↑
Measles	0	n/a
Mumps	< 5	↑
Mycobacterium (non-TB)	39	↓
Pertussis	35	↑
Q Fever	< 5	n/a
Salmonellosis	13	No change
Shigellosis	12	↑
Streptococcal Disease (A)	< 5	↓
Streptococcal Disease (B)	11	No change
Streptococcus Pneumoniae	12	↑
Tuberculosis	< 5	No change
Tuberculosis, Latent	10	↓
Varicella (Chicken Pox)	9	↑
STDs		
Chlamydia	312	↑
Gonorrhea	45	↑
Total	**666**	↑

REFERENCES

1. Central Racine County Health Department. Communicable Disease Surveillance Reports, 2011-2016.
2. WI DHS. 2016. Public Health Profiles, Racine County, 2008-2016 & Wisconsin, 2008-2016 & Central Racine LHD 2016. Retrieved from: https://www.dhs.wisconsin.gov/stats/pubhealth-profiles.htm
3. WI DHS. 2017. TB Cases by Region and County 2003-2015. Retrieved from: https://www.dhs.wisconsin.gov/tb/data.htm.
4. WI DHS. 2016. WI Hepatitis C Virus Surveillance Annual Review, 2016. Retrieved from: https://www.dhs.wisconsin.gov/publications/p00440-2016.pdf
5. WIR Benchmark Reports 2008-2016. Retrieved from: https://www.dhs.wisconsin.gov/immunization/wir.htm.

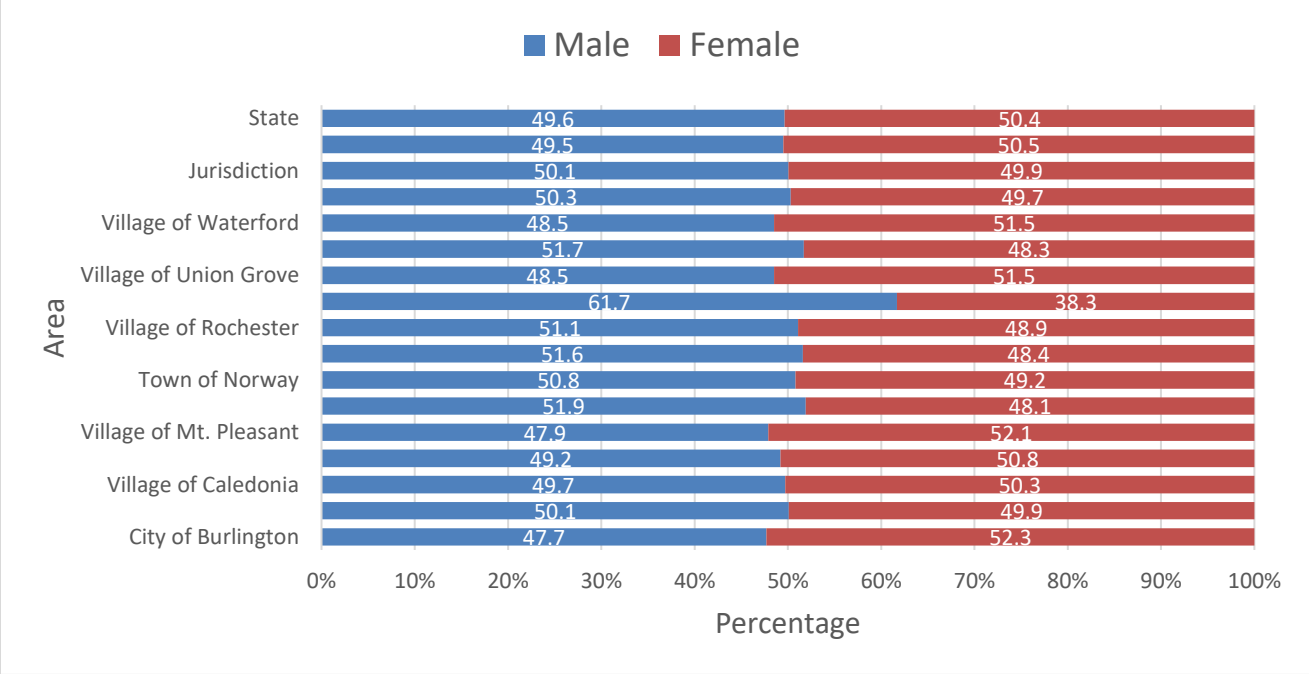
APPENDIX

Figure A.1 Population Change by CRCHD Municipality Over Selected Timespans, 1990-2016



Source: WI Department of Administration. (Jan 1, 2016). Municipality Final Population Estimates, Alphabetical List. Retrieved from: http://www.doa.state.wi.us/divisions/intergovernmental-relations/demographic-services-center/estimates

Figure A.2 Population Percentages by Gender and Area, 2010



Source: U.S. Census Bureau (2010). General Population and Housing Characteristics. Retrieved from https://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml

Figure A.3 Percentage of Surveyed Students by Sexual Orientation and Area, 2016

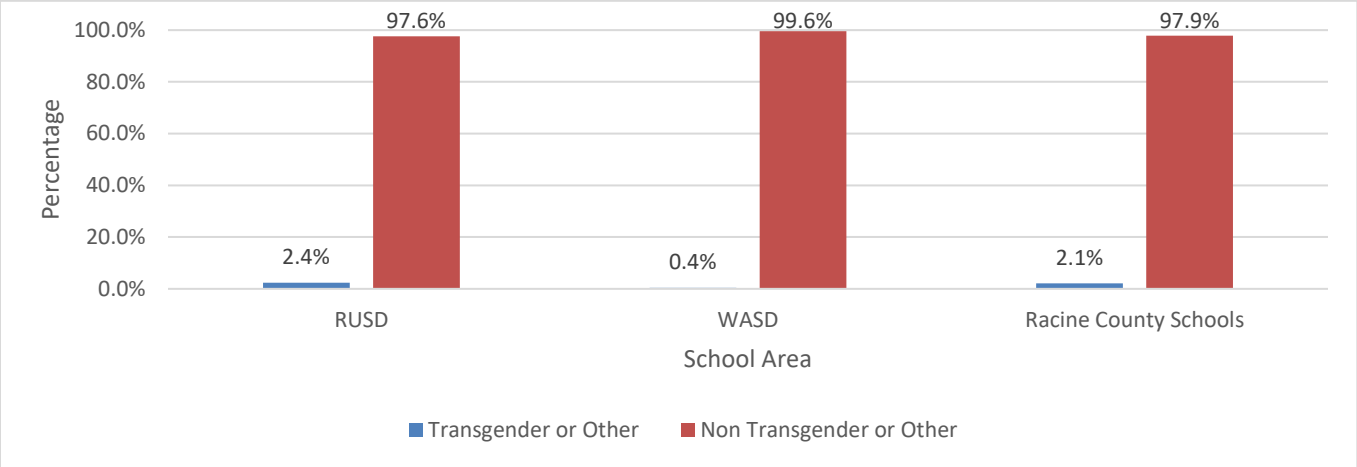


Figure A.4 RUSD Student Percentages of External Assets Reported, 2016

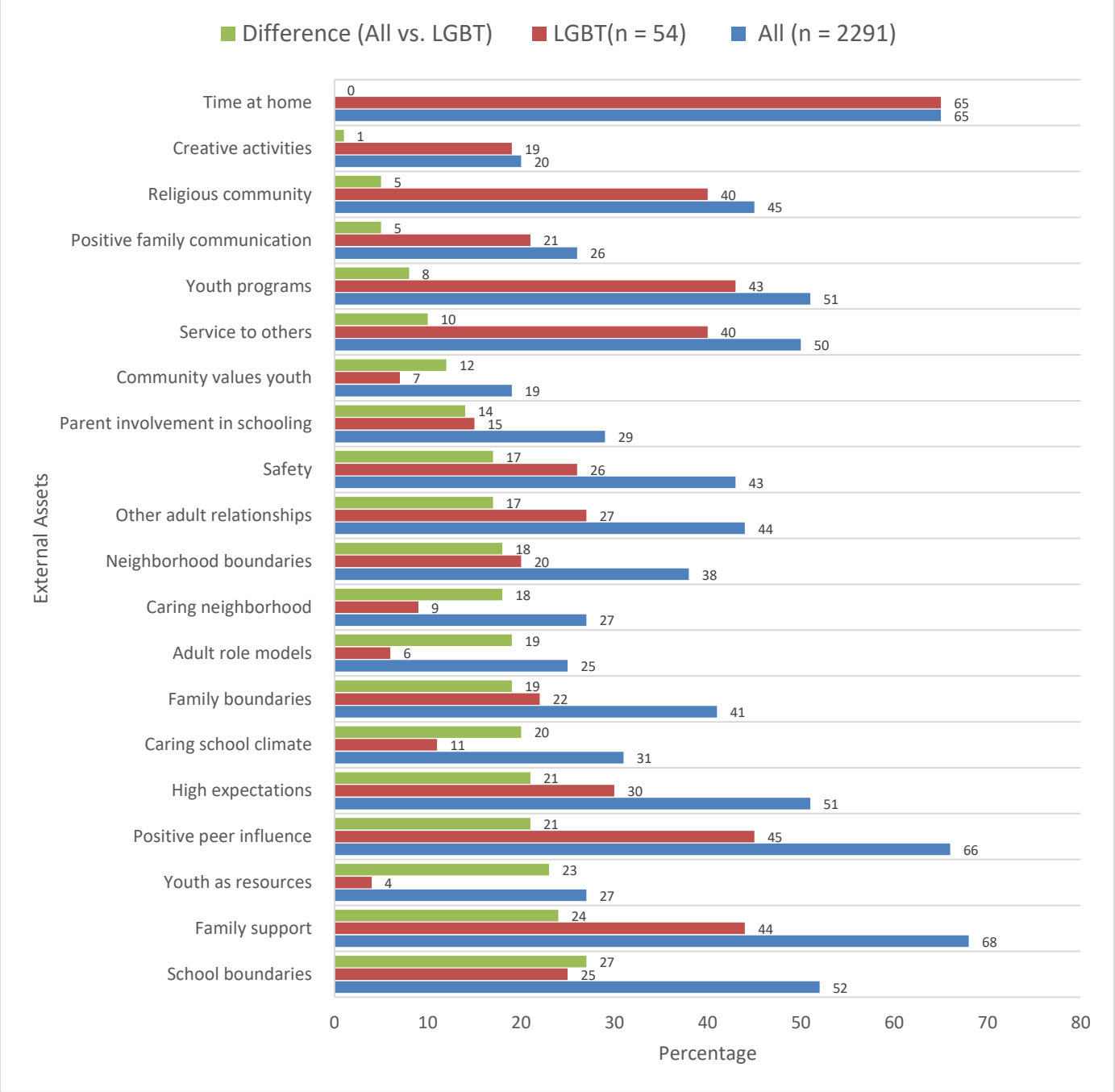


Figure A.5 RUSD Student Percentages of Internal Assets Reported, 2016

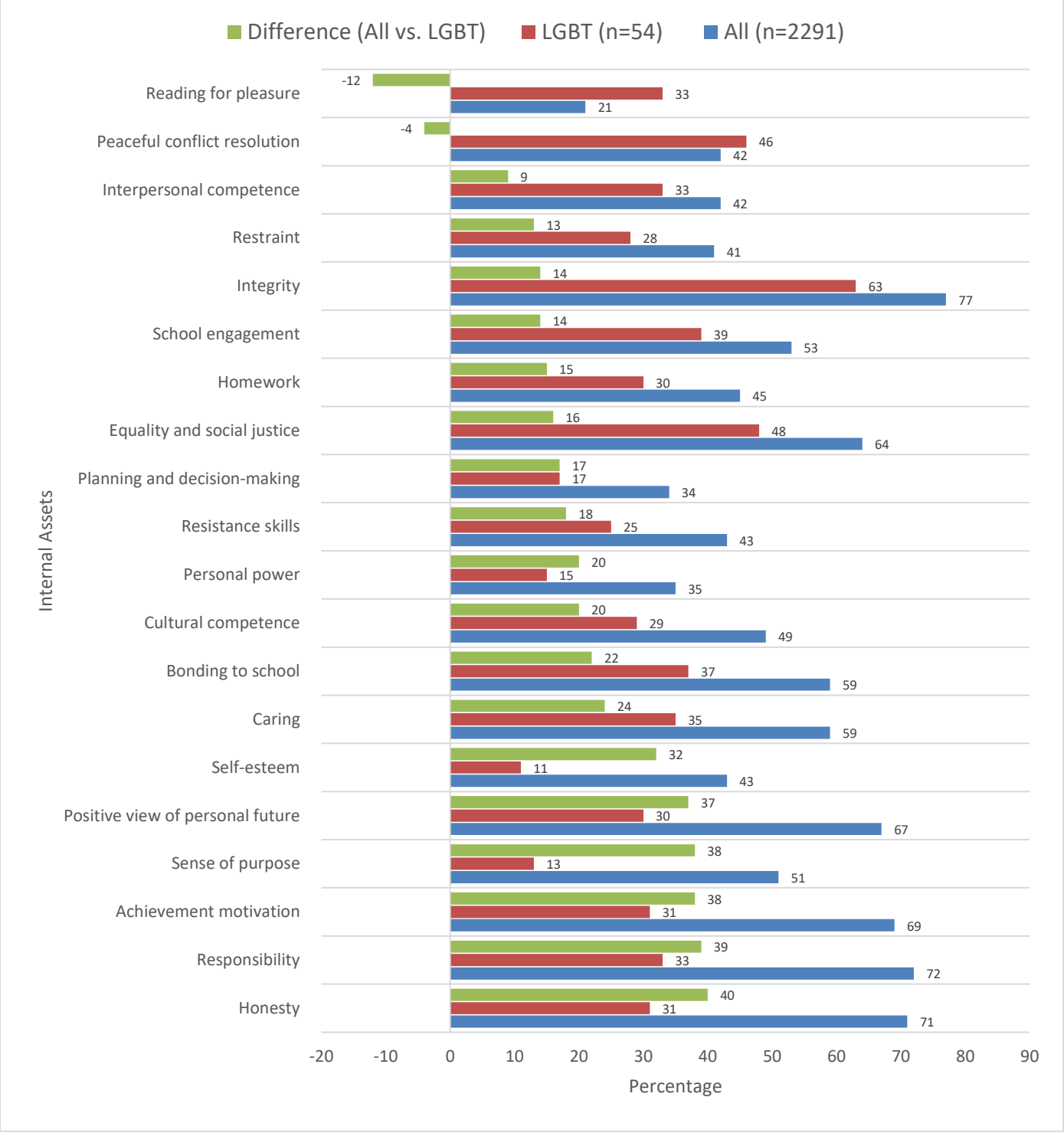


Table A.1 Percent Distribution of Race and Hispanic Ethnicity by Municipality in the Jurisdiction, 2010

Area	White	Black or African American	American Indian or Alaska Native	Asian (alone)	Native Hawaiian or other Pacific Islander	Other Race	Two or More Races	Hispanic or Latino (of any race)	Not Hispanic or Latino
City of Burlington	92.8	0.9	0.4	1.1	0.0	*3.4*	1.5	*8.58*	*91.42*
Town of Burlington	97.14	0.31	0.29	0.45	0.00	0.92	0.89	3.66	96.34
Village of Caledonia	93.71	3.26	*0.96*	0.54	0.02	0.84	0.67	3.55	96.45
Town of Dover	91.71	2.78	0.37	1.85	0.02	1.49	1.79	5.27	94.73
Village of Mt. Pleasant	85.98	6.69	0.22	*2.14*	0.02	2.94	2.02	8.3	91.7
Village of North Bay	94.19	2.90	*0.00*	1.24	0.00	0.83	0.83	6.64	93.36
Town of Norway	96.94	0.34	0.36	*0.44*	0.05	0.64	1.22	2.52	97.48
Town of Raymond	96.85	0.39	0.57	0.70	0.00	0.72	0.78	3.07	96.93
Village of Rochester	97.83	*0.16*	0.33	0.46	*0.14*	0.49	*0.60*	2.8	97.2
Village of Sturtevant	*78.8*	*15.9*	0.7	1.0	0.0	1.3	*2.2*	6.1	93.9
Village of Union Grove	96.6	0.5	0.3	0.6	0.0	0.5	1.5	3.2	96.8
Town of Waterford	*98.01*	0.24	0.19	0.52	0.06	*0.32*	0.66	*2.10*	*97.90*
Village of Waterford	97.0	0.4	0.2	0.7	0.0	0.6	1.0	3.0	97.0
Town of Yorkville	96.9	0.7	0.3	0.8	0.0	0.5	0.8	3.1	96.9

Table A.2 Age Distribution Percentage by Area and Age Group, 2016

Area	Age Group				
	0-19	*20-39*	*40-59*	*60-79*	*80+*
City of Burlington	27.60	24.20	28.30	14.60	5.30
Town of Burlington	25.60	19.90	34.00	17.20	3.40
Village of Caledonia	24.70	20.30	33.90	17.10	4.10
Town of Dover	22.30	20.60	38.10	13.70	5.30
Village of Mt. Pleasant	22.50	20.00	30.90	20.10	**6.60**
Village of North Bay	26.60	10.80	37.40	**22.00**	3.30
Town of Norway	26.10	18.80	**38.40**	14.40	2.20
Town of Raymond	26.50	17.00	36.80	17.10	2.70
Village of Rochester	26.40	20.20	36.80	14.00	2.40
Village of Sturtevant	20.00	**36.80**	30.10	10.80	2.30
Village of Union Grove	28.50	25.00	29.70	12.70	4.20
Town of Waterford	27.80	17.50	38.30	14.90	1.50
Village of Waterford	**29.10**	21.70	28.90	16.30	3.90
Town of Yorkville	25.90	16.50	37.30	17.30	3.00
CRCHD Jurisdiction	24.92	21.35	33.06	16.40	4.27
Racine County	27.22	24.07	30.03	14.71	3.97
Wisconsin	26.41	25.56	28.84	15.04	4.14

Table A.3 Estimated Household Income by Municipality in the Jurisdiction

Area	Household Income ($)
City of Burlington	52,822
Town of Burlington	62,233
Village of Caledonia	69,045
Town of Dover	77,067
Village of Mt. Pleasant	63,295
Village of North Bay	**94,792**
Town of Norway	84,842
Town of Raymond	67,438
Village of Rochester	62,865
Village of Sturtevant	62,973
Village of Union Grove	59,913
Town of Waterford	64,590
Village of Waterford	79,881
Town of Yorkville	73,966
CRCHD Jurisdiction	-
Racine County	55,584
Wisconsin	53,357

Table A.4 Estimated Level of Educational Attainment by Area, 2011-2015

	Less than 9th grade	9th to 12th grade, no diploma	High School Graduate	Some college, no degree	Associate's degree	Bachelor's degree	Graduate or Professional degree
City of Burlington	1.43	5.31	34.26	28.23	11.46	13.08	6.23
Town of Burlington	3.27	7.32	34.94	22.00	10.63	16.01	5.84
Village of Caledonia	2.29	3.80	29.79	24.17	10.00	18.45	11.51
Town of Dover	5.43	7.43	33.54	23.31	10.06	13.75	6.48
Village of Mt. Pleasant	2.04	5.04	26.32	23.59	9.46	20.71	12.84
Village of North Bay	0.55	1.09	15.30	9.84	7.65	36.07	29.51
Town of Norway	0.92	4.41	29.46	26.92	9.63	21.07	7.59
Town of Raymond	1.02	5.73	36.12	27.37	9.80	15.00	4.95
Village of Rochester	3.73	7.18	40.61	15.88	8.74	15.63	8.23
Village of Sturtevant	2.70	9.60	36.40	27.20	6.50	12.90	4.60
Village of Union Grove	4.76	3.13	30.84	34.13	10.33	11.96	4.85
Town of Waterford	2.30	4.46	30.91	20.98	9.58	22.39	9.38
Village of Waterford	2.85	5.31	35.88	22.11	11.16	15.15	7.55
Town of Yorkville	2.00	7.39	34.85	19.58	12.64	16.56	6.99
CRCHD Jurisdiction	2.38	5.30	31.24	24.42	9.85	17.63	9.18
Racine County	3.96	7.88	30.69	24.44	9.32	15.75	7.96
Wisconsin	3.12	5.85	32.00	21.12	10.08	18.43	9.39

Figure A.6 Estimated Level of Educational Attainment by Area, 2011-2015

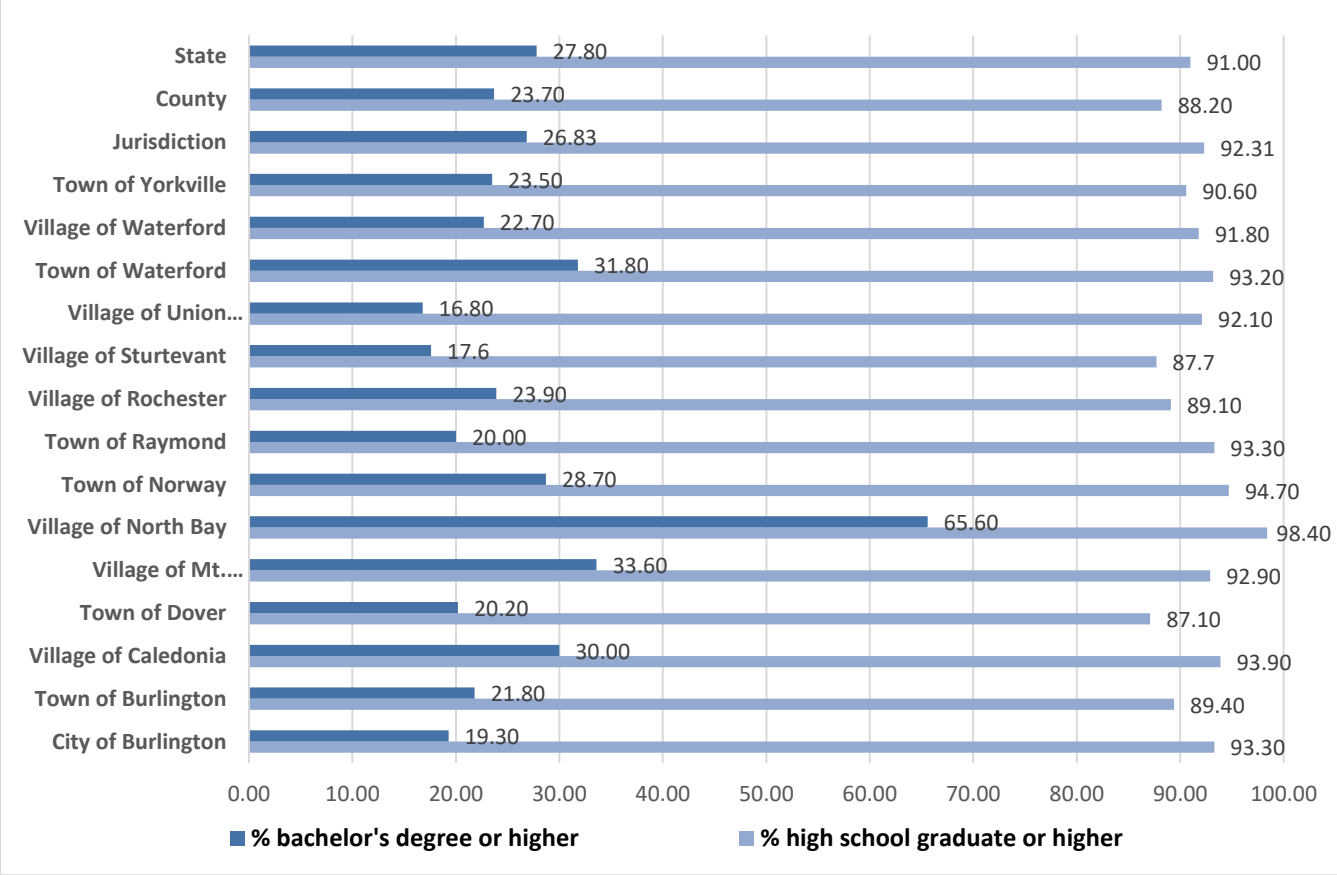


Figure A.7 Unemployment Estimates by Area, 2000-2015

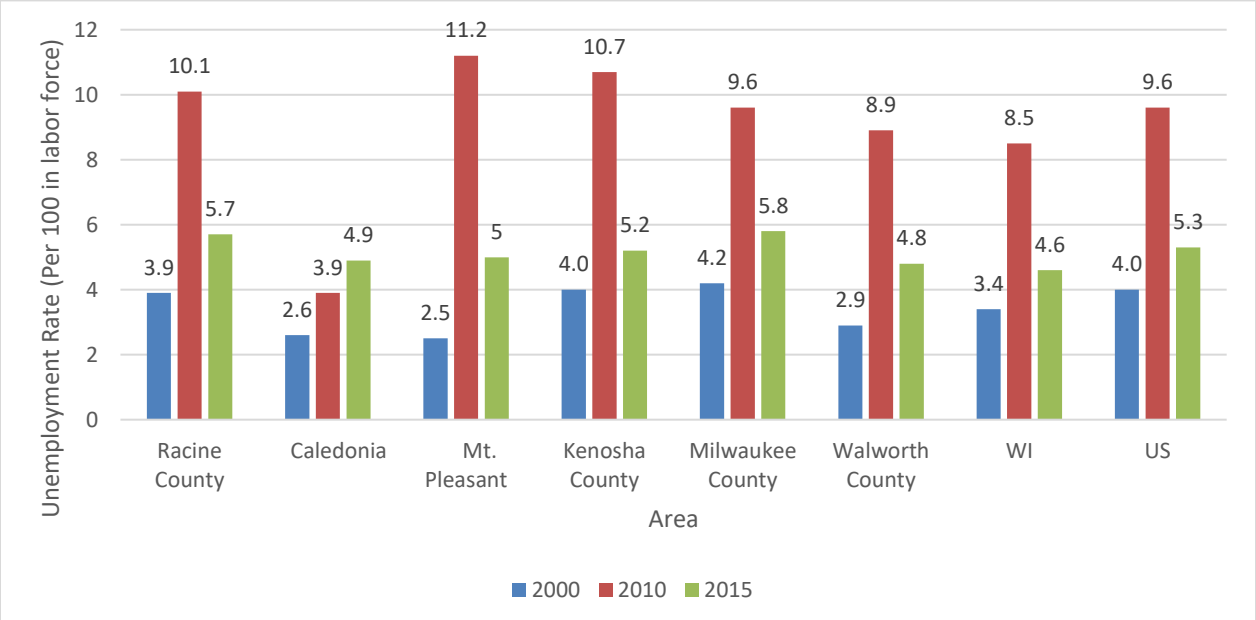
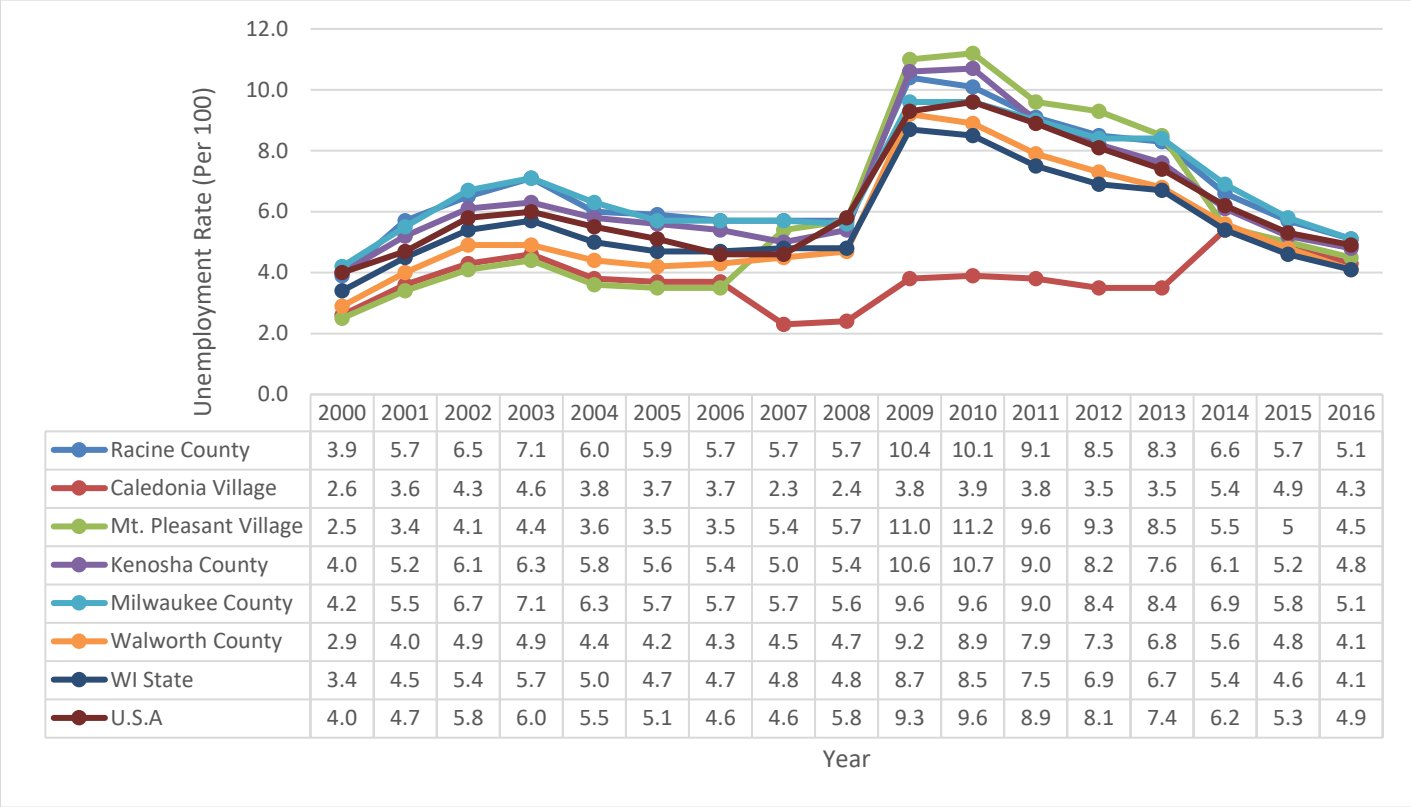


Figure A.8 Unemployment Estimates by Area, 2000-2015



	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Racine County	3.9	5.7	6.5	7.1	6.0	5.9	5.7	5.7	5.7	10.4	10.1	9.1	8.5	8.3	6.6	5.7	5.1
Caledonia Village	2.6	3.6	4.3	4.6	3.8	3.7	3.7	2.3	2.4	3.8	3.9	3.8	3.5	3.5	5.4	4.9	4.3
Mt. Pleasant Village	2.5	3.4	4.1	4.4	3.6	3.5	3.5	5.4	5.7	11.0	11.2	9.6	9.3	8.5	5.5	5	4.5
Kenosha County	4.0	5.2	6.1	6.3	5.8	5.6	5.4	5.0	5.4	10.6	10.7	9.0	8.2	7.6	6.1	5.2	4.8
Milwaukee County	4.2	5.5	6.7	7.1	6.3	5.7	5.7	5.7	5.6	9.6	9.6	9.0	8.4	8.4	6.9	5.8	5.1
Walworth County	2.9	4.0	4.9	4.9	4.4	4.2	4.3	4.5	4.7	9.2	8.9	7.9	7.3	6.8	5.6	4.8	4.1
WI State	3.4	4.5	5.4	5.7	5.0	4.7	4.7	4.8	4.8	8.7	8.5	7.5	6.9	6.7	5.4	4.6	4.1
U.S.A	4.0	4.7	5.8	6.0	5.5	5.1	4.6	4.6	5.8	9.3	9.6	8.9	8.1	7.4	6.2	5.3	4.9

Figure A.9 Percentage of Owner Occupied Homes by Area

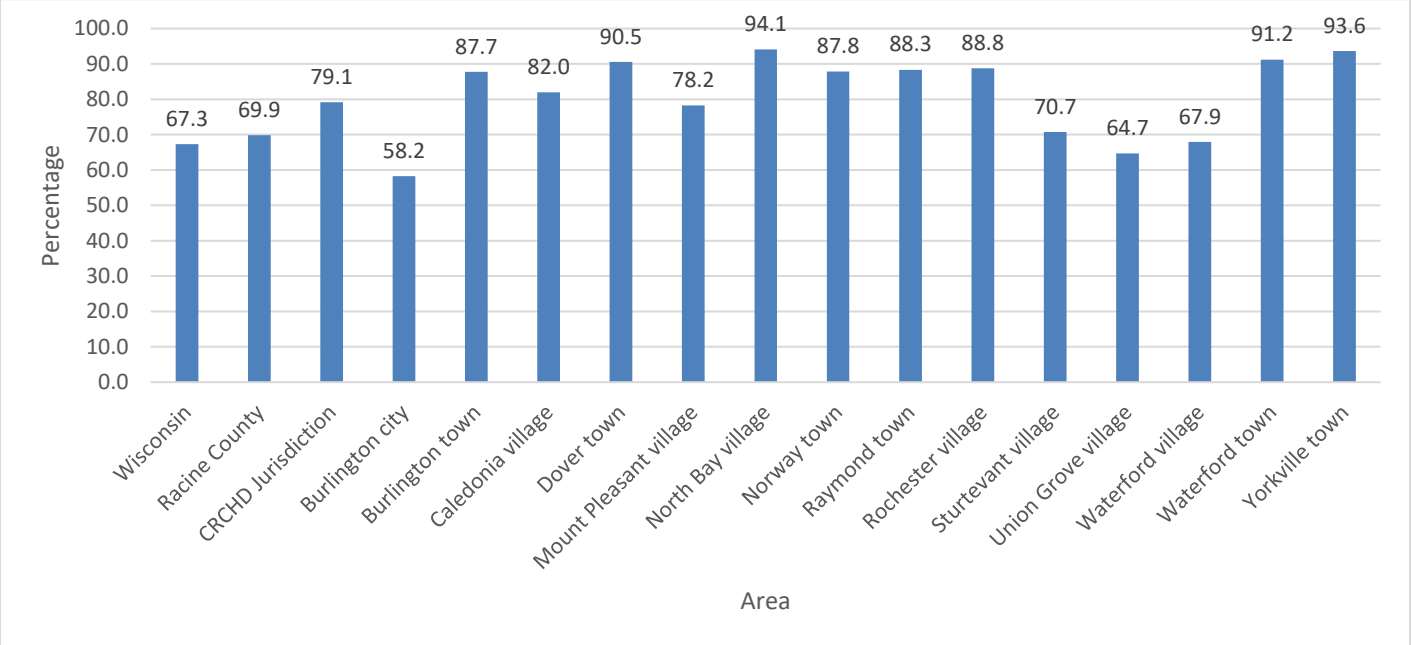


Figure A.10 Number and Rate of Violent Crimes in Racine County

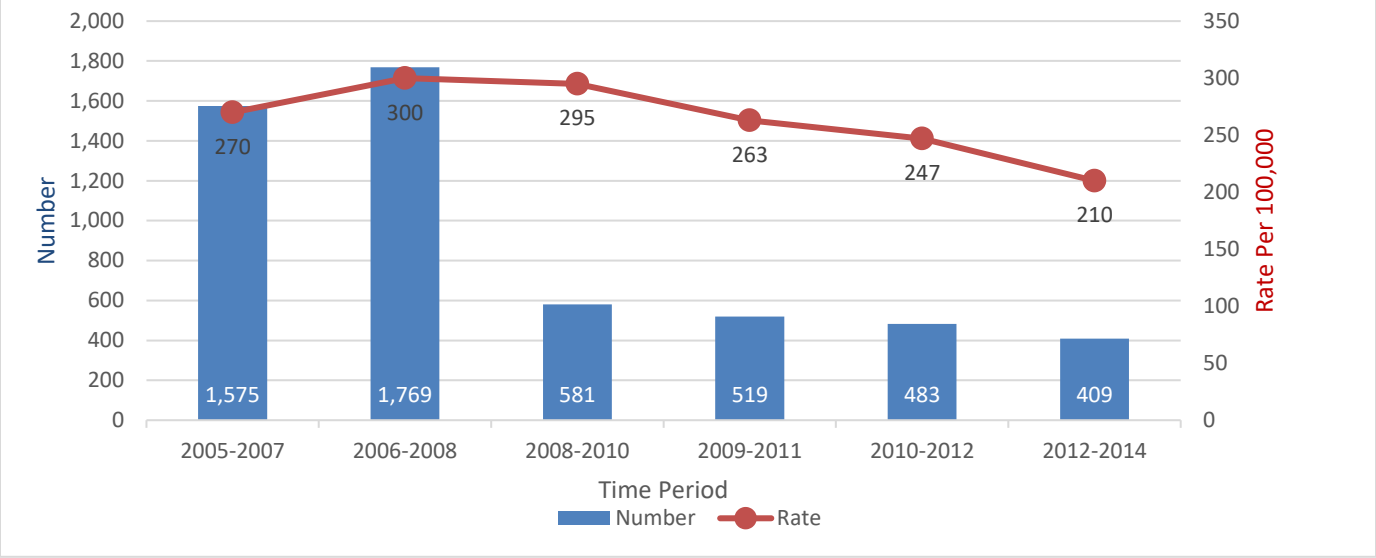


Figure A.11 Percentage of Native and Foreign Born Populations

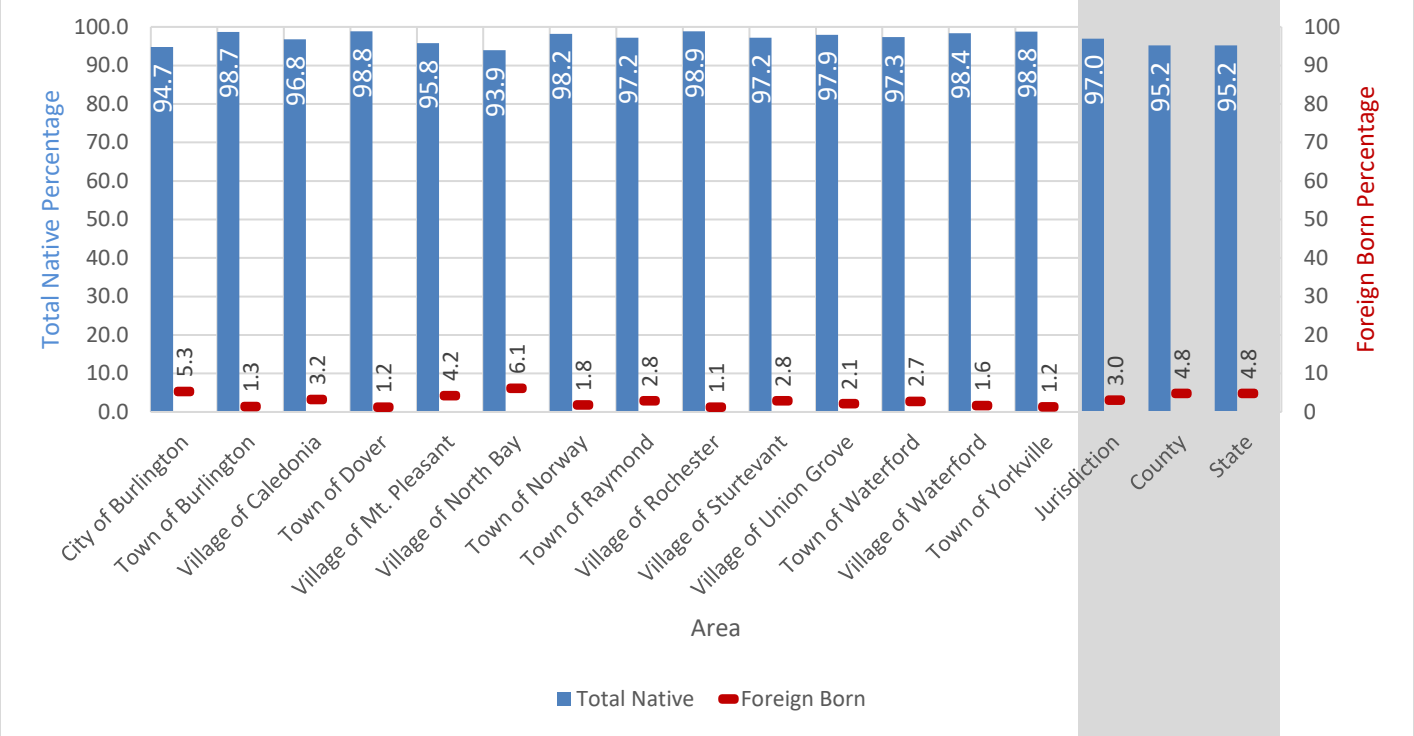


Figure A.12 Percentage of Language Spoken at Home by Area

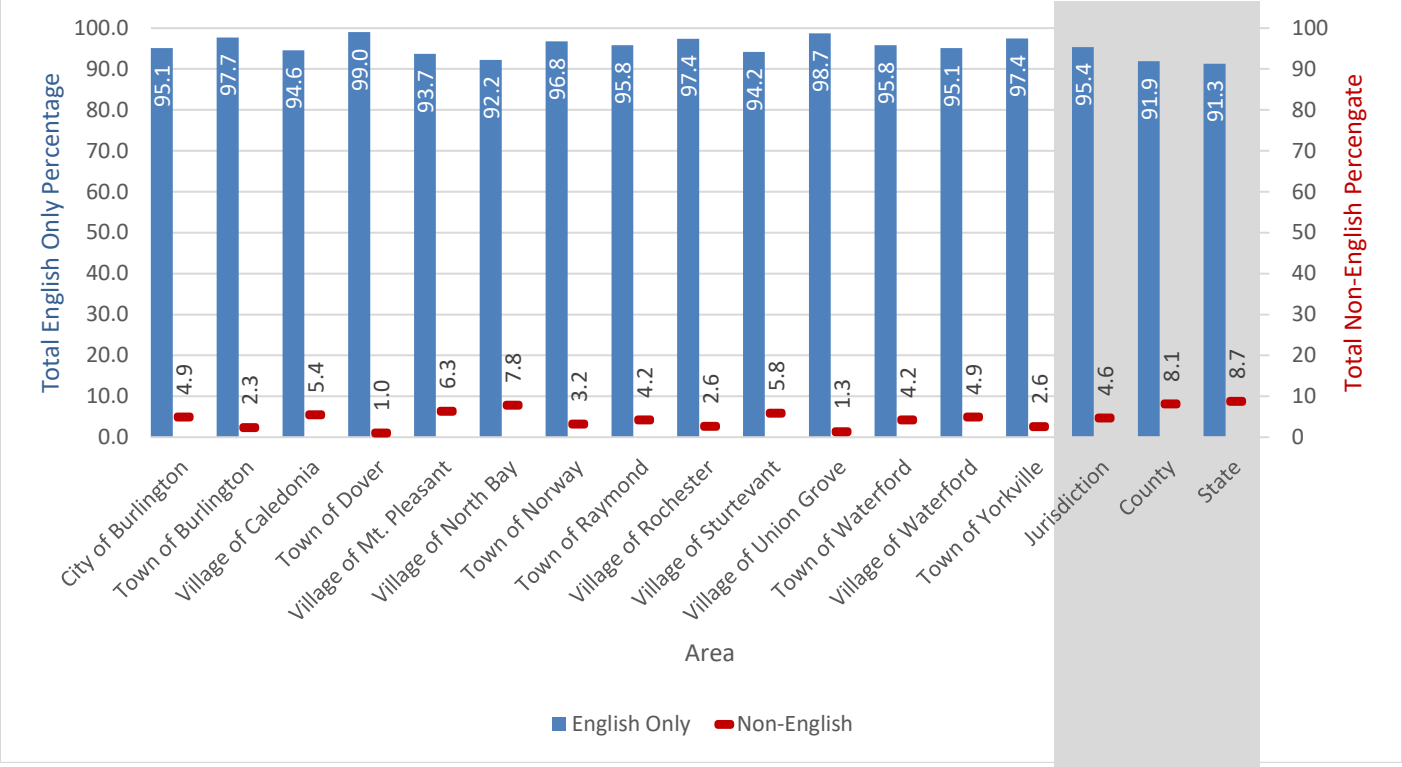
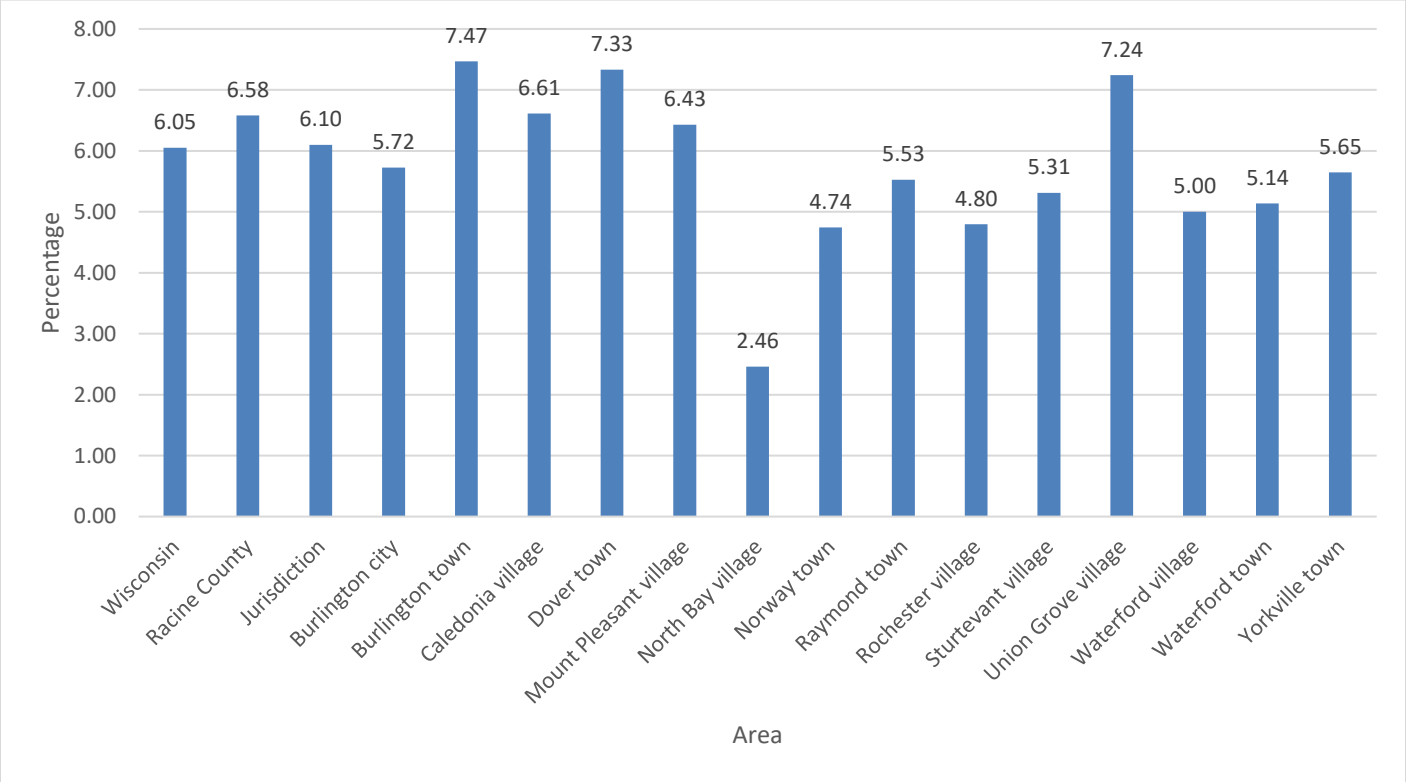
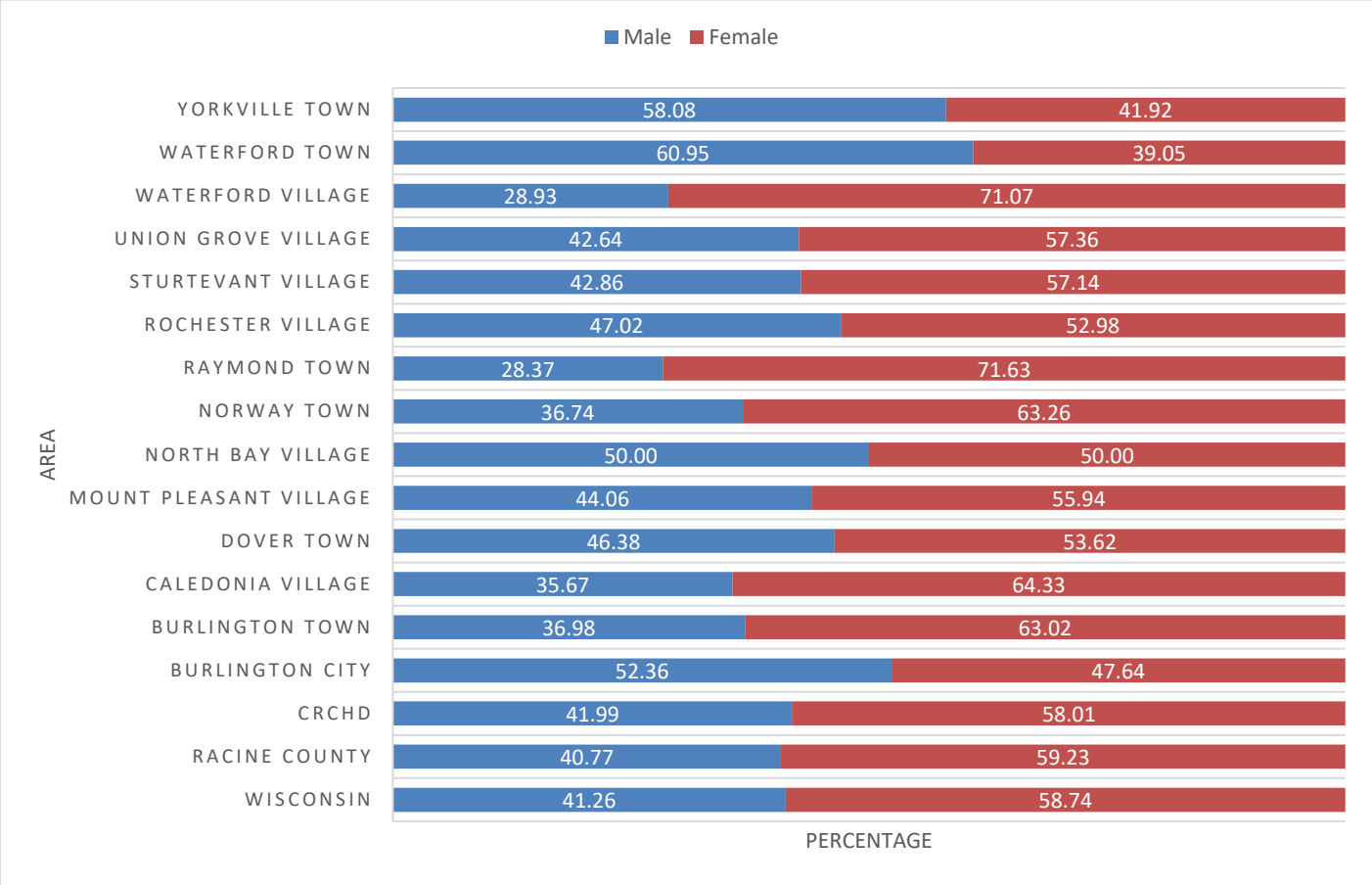


Figure A.13 Estimated Percentage of the Total Civilian Noninstitutionalized Population (≥5 Yrs) with an Ambulatory Difficulty* by Area



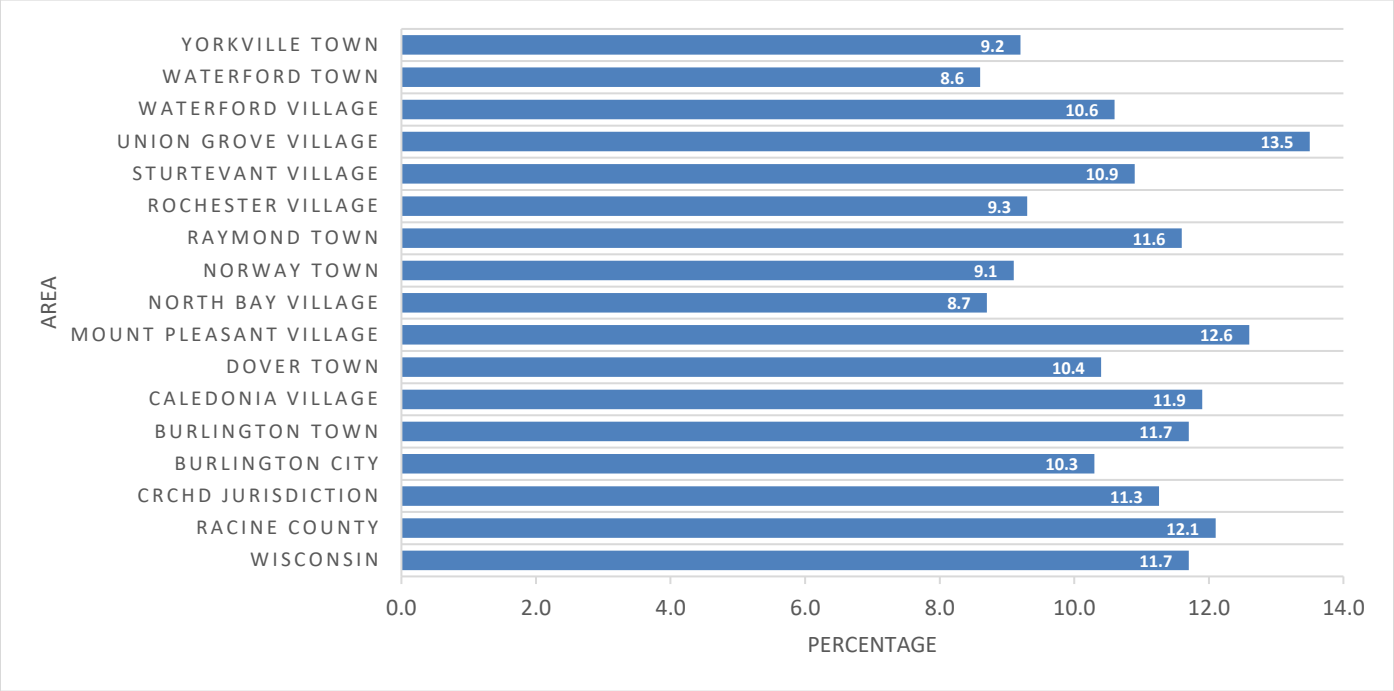
*Having serious difficulty walking or climbing stairs

Figure A.14 Estimated Percentage of the Total Civilian Noninstitutionalized Population (≥5 Yrs) with an Ambulatory Difficulty* by Gender and Area



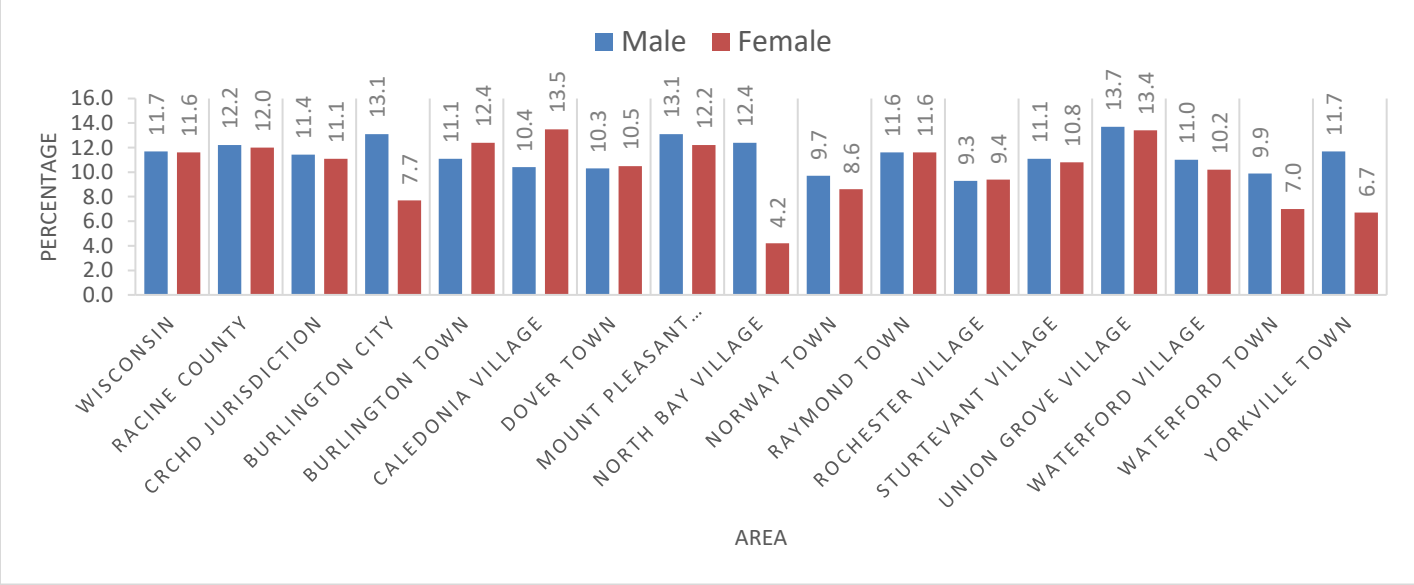
*Having serious difficulty walking or climbing stairs

Figure A.15 Estimated Percentage of the Total Noninstitutionalized Population with a Disability* by Area



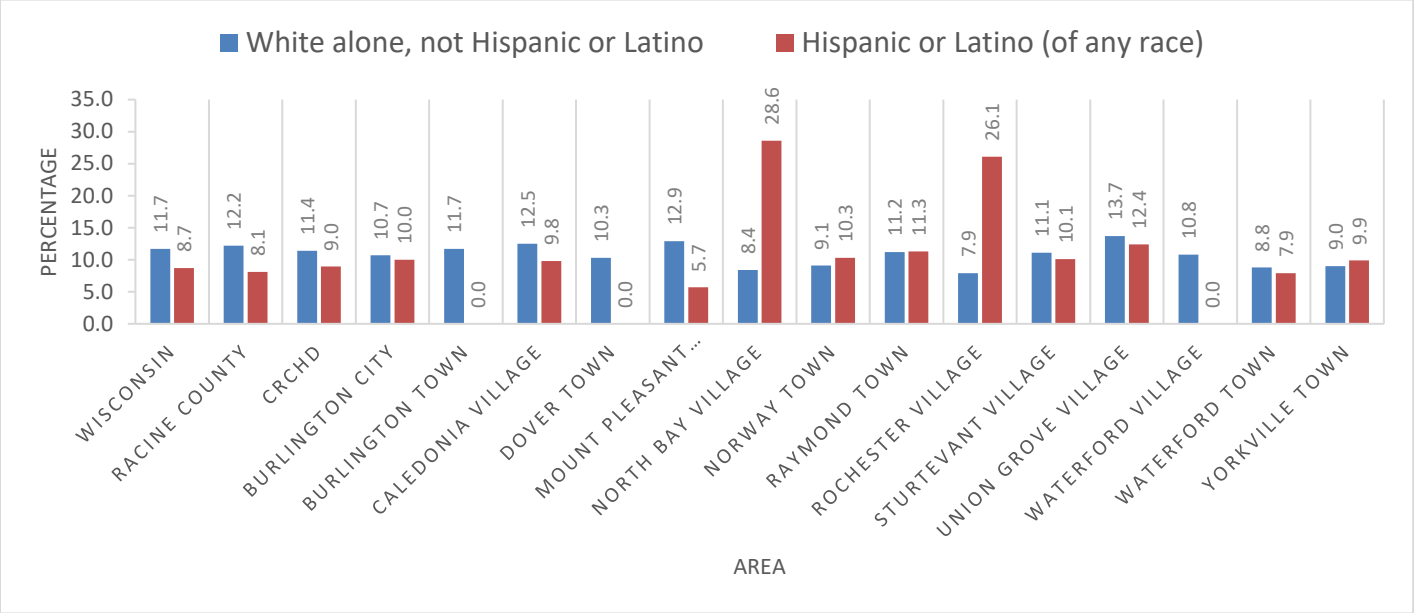
**Includes hearing, vision, cognitive, ambulatory, self-care, independent living difficulties*

Figure A.16 Estimated Percentage of the Total Noninstitutionalized Population with a Disability* by Gender and Area (2011-2015)



*Includes hearing, vision, cognitive, ambulatory, self-care, independent living difficulties

Figure A.17 Estimate Percentage of the Total Noninstitutionalized Population with a Disability* by Hispanic Ethnicity and Area (2011-2015)



*Includes hearing, vision, cognitive, ambulatory, self-care, independent living difficulties

Figure A.18 Number of Days Exceeding the Ozone Standard (3 Year Rolling Average)

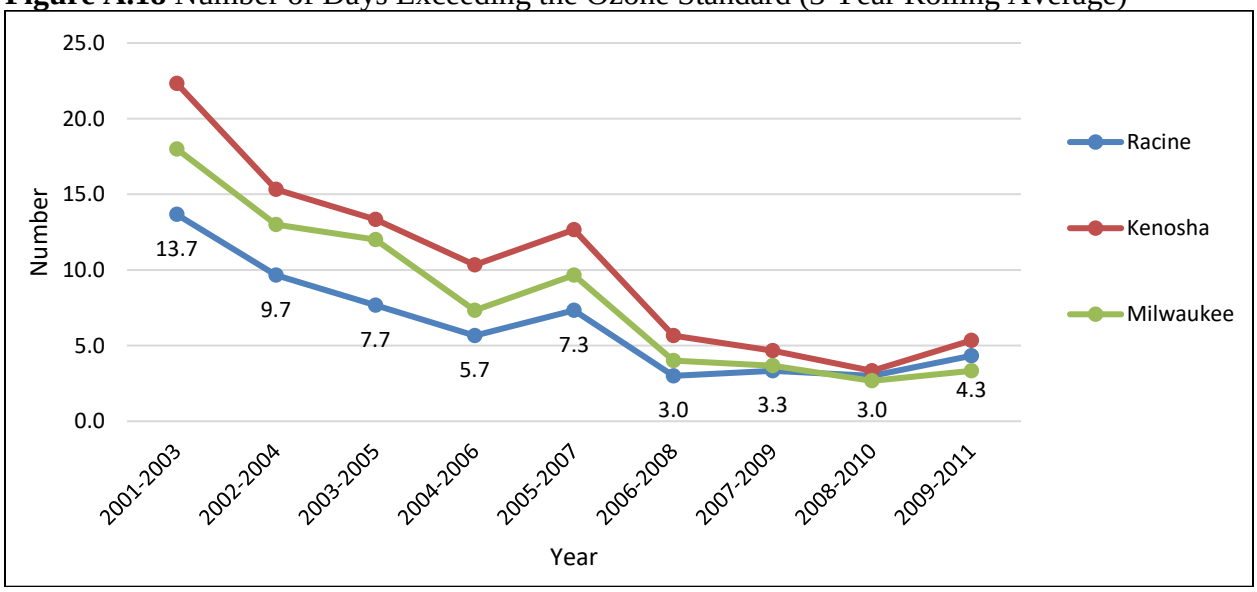
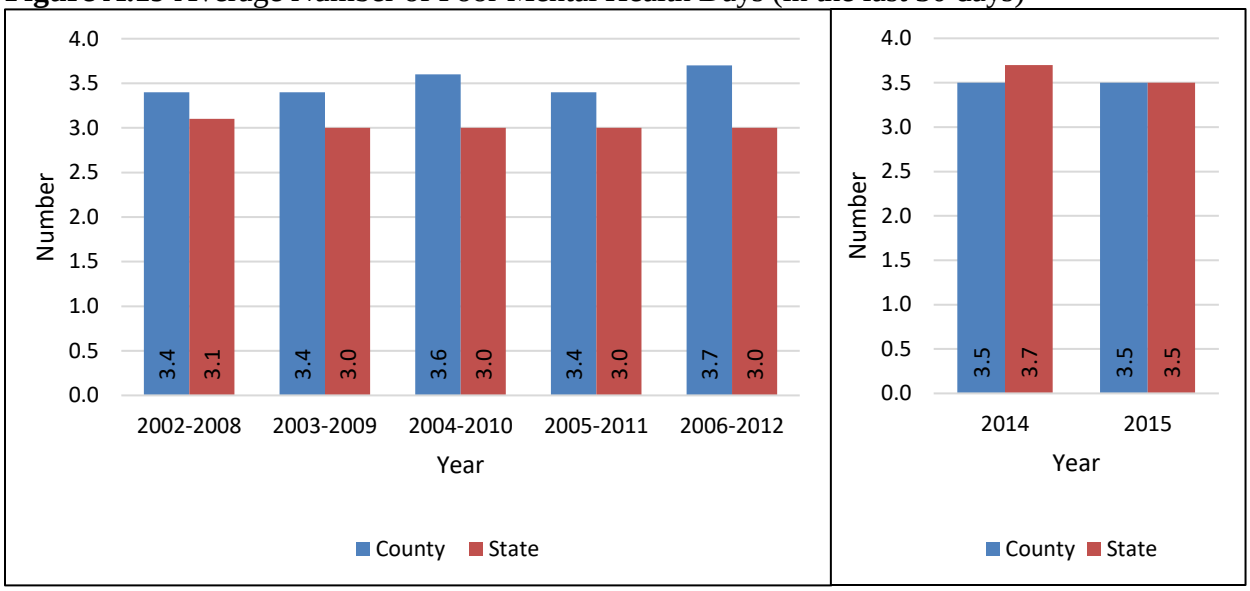


Figure A.19 Average Number of Poor Mental Health Days (in the last 30 days) *



*Prior to 2014 report year, up to 7 years of data were aggregated to produce county estimates. For 2014 and 2015 report year, the CDC produced single year estimates. There is no data on County Health Rankings for report year 2013.

Figure A.20 Maltreatment Allegation Substantiation, Neglect

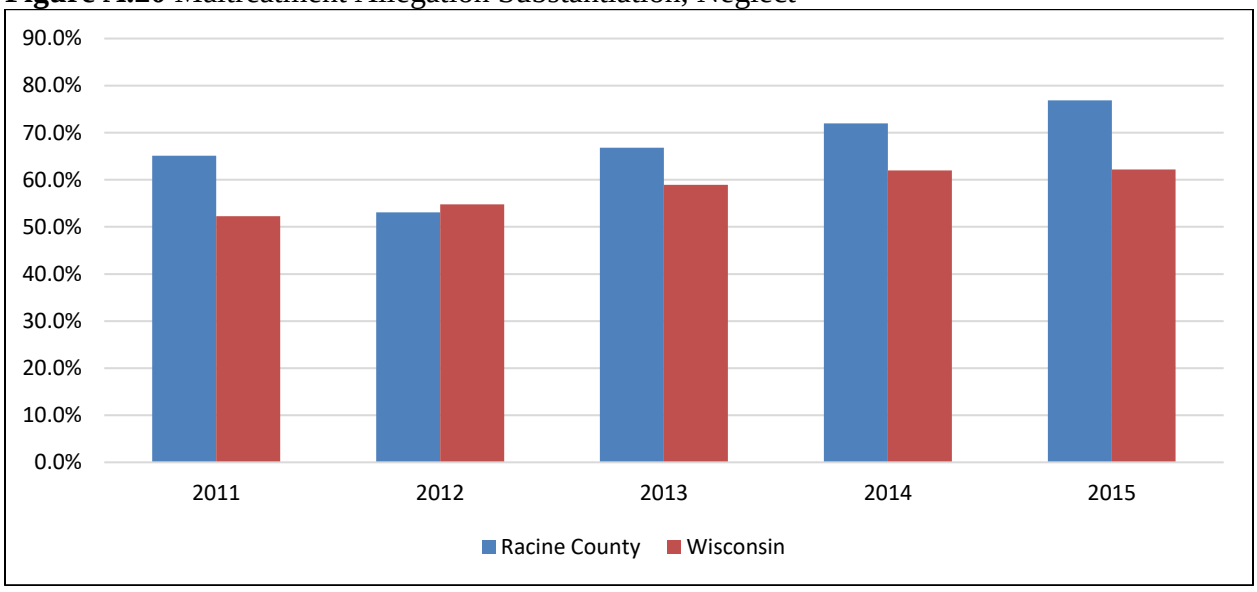


Figure A.21 Rate of Reported Induced Abortions per 1,000 Women Aged 15-44 (3 Year Rolling Average) *

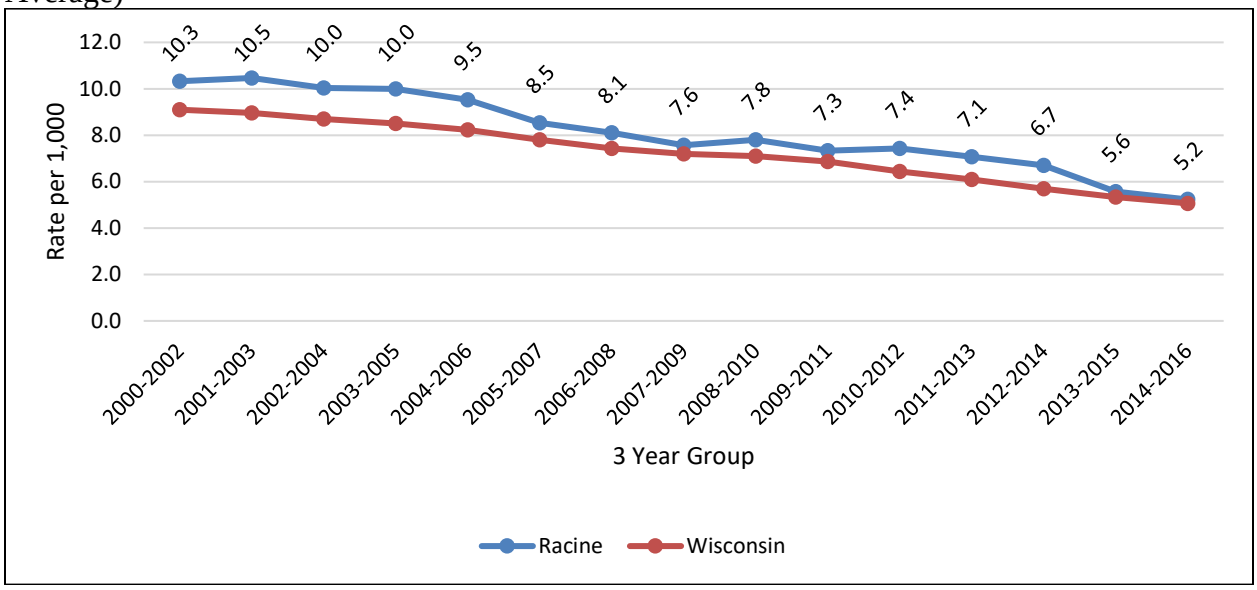


Table A.5 Fair or Poor Health by Demographic, CRCHD and Racine County

Demographic	Jurisdiction					County				
	2005	**2009**	**2012**	**2015**	**2017**	**2005**	**2009**	**2012**	**2015**	**2017**
Total	12%	10%	13%	18%	15%	16%	12%	15%	19%	18%
Gender										
Male	10%	9%	14%	20%	22%	16%	12%	14%	19%	20%
Female	14%	11%	12%	17%	9%	16%	13%	15%	19%	15%
Age										
18-34	9%	6%	12%	23%	20%	11%	6%	8%	14%	13%
35-44	9%	3%	8%	11%	6%	15%	10%	7%	17%	8%
45-54	9%	11%	12%	19%	11%	16%	17%	20%	25%	24%
55-64	16%	17%	15%	24%	19%	18%	18%	21%	26%	24%
65+	19%	20%	18%	12%	20%	22%	18%	20%	14%	21%
Education										
H.S. or less	16%	16%	19%	14%	26%	19%	15%	17%	18%	27%
Some post H.S	12%	11%	12%	20%	13%	20%	14%	15%	23%	17%
College graduate	8%	3%	8%	20%	9%	9%	6%	11%	14%	12%
Household income										
Bottom 40% Bracket	19%	22%	17%	29%	36%	23%	22%	25%	30%	38%
Middle 20% Bracket	7%	7%	15%	14%	5%	10%	6%	6%	13%	7%
Top 40% Bracket	7%	3%	10%	13%	6%	6%	4%	8%	10%	7%
Marital status										
Married	10%	9%	9%	16%	11%	12%	11%	11%	14%	11%
Not married	16%	11%	19%	22%	23%	21%	14%	19%	22%	29%
Overweight Status										
Not Overweight	10%	6%	11%	16%	7%	14%	8%	11%	19%	14%
Overweight	13%	12%	14%	17%	19%	17%	14%	16%	18%	19%
Physical Activity										
Inactive	-	21%	34%	45%	29%	-	24%	33%	42%	42%
Insufficient	-	11%	10%	15%	14%	-	12%	16%	14%	19%
Recommended	-	5%	10%	12%	14%	-	8%	8%	15%	11%
Smoking Status										
Nonsmoker	11%	9%	11%	15%	15%	15%	9%	13%	15%	16%
Smoker	14%	12%	21%	28%	18%	19%	21%	21%	30%	25%

Figure A.22 Age-Adjusted Mortality Rate per 100,000 Population: Cerebrovascular Disease Deaths (3 Year Rolling Average)

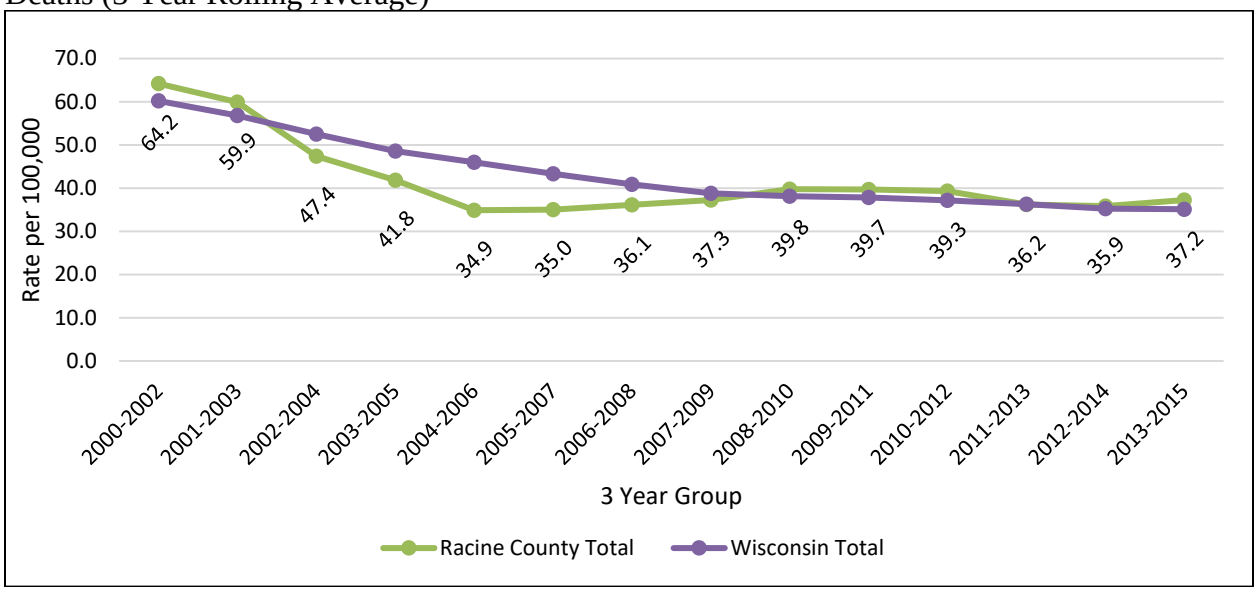


Figure A.23 Age-Adjusted Mortality Rate per 100,000 Population by Age: Unintentional Injury Deaths 3 Year Rolling Average)

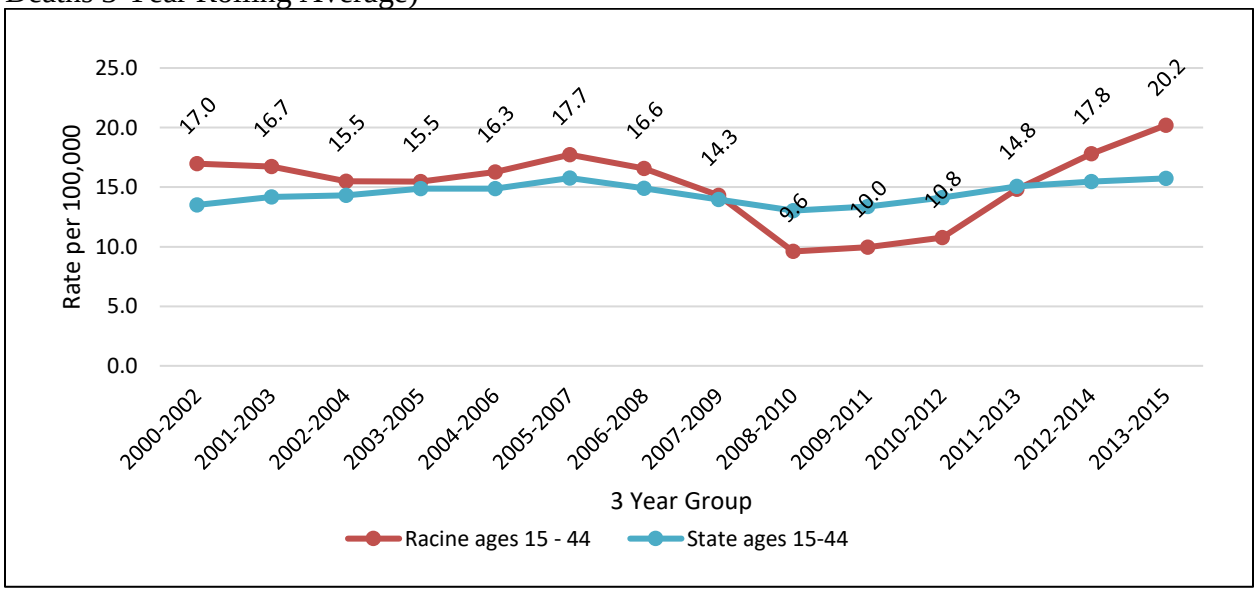


Figure A.24 Crash Count for Racine County (3 Year Rolling Average)

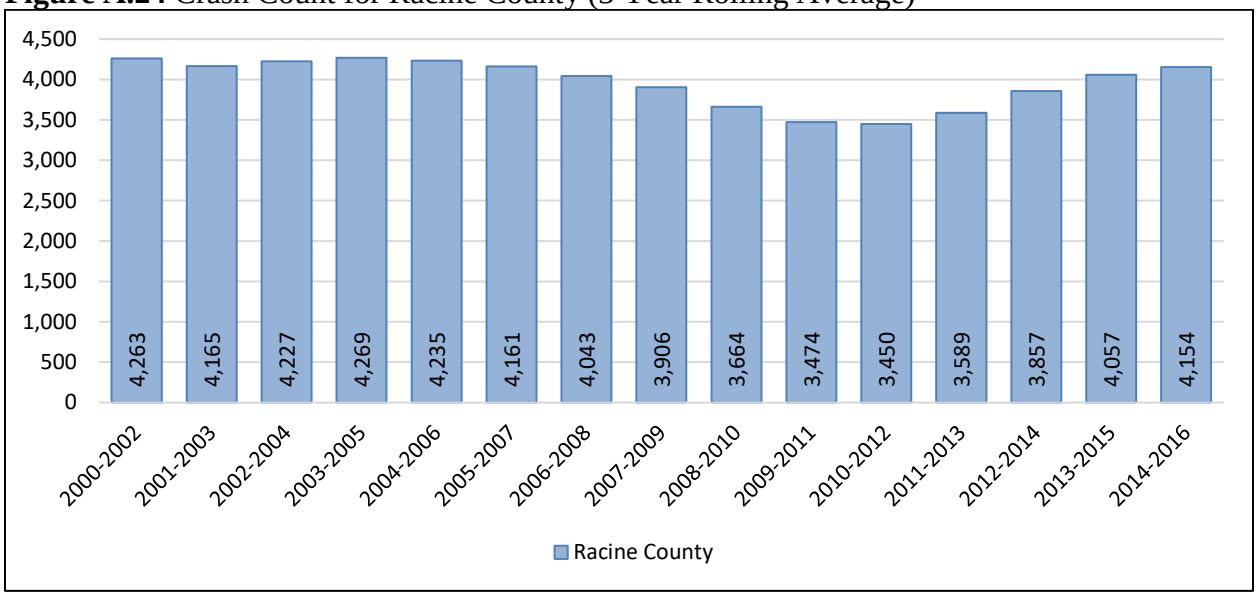


Figure A.25 Alcohol Related Crashes (3 Year Rolling Average)

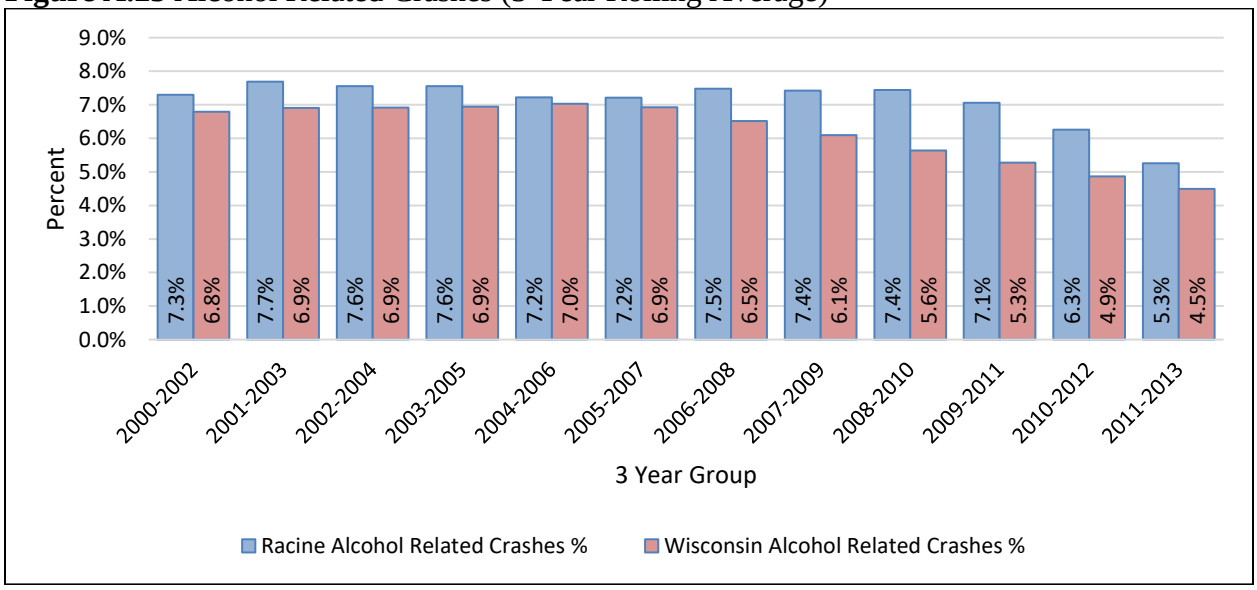


Figure A.26 Speed Related Crashes (3 Year Rolling Average)

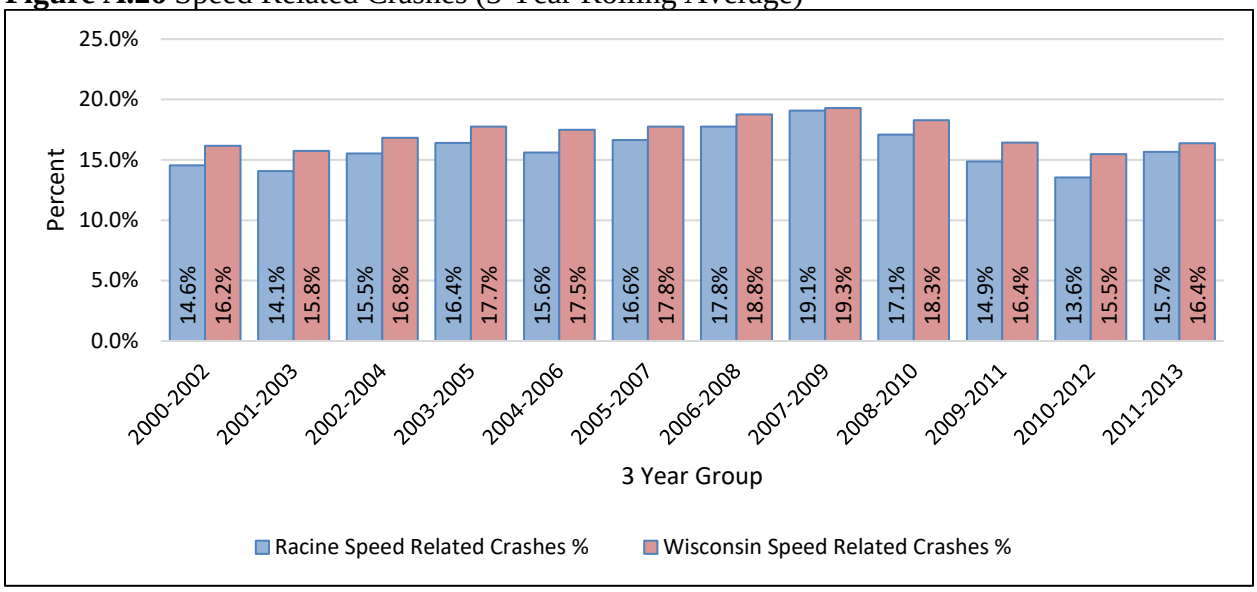
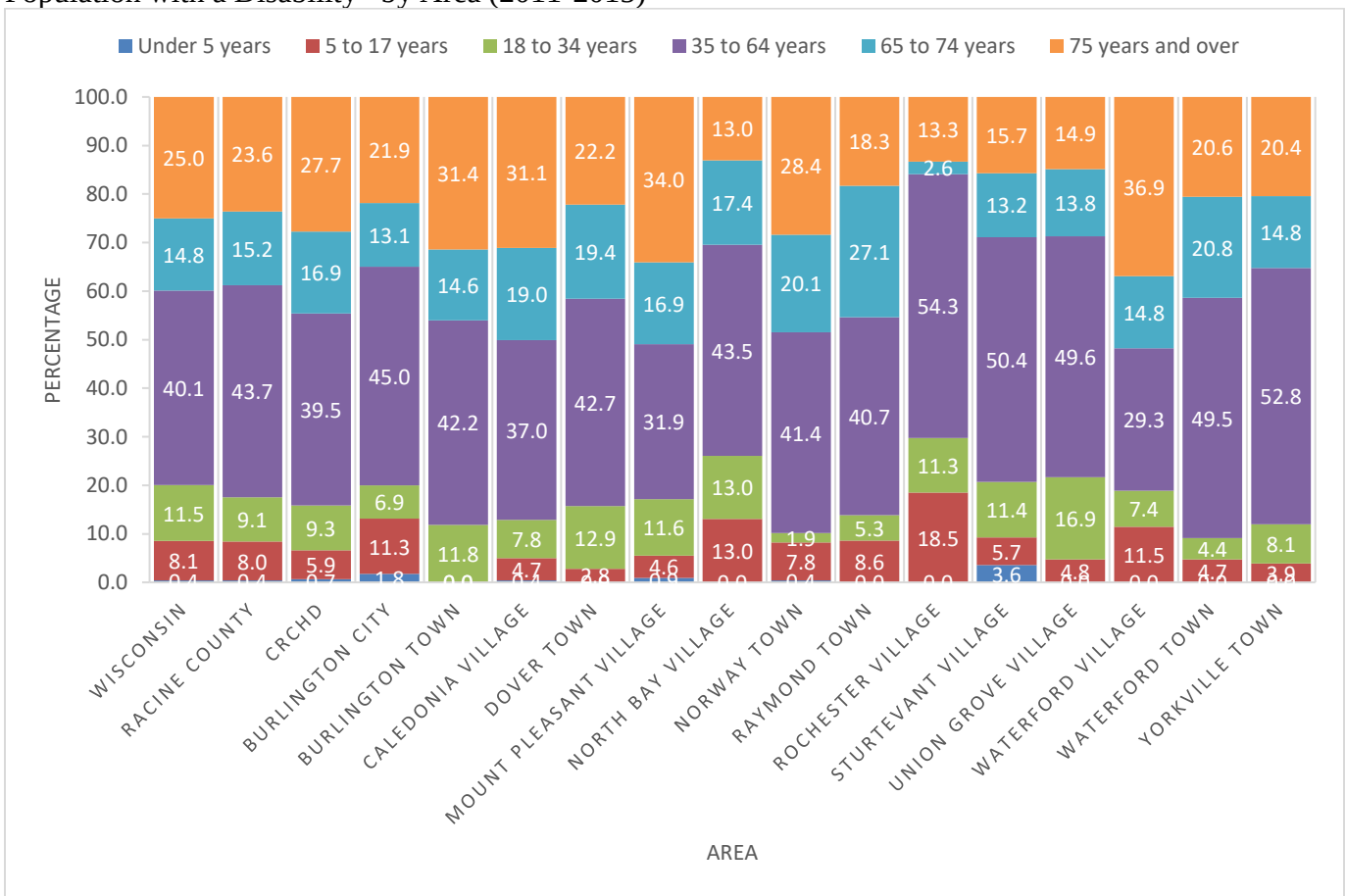


Figure A.27 Age Group Composition as a Percentage of the Civilian Noninstitutionalized Population with a Disability* by Area (2011-2015)



*Includes hearing, vision, cognitive, ambulatory, self-care, independent living difficulties

Table A.6 Median Household Income in the Past 12 Months (In 2015 Inflation-Adjusted Dollars) by Race/Ethnicity

Household Race/Ethnicity	County	State
Total	$55,584	$53,357
RACE		
White	**$60,923**	**$55,904**
Black or African American	$26,552	*$27,099*
American Indian or Alaska Native	$57,045	$37,492
Asian	$52,326	$57,785
Native Hawaiian or other Pacific Islander	-	$35,588
Other race	$36,538	$35,125
Two or more races	-	$40,881
ETHNICITY		
Hispanic or Latino (of any race)	$36,852	$37,766
White Alone , Not Hispanic or Latino	$62,368	$56,470

Table A.7 Ratio of Individuals Per Health Provider in Racine County and Wisconsin by Year

		2011	2012	2013	2014	2015	2016
Primary Care Physician	*Racine County*	1861:1	1838:1	1990:1	2076:1	-	-
	WI	1233:1	1215:1	1220:1	1240:1	-	-
Dentist	*Racine County*	-	1891:1	1773:1	1712:1	1726:1	-
	WI	-	1660:1	1631:1	1586:1	1563:1	-
Mental Health Provider	*Racine County*	-	-	-	1000:1	996:1	899:1
	WI	-	-	-	675:1	636:1	597:1

Figure A.28 Estimated Percentage of Uninsured by Area and Race and Ethnicity, 2015-2016

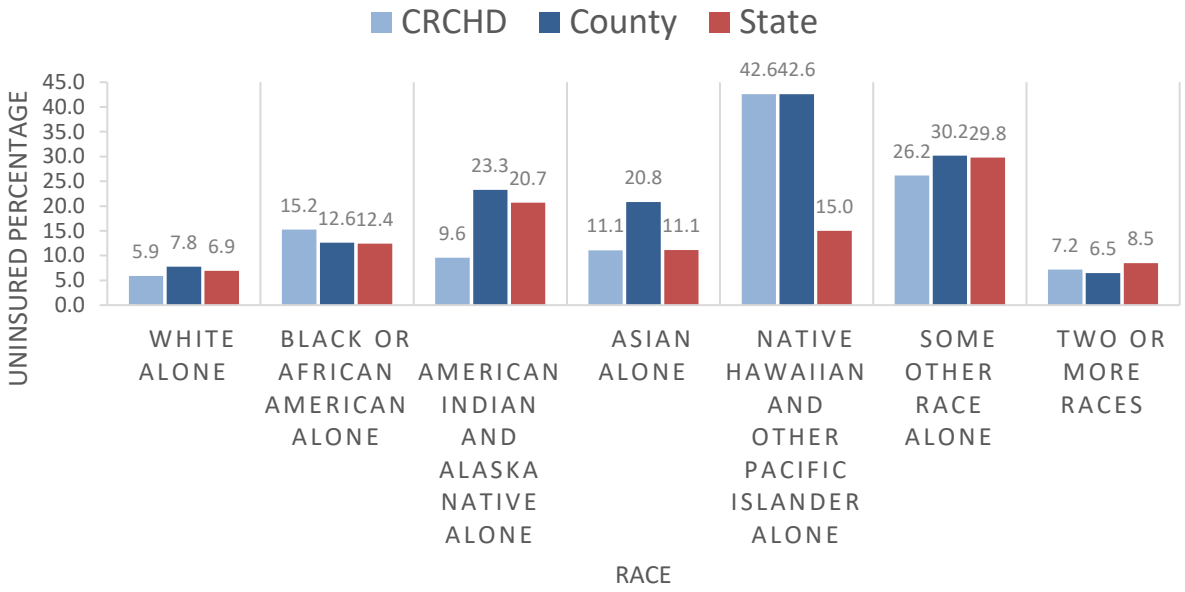


Figure A.29 Estimated Percentage of Uninsured by Area and Hispanic Ethnicity

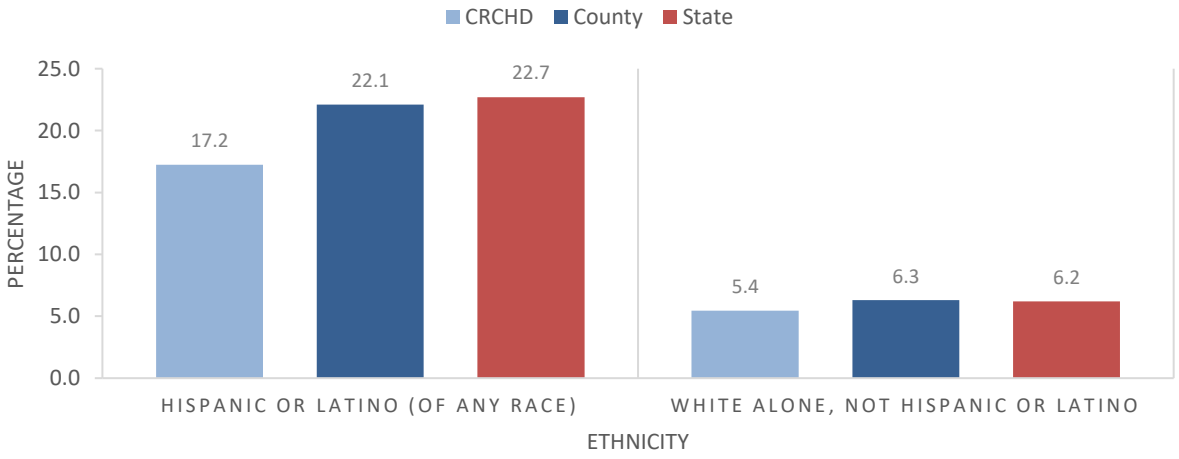
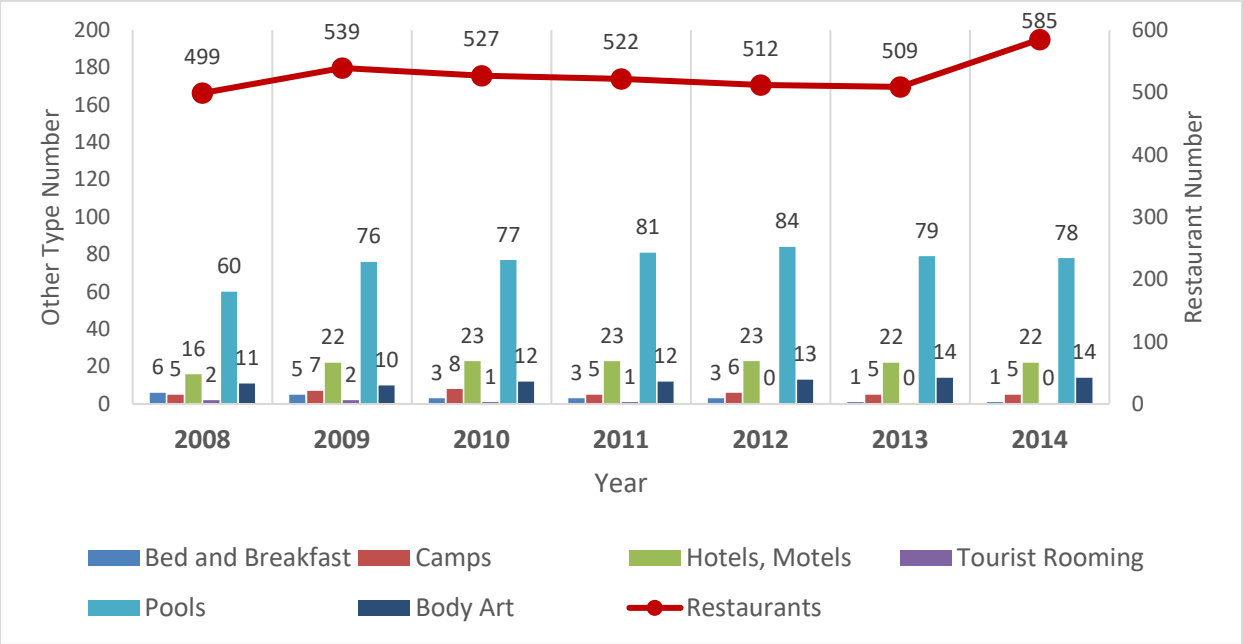
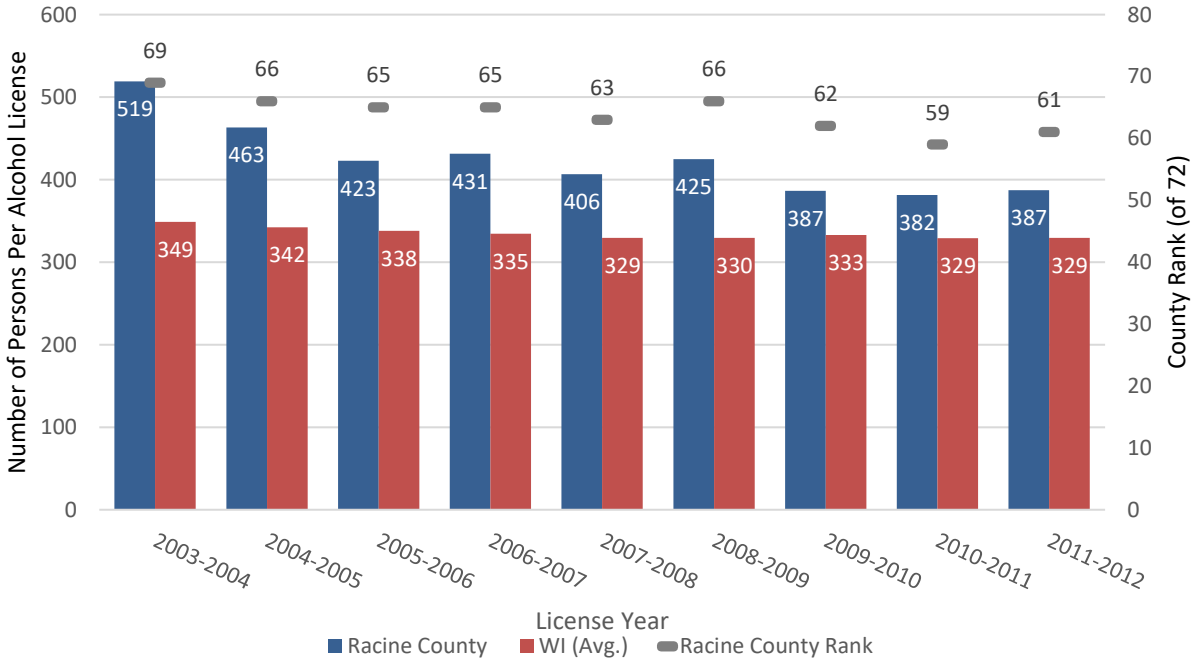


Figure A.30 Number of Licensed Establishments in Racine County



Source: WI DHS. 2008-2016. Public Health Profiles: Racine County and WI.

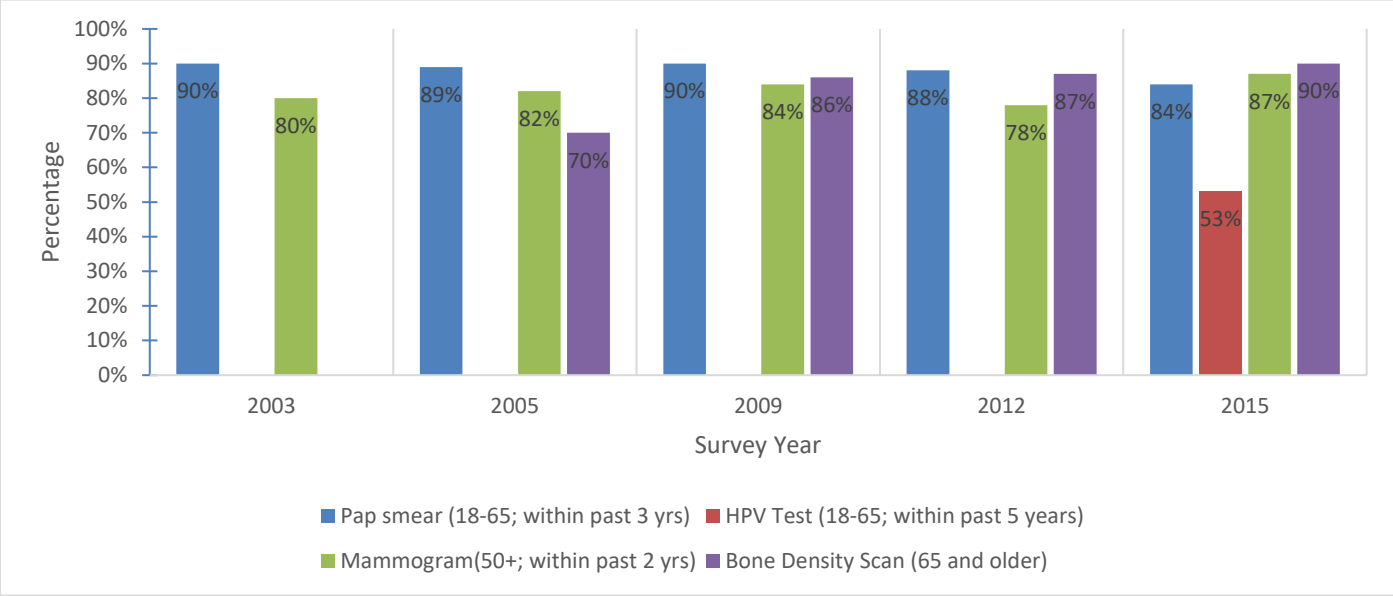
Figure A.31 Number and County Rank* for Persons Per Alcohol License Issued in Racine County



*County ranked #1 has the fewest people per license in the state (65.5). The county ranked #72 has the most people per license in the state (513.5)

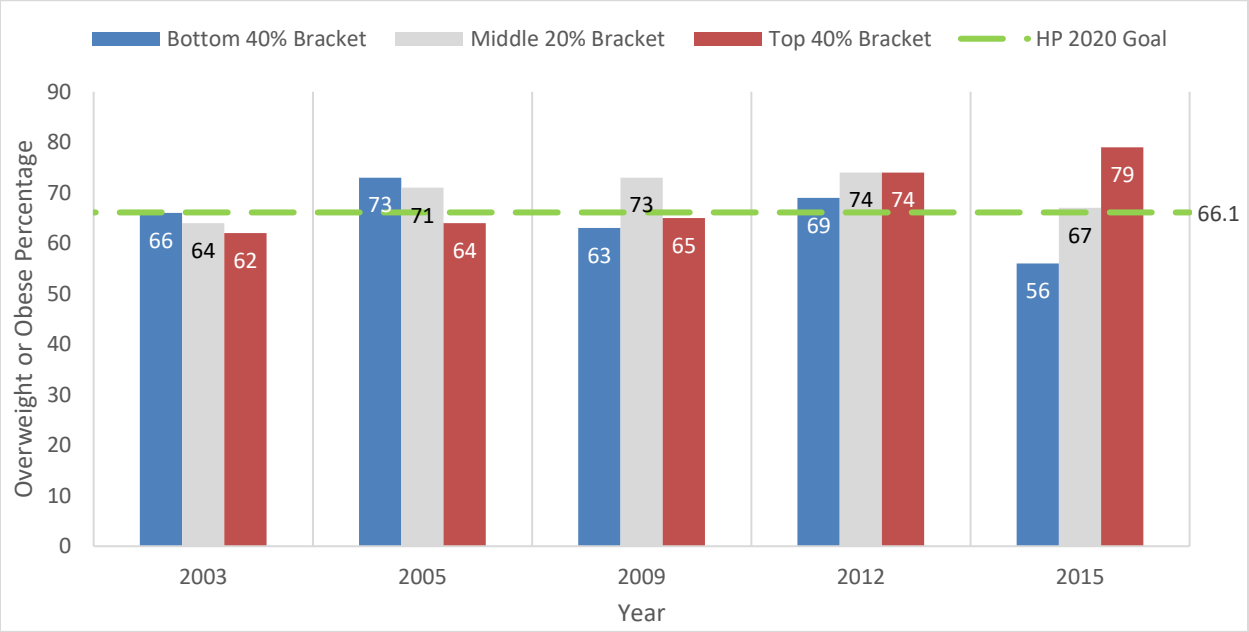
Source: Wisconsin Department of Health Services. County Alcohol Outlet Density Reports. Racine County (2012). Retrieved from: https://www.dhs.wisconsin.gov/publications/p0/p00778-racine.pdf

Figure A.32 Percentage of Surveyed Women in CRCHD Reporting Preventative Care Procedures



Source: Aurora Healthcare. 2015. Community Survey: Racine County. Retrieved from: https://ahc.aurorahealthcare.org/aboutus/community-benefits/community-health-research/index.asp

Figure A.33 Percentage of Surveyed CRCHD Respondents Reported as Overweight or Obese (BMI≥25) by Household Income and Year



Source: Aurora Healthcare. 2015. Community Health Survey: Central Racine County. Retrieved from: https://ahc.aurorahealthcare.org/aboutus/community-benefits/community-health-research/index.asp

Table A.8 Number and Percentage of Rabies Investigations by Year and Area

	2012		2013		2014		2015		2016	
Municipalities	**Total**	**%**	**Total**	**%**	**Total**	**%**	**Total**	**%**	**Total**	**%**
Mt. Pleasant	46	54.1%	29	34.9%	26	38.8%	37	19.4%	33	18.1%
Caledonia	29	34.1%	33	39.8%	31	46.3%	31	16.2%	29	15.9%
Sturtevant	10	11.8%	8	9.6%	9	13.4%	9	4.7%	5	2.7%
North Bay	0	0.0%	0	0.0%	1	1.5%	1	0.5%	0	0.0%
City of Burlington*	0	0.0%	0	0.0%	0	0.0%	34	17.8%	33	18.1%
Town of Burlington*	0	0.0%	0	0.0%	0	0.0%	15	7.9%	18	9.9%
Town of Waterford*	0	0.0%	7	8.4%	0	0.0%	11	5.8%	17	9.3%
Rochester*	0	0.0%	0	0.0%	0	0.0%	9	4.7%	11	6.0%
Village of Waterford*	0	0.0%	1	1.2%	0	0.0%	12	6.3%	11	6.0%
Union Grove*	0	0.0%	5	6.0%	0	0.0%	8	4.2%	8	4.4%
Dover*	0	0.0%	0	0.0%	0	0.0%	8	4.2%	7	3.8%
Raymond*	0	0.0%	0	0.0%	0	0.0%	4	2.1%	5	2.7%
Norway*	0	0.0%	0	0.0%	0	0.0%	9	4.7%	4	2.2%
Yorkville*	0	0.0%	0	0.0%	0	0.0%	3	1.6%	1	0.5%
Jurisdiction	85	+9% change	83	-2% change	67	-19% change	191	+185% change	182	-5% change

*New Municipalities added to Central Racine Jurisdiction

Figure A.34 Percentage of Surveyed Adults in the Jurisdiction Who Reported as Overweight or Obese (BMI≥25) by Education Level and Year

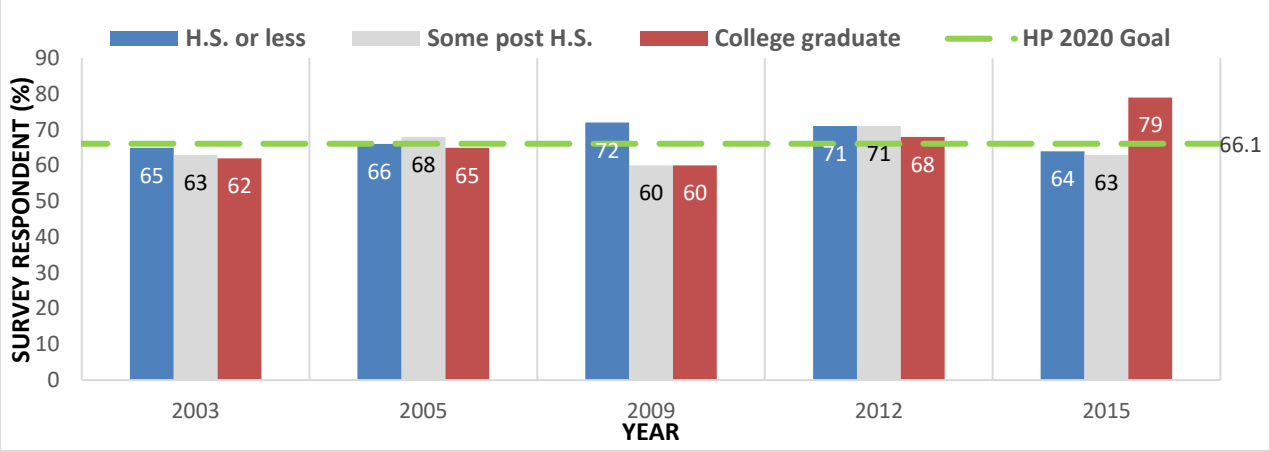
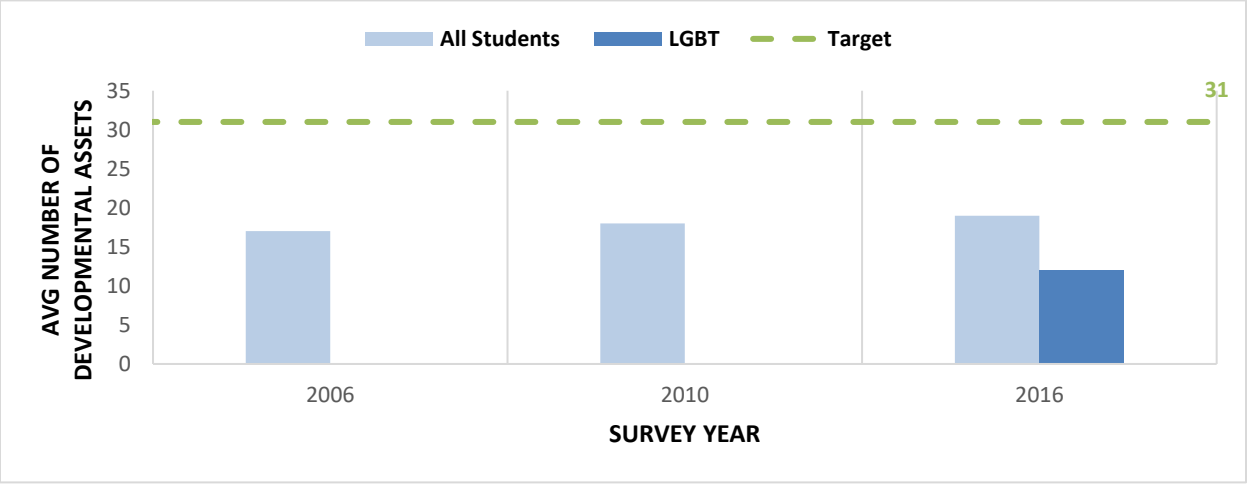


Figure A.35 Average Number of Developmental Assets for Racine County Students*, 2006-2016



*Not representative of all schools

Table A.36 Excellent or Very Good Health Status, CRCHD and Racine County

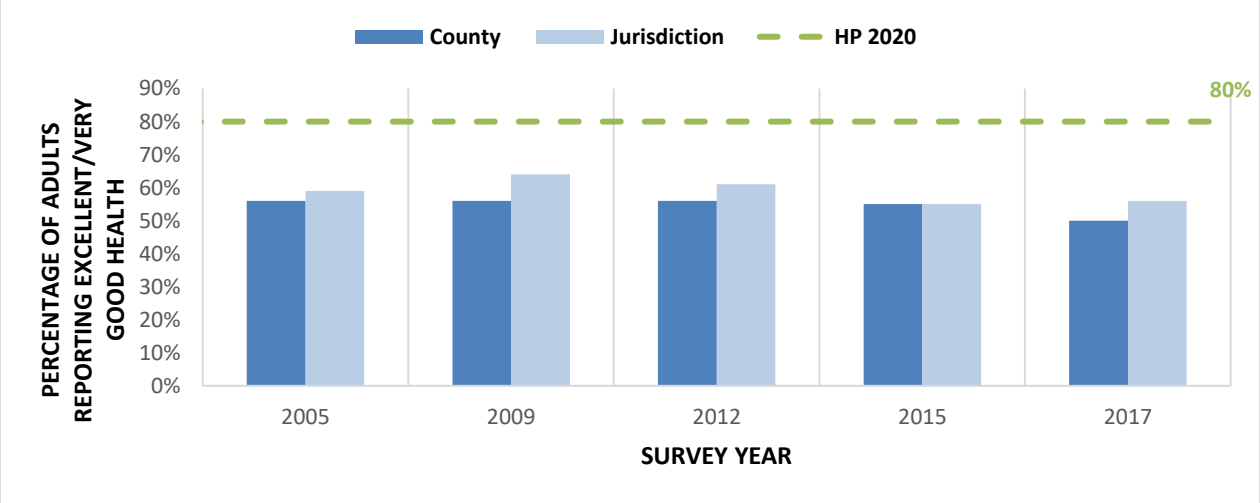


Table A.9 Percentage of Adults Reporting Seldom/Never Finding Purpose in Daily Life by Demographic Variables for Each Survey Year, CRCHD

	2005	2009	2012	2015	2017
TOTAL	3%	4%	4%	6%	6%
GENDER					
male	--	5	6	9	9
female	--	3	2	3	2
AGE					
18 to 34	--	1	4	9	8
35 to 44	--	3	3	4	0
45 to 54	--	7	3	8	8
55 to 64	--	4	3	1	7
65 and older	--	5	8	7	5
EDUCATION					
high school or less	--	6	6	4	7
some post high school	--	6	6	7	5
college graduate	--	1	1	7	5
HOUSEHOLD INCOME					
bottom 40 percent bracket	--	7	5	8	13
middle 20 percent bracket	--	10	5	3	2
top 40 percent bracket	--	<1	3	6	<1
MARITAL STATUS					
married	--	4	3	<1	3
not married	--	4	6	11	10

Table A.10 Percentage of Adults Reporting a Mental Health Condition by Demographic Variables for Each Survey Year, CRCHD

	2009	2012	2015	2017
TOTAL	12%	11%	21%	17%
GENDER				
male	8	8	16	10
female	15	14	26	23
AGE				
18 to 34	12	10	24	28
35 to 44	7	15	29	13
45 to 54	18	9	31	16
55 to 64	14	12	11	17
65 and older	7	9	8	11
EDUCATION				
high school or less	13	14	27	24
some post high school	13	12	17	23
college graduate	9	8	18	5
HOUSEHOLD INCOME				
bottom 40 percent bracket	18	17	30	41
middle 20 percent bracket	9	11	22	7
top 40 percent bracket	8	8	12	6
MARITAL STATUS				
married	8	8	15	13
not married	17	16	27	24

Table A.11 Percentage of Adults Reporting Having Considered Suicide in Past Year by Demographic Variables for Each Survey Year, CRCHD

	2005	2009	2012	2015	2017
TOTAL	3%	1%	3%	4%	5%
GENDER					
male	--	--	--	6	7
female	--	--	--	2	4
AGE					
18 to 34	--	--	--	3	13
35 to 44	--	--	--	0	1
45 to 54	--	--	--	12	7
55 to 64	--	--	--	3	4
65 and older	--	--	--	1	1
EDUCATION					
high school or less	--	--	--	4	11
some post high school	--	--	--	8	1
college graduate	--	--	--	0	5
HOUSEHOLD INCOME					
bottom 40 percent bracket	--	--	--	6	12
middle 20 percent bracket	--	--	--	5	0
top 40 percent bracket	--	--	--	3	1
MARITAL STATUS					
married	--	--	--	1	5
not married	--	--	--	7	6

Figure A.37 Rate of ED Visits for Suicide/Self-Inflicted Injuries (Per 100,000), CRCHD

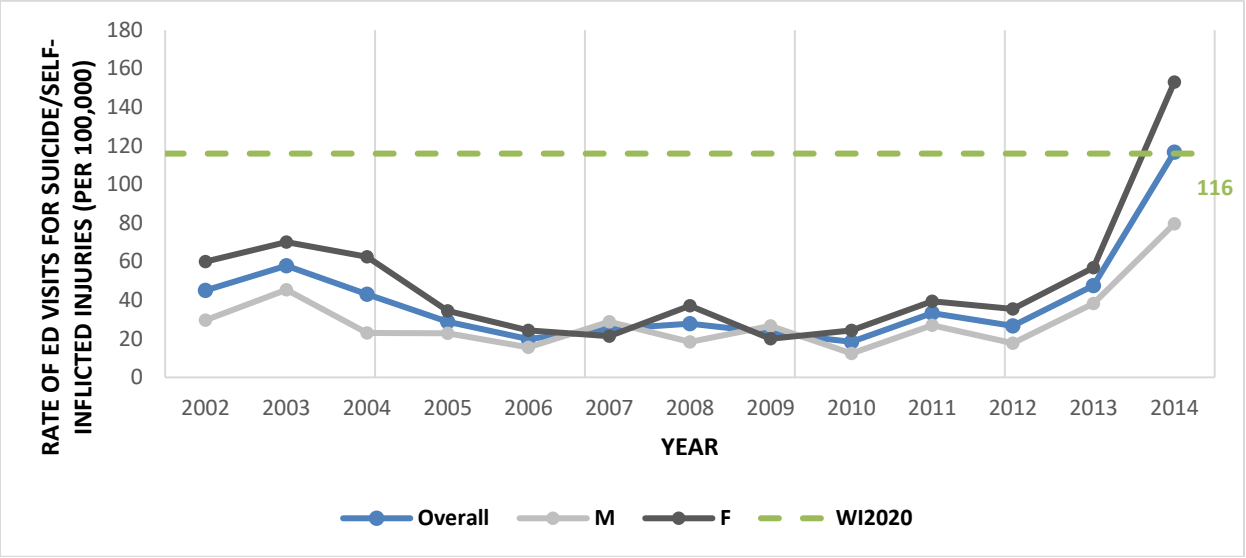


Table A.12 Percentage of Adults Reporting Moderate or Vigorous Physical Activity by Demographic Variables for Each Survey Year, CRCHD

	2009	2012	2015	2017
TOTAL	40%	47%	41%	57%
GENDER				
male	42	49	38	59
female	38	45	44	55
AGE				
18 to 34	45	55	36	64
35 to 44	41	49	50	57
45 to 54	40	48	41	57
55 to 64	42	46	45	51
65 and older	29	36	36	49
EDUCATION				
high school or less	37	47	42	56
some post high school	41	44	42	58
college graduate	42	50	40	56
HOUSEHOLD INCOME				
bottom 40 percent bracket	30	42	48	55
middle 20 percent bracket	45	43	30	44
top 40 percent bracket	42	53	42	59
MARITAL STATUS				
married	41	48	44	58
not married	39	47	38	55
OVERWEIGHT STATUS				
not overweight	44	55	50	72
overweight	38	44	39	53

Table A.13 Percentage of Adults Reporting Consumption of Five or More Servings of Fruit or Vegetables on Average Day by Demographic Variables for Each Survey Year, CRCHD

	2005	2009	2012	2015	2017
TOTAL	38%	36%	37%	39%	38%
GENDER					
male	29	27	26	32	29
female	46	44	48	45	48
AGE					
18 to 34	34	43	31	43	40
35 to 44	38	35	40	40	49
45 to 54	40	37	37	33	40
55 to 64	36	25	41	42	31
65 and older	45	32	40	35	26
EDUCATION					
high school or less	30	22	27	34	24
some post high school	37	35	33	27	29
college graduate	47	48	50	57	56
HOUSEHOLD INCOME					
bottom 40 percent bracket	36	23	33	32	30
middle 20 percent bracket	38	40	38	41	42
top 40 percent bracket	40	43	40	43	40
MARITAL STATUS					
married	40	38	41	42	43
not married	36	32	31	35	30
OVERWEIGHT STATUS					
not overweight	45	32	42	30	45
overweight	35	38	35	44	35
PHYSICAL ACTIVITY					
inactive	--	31	23	28	17
insufficient	--	33	34	40	28
recommended	--	41	43	41	48

Table A.14 Percentage of Adults Reporting Consumption of Five or More Servings of Fruit or Vegetables on Average Day by Demographic Variables for Each Survey Year, Racine County

	2005	2009	2012	2015	2017
TOTAL	38%	36%	34%	39%	35%
GENDER					
male	34	28	24	33	25
female	42	44	43	45	45
AGE					
18 to 34	35	41	34	50	34
35 to 44	42	33	39	37	46
45 to 54	42	40	31	33	33
55 to 64	32	26	34	37	36
65 and older	37	34	33	33	27
EDUCATION					
high school or less	30	26	24	29	22
some post high school	36	36	35	37	27
college graduate	51	50	48	55	52
HOUSEHOLD INCOME					
bottom 40 percent bracket	35	30	29	33	31
middle 20 percent bracket	36	39	37	45	30
top 40 percent bracket	45	42	41	43	42
MARITAL STATUS					
married	39	41	38	41	37
not married	37	31	30	38	33
OVERWEIGHT STATUS					
not overweight	40	32	41	39	39
overweight	37	39	31	40	33
PHYSICAL ACTIVITY					
inactive	--	31	17	27	23
insufficient	--	35	27	41	25
recommended	--	40	44	41	45

Figure A.38 Percentage of Children Reported Having Five or More Servings of Fruits or Vegetables by Demographic Variables for Each Survey Year (Children 5 to 17 Years Old), CRCHD

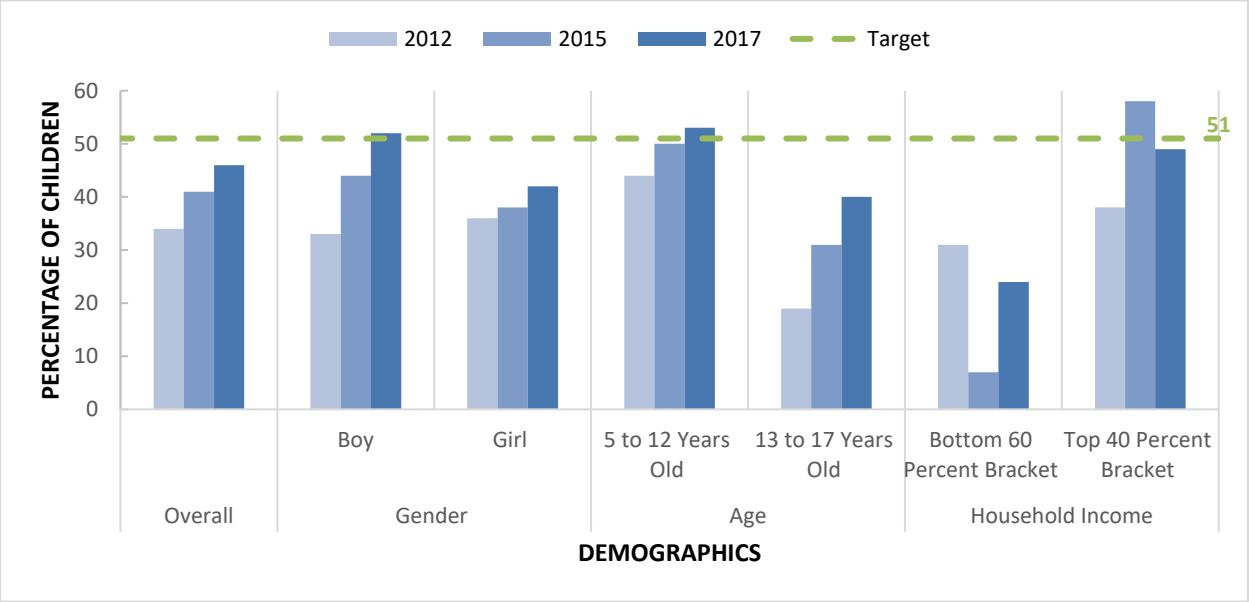


Table A.14 Percentage of Adults Reporting Overweight (BMI 25.0 or Higher) by Demographic Variables for Each Survey Year, CRCHD

	2005	2009	2012	2015	2017	HP 2020 TARGET
TOTAL	66%	64%	70%	68%	73%	66%
GENDER						
male	83	77	82	77	81	
female	51	51	58	59	64	
AGE						
18 to 34	63	51	59	35	75	
35 to 44	61	66	74	75	69	
45 to 54	73	64	75	84	72	
55 to 64	69	76	73	71	82	
65 and older	66	72	70	75	71	
EDUCATION						
high school or less	66	72	71	64	84	
some post high school	68	60	71	63	74	
college graduate	65	60	68	79	64	
HOUSEHOLD INCOME						
bottom 40 percent bracket	73	63	69	56	82	
middle 20 percent bracket	71	73	74	67	70	
top 40 percent bracket	64	65	74	79	70	
MARITAL STATUS						
married	67	70	71	79	76	
not married	64	56	69	55	67	
PHYSICAL ACTIVITY						
inactive	--	72	68	79	89	
insufficient	--	64	76	70	81	
recommended	--	60	65	63	67	

Figure A.39 Percentage of Students Reporting As Obese by Demographic Variables for Each Survey Year (gr. 9-12), WI

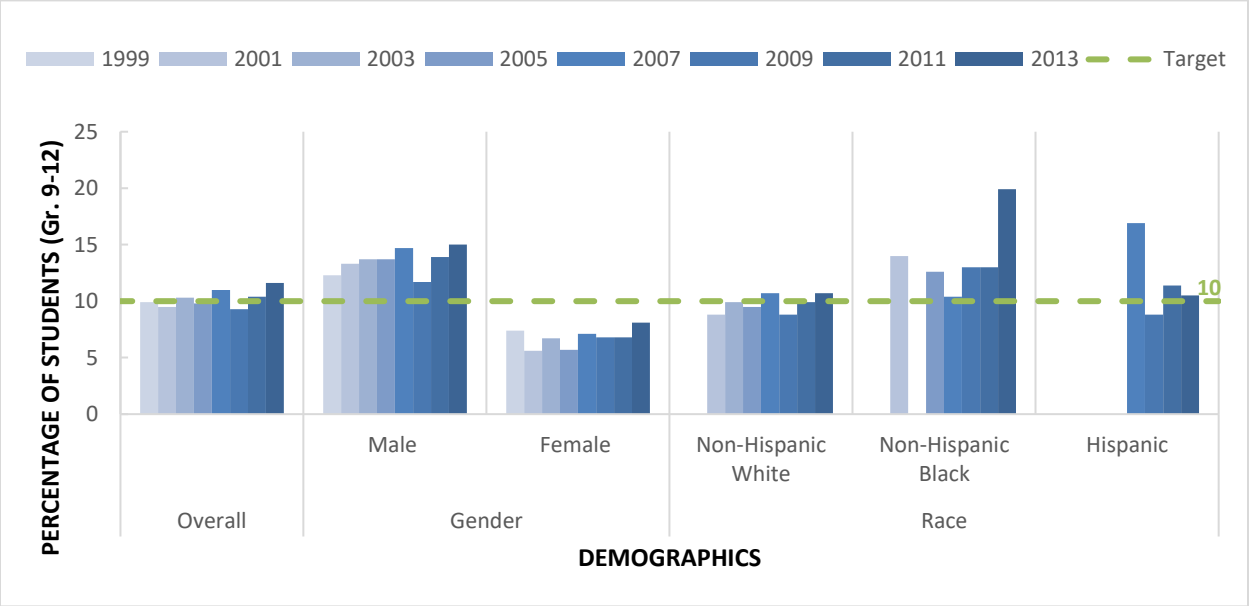


Table A.15 Percentage of Adults Reporting as Current Tobacco Cigarette Smokers by Demographic Variables for Each Survey Year, CRCHD & Racine County

	CRCHD					RACINE COUNTY				
	2005	*2009*	*2012*	*2015*	*2017*	*2005*	*2009*	*2012*	*2015*	*2017*
TOTAL	20	21	17	26	11	25	26	23	25	19
GENDER										
male	20	20	15	27	11	26	29	23	22	24
female	21	22	18	26	11	24	24	23	29	14
AGE										
18 to 34	26	28	22	42	0	29	33	26	32	16
35 to 44	21	13	18	46	17	28	25	23	36	21
45 to 54	20	24	18	24	15	29	31	29	24	26
55 to 64	25	26	15	13	13	31	30	20	22	20
65 and older	10	12	8	4	7	10	9	11	10	9
EDUCATION										
high school or less	30	27	27	39	15	33	36	34	38	25
some post high school	16	28	17	32	7	26	29	22	22	17
college graduate	14	10	7	6	12	14	10	8	12	16
HOUSEHOLD INCOME										
bottom 40 percent bracket	25	32	24	40	6	29	43	34	38	18
middle 20 percent bracket	20	33	12	32	5	26	27	19	23	30
top 40 percent bracket	17	9	12	13	15	19	12	13	14	15
MARITAL STATUS										
married	17	15	14	20	15	20	18	18	16	20
not married	26	30	21	34	4	32	35	28	33	16

Table A.16 Mortality Rates for Overall Cancer, Breast (Female), and Prostate Cancers by Year, Racine County & Wisconsin

	Overall Cancer		Breast (Female)		Prostate (Male)	
	County	*WI*	*County*	*WI*	*County*	*WI*
1999	198.8	195.6	22.9	26.9	25.3	32
2000	188.6	191.4	32.1	25.2	25.1	31.4
2001	199.2	189.7	18.1	25.6	27.5	28.7
2002	180.1	188.5	21.3	24.4	25.9	29.6
2003	177.3	181.3	13.7	23.5	26.2	28.9
2004	194.7	182.9	20.9	23.4	33	28.1
2005	174.5	180.4	20.8	22.5	21.4	26.2
2006	190	179.2	29	21.2	21	23.8
2007	178.1	176.2	22.3	22.5	32.3	26
2008	194.6	176.3	23.2	20.7	27.4	25
2009	173.3	169.9	27.4	20.3	16.3	23.4
2010	192.3	174.3	18.3	21.5	27.8	24
2011	171	174.3	17	21.6	15.9	23.3
2012	149.2	165.6	16.2	20.1	13.6	20.5
2013	157.4	165	20.2	20.4	15.8	21.6
2014	177.7	160.4	17.8	19.2	16.4	19.8
2015	166.9	159.5	20	18.7	20	20.7
2016	159.1	158.1	21.1	19.3	26.7	20.1

Figure A.40 Mortality Rates for Overall Cancer by Race and Year, Racine County

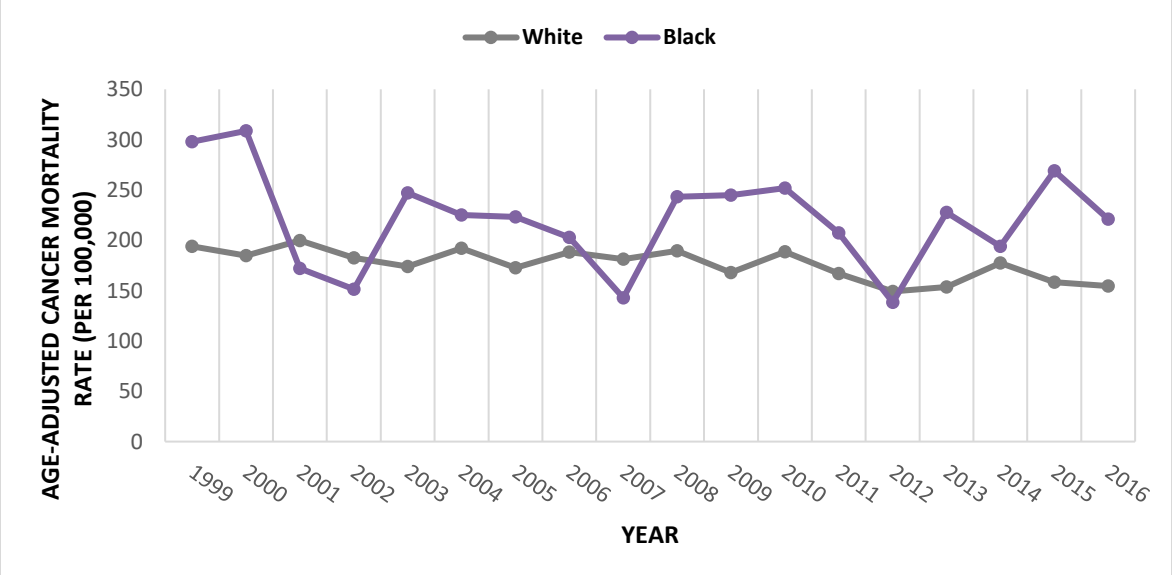
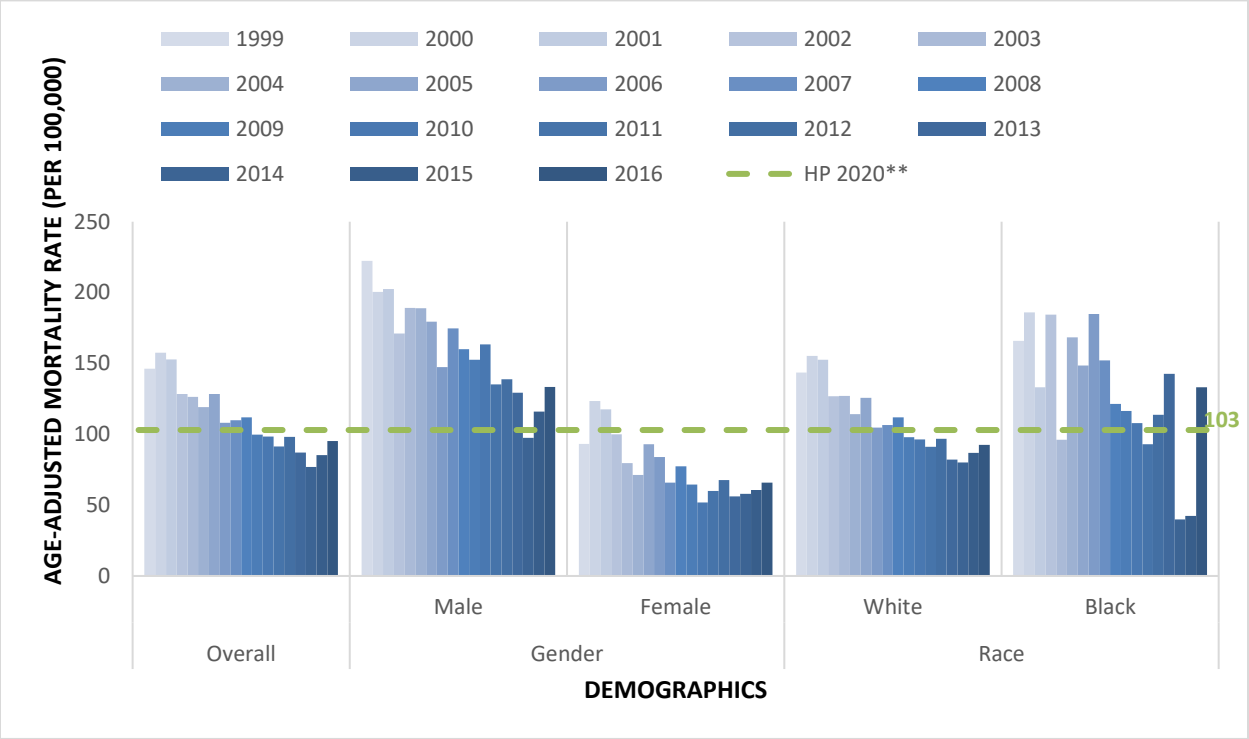


Figure A.41 Age-Adjusted Mortality Rate for Coronary Heart Disease* by Demographic Variables, Racine County



*Based on WI WISH data module for heart diseases related to ICD-10 codes I20-I22, I24-I25
**HP 2020 Target for Coronary Heart Disease is ICD-10 codes I20-I25

Table A.17 Percentage of Adults Reporting Use of Urgent Care as Primary Source of Health Services by Demographic Variables for Each Survey Year, CRCHD & Racine County

	JURISDICTION					COUNTY				
	2005	***2009***	***2012***	***2015***	***2017***	***2005***	***2009***	***2012***	***2015***	***2017***
TOTAL	2%	7%	9%	17%	17%	2%	7%	9%	16%	21%
GENDER										
male	--	7	11	24	19	--	7	11	19	26
female	--	8	8	11	14	--	7	8	13	16
AGE										
18 to 34	--	11	19	30	40	--	8	12	25	42
35 to 44	--	12	14	21	20	--	13	17	23	22
45 to 54	--	4	7	17	8	--	5	9	14	16
55 to 64	--	2	4	13	4	--	3	5	8	8
65 and older	--	2	2	1	9	--	2	2	3	7
EDUCATION										
high school or less	--	4	13	12	17	--	3	10	12	14
some post high school	--	8	7	23	17	--	10	9	21	25
college graduate	--	9	9	16	17	--	8	9	13	22
HOUSEHOLD INCOME										
bottom 40 percent bracket	--	4	10	17	13	--	5	9	14	11
middle 20 percent bracket	--	11	9	11	2	--	7	9	9	27
top 40 percent bracket	--	8	11	22	24	--	11	14	25	28
MARITAL STATUS										
married	--	6	11	16	19	--	6	12	19	23
not married	--	9	7	19	12	--	8	6	13	18

Table A.18 Percentage of Adults Reporting as Personally Not Covered by Health Insurance in Past 12 Months by Demographic Variables for Each Survey Year, CRCHD & Racine County

	JURISDICTION				COUNTY			
	2009	***2012***	***2015***	***2017***	***2009***	***2012***	***2015***	***2017***
TOTAL	9%	11%	11%	4%	15%	14%	15%	5%
GENDER								
male	11	13	10	3	20	18	15	5
female	7	9	11	5	10	10	15	6
AGE								
18 to 34	14	22	32	0	24	24	28	2
35 to 44	8	11	7	11	20	11	15	11
45 to 54	10	10	1	4	9	16	13	7
55 to 64	6	5	10	4	9	10	11	7
65 and older	2	2	0	1	2	2	<1	2
EDUCATION								
high school or less	15	15	10	3	24	17	16	4
some post high school	7	6	14	8	12	14	15	7
college graduate	4	10	7	<1	4	9	12	4
HOUSEHOLD INCOME								
bottom 40 percent bracket	22	20	20	5	26	24	29	7
middle 20 percent bracket	5	16	23	9	8	12	15	4
top 40 percent bracket	3	4	<1	4	4	4	1	5
MARITAL STATUS								
married	4	6	7	5	8	9	8	5
not married	15	19	15	2	21	19	20	5

Table A.19 Percentage of Adults Reporting Delayed or Did Not Seek Medical Care Due to Cost in Past 12 Months by Demographic Variables for Each Survey Year, CRCHD & Racine County

	JURISDICTION		COUNTY	
	2015	2017	2015	2017
TOTAL	16%	14%	21%	17%
GENDER				
male	15	13	20	16
female	16	15	23	17
AGE				
18 to 34	24	11	24	21
35 to 44	9	6	25	13
45 to 54	23	24	32	19
55 to 64	17	23	21	25
65 and older	3	5	3	4
EDUCATION				
high school or less	10	16	14	12
some post high school	19	17	26	22
college graduate	19	9	26	15
HOUSEHOLD INCOME				
bottom 40 percent bracket	17	11	24	15
middle 20 percent bracket	23	12	33	23
top 40 percent bracket	11	17	13	17
MARITAL STATUS				
married	17	15	21	17
not married	15	14	22	16

Table A.20 Percentage of Adults Reporting Prescription Medications Not Taken Due to Cost in Past 12 Months by Demographic Variables for Each Survey Year (Household Member), CRCHD & Racine County

	JURISDICTION				COUNTY			
	2009	2012	2015	2017	2009	2012	2015	2017
TOTAL	7%	8%	10%	8%	12%	14%	13%	10%
HOUSEHOLD INCOME								
bottom 40 percent bracket	8	11	11	6	13	20	16	12
middle 20 percent bracket	10	11	8	2	15	9	15	8
top 40 percent bracket	4	6	11	10	10	6	9	11
MARITAL STATUS								
married	7	5	12	8	14	8	12	11
not married	7	13	8	7	10	20	14	9

Table A.21 Percentage of Adults Unmet Dental Care in Past 12 Months by Demographic Variables for Each Survey Year, CRCHD & Racine County

	JURISDICTION			COUNTY		
	2012	2015	2017	2012	2015	2017
TOTAL	11%	17%	14%	15%	18%	13%
GENDER						
male	8	18	12	12	19	11
female	13	15	15	19	17	15
AGE						
18 to 34	13	16	13	16	19	12
35 to 44	11	16	7	17	27	8
45 to 54	13	24	13	20	19	14
55 to 64	12	20	19	16	20	18
65 and older	5	4	18	8	6	15
EDUCATION						
high school or less	15	21	21	17	18	17
some post high school	10	16	11	16	19	15
college graduate	8	13	11	13	18	9
HOUSEHOLD INCOME						
bottom 40 percent bracket	21	33	15	27	30	16
middle 20 percent bracket	9	9	9	12	12	7
top 40 percent bracket	4	6	13	5	7	13
MARITAL STATUS						
married	9	11	13	11	12	11
not married	13	23	15	21	23	16

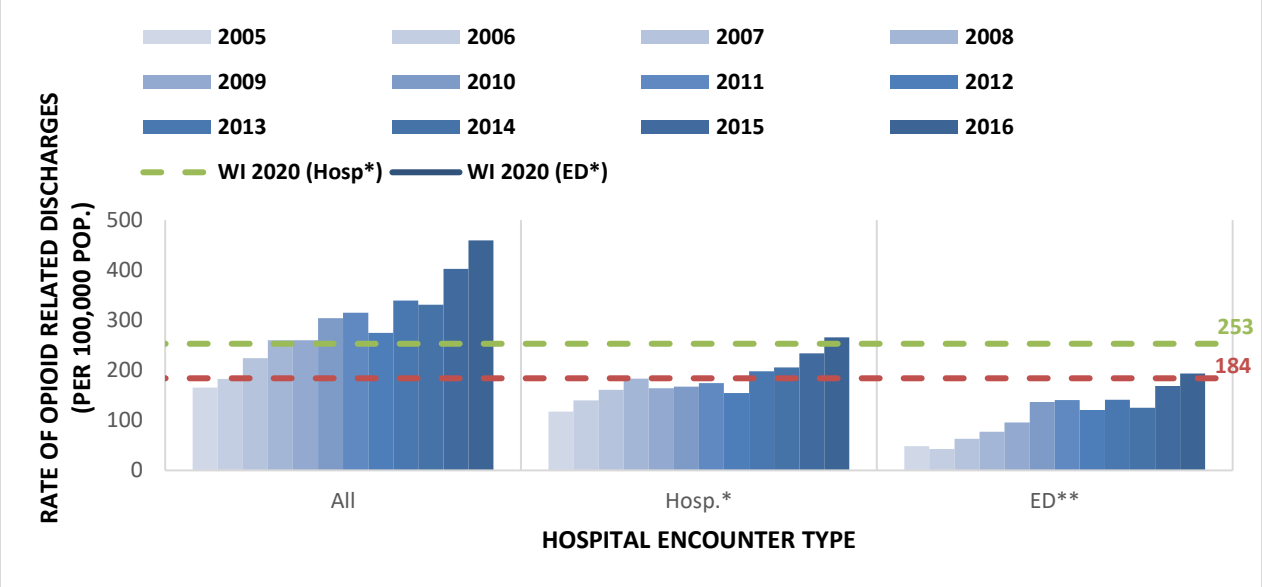
Table A.22 Percentage of Adults Unmet Medical Care in Past 12 Months by Demographic Variables for Each Survey Year, CRCHD & Racine County

	JURISDICTION			COUNTY		
	2012	2015	2017	2012	2015	2017
TOTAL	6%	13%	9%	8%	18%	11%
GENDER						
male	5	14	9	6	17	13
female	7	12	10	11	18	10
AGE						
18 to 34	3	29	8	7	29	16
35 to 44	8	0	10	9	18	11
45 to 54	8	11	9	13	16	10
55 to 64	12	16	16	11	15	13
65 and older	<1	4	5	2	3	5
EDUCATION						
high school or less	6	10	13	7	10	7
some post high school	5	14	9	10	26	13
college graduate	7	15	7	9	17	13
HOUSEHOLD INCOME						
bottom 40 percent bracket	7	23	11	12	26	12
middle 20 percent bracket	9	9	2	9	22	16
top 40 percent bracket	6	8	9	5	6	10
MARITAL STATUS						
married	4	7	8	6	9	11
not married	10	19	11	11	24	12

Table A.22 Percentage of Adults Unmet Mental Care in Past 12 Months by Demographic Variables for Each Survey Year, CRCHD & Racine County

	JURISDICTION			COUNTY		
	2012	2015	2017	2012	2015	2017
TOTAL	<1%	4%	3%	2%	4%	3%
GENDER						
male	--	6	--	--	3	3
female	--	2	--	--	5	3
AGE						
18 to 34	--	10	--	--	5	1
35 to 44	--	3	--	--	6	5
45 to 54	--	4	--	--	7	4
55 to 64	--	1	--	--	<1	4
65 and older	--	0	--	--	<1	0
EDUCATION						
high school or less	--	3	--	--	5	1
some post high school	--	<1	--	--	3	3
college graduate	--	7	--	--	4	3
HOUSEHOLD INCOME						
bottom 40 percent bracket	--	4	--	--	8	3
middle 20 percent bracket	--	5	--	--	2	<1
top 40 percent bracket	--	5	--	--	3	3
MARITAL STATUS						
married	--	0	--	--	<1	3
not married	--	9	--	--	7	2

Figure A.42 Rate of Opioid Related Discharges by Hospital Encounter Type, Racine County



*Inpatient Hospitalizations **Emergency Department Visits

Figure A.43 Rate of Opioid Related Discharges by Hispanic Ethnicity, Racine County

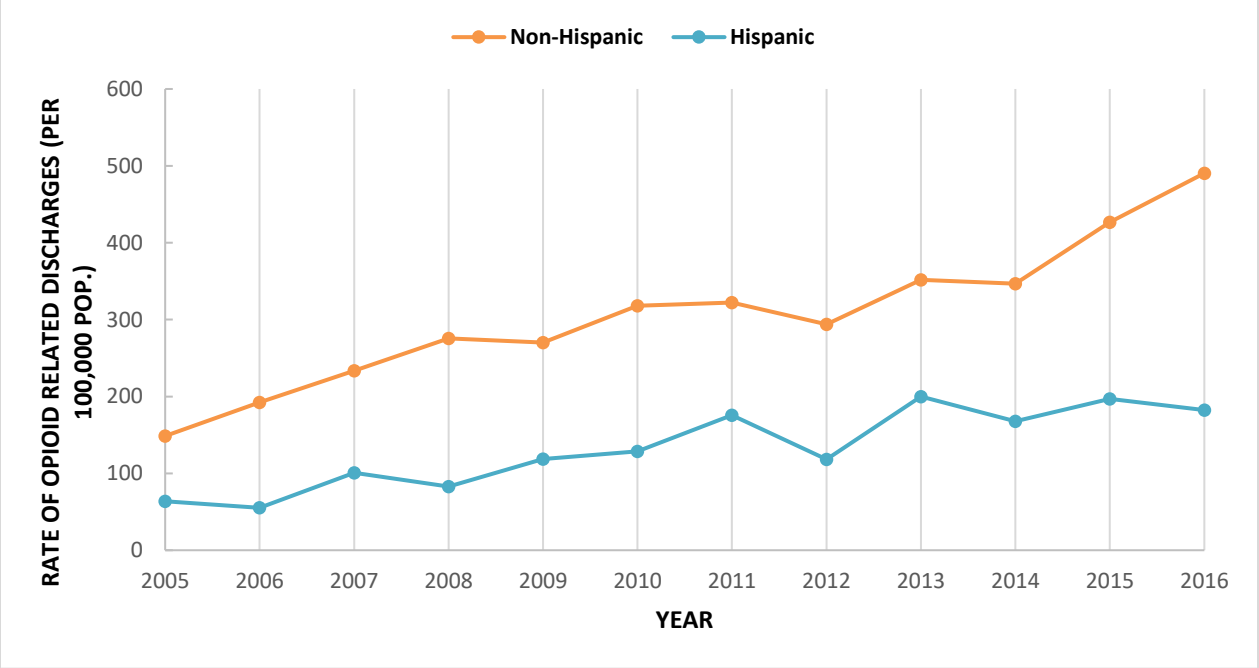


Figure A.44 Rate of Overdose Deaths Involving Any Drug, Racine County & WI

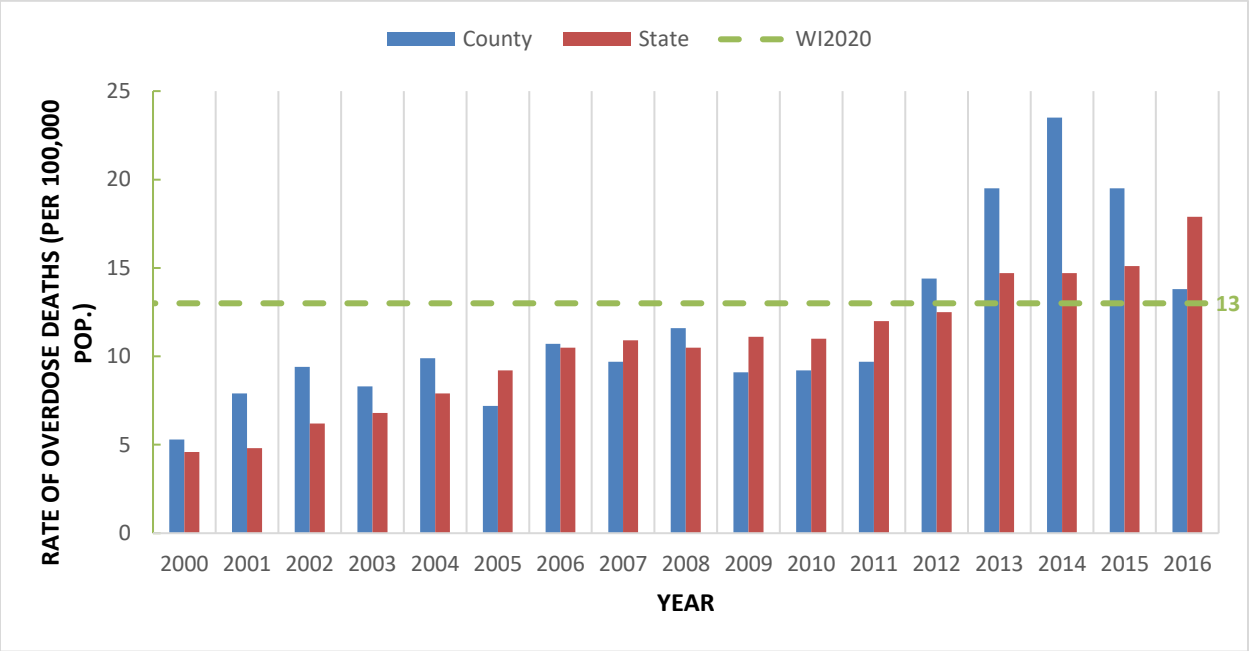


Figure A.45 Rate of Overdose Deaths Involving Any Drug by Age Group, Racine County

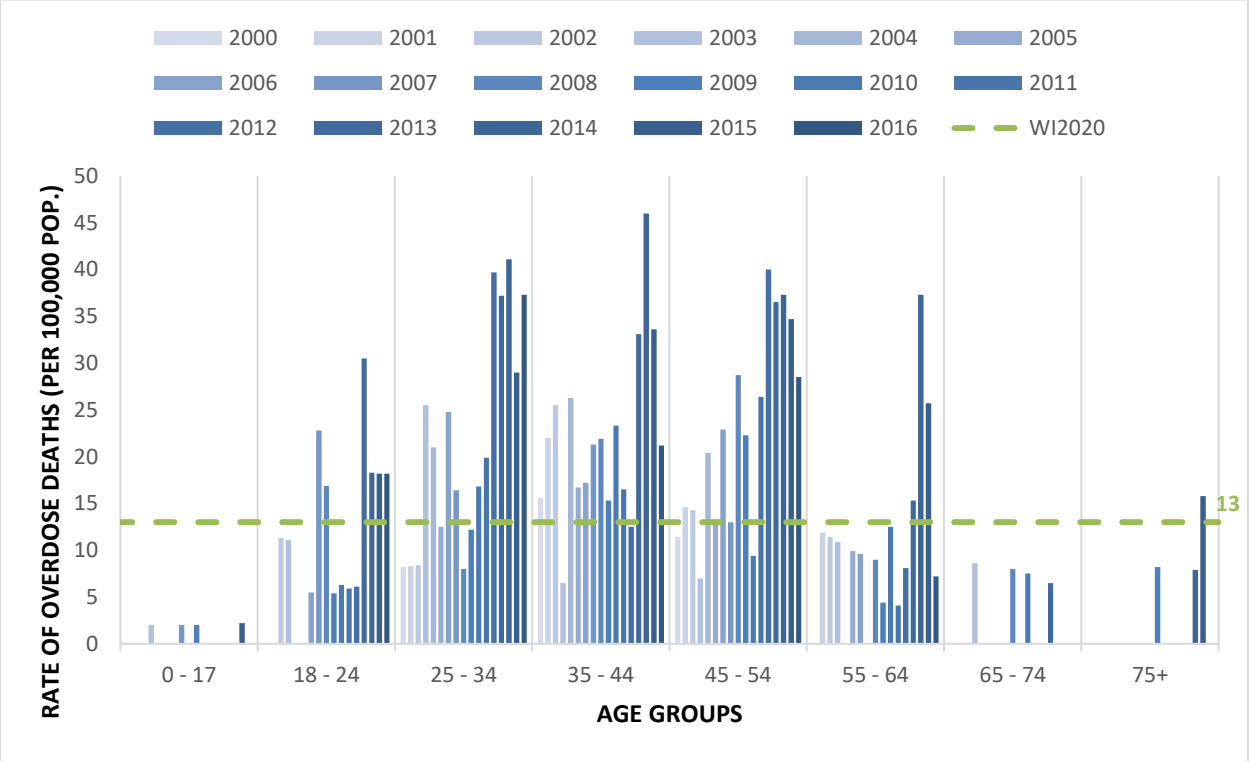
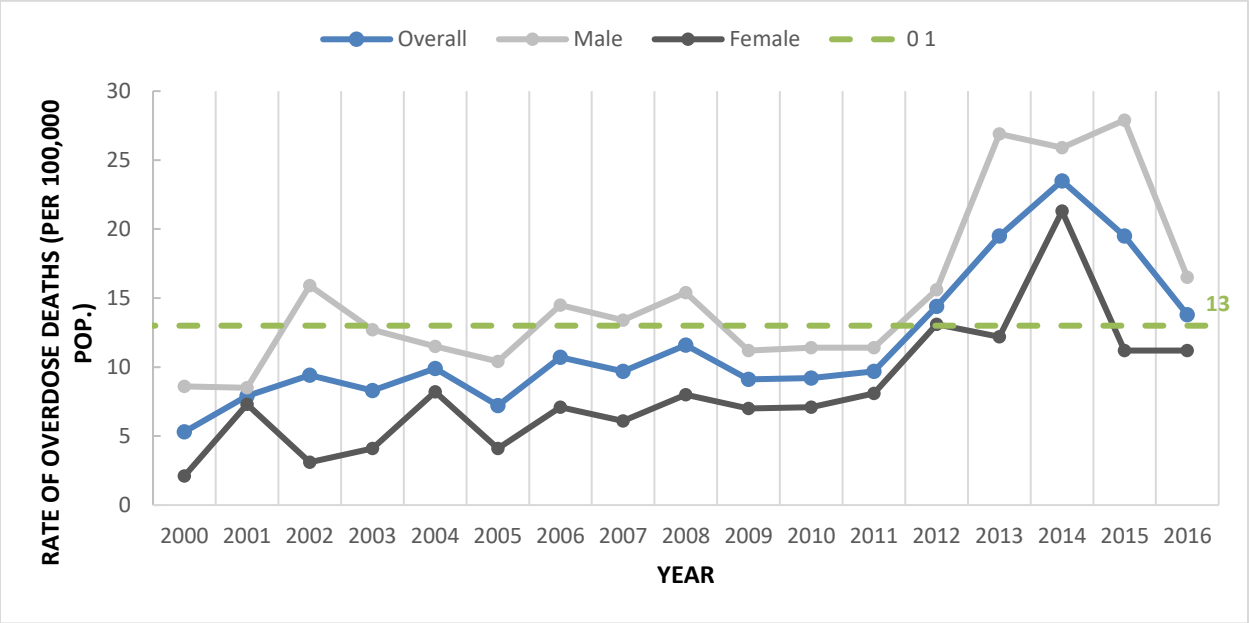


Figure A.47 Rate of Overdose Deaths Involving Any Drug by Gender, Racine County



GLOSSARY

Class A: beer fermented malt beverage licenses allow retail sale of fermented malt beverage (beer) for consumption off the premises (e.g. grocery or convenience stores). Class A alcohol licenses allow retail sale of distilled spirits (including wine) for consumption off the premises (e.g. liquor stores or grocery stores selling both beer and distilled spirts), and Class A beer/Class A liquor (includes wine) – off-premises sales.

Class B: fermented malt beverage licenses allow retail sale of fermented malt beverages (beer) for consumption on premises and limited off premises sales by local ordinances (e.g. restaurants, "beer bars"), Class B licenses allow retail sale of distilled spirits (including wine) for consumption on the premises.

Class C: wine (on-premise sale), licenses allow the sale of wine for consumption only on the premises and allow the carryout of a single opened (resealed) bottle if sole with a meal.

THIS PAGE IS INTENTIONALLY LEFT BLANK