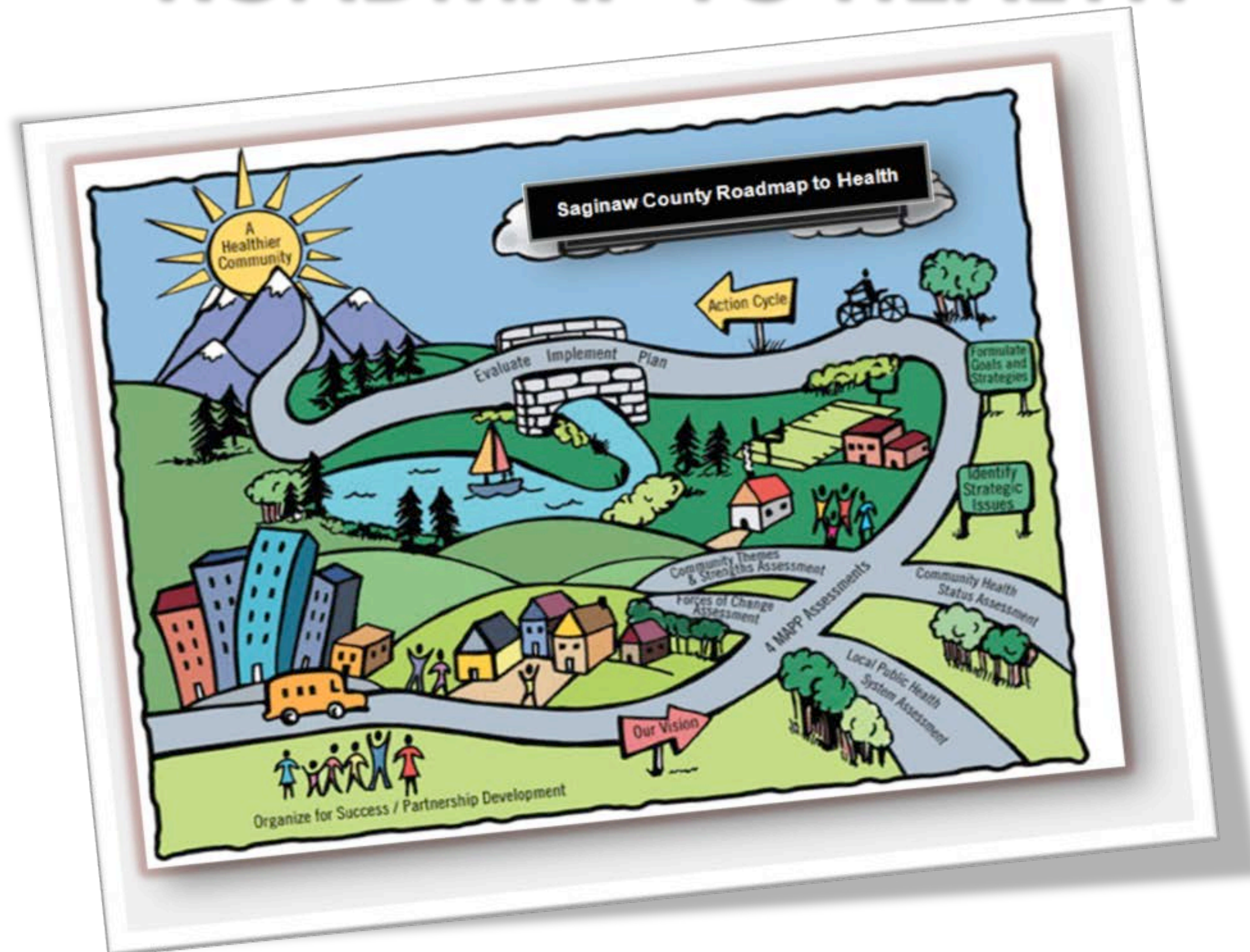
SAGINAW COUNTY
ROADMAP TO HEALTH



Saginaw County Health Improvement Plan
2014 - 2016

Saginaw County Community Health Improvement Plan FY 2014 – 2016
An Initiative of Alignment Saginaw - Community Health Improvement Plan (CHIP) Partners

Alignment Saginaw is a community collaborative with a mission of preparing and mobilizing around opportunities that impact key areas affecting Saginaw County's quality of life. The Saginaw Community Foundation is the fiduciary and manager of operations of Alignment Saginaw.

This effort was funded by the members of the CHIP Steering Committee Agencies, United Way of Saginaw, and YMCA of Saginaw. The following are the Community Health Improvement Steering Committee Agencies:

The Saginaw County Community Health Improvement Plan 2014-2016
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Executive Summary

The Saginaw County Community Health Improvement Plan (CHIP) Partners formed in 2009, under the auspices of Alignment Saginaw, with a mission of developing a health improvement plan that would support and maintain a healthier Saginaw.

We are pleased to present the updated *"Saginaw County Roadmap to Health - Saginaw County Health Improvement Plan 2014-2016 "*. The *Saginaw County Roadmap to Health* outlines the goals, strategies, and activities related to the top health indicators and determinants of health identified from the most recent Community Health Needs Assessments (CHNA).

The CHNA data was gathered using the four Mobilizing for Action through Planning and Partnerships (MAPP) assessments: community themes and strengths, local public health system, community health status, and forces of change. In an attempt to acquire broad community input regarding the health concerns of Saginaw County residents, information was gathered at various public meetings throughout the County and from area agencies using surveys conducted from April through November 2013.

Based on the CHNA data collected, the following health issues and determinants of health were identified as priorities:

Health Indicators

Chronic Diseases

Obesity

Infant Mortality

Behavioral Health

Determinants of Health

Health care/Insurance Access and Utilization of Services

Jobs/Employment

Neighborhood Safety

Connectedness of Community

Parent Support

Transportation

Air/Environmental Hazards

Health Prevention, Screening, and Wellness promotion

The CHIP will be updated every 3 years based on new CHNA data. Action plans, aimed at addressing the priorities will be developed annually.

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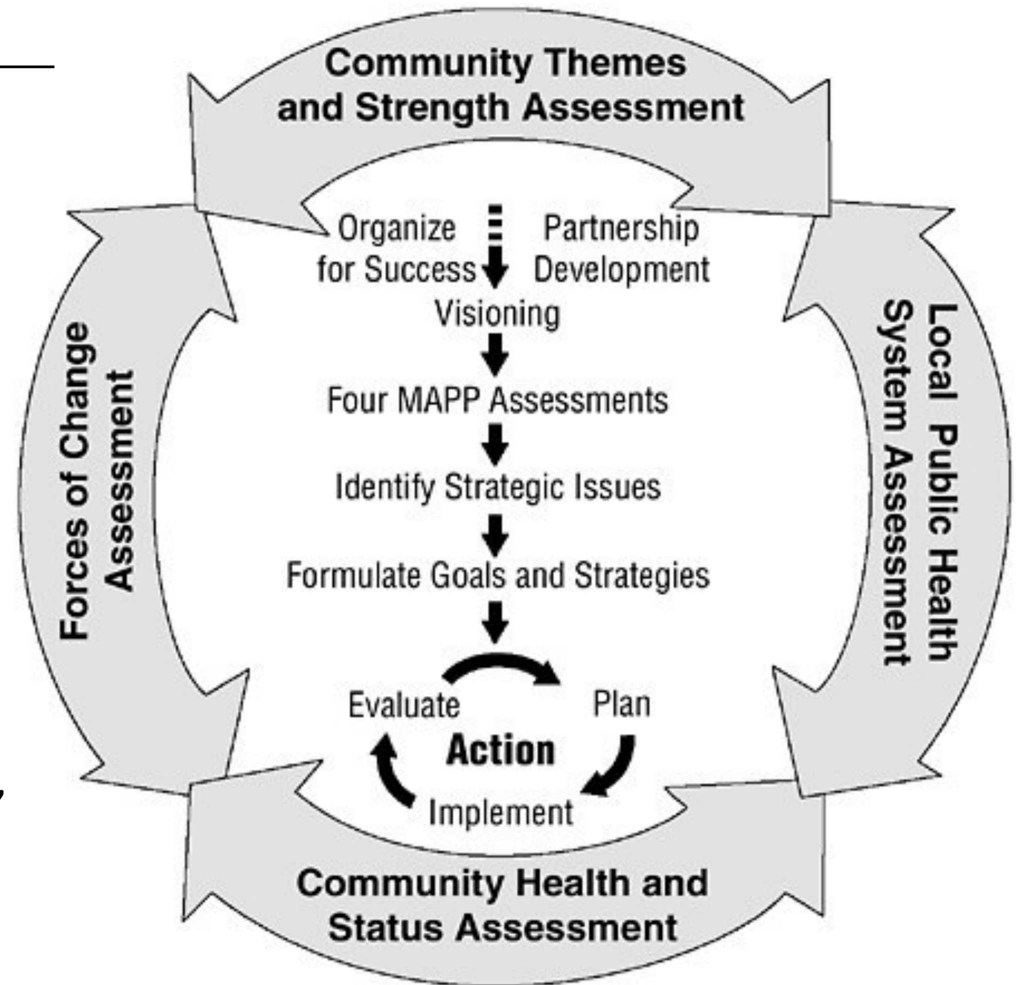
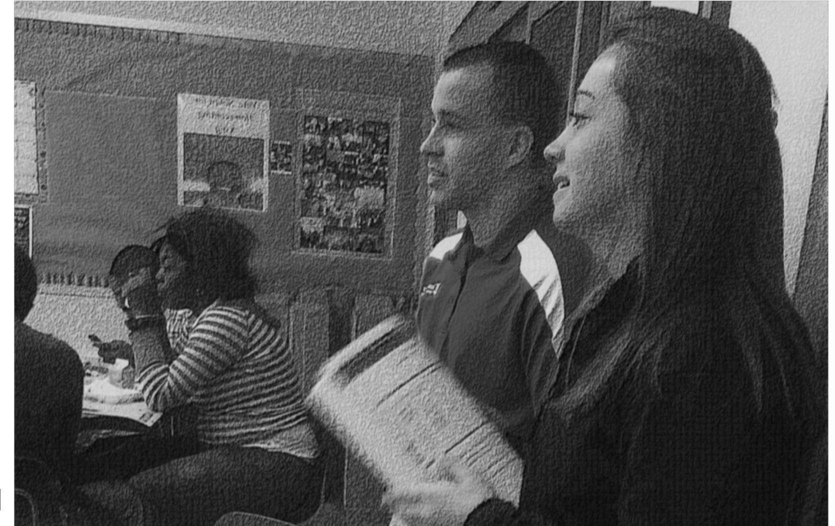
Mobilizing for Action through Planning and Partnership (MAPP)

The **METHODOLOGY** used to design the Plan follows a national model called Mobilizing for Action through Planning and Partnerships (MAPP), developed by the Centers for Disease Control and Prevention (CDC) and the National Association of County and City Health Officials (NACCHO). MAPP is a community-wide strategic planning tool for improving community health. This tool was selected because of its comprehensive approach to assessment, its national credibility, and because it embodies the principle of collaboration with a community-driven approach.



Our Approach

Organizing for Success and Visioning: The CHIP Steering Committee was formed in 2009 under the auspices of Alignment Saginaw. The Committee is made up of representatives from the Saginaw Community Foundation (SCF), Covenant HealthCare, St. Mary's of Michigan, Saginaw Intermediate School District (SISD), Saginaw County Community Mental Health Authority (SCCMHA), Saginaw County Department of Public Health (SCDPH), Health Delivery Incorporated (HDI), and Saginaw Department of Human Services. Local champions and existing coalitions have been enlisted to form five Action Groups. The Action Groups, along with the Steering Committee, are identified as the Community Health Improvement Plan (CHIP) Partners. For over five years, CHIP Partners have played a vital role in designing strategies aimed at planning, implementing, promoting, and overseeing the success of Health Improvement in Saginaw County.



Saginaw Valley State University students assist in administering the Community Themes and Strengths Assessment to members of Saginaw High School/Health Delivery, Inc. School-Based Health Center Teen Advisory Council

The Four MAPP Assessments: CHIP Partners formed four sub-groups in order to administer and refresh the Community Health Needs Assessment (CHNA) in Saginaw County. From April until November 2013, the sub-groups conducted the four MAPP assessments: Community Themes and Strengths (CTSA), Local Public Health System (LPHSA), Community Health Status (CHSA), and Forces of Change Assessment (FOCA). In an attempt to acquire broad community input regarding the health concerns of Saginaw County residents, information was gathered at various public meetings throughout the County and from area agencies using surveys conducted from April through November 2013. These venues included uninsured, medically underserved, and minority populations. More detailed information pertaining to the process used to conduct the CHNA, including information pertaining to community assessment participants, may be found in the information for each assessment.

Our Approach *Cont'd*

Identifying Strategic Issues: In November and December the CHIP Steering Committee met and reviewed the data collected. Based on the information collected from the community, the top prioritized health issues were identified and placed into 4 categories: Chronic diseases/illnesses, Obesity, Infant Mortality, Behavioral Health. Key determinants of health that are necessary to address/improve health were also identified and categorized as health care and insurance access, utilization of services; and other determinants of health/health equity.

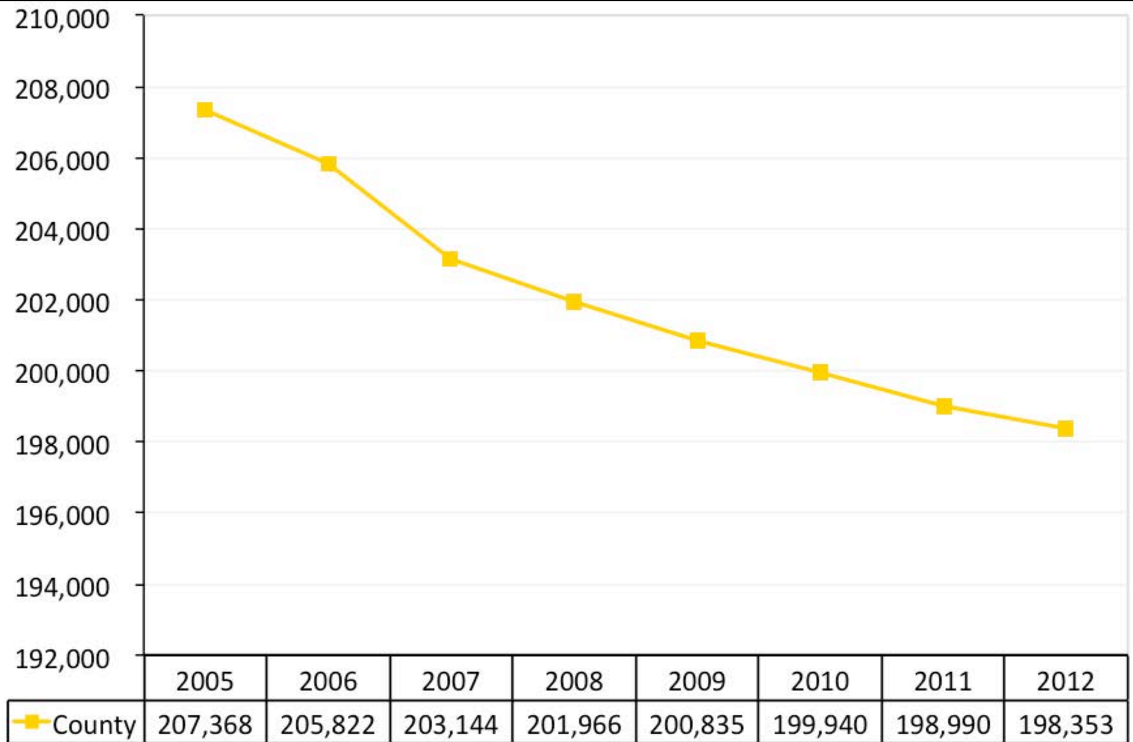
Formulating Goals and Action Cycle: During the months of December through February, groups throughout Saginaw County, including those initially surveyed, were contacted and additional information was gathered pertaining to strategies and activities that may be used to improve the identified health issues and address the determinants of health. Then in February, the following Action Groups were convened:

- Chronic Disease Action Group
- Obesity Action Group
- Infant Mortality Action Group
- Behavioral Health Action Group
- Emerging Models of Health Services Delivery Action Group
- Health and Social Equity Advisory Group

Action Group members used all the data collected to develop 3-year goals and strategies and 1-year Action/Implementation Plans to address the identified health issues and key determinants of health.

Population Trends

- In 2012 the County population was 198,153
- Slowing rate of decline in overall County population (0.3% loss in population from 2011-2012 vs. 0.5% between 2010-2011)
- Younger population and working population decreasing
- Greatest decline for 2011-2012 was for residents under 18 years old (-1.7%) followed by 45-64 year old residents (-1.3%)
- Population age 65 Years and older increased (+3.4% 2011-2012)
- Saginaw County White and African American population declined slightly between 2011-2012, 0.4% for both
- Asian and Pacific Islander population grew by almost 5% from 2011-2012
- Population of residents with Hispanic/Latino origin grew slightly by 0.8% from 2011-2012



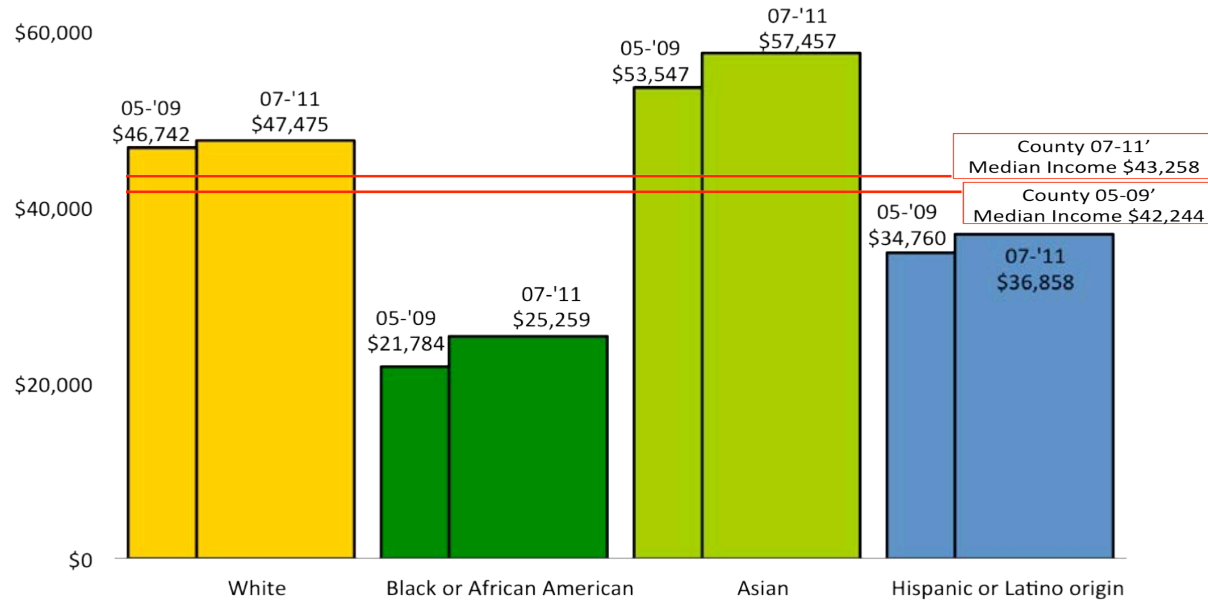
Saginaw County Population Trend by Age and Race/Ethnicity (2008-2012)

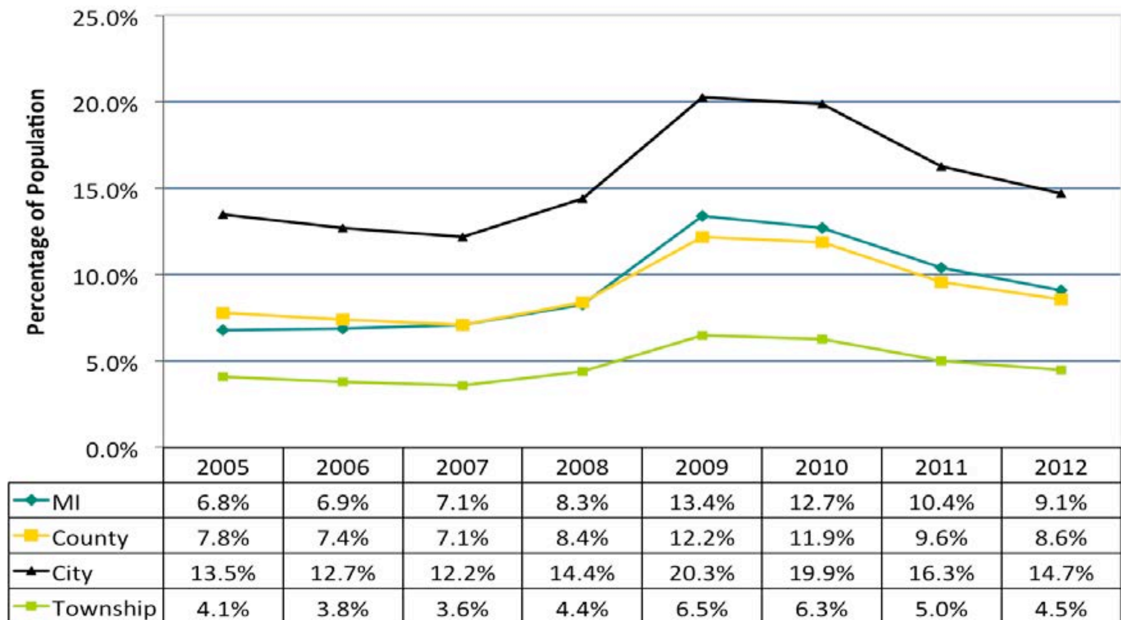
Age	2008	2009	2010	2011	2012
Under 18 Years	48,793	47,601	46,640	45,826	45,063
18-44 Years	68,012	67,437	66,963	66,444	66,210
45-64 Years	55,168	55,452	55,648	55,747	55,045
65 Years & Older	29,993	30,345	30,689	30,973	32,035
Race/Ethnicity	**2008**	**2009**	**2010**	**2011**	**2012**
White	157,555	156,481	155,575	154,715	154,090
Black/African American	40,823	40,673	40,548	40,380	40,223
Asian and Pacific Islander	2,372	2,446	2,543	2,619	2,748
Hispanic Latino	15,322	15,415	15,608	15,622	15,743

Source: Table prepared by the Division for Vital Records and Health Statistics, Michigan Department of Community Health using US 2000 & 2010 Census Population Figures, Michigan birth and death certificate counts and PopStats block-level migration estimates and population distributions of race. Hispanic Latino is an ethnicity, not a racial group. Consequently, a proportion of the population estimated to be White, Black, Native American or Asian/Pacific Islander are also enumerated as Hispanic origin.

Economic Trends

- According to 2005-2009 and 2007-2011 U.S. Census data, median household income increased for all County populations
- Median household income of Saginaw County African American residents is significantly lower than the median County household income
- Saginaw County unemployment rates continue to decline
- The unemployment rate for all County residents is below the rate of the State
- Residents living in the City of Saginaw have an unemployment rate that is greater than the State and County rates





	2005	2006	2007	2008	2009	2010	2011	2012
MI	6.8%	6.9%	7.1%	8.3%	13.4%	12.7%	10.4%	9.1%
County	7.8%	7.4%	7.1%	8.4%	12.2%	11.9%	9.6%	8.6%
City	13.5%	12.7%	12.2%	14.4%	20.3%	19.9%	16.3%	14.7%
Township	4.1%	3.8%	3.6%	4.4%	6.5%	6.3%	5.0%	4.5%

Source: Michigan Department of Labor and Economic Growth, Labor Market Information

MAPP ASSESSMENTS

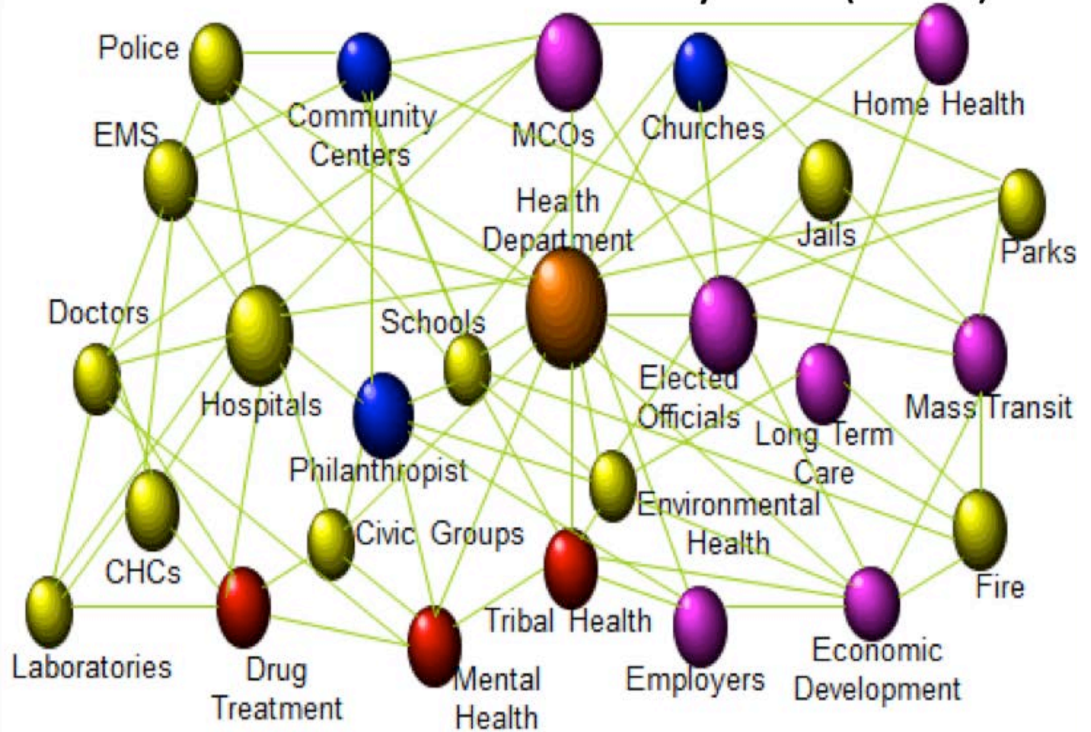
- Local Public Health System (LPHSA)
- Community Themes and Strengths (CTSA)
- Community Health Status (CHSA)
- Forces of Change Assessment (FOCA)

LOCAL PUBLIC HEALTH SYSTEM ASSESSMENT (LPHSA)

The goal of the LPHSA was to provide insight and develop strategies toward improving public health in Saginaw County. The electronic survey was developed in partnership with the University of Michigan Prevention Research Center in 2009. *It* was designed using the Ten (10) Essential Public Health Services, developed by CDC and NACCHO, as the fundamental framework for assessing the local public health system.

The survey focused on the local public health system, defined as all entities that contribute to the delivery of public health services within a community. As shown in the diagram to the right, the local public health system includes all public, private, and voluntary entities, as well as individuals and informal associations.

Assessment Participants:
One hundred twelve (112) collaborative partners were identified and e-mailed the survey link. Fifty-six partner group representatives responded to the survey, resulting in a 50% response rate.



Type of Local Public Health Organization of LPHSA Participants	% of Participants
Local Health Department	12%
Hospital	10%
Health, Mental Health, or Substance Abuse Center	20%
Managed Care Organization	2%
Human Services Agency	8%
Environmental Health, Mosquito Control, or Laboratory	12%
Police, Fire, EMS, or Court System	10%
School	4%
Parks	4%
Church, Faith Based Organization, Civic Group, or Non-Profit	10%
Public Health Board Rep. or Elected Official	6%
Public Utilities	2%
Homeless Shelter	2%

10 Essential Public Health Services

- ES 1: Monitor health status to identify and solve community health problems.
- ES 2: Diagnose and investigate health problems and health hazards in the community.
- ES 3: Inform, educate, and empower people about health issues.
- ES 4: Mobilize community partnerships and action to identify and solve health problems.
- ES 5: Develop policies and plans that support individual and community health efforts.
- ES 6: Enforce laws and regulations that protect health and ensure safety.
- ES 7: Link people to needed personal health services and assure the provision of health care when otherwise unavailable.
- ES 8: Assure competent public and personal health care workforce.
- ES 9: Evaluate effectiveness, accessibility, and quality of personal and population-based health services.
- ES 10: Research for new insights and innovative solutions to health problems.

Lowest Ranked

2013

ES 10: "to research for new insights and innovative solutions to health problems"

ES 9: "to evaluate the effectiveness, accessibility, and quality of personal and population-based health services"

ES 7: "to link people to needed personal health services and assure provision of health care when otherwise unavailable"

2010

ES 10: "to research for new insights and innovative solutions to health problems"

ES 9: "to evaluate the effectiveness, accessibility, and quality of personal and population-based health services"

ES 1: "to monitor the health status of the community"

Highest Ranked

2013

ES 2: "to diagnose and investigate health problems and health hazards in the community"

ES 4: "to mobilize community partnerships to identify and solve health problems"

ES 3: "to inform, educate, and empower people about health issues"

2010

ES 2: "to diagnose and investigate health problems and health hazards in the community"

ES 6: "Enforce laws and regulations that protect health and ensure safety"

ES 3: "to inform, educate, and empower people about health issues"

FORCES OF CHANGE ASSESSMENT (FOCA)

The Forces of Change Assessment is designed to help answer the following questions:

"What is occurring or might occur that affects the health of our community or the local public health system?"

"What specific threats or opportunities are generated by these occurrences?"

The Forces of Change Assessment required participants to dialogue on a broad range of issues affecting Saginaw County, including social (e.g., transportation, cultural changes, affordable housing), economic (e.g., increasing costs of health care, unemployment), environmental, political, and legal, just to name a few.

Information for Forces of Change was gathered using a nominal group technique during the August 2013 CHIP Steering Committee meeting and from additional input gathered during the October Alignment Saginaw Meeting.

FORCES	THREATS	OPPORTUNITIES
CHANGES in POPULATION	Less community connectivity, blight, school closures, hard to contact people for services and follow-up, need for more services (i.e., retirees, unemployed, etc.)	Volunteer Retirees, redesign of community
WILLPOWER of COMMUNITY and FAMILY	Losing hope, apathy	Health, business, education, workforce development
SHIFT in ECONOMY and EMPLOYMENT OPPORTUNITY	Poverty, unemployment, decreased resources and living wage job, Lack of adequate transportation	New business growth, redevelopment, workforce development
HIGH CRIME and VIOLENCE RATES	Need for more mental health services, including Trauma Informed Care; poor perception of area	Unity events, funding to address the “root” of problems
FEDERAL/STATE/ LOCAL GOVERNMENT	Term limits, threat of State takeover, school closures, privacy laws barriers for agency collaboration, heavy focus on “Individual responsibility” and business	Advocacy, Health in All Policy, courts moving toward problem solving/ consideration of root causes

FORCES	THREATS	OPPORTUNITIES
HEALTH CARE REFORM	"Are there enough doctors and insurance companies?"	Expanded access to insurance and expected reduction in health care costs due to early prevention
AFFORDABLE CARE ACT (ACA); ACCOUNTABLE CARE ORGANIZATIONS	"What does the law mean?"; A lot of change at the same time	Providers and patients working to improve their health
CUTS in FUNDING	Decreased funding (e.g. WIC, SNAP, cash and food assistance); Unstable early education funding; Less police, fire, etc.	Self-sufficiency programs, increased collaborative efforts
Improved TECHNOLOGY/ GREATER DEPENDENCE on TECHNOLOGY	"Digital divide" (Unequal access to technology); Less talking face-to-face	On-line [Tele-medicine] health information; Electronic medical records; Real time data; Department of Human Services going paperless
ETHICS and ADVANCES in MEDICINE and PUBLIC HEALTH	Over-prescribing and the use of medications, Requirement of Evidence-based (EB) programs costly	Greater availability of needed medications, increased emphasis on appropriate prescription drug use, required use of activities that are tried and proven
THREATS to the ENVIRONMENT	Aging housing; Shuttered buildings; People without housing and/or safe, and healthy housing; Inadequate transportation; No safe walking or bike paths (sidewalks); Too much heat/cold; Hard to find fresh fruits and vegetables; Can't swim, eat, drink from water bodies, air pollution, etc.	Greater attention on how the environment impacts health; More green space and community gardens

COMMUNITY HEALTH STATUS ASSESSMENT(CHSA)

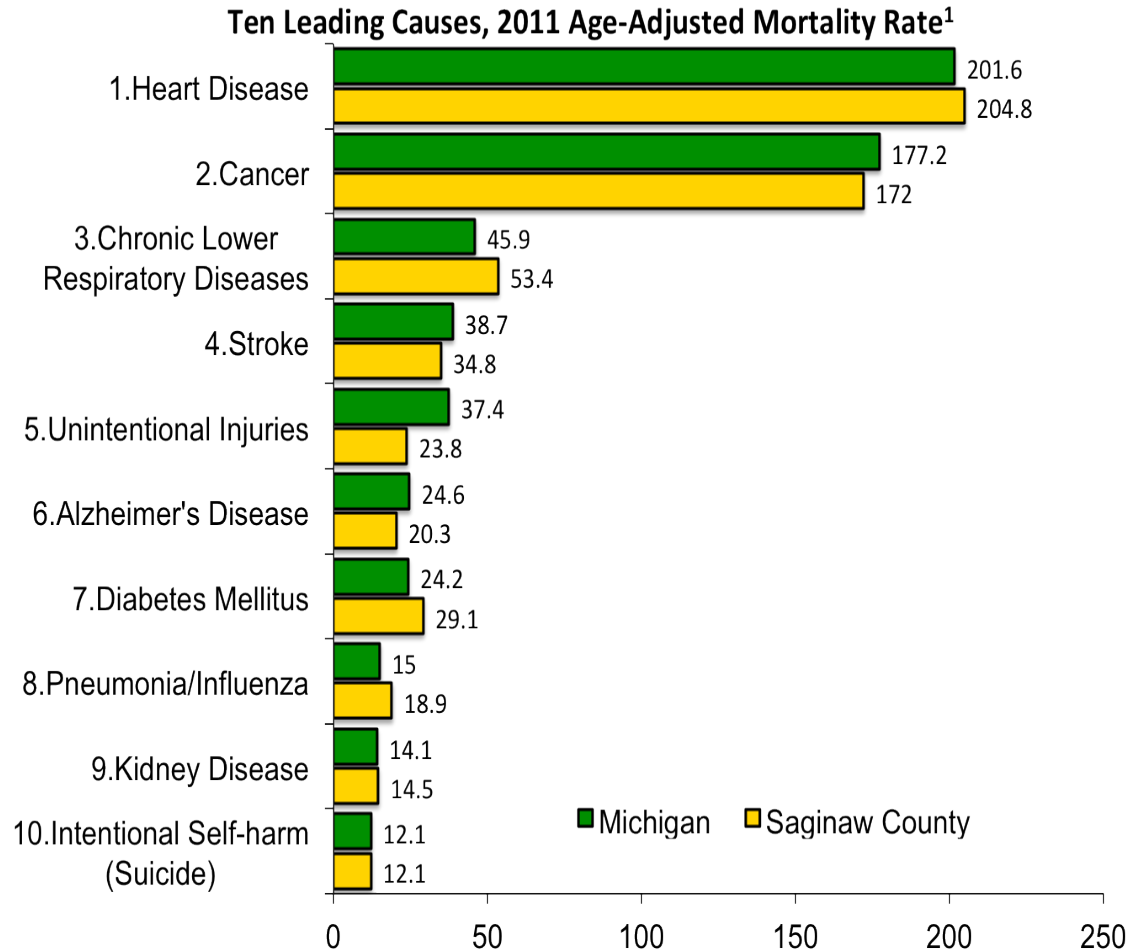
The purpose of the CHSA is to provide an understanding of the community's health status and ensure that the community's priorities include specific health status issues.

Data for the CHSA was collected from:

- Michigan Department of Community Health
- Kids Count Data
- U.S. Census Bureau
- Michigan Behavioral Risk Factor Surveillance System (BRFSS)
- other county, state, and federal agencies and reports

In some cases, health information for Saginaw County is compared to data for the entire state of Michigan, over consistent time periods.

There are instances when health data are stratified by race/ethnicity (African American, White, and Hispanic/Latino) and geography (Saginaw City and Township statistics) to examine variations in sub-population statistics.



Source: 2011 Geocoded Michigan Death Certificate Registry. Division for Vital Records & Health Statistics, Michigan Department of Community Health; Population Estimate (latest update 9/2012), National Center for Health Statistics, U.S. Census Populations With Bridged Race Categories. Last Updated: 9/27/2013. Rate per 100,000.

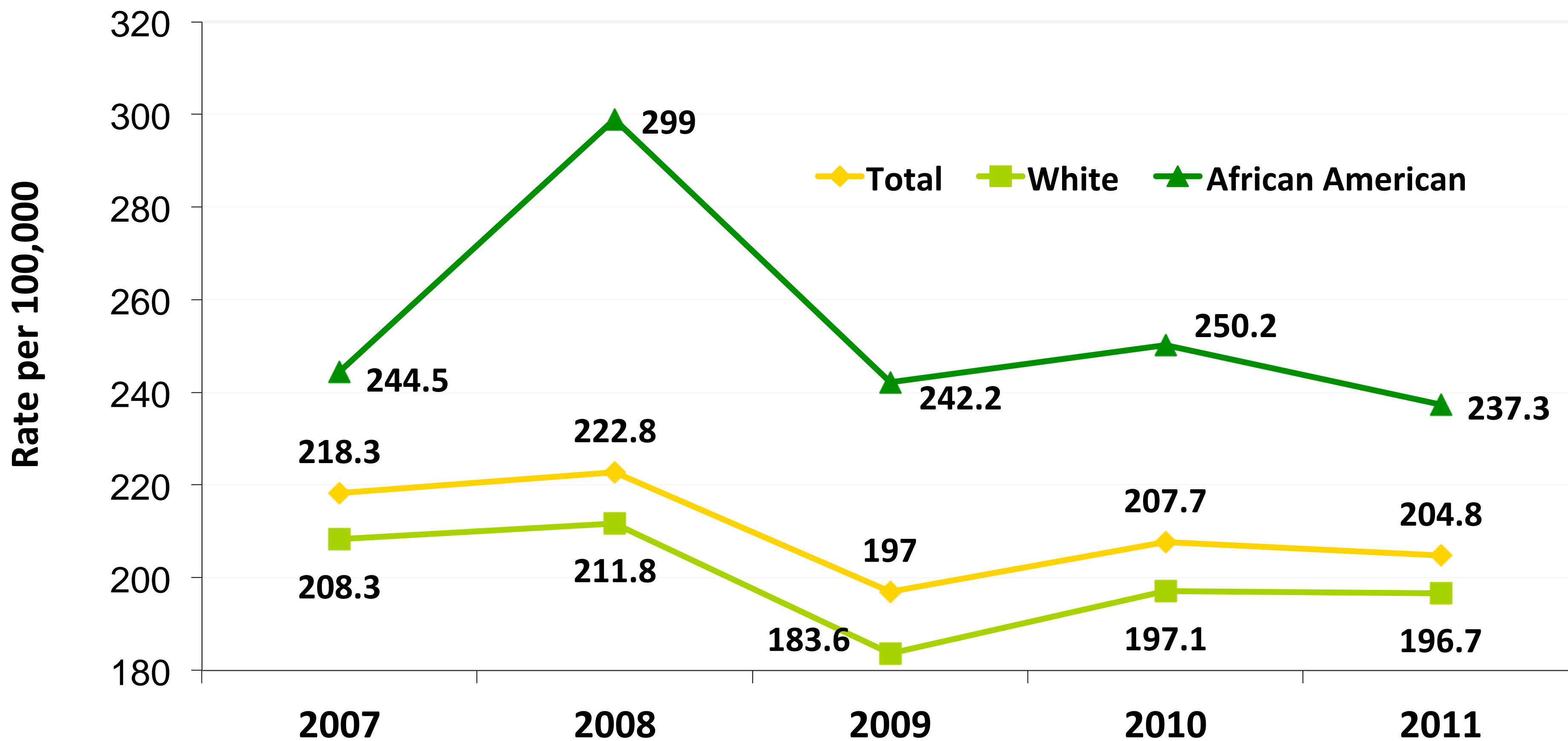
As shown in the figure to the right:

- Saginaw County's and Michigan's top two causes of death for 2011 were heart disease and cancer.
- Saginaw County had a higher rate of mortality for heart disease, chronic lower respiratory diseases, diabetes, pneumonia/influenza, and kidney disease than Michigan.
- Remarkably, Saginaw County's cancer rate fell slightly below that of the entire state.

Chronic Illness Rates: Heart Disease

Saginaw County Age-Adjusted Death Rates by Race, 2007-2011

- According to the latest reportable data, deaths due to heart disease decreased between 2010 and 2011 for all populations
- Deaths due to heart disease remain greatest for African American County residents

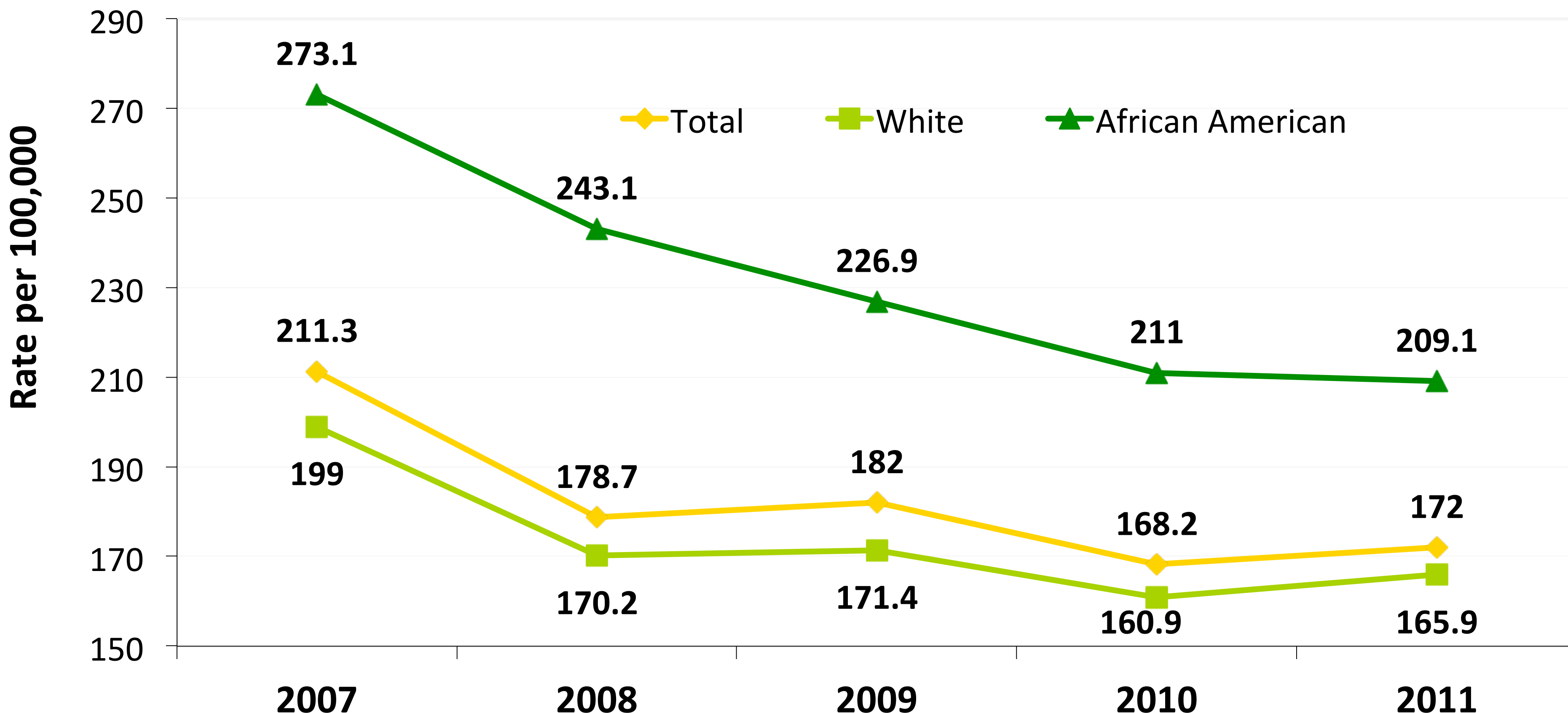


Source: 2007-2011 Geocoded Michigan Death Certificate Registry. Division for Vital Records & Health Statistics, Michigan Department of Community Health; Population Estimate (latest update 9/2012), National Center for Health Statistics, U.S. Census Populations With Bridged Race Categories. **Last Updated**: 9/27/2013.

Chronic Illness Rates: Cancer

Saginaw County Age-Adjusted Death Rates by Race, 2007-2011

- According to the latest reportable data, deaths due to cancer increased between 2010 and 2011 for the total county population and for White County residents
- Deaths due to cancer remain greatest for African American County residents
- From 2007 – 2011, cancer death rates consistently declined for the African American population

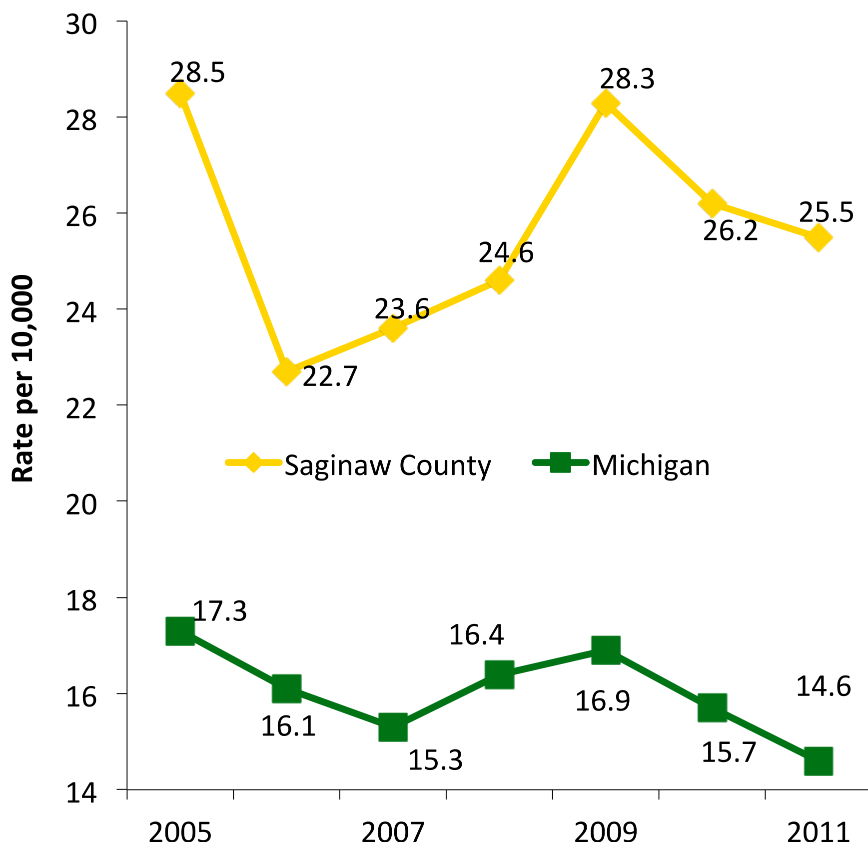


Source: 2007-2011 Geocoded Michigan Death Certificate Registry. Division for Vital Records & Health Statistics, Michigan Department of Community Health; Population Estimate (latest update 9/2012), National Center for Health Statistics, U.S. Census Populations With Bridged Race Categories. **Last Updated**: 9/27/2013.

Chronic Illness Rates: Asthma and Childhood Lead Poisoning

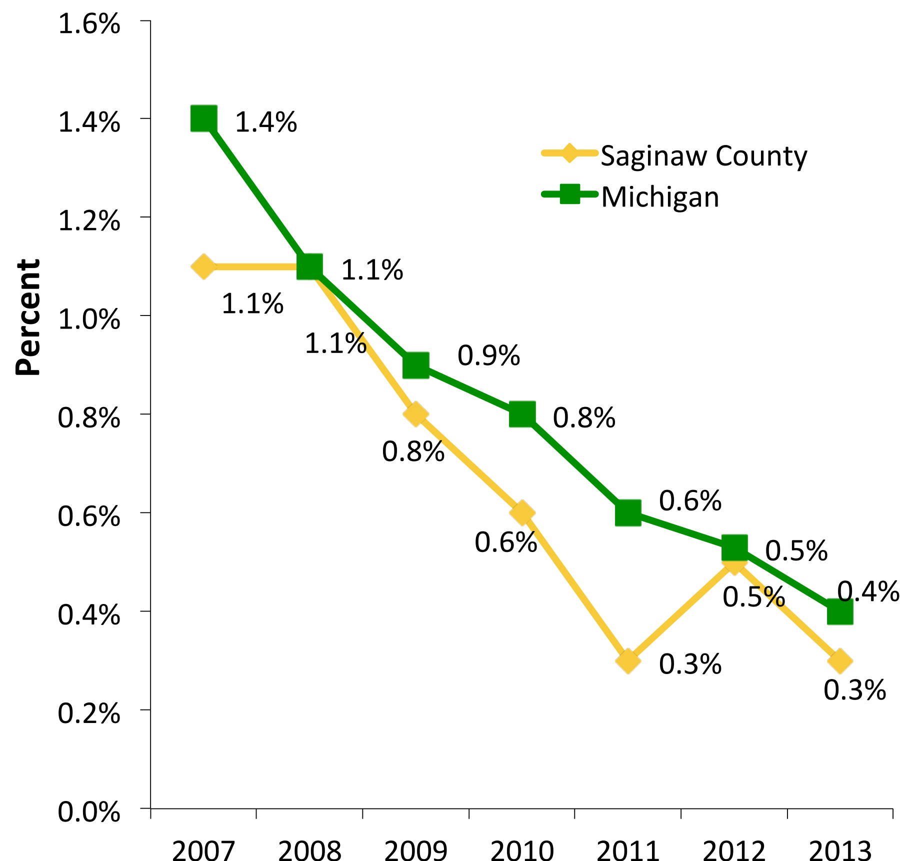
Age-Adjusted Rate of Asthma Hospitalization, All Ages 2005-2011[2]

- Saginaw County asthma hospitalization rates decreased between 2010 and 2011
- The County asthma hospitalization rates remain higher than the rate of the entire state



Saginaw County Children < 6 Years Old, Tested and with Elevated Blood Lead Levels, 2007-2012[1]

- Childhood lead poisoning rates decreased from 2012 to 2013
- The 2013 Saginaw County blood lead level rate is lower than that of the entire State



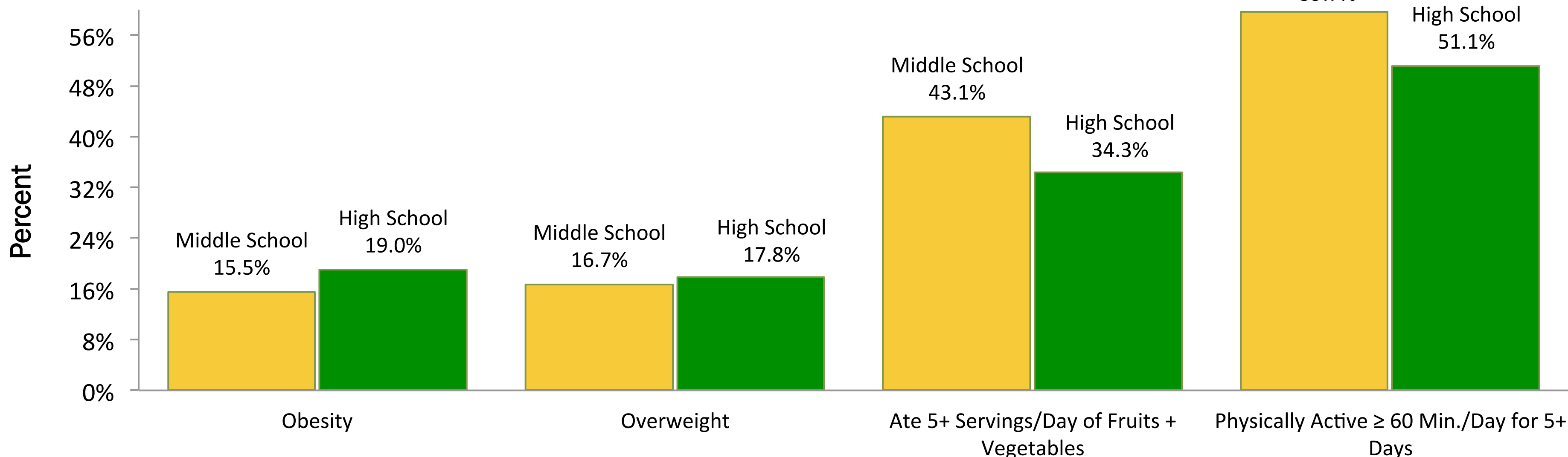
Source: Michigan Department of Community Health: Annual Report on Blood Lead Levels in Michigan Children < 6 years old, 2007-2012; [2]Michigan Department of Community Health, Division of Genomics, Perinatal Health, and Chronic Disease Epidemiology, Asthma Hospitalization Rates for Saginaw County

Child Obesity Rates

- Obesity rates for Saginaw County middle school students decreased from 2010 to 2012
- Obesity rates for Saginaw County high school students had a slight increase between 2010 and 2012
- 2012 Obesity rates show that County high school students have a higher obesity rate than County middle school students

Saginaw County Middle and High School Obesity Rate by Race and Gender, 2010 - 2012

	Male	Female	Black	White	Hispanic
Middle School (7th Grade)					
2010 MS	22.1%	14.9%	22.2%	18.2%	20.0%
2012 MS	18.6%	12.3%	20.3%	14.3%	16.5%
High School (9th and 11th Grade)					
2010 HS	21.4%	15.8%	24.4%	15.9%	19.7%
2012 HS	23.6%	14.2%	25.4%	14.9%	22.9%

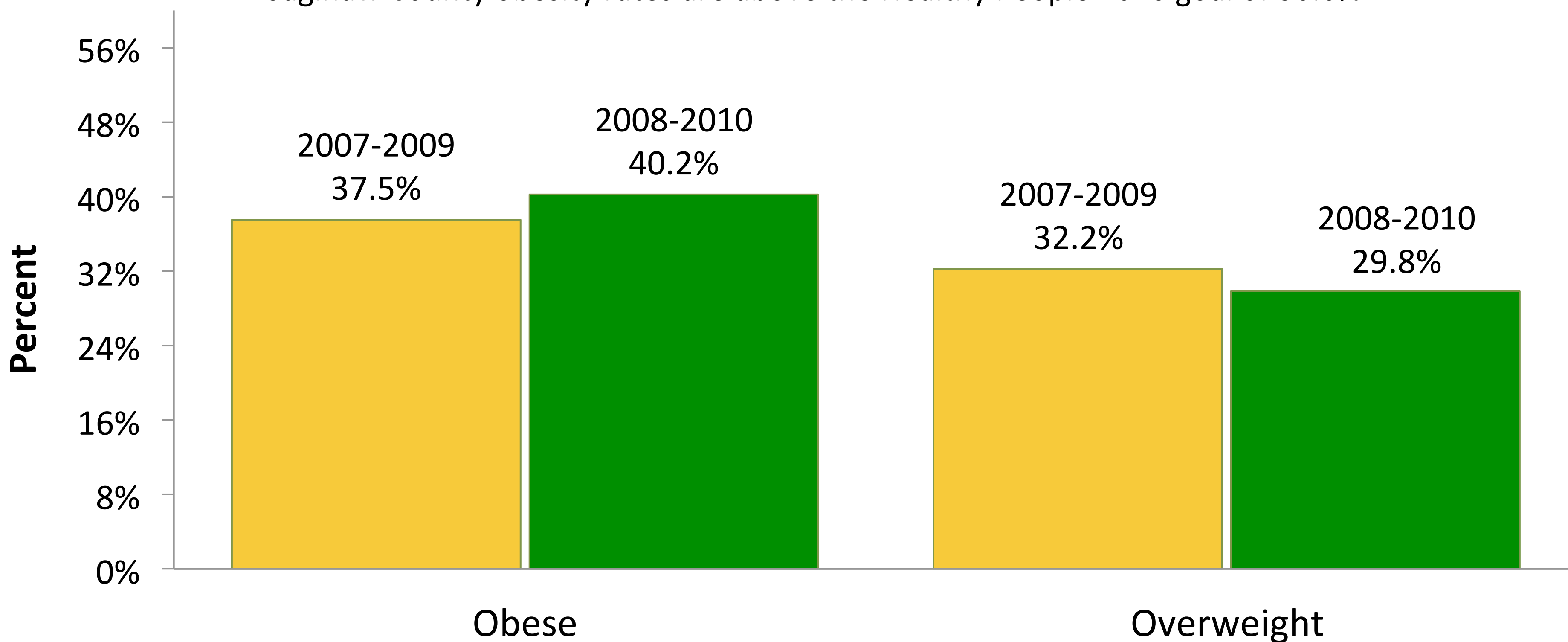


Source: Michigan Department of Education and Michigan Department of Community Health, Michigan Profile for Healthy Youth, 2009-2010 and 2011-2012 Survey. BMI, body mass index, is defined as weight (in kilograms) divided by height (in meters) squared [weight in kg/(height in meters)^2] Obese: at or above the 95th percentile for BMI by age and sex; Overweight: at or above the 85th percentile and below the 95th percentile for BMI by age and sex).

Adult Obesity Rates

Saginaw County Adult Weight Status, 2007-2009 vs. 2008-2010

- Based on 2007-2009 and 2008-2010 data, there was no statistical change in Saginaw County obesity and overweight rates*
- Though there appears to be differences in rates, there is overlap in confidence intervals*
- Saginaw County obesity rates are above the Healthy People 2020 goal of 30.6%

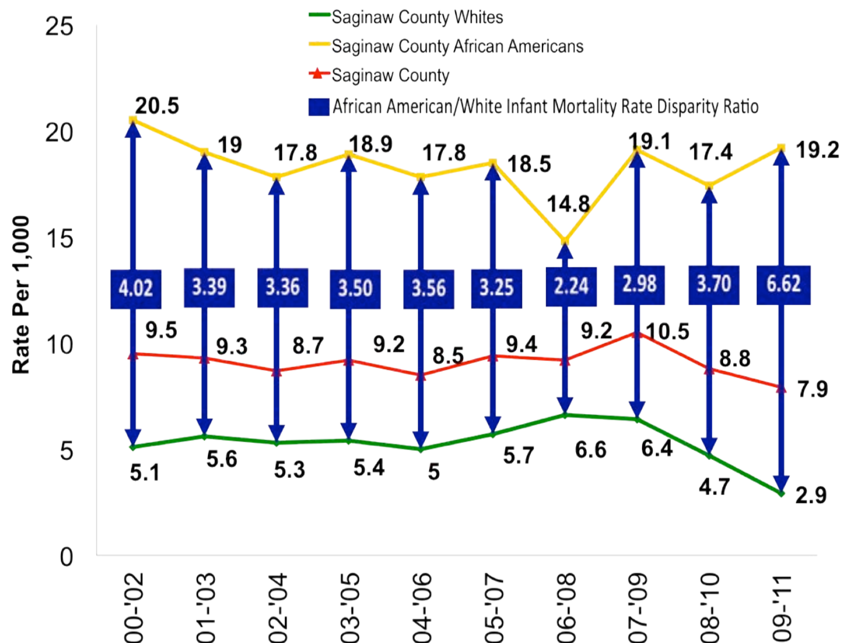


Source: 2007- 2009 and 2008—2010 Combined Michigan Behavioral Risk Factor Surveillance System (BRFSS) Regional & Local Health Department Estimates. *95 percent confidence intervals were considered in assessing adult weight status. If two intervals do not overlap then they are probably statistically different from one another (noted as improved or declined in "Action Needed" column); if they overlap, then the observed difference in the estimates cannot be interpreted as statistically different. BMI, body mass index, is defined as weight (in kilograms) divided by height (in meters) squared [weight in kg/(height in meters)^2]. Weight and height were self-reported. Pregnant women were excluded. Adult obesity is based on the proportion of adults whose BMI was greater than or equal to 30.0 and adult overweight status is based on the proportion of adults whose BMI was greater than or equal to 25.0, but less than 30.0.

Infant Mortality and Birthweight Rates

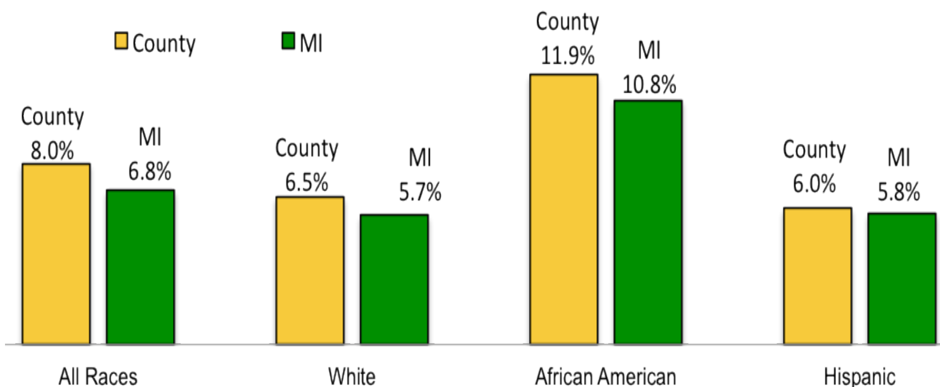
Infant Mortality Rates by Race (per 1,000 births) Three-Year Moving Average (2000-2002 - 2009-2011)

- In comparing 07-'09 to 09-'11 rates, Saginaw County infant deaths declined for the total population and for White residents
- In comparing 08-'10 to 09-'11 rates, Saginaw County infant deaths increased for the Saginaw County African American Infants
- The ratio between White and African American infant death rates increased and African American infant mortality rate is almost 7 times greater than Saginaw County's White infant mortality rate



Low Birthweight by Race/Ethnicity as a Percentage of Each Subpopulation's Live Births (2011)

- Low birthweight (LBW) is an infant born weighing less than 5 pounds, 8 ounces (2500 grams)
- The percentage of Saginaw County low birthweight births was greater than the percentage of Michigan's low birth weight births
- A side-by-side comparison of race and ethnicity within Saginaw County and Michigan shows African Americans having a higher percentage of low birthweight outcomes overall.



Source: 2000-2010 Geocoded Michigan Death Certificate Registries; 2011 Michigan Death Certificate Registry. 2000-2011 Geocoded Michigan Birth Certificate Registries Division for Vital Records & Health Statistics, Michigan Department of Community Health Created: 11/20/2013

Behavioral Risk Factors

	Saginaw County		Michigan
Status	**2006**	**2008-2010**	**2008-2010**
Current Smoker	22.4%	19.9%	19.7%
Former Smoker	25.2%	26.8%	25.6%
Never Smoked	52.4%	53.3%	54.8%
Heavy Drinker[1]	4.9%	4.9%	5.4%
Binge Drinker [2]	14.8%	18.5%	16.6%

Source: Michigan Behavioral Risk Factor Survey, 2002-2006 Combined and 2008-2010

[1] Proportion reporting 2 or more alcoholic beverages/day for men; 1 or more/day for women

[2] Proportion reporting 5 or more alcoholic beverages per occasion at least once in past month

COMMUNITY THEMES AND STRENGTHS ASSESSMENT (CTSA)

The Community Themes & Strengths Assessment data provided a deep understanding of the issues residents feel are important by answering the questions:

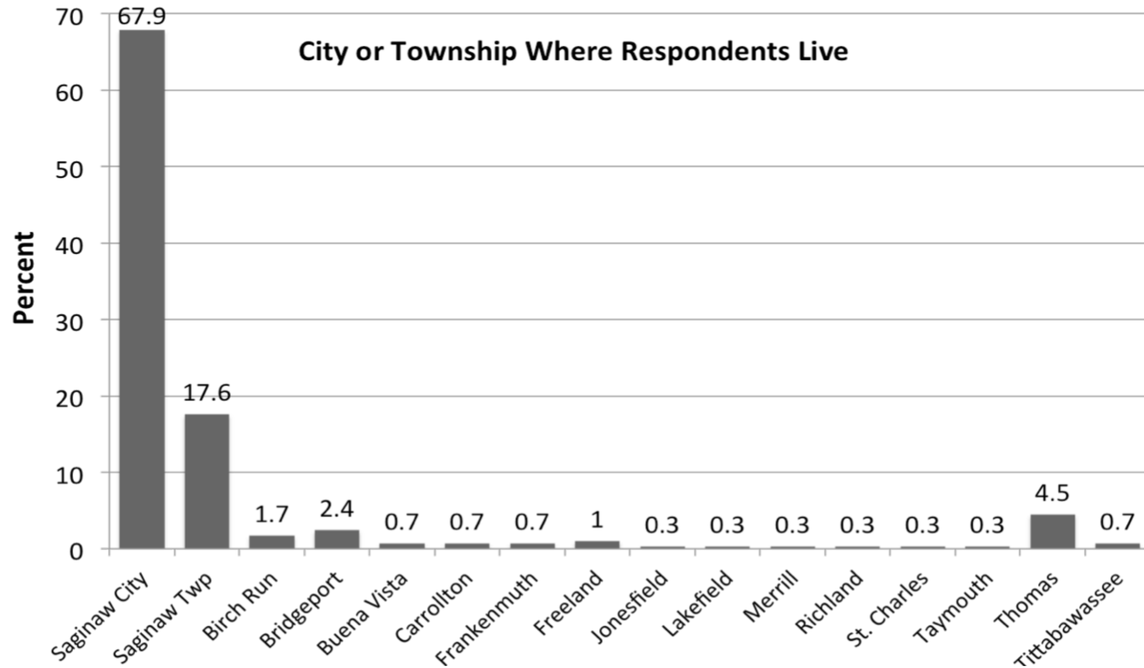
"What is important to our community?"

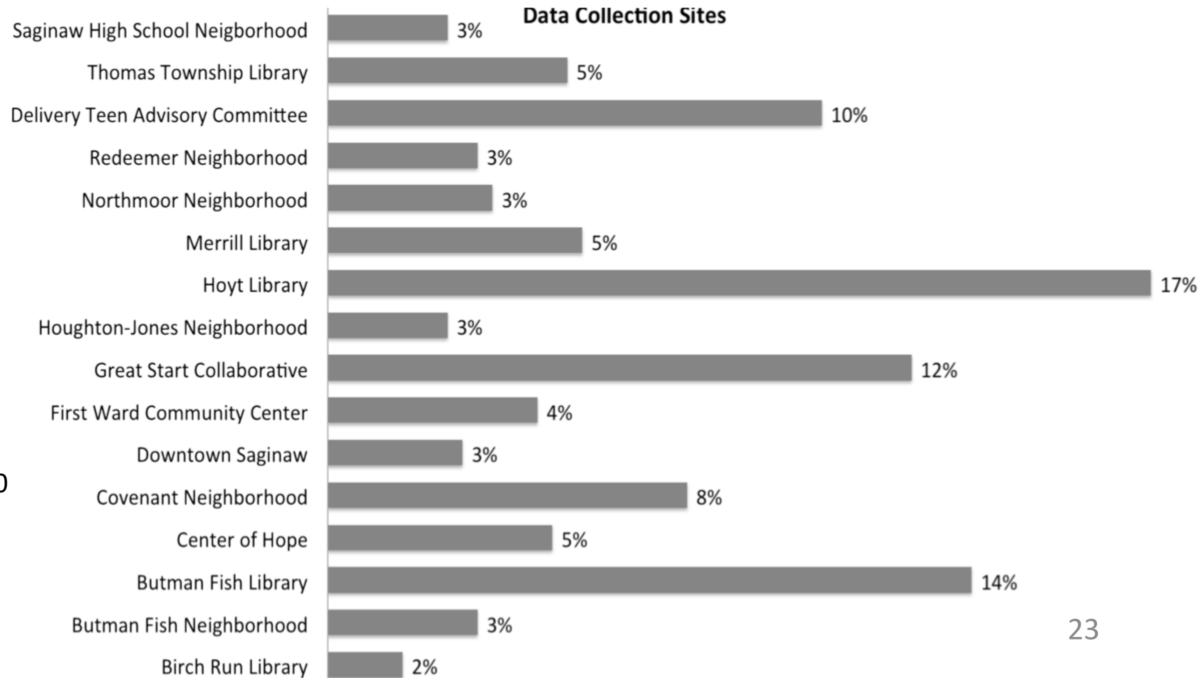
"How is quality of life perceived in our community?"

"What assets do we have that can be used to improve community health?"

Information was gathered by surveys conducted throughout Saginaw County. There were 317 survey participants:

- 54% of the participants were White
- 34% were African American/Black
- 7% were Hispanic/Latino
- 43% had a household income less than $25,000
- 26% had a household income $25,000 - $49,999
- 23% had a household income $50,000 - $74,999
- 8% had a household income greater than $75,000
- 16% of the participants had no health insurance





IDENTIFIED PRIORITIES

Respondents' Top Health Issues

Chronic Illnesses (Heart Disease, Cancer, Stroke, Diabetes)

Obesity

Infant Mortality (Deaths of Babies less than 1 year old)

Mental/Behavioral Health

Top Ranked Quality of Life Indicators/Determinants of Health Concerns

Health Care and Insurance Access, Utilization Of Services

Jobs/Employment

Neighborhood Safety

Connectedness of Community

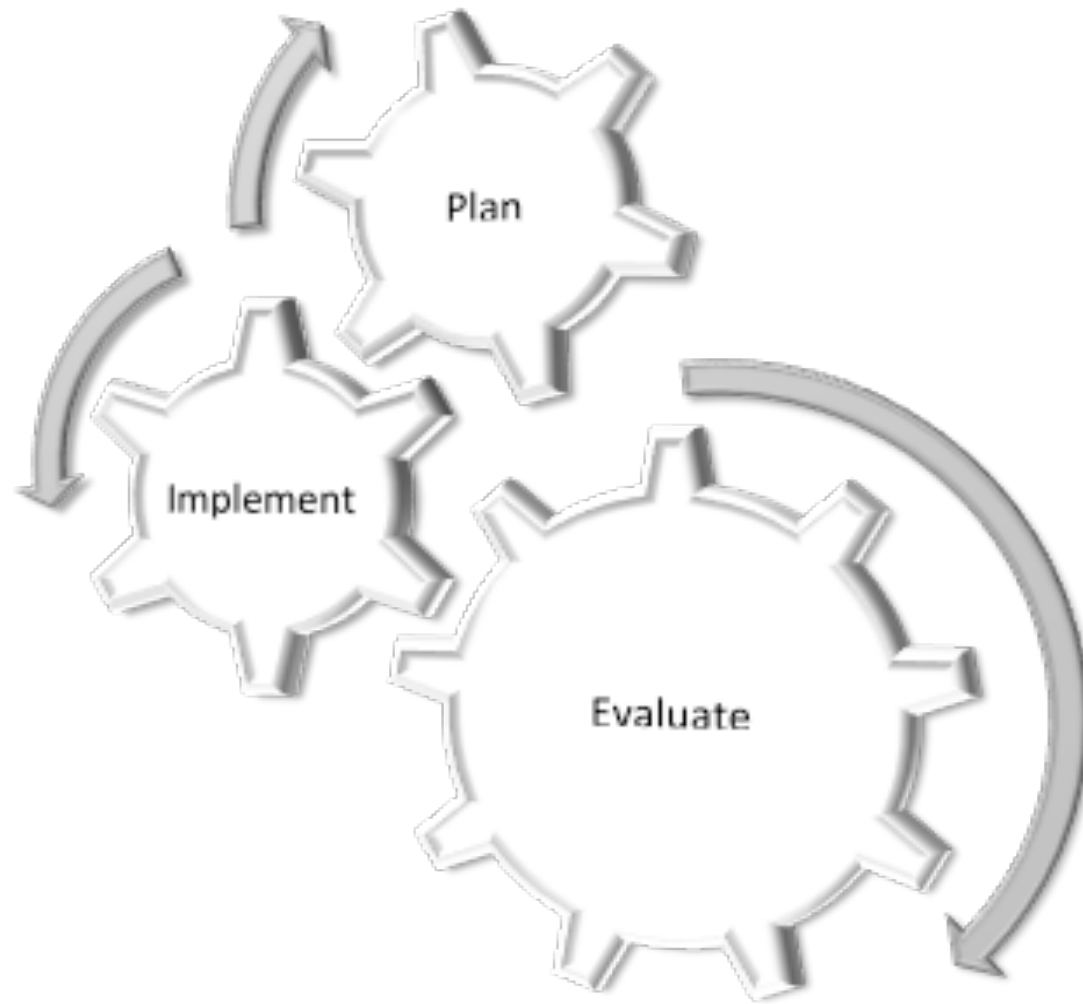
Parent Support

Transportation

Air/Environmental Hazards

Health Prevention, Screening and Wellness promotion

Source: Saginaw Community Health Improvement Planning Partners (CHIP) and Saginaw Valley State University (SVSU) Community Themes and Strengths survey, 2013



Formulating Goals, Objectives, & Strategies

CHRONIC DISEASES

Chronic diseases – such as heart disease, stroke, cancer, diabetes, and arthritis – are among the most common, costly, and preventable of all health problems in the U.S.

Chronic diseases account for 7 of the 10 leading causes of death in Michigan and are responsible for a great deal of morbidity and disability. Over 60% of Michigan's adult population suffers from a chronic disabling condition, such as arthritis, heart disease, hypertension, or diabetes.

GOALS

1. Reduce the overall cancer death rate.
2. Reduce deaths due to cardiovascular disease.
3. Reduce complications due to diabetes (i.e., diabetic patient amputations).
4. Reduce asthma hospitalizations of children < 18 years old.
5. Eliminate Elevated Blood Lead Levels for children less than 6 years old.

OBJECTIVES

Our objectives are:

1. Improve coordination among agencies/entities working towards reducing chronic disease.
2. Develop new programs and keep existing programs that address multiple chronic diseases.
3. Reduce environmental risk factors associated with chronic illness in relation to living environment/ conditions.
4. Develop and implement county-wide policy (codification) which increases access to safe and healthy housing.

Indicators	Baseline	Healthy People 2010*/2020** Targets
2011 Deaths Due to Chronic Diseases (Age Adjusted Rate per 100,000)[1]		
Death Due to Cancer	172.0	160.6**
Death Due to Heart Disease	204.8	100.8**
Death Due to Diabetes Mellitus	29.1	26.2***
2013 Childhood Blood Lead Level (BLL) (Percentage)[2]		
Children < 6 years old Tested for BLL	26.3%	
Children < 6 years with BLL ≥ 10 µg/dL	0.3%	0**
Children < 6 years with BLL ≥ 5 µg/dL	3.5%	
Asthma Hospitalizations of Children ≤ 18 years old (Rate per 10,000 Population)[3]		
Saginaw County children, 2010	14.9	17.3*
Saginaw City children, 2008-2010	28.0	17.3*

Source:[1]2011Geocoded Michigan Death Certificate Registry. Division for Vital Records & Health Statistics, Michigan Department of Community Health; [2]2013 Annual Data Report on Blood Lead Levels of Children in Michigan; [3]Michigan Inpatient Database (MIDB), Michigan Department of Community Health; ***represents a 10% reduction from baseline.

Chronic Diseases Objectives and Strategies

Objectives	Strategy	Lead Agency(s)/Person(s)
1. Improve coordination among agencies/entities working towards reducing chronic disease	1.1 Convene stakeholders monthly	Action Group Champion(s) and members
2. Develop new programs and keep existing programs that address multiple chronic diseases	2.1 Educate agency staff on various programs to reduce chronic diseases 2.2 Promote existing programs and develop new programs 2.3 Promote participation from Primary health organizations (PHO) and other agencies to refer to Pathways for Better Health (PATH)	Covenant HealthCare Partners, Inc. MSU Extension St. Mary's of Michigan Covenant HealthCare YMCA of Saginaw Saginaw County Community Mental Health Authority (SCCMHA)
3. Reduce environmental risk factors associated with chronic illness in relation to living environment/conditions	3.1 Promote healthy and safe living environments 3.2 Seek funding to carry out strategies 3.3 Educate Women, Infants & Children (WIC) staff and participants 3.4 Educate Great Start Collaborative staff and participants • Parent Coalition – Saginaw • Great Start to Quality Resource Centers • Eastern Region serving registered licensed daycare providers (Saginaw and Bay Counties) 3.5 Educate Early Head Start /Head Start (EHS/HS) staff on the recognition and prevention of lead exposure of children in families enrolled in their programs through use of Michigan Department of Community Health (MDCH) toolkit 3.6 Conduct follow-up online survey of participants attending educational sessions 3.7 Participate in learning community meeting(s) to assess and improve the use of the MDCH toolkit 3.8 Implement MDCH Managing Asthma Through Case Management in Homes (MATCH) program in Saginaw County 3.9 Conduct other prevention activities (i.e., education on environmental hygienic practices automatically sent to families with blood lead level ≥ 5 µg/dL, report of quarterly of prevention activity)	Saginaw County Department Public Health (SCDPH) Environmental Health
4. Develop and implement county-wide policy (codification) which increases access to safe and healthy housing	4.1 Develop a "Community Prescription" related to lead prevention community resources. 4.2 Education of Saginaw rental property owners on the dangers of lead poisoning, legal requirements, and methods for keeping properties lead safe. 4.3 Use of MDCH/CLPP outline in creation of a dashboard on code enforcement related to lead inspection activities with city/county	SCDPH Environmental Health

OBESITY

Obesity is more than a cosmetic problem. Several serious medical conditions have been linked to obesity, including type 2 diabetes, heart disease, high blood pressure, and stroke. Obesity is also linked to higher rates of certain types of cancer. Child obesity has been well-documented as a national epidemic and it is equally significant in Saginaw County. Combating childhood obesity is likely the key to eliminating Adult Obesity rates and the dangerous health implications that go along with it. Both adult and child obesity are often the end result of an overall energy imbalance due to poor diet and limited physical activity.

GOALS

Our goal is to reduce the number of children, adolescents and adults who are obese.

OBJECTIVES

Our objectives are to:

1. Improve coordination among agencies/entities working towards reducing adult and childhood obesity.
2. Enhance nutrition and physical activity programs/ Initiatives.
3. Disseminate consistent nutrition and physical activity messaging.
4. Advocate for community-wide policy and initiatives which increases healthy food choices and physical activity.

Indicators	Baseline	Healthy People 2020 Target
Child Obesity	2012 Rate	(6 -19 Years) Rate
7th Grade Students[1]	15.5%	14.6%
9th and 11th Grade Students[1]	19.0%	
Adult Obesity	08-’10 Rate	(>19 Years) Rate
Reduce Adult Obesity Rate[2]	40.2%	30.6%
Physical Inactivity[2]	27.4%	24.7%
Limited Access to Healthy Foods[3]	7%	TBD

Source: [1]Michigan Department of Education and Michigan Department of Community Health, Michigan Profile for Healthy Youth, 2009-2010 and 2011-2012 Survey. [2]2007- 2009 and 2008—2010 Combined Michigan BRFS Regional & Local Health Department Estimates. USDA Food Environment Atlas 2012

Obesity Objectives and Strategies

Objectives	Strategy	Lead Agency(s)/Person(s)
1. Improve coordination among agencies/ entities working towards reducing adult and childhood obesity	1.1 Convene stakeholders monthly	Action Group Champions and members
2. Enhance Nutrition and Physical Activity Programs/Initiatives	2.1 Enhance Nutrition and Physical Activity Education	MSU Extension (MSU-E) Saginaw Intermediate School District (SISD) Pulse 3 Foundation YMCA Saginaw Saginaw Township Community Development Covenant HealthCare St. Mary's of Michigan
3. Disseminate consistent nutrition and physical activity messaging	3.1 Development of a marketing plan 3.2 Implementation of the marketing plan	Action Group Champions and members Saginaw County Parks and Recreation
4. Advocate for community-wide policy and initiatives which increases healthy food choices and physical activity	4.1 Increase referral capabilities to community programs 4.2 Support the growth and expansion of area farmers markets that include food access 4.3 Partner with environmental and planning and development agencies/boards 4.4 Increase community garden initiatives	Action Group Champions and members MSU-E Saginaw Township Community Development Saginaw County Community Action Committee

INFANT MORTALITY

Infant mortality is one of the most important indicators of the health of a nation and predictor of the health of the next generation. Infant mortality rates provide insight into the health of the child and mother and is defined as the number of children dying under one year of age per 1,000 live births. It is associated with a variety of factors including maternal health, quality of and access to medical care, psychosocial conditions, environmental risk factors, and public health practices.

GOALS

Our goal is to reduce the number of Saginaw County children who die before their 1st birthday.

OBJECTIVES

Our Objectives are to:

1. Improve coordination among agencies/entities working towards eliminating infant mortality.
2. Provide consistent, relevant, fact-based education and messaging for various target groups/communication mechanisms.
3. Provide one-on-one prenatal through age five parenting services.
4. Reduce premature birth through improved women's health before, during, and after pregnancy.
5. Decrease the gaps of disparity among African American and White infant deaths through promotion of health equity advocacy and outreach.

Indicators	2009-2011 Rate	Healthy People 2020 Target
Infant Death Rate per 1,000 live births		
- Saginaw County overall	7.9	6.0
- Saginaw County African American	19.2	6.0
- Saginaw City overall	13.7	6.0
- Saginaw City African American	20.5	6.0

Source: 1989 - 2011 Michigan Resident Death Files and Michigan Resident Birth Files, Vital Records and Health Statistics Section, Division for Vital Records and Health Statistics, Michigan Department of Community Health, Created: 5/16/2012

Infant Mortality Objectives and Strategies

Objectives	Strategy	Lead Agency(s)/Person(s)
1. Improve coordination among agencies/ entities working towards eliminating infant mortality through Action Group	1.1 Convene stakeholders monthly	Action Group Champion(s) and members
2. Provide consistent, relevant, fact-based education and communication message for various target groups/communication mechanisms.	2.1 Create and disperse consistent, relevant, fact-based communication messages	Great Start Collaborative(GSC) Partners MSU-Extension Covenant HealthCare WIC
3. Offer one-on-one prenatal through age five parenting services.	3.1 Maintain and/or expand Preventative Home Visiting Programs that can offer prenatal through age five services	GSC Home Visitation Partners- Birth-5 (Saginaw Public Schools, Teen Parent Services, SISD) Saginaw County Department of Public Health (SCDPH) Nurse-Family Partnership Neonatal Intensive Care Unit (NICU)/ Early Childhood Partnership Maternal Infant Health Programs (MIHP) Healthy Families of America
4. Reduce premature births	4.1 Provide improved women's health before, during and after pregnancy	Physicians Advisory Committee Health Delivery Inc. SCDPH GSC partners All Home Visiting Programs
5. Decrease the gaps of disparity among African American and White infant deaths through promotion of health equity advocacy and outreach.	5.1 Provide health equity education: Providers, Community, Policy Makers, Consumers	Action Group Champions

BEHAVIORAL HEALTH

Behavioral Health is a term of art that refers to the specialty division of health care that typically includes the management and provision of services to address psychiatric disorders/ illness and substance use disorders/ illness.

It is noted that the prevalence of poor mental health has the potential to echo throughout the community by influencing the health and safety of citizens.

GOALS
Our goal is to improve the mental health and reduce the incidence and negative impact of chemical addictions of Saginaw County residents.

OBJECTIVES
Our objectives are:

1. Improve coordination among agencies/entities working towards improving behavioral health
2. Increase in workforce and community members trained in Trauma Informed Care.
3. Increase community knowledge and awareness of mental health conditions and where to seek treatment.
4. Integration of local health care efforts for substance use disorder priorities.

Indicators	Target
Persons trained in Trauma Informed Care	150
Saginaw citizens trained in Mental Health First Aid (MHFA)	350
Publication of Counseling Directory	1
Referral processes for Substance Use Disorder and treatment	Developed

The mental health outcome measures readily available do not adequately reflect the objectives of the Behavioral Health Action Group. Therefore, the above targets have been identified to gauge progress.

Behavioral Health Objectives and Strategies

Objectives	Strategy	Lead Agency(s)/Person(s)
1. Improve coordination among agencies/ entities working towards improving behavioral health	1.1 Convene stakeholders monthly	Action Group Champions
2. Increase in workforce and community members trained in Trauma Informed Care	2.1 Expand training and community education regarding trauma 2.2 Establish comprehensive Trauma Informed system policy and plan	Saginaw County Community Mental Health Authority (SCCMHA) Great Start Collaborative (GSC)
3. Increase community knowledge and awareness of mental health conditions & where to seek treatment	3.1 Expand Saginaw Counseling Directory to include providers of substance use disorder services; include listing of all self-help groups 3.2 Reach out to community counseling providers to better coordinate and collaborate local services, needs assessment and planning 3.3 Update SCCMHA website 3.4 Provide Mental Health First Aid Training (MHFA) program in Saginaw	SCCMHA
4. Local health care integration efforts for substance use disorder priorities	4.1 Connect education and primary care providers with substance use disorder screening and treatment resources 4.2 Provide targeted community education on substance use disorder and health	SCCMHA

EMERGING MODELS OF HEALTH SERVICES DELIVERY

Lack of health insurance coverage is a significant barrier to accessing needed health care. Having access to care requires not only having financial coverage but also access to providers.

Saginaw County has four hospitals providing services which include emergency, laboratory, children's health, cancer care, and cardiology services. However, the east side of the City of Saginaw received a geographic designation as a health professional shortage area (HPSA) in primary medical care by the Health Resources and Services Administration (HRSA).

GOALS

Our goal is to increase access to health care and health insurance and improve utilization and quality of health services delivery.

OBJECTIVES

Our objectives are to:

- Promote person-centered engagement and care.
- Enhance the patient experience of care through workforce development.
- Advocate for improved access to health care and delivery of services.
- Develop a system to better assess population health improvement and patient experience.

Indicators	Baseline* 2008-2010	Healthy People 2020 Target
Increase the proportion of adults with health insurance	87%	100%
Increase the proportion of adults with a personal health care provider	90%	100%
Reduce proportion of adults who are unable to obtain medical care when needed	13%	4%

*Source: Michigan Behavioral Risk Factor Survey 2008-2010 Combined

Emerging Models of Health Services Delivery Objectives and Strategies

Objectives	Strategy	Lead Agency(s)/Person(s)
1. Improve coordination among agencies/persons working to improve health services delivery	1.1 Convene stakeholders on a regular basis	Action Group Champions and members
2. Advocate for improved access to health care and delivery of services	2.1 Support and promote activities to increase enrollment in health insurance available through the Affordable Care Act 2.2 Support and promote activities to increase enrollment in the Healthy Michigan Plan (Medicaid expansion) 2.3 Support expansion of the Saginaw Pathways to Better Health program (adult care coordination via centralized hub) 2.4 Support expansion of early childhood home visiting services and coordination via centralized community hub 2.5 Engage in Healthy Michigan High Utilizers Project to impact appropriate utilization of hospital emergency department services 2.6 Support and promote expansion of school-based and health-related services (e.g., DHS Pathways to Potential program and Saginaw City Schools Safe Schools/Healthy Students program) 2.7 Support and promote expansion of public transportation efforts	Health Delivery, Inc. (HDI) Saginaw Health Plan Department of Human Services (DHS) Saginaw County Department of Public Health (SCDPH) Saginaw County Community Mental Health Authority (SCCMHA) St. Mary's of Michigan Covenant HealthCare Saginaw Transit Authority Regional Services (STARS)
3. Enhance patients' experience of care through workforce development	3.1 Support and promote health care workforce training in patient activation and engagement 3.2 Support and promote health care workforce training in cultural competency and health equity 3.3 Support and promote expansion and funding for community health and peer support workers 3.4 Create supportive learning communities for insurance navigation and community health/peer support workers	SCCMHA SCDPH HDI St. Mary's of Michigan Covenant HealthCare Saginaw Health Plan
4. Develop a data collection system to better assess population health improvement and patient experience	4.1 Explore measures, data sources, surveillance methodologies, and funding resources for relevant, local and timely population health trend data	HDI Saginaw Health Plan DHS SCDPH SCCMHA St. Mary's of Michigan Covenant HealthCare Mobile Medical Response (MMR)

HEALTH AND SOCIAL EQUITY

Socioeconomic and environmental differences experienced by Saginaw County residents influence the persistence of Saginaw County's health burdens. Historical factors that have left a legacy of inequities in education, housing, employment, income, wealth, and other areas continue to impact achievement, quality of life, and ultimately health.

These historical factors compounded by the current economic environment have been especially challenging to minority residents, African Americans and Hispanic/Latinos in particular.

Henceforth, addressing determinants of health, or factors that drive inequity in health outcomes, is necessary in order to reduce persistent health burdens in Saginaw County. Seven such determinants of health were identified by Saginaw County residents and workers as priorities:

- Jobs/Employment
- Neighborhood Safety
- Connectedness of Community
- Parent Support
- Transportation
- Air/Environmental Hazards
- Health Prevention, Screening, and Wellness promotion

".....disparities in health cost the U.S. an estimated $60 billion in excess medical costs and $22 billion in lost productivity in 2009.

When people face barriers to achieving their full potential, the loss of talent, creativity, energy, and productivity is a burden not only for those disadvantaged, but for communities, businesses, governments, and the economy as a whole" ~ *Altarum Institute, 2013*

Goal

Our goal is to engage county, city, and other jurisdictional leaders to promote and champion strategies that facilitate health and social equity.

Objectives

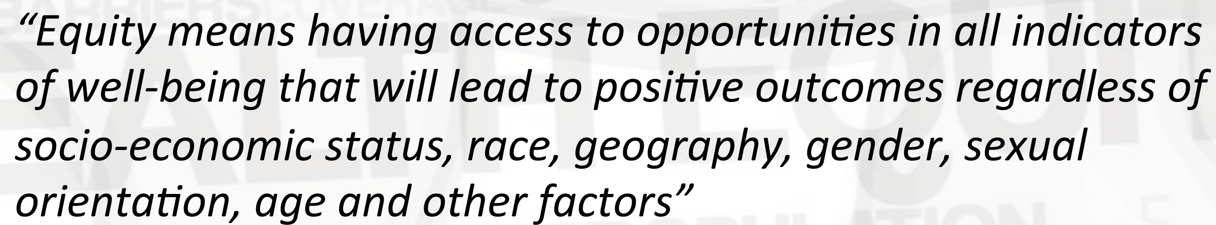
Our objectives are to:

1. Improve Coordination amongst agencies/entities working towards eliminating health inequities.
2. Advocate for policy, procedures, and services aimed at addressing the determinants of health including those aimed at keeping youth in Saginaw County (i.e. Growth and expanded options for youth and a community of engaged stakeholders).

Indicators	Targets
Report which outlines strategies to address root causes and determinants of health inequities	1
Public meetings to determine root causes, develop strategies to address them, and disseminate findings	3

Health And Social Equity Advisory Group Objectives and Strategies

Objectives	Strategy	Lead Agency(s)/Person(s)
1. Improve Coordination among agencies/entities working towards eliminating health inequities.	1.1 Convene stakeholders on a regular basis 1.2 Training for Health and Social Equity Advisory Committee	Committee Champions and members
2. Advocate for policy, procedures, and services aimed at addressing the determinants of health, including those that create strong families with economic security and Keep youth in Saginaw County (i.e. Growth and expanded options for youth and a community of engaged stakeholders).	2.1 Review disparities in health outcomes 2.2 Conduct root cause analysis exercise 2.3 Prioritize root causes or determinants of health 2.4 Educate on root causes	CHIP Action Group Champions HSEA Champions Committee members



"Equity means having access to opportunities in all indicators of well-being that will lead to positive outcomes regardless of socio-economic status, race, geography, gender, sexual orientation, age and other factors"

~ Council of Michigan Foundations

APPENDIX

KEY TERMS

3-year moving average - The number of deaths due to a specific cause are averaged for a three year consecutive period to smooth yearly variance in order to make seeing trends in the data easier.

Age-adjusted rate - The crude age-specific rates are averaged by weighting the proportion of persons in each age group against a standard population (typically the 2000 U.S. Population Census).

BMI, or body mass index, - Weight (in kilograms) divided by height (in meters) squared [weight in kg/(height in meters)^2]. Overweight for children is defined as a BMI at or above the 85th percentile and lower than the 95th percentile for children of the same age and sex. Obesity for children is defined as a BMI at or above the 95th percentile for children of the same age and sex. Adult obesity is based on the proportion of adults whose BMI was greater than or equal to 30.0 and adult overweight status is based on the proportion of adults whose BMI was greater than or equal to 25.0, but less than 30.0.

Determinant - Any factor, whether event, characteristic, or other definable entity, that brings about change in a health condition, or in other defined characteristics.
Determinants of Health Include:

- the social and economic environment,
- the physical environment, and
- the person's individual characteristics and behaviors.

Heath Inequity - A difference or disparity in health outcomes that is systematic, unfair, and about which you can do something.

Health Indicator - A measure that reflects, or indicates, the state of health of persons in a defined population, e.g., the infant mortality rate.

Health Outcomes - A change in the health status of an individual, group or population which is attributable to a planned intervention or series of interventions, regardless of whether such an intervention was intended to change health status.

Incidence - The number of new cases of a disease or event being identified and reported in a population.

Median - The middle number of a group of numbers that are arranged in numerical order. {1, 3, 10, 75, 76}.

Proportion - A part of the population with respect to the entire population. {50 men exercise out of 100 men surveyed, so the proportion is 50/100 which is equivalent to 0.5 or to 50%}.

Rate - The number of individuals affected by an event or disease divided by the population {Infant mortality rate would be 10 per 1,000 live births for a population with 2,000 births experiencing 20 infant deaths. 20/2,000 = 0.01 x 1,000 = 10 per 1,000}. Rates may also be expressed as rate per 100,000, or another number. Calculating rates allows comparison with areas that have more (i.e., Michigan) or less residents.

Data Sources

Healthy People

- 2020 Objectives

Michigan Behavioral Risk Factor Survey

- 2007-2009 Combined and 2008-2010 Combined

Michigan Department of Community Health

- Life course Epidemiology & Genomics Division Surveillance and Program Evaluation Section
  - Asthma Hospitalization Rates for Saginaw County
- Vital Records and Health Data Development Section
  - 2000-2010 Geocoded Michigan Death Certificate Registries
  - 2011 Michigan Death Certificate Registry.
  - 2000-2011 Geocoded Michigan Birth Certificate Registries Division for Vital Records & Health Statistics, Michigan Department of Community Health Created: 11/20/2013

Michigan Department of Education (Collaborates with MDCH)

- Michigan Profile for Healthy Youth
  - 2009-2010 Survey
  - 2011-2012Survey

Michigan Department of Labor and Economic Growth

- 2005-2012 Labor Market Information

Michigan Department of Community Health Childhood Lead Poisoning Prevention Program

- 2012 and 2013 Annual Report on Blood Lead Levels in Michigan

United States Census Bureau

- 2005-2009 Population Estimate
- 2010 Census

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Community Health Improvement Plan (CHIP) Partners

CHIP Partner Group	Goal	Contact
Steering Committee	Champion the development and implementation of an integrated plan that will support and maintain a healthy Saginaw Community.	Pamela L. Smith 989-992-6353 pamela@urbanregenerationllc.com
Health and Social Equity Advisory	Engage county, city, and other jurisdictional leaders to promote and champion strategies that facilitate health and social equity.	Pamela L. Smith 989-992-6353 pamela@urbanregenerationllc.com
Emerging Models Of Health Services Delivery Action Group	Increase access to health care, increase access to health insurance, and improve utilization and quality of health services delivery.	Linda Tilot, Saginaw County Community Mental Health Authority (SCCMHA) 989-797-3506, ltilot@sccmha.org
Infant Mortality Action Group	Reduce the number of Saginaw County children who die before their 1st birthday.	Julie Kozan, Great Start Collaborative 989-399-7452, jkozan@sisd.cc
Obesity Action Group	Reduce the number of children, adolescents, and adults who are obese.	Dawn Earnesty, MSU Extension (989) 758-2514 wilcoxd4@anr.msu.edu
Chronic Diseases Action Group	Reduce the overall cancer death rate; Reduce cardiovascular disease death rate; Reduce complications due to diabetes (i.e., diabetic patient amputations); Reduce asthma hospitalizations of children < 18 years old; Eliminate Elevated Lead Levels for children < 6 yrs.	Dawn Bellinger, St. Mary's of Michigan dmbellinger@stmarysofmichigan.org
Behavioral Health Action Group	Improve mental health and reduce the incidence and negative impact of chemical addictions of Saginaw County residents.	Ginny Reed, SCCMHA (989)797-3493, greed@sccmha.org

Saginaw County Road Map to Health 2014 - 2016

Facilitator and Publisher