

2018



Healthy!CapitalCounties

a community approach to better health

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Vision

The vision of the Healthy! Capital Counties Community Health Improvement Process is that all people in Clinton, Eaton, and Ingham counties live:

- In a physical, social, and cultural environment that supports health
- In a safe, vibrant, and prosperous community that provides many opportunities to contribute and thrive
- With minimal barriers and adequate resources to reach their full potential

Purpose

The purpose of this Community Health Profile is to describe the health status of the population, communicate key health behaviors, describe determinants of health outcomes and behaviors, and examine root causes of ill health and health inequalities. A community health assessment and improvement plan is a collaborative, systemic process of collecting and analyzing data and information, mobilizing communities, developing priorities, garnering resources, and planning actions to improve the population's health.

About The Project

ACKNOWLEDGMENTS

A project such as this, conducted at such scope and swiftness, could not have been possible without the support and meaningful participation of many people and organizations across Clinton, Eaton, and Ingham counties. Sincere thanks go to the members of the Healthy! Capital Counties Workgroup — representing hospital systems and local health departments across the three counties. Your continued support is welcomed as we transition from the assessment to the planning stage of this endeavor. Additional thanks go to those throughout the community who gave their input via participation in focus groups, stakeholder meetings, and surveys.

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PUBLICATION DESIGN

Redhead Design Studio

PUBLICATION DATE

December 31, 2018

PROJECT SUPPORT

Support for this project was provided by:

HOSPITALS

- Eaton Rapids Medical Center
- Hayes Green Beach Memorial Hospital
- McLaren Greater Lansing
- Sparrow Health System

LOCAL HEALTH DEPARTMENTS

- Barry-Eaton District Health Department
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DEFINITIONS*

COMMUNITY HEALTH IMPROVEMENT PROCESS

A comprehensive approach to assessing community health and developing and implementing action plans to improve community health through substantive community member and local public health system partner engagement. The community health improvement process yields two distinct yet connected deliverables: a community health assessment, presented in the form of a community health profile, and a community health improvement plan.

COMMUNITY HEALTH ASSESSMENT (CHA)

A process that engages with community members and partners to systematically collect and analyze qualitative and quantitative health-related data from a variety of sources within a specific community. The findings of the CHA are presented in the form of a community health profile and inform community decision-making, the prioritization of health problems, and the development and implementation of community health improvement plans.

COMMUNITY HEALTH IMPROVEMENT PLAN (CHIP)

An action-oriented plan outlining the priority community health issues (based on the community health assessment findings and community member and partner input) and how these issues will be addressed, including strategies and measures, to ultimately improve the health of a community. The CHIP is developed through the community health improvement process.

*from the NACCHO Demonstration Site Project Requirements, Required CHA/CHIP Characteristics

PROCESS

The Healthy! Capital Counties project began in December 2010 as a partnership between the four hospital systems and the three local health departments serving Clinton, Eaton, and Ingham counties. The 2010 Patient Protection and Affordable Care Act requires non-profit hospitals to conduct or participate in a "community health needs assessment", partner with public health and the community, and to develop an action plan to address health needs identified in the assessment.

The public health departments, while accredited at the state level in Michigan, must conduct a high-quality Community Health Assessment and Community Health Improvement Plan as a prerequisites to applying for voluntary national accreditation through the Public Health Accreditation Board. Building on a regional history of cross-hospital system and cross-health department collaboration, the entities decided to partner collaboratively on this project to conserve and enhance the local capacity to do this work.

In June of 2012, the Healthy! Capital Counties project published the first Community Health Profile and Needs Assessment, with a key findings section added in August 2012. The second round of the community health improvement process was started in October 2014 and resulted in the 2015 Profile and Needs Assessment, published in October of 2015. The third cycle of the Healthy! Capital Counties project started in August of 2017, leading to this publication.

COMMUNITY ENGAGEMENT

The Healthy! Capital Counties project is unique in its multi-agency, collaborative structure that reflects the lived experiences of residents. Many view the area as one region rather than three separate counties. This collaboration also promises to integrate and apply a health equity perspective to its processes and data interpretations. Health equity is defined as the economic and social conditions that influence the health of individuals, communities, and jurisdictions as a whole.¹

The project included one main workgroup, which is made of hospital system and health department representatives, to provide guidance to the project staff, as well as to assist with project visioning, indicator selection, identification of key focus group populations, promotion, communications, and media.

Input from the community was sought through several mechanisms. First, suggestions and comments on the proposed indicator table for the quantitative data were solicited through the Healthy! Capital Counties workgroup. Second, six focus groups were held in various locations across the three counties to gather input from traditionally underserved populations. Online surveys were also distributed to both the community at large and the health care providers of the participating hospital systems to obtain perspective on the health issues and needs currently existing in the tri-county area. In addition, local youth shared their perspectives through the Youth Photo Project.

Three stakeholder meetings were held in November 2017, February 2018, and July 2018 to provide community organizations, partners, stakeholders, and the public the opportunity to give feedback on many aspects of the project, including the quantitative indicator table, asset mapping, questions for the focus group participants, the community survey, and a preview of quantitative and qualitative results.

These meetings were critical to engaging the community in the community health assessment process.

Finally, the project conducted an event to determine the community health priorities, at which there were representatives from community members, elected officials, cross-sector agency representatives, and leaders from each of the three counties, in addition to members of the workgroup. Development of the Community Health Improvement Plan will be based on the priorities selected at this event.

1. Dennis Raphael, Social Determinants of Health; Toronto: Scholars Press, 2004

JURISDICTION

Many persons living in Clinton, Eaton, and Ingham counties view themselves as residents of a greater "Capital Area", which is centered on the urban core of the cities of Lansing and East Lansing. These capital counties include a wide variety of communities — from East Lansing, home to Michigan State University, to downtown neighborhoods in Lansing, to inner suburban communities surrounding the urban core, to small towns and villages scattered through the countryside. The hospital systems serving the area range from small community hospitals to large tertiary care centers. The need to establish a process that would simultaneously look broadly at the region as a whole and at the county level, while also viewing smaller communities more closely, was essential. The jurisdiction covered by this Community Health Profile includes all of the residents living in Clinton, Eaton, and Ingham counties.

MODEL

We used the Association for Community Health Improvement's model for our Community Health Assessment and Improvement Planning project. Constructed by a team of professionals working in both hospital and public health settings, this model fit both the nature of our project as well as the timeframe. The website for the model is www.assesstoolkit.org.

Steps in this model were modified in order to meet PHAB accreditation standards and to enhance community engagement.

Health equity principles were also applied in the framing of the project. The workgroup and project staff outlined a plan that would allow for:

- The inclusion of social determinants of health - defined as the physical, economic, and social environment in which people live; and
- The participation of communities that are traditionally marginalized; and
- Community engagement activities.



DATA COLLECTION

The data presented in this report was compiled from a variety of sources and includes both primary (collected for local health assessment purposes) and secondary data sources (collected for another purpose, usually by another organization/institution). Portions of the data collected for the Healthy! Capital Counties project were quantitative (information are described in terms of quantity of an item), while the data from the focus groups and Youth Photo Project were qualitative (information is described in terms of attributes, characteristics, properties).

PRIMARY DATA SOURCES

Several primary data sources were used in the development of this report: the Healthy! Capital Counties focus groups, the Healthy! Capital Counties community and health care provider surveys, the Youth Photo Project, and the Capital Area Behavioral Risk Factor and Social Capital survey.

Healthy! Capital Counties Focus Groups: In order to gather information from traditionally hard to survey populations and to document the experiences, thoughts, beliefs, and stories of the community, a series of focus groups were conducted for the project. Six focus groups were held in March-May 2018 and took place in various locations throughout the three counties. Groups that were actively solicited for input were:

- Persons with disabilities;
- Persons recovered/recovering from substance addiction;
- Persons who did not have health insurance;
- Persons who had low incomes or were unemployed;
- Persons who identified as Spanishspeaking Hispanic or Latino/a; and
- Persons who identified as persons of color.

Capital Area Behavioral Risk Factor & Social Capital Survey: Since 2000, the Capital Area United Way, Barry-Eaton District Health Department, Ingham County Health

Department, and Mid-Michigan Health Department have conducted a populationbased landline/mobile phone health survey of adults in their jurisdictions (Barry, Eaton, Ingham, Clinton, Gratiot, and Montcalm counties) on various behaviors, medical conditions, and preventive health care practices. The survey was conducted using the Capital Area Behavioral Risk Factor & Social Capital survey instrument, which is based on the Centers for Disease Control and Prevention's Behavioral Risk Factor Surveillance System questionnaire, as well as questions developed by the health departments to collect information of interest to the local community. During 2014-2016, a total of 3,613 adults in Clinton, Eaton, and Ingham counties responded to the landline/mobile phone survey, and the overall survey response rate was 32.9%.

Community and Health Care Provider Surveys: In order to gather input about the community's health needs from stakeholders and the general public, two online surveys were administered during April-June 2018. One survey was for any community resident who lived and/or worked in the tri-county area, and the second survey was for health care providers associated with the project's hospital system partners.

Youth Photo Project: During July-August 2017 (Eaton County) and November 2017-January 2018 (Clinton and Ingham counties), 27 local high school students participated in a photo project. The goal of the project was to encourage the students to consider their own health status and contributing factors, the health status of their families and contributing factors, and their school, home, and community environments, and to then express those thoughts through photographs and accompanying captions.

SECONDARY DATA SOURCES

In addition to primary data sources, secondary sources were also used. These included:

American Community Survey (ACS), U.S. Census Bureau: In 1992, the House Commerce Oversight Subcommittee asked the Census Bureau to create an annual snapshot of demographic information so Congress can react to current trends instead of 10-year-old data. The American Community Survey (ACS) is the response to that request. It is an ongoing statistical survey conducted by the U.S. Census Bureau, sent to approximately 250,000 addresses monthly (or 3 million per year) that gathers information about: demographics, family and relationships, income and benefits, and health insurance. In 2010, it replaced the long form of the decennial census.

Centers for Disease Control and Prevention (CDC): Prescription data comes from the QuintilesIMS Transactional Data Warehouse, which is based on a sample of approximately 59,000 retail (non-hospital) pharmacies that dispense roughly 88% of all retail prescriptions in the United States.

Michigan Care Improvement Registry (MCIR): MCIR was created in 1998 to collect reliable immunization information for children and make it accessible to authorized users. A 2006 change to the Michigan Public Health Code enabled the MCIR to transition from a childhood immunization registry to a lifespan registry which includes citizens of all ages. MCIR benefits health care organizations, schools, licensed childcare programs, pharmacies, and Michigan's citizens by consolidating immunization information from multiple providers into a comprehensive immunization record.

Michigan Department of Health and Human Services (MDHHS): The Michigan Department of Health and Human Services is responsible for the collection of information on a range of health-related issues, including monitoring Michigan's general health and well-being, health program development, targeting and evaluation of program progress, and identification of emerging health issues and trends.

Federal Bureau of Investigation (FBI): FBI Uniform Crime Reporting Program provides information on the rate of violent crimes.

Michigan Profile for Healthy Youth Survey (MiPHY) (Michigan Department of Education and MDHHS): The Michigan Profile for Healthy Youth is an online student health survey. It provides student results on health risk behaviors including substance use, violence, physical activity, nutrition, sexual behavior, and emotional health in grades 7, 9, and 11. The survey also measures risk and protective factors most predictive of alcohol, tobacco, and other drug use and violence.

National Environmental Public Health Tracking Network (NEPHTN): Coordinated by the Centers for Disease Control and Prevention, the NEPHTN brings together health and environment data in one place, making it easier to analyze, interpret, and distribute information about the relationship between environmental exposures, hazards, and health outcomes.

United States Department of Agriculture (USDA): The USDA measures many aspects of the food environment, including store/ restaurant proximity, food prices, food and nutrition assistance programs, and community characteristics, as well at the interaction between these aspects, in order to identify causal relationships of food choice, diet quality, and access to healthy food.

United Ways of Michigan: Since 2014, the United Ways of Michigan have authored the ALICE report, which provides a comprehensive look at Michigan residents who are at risk of financial deprivation. ALICE stands for Asset Limited, Income Constrained, Employed, and comprises households with income above the Federal Poverty Level but below the basic cost of living for their area. These households typically do not have enough financial resources to cover unforeseen expenses which, when they occur, send them spiraling into poverty.

GEOGRAPHIC AREA GROUPS METHODOLOGY

Counties are typically not homogeneous areas. One part of a county maybe very urban, meanwhile another part can be very rural. Nevertheless, the lowest geography for which health data is usually reported is at the county level. While accurate, this way of presenting the data mask variations that maybe present at the sub-county level. To the extent possible, this project sought to give a more nuanced view of health in the capital area.

What usually prevents health professionals from reporting sub-county statistics is population size. A city/township with a population of 150,000 has sufficient persons experiencing a health event (births, deaths, diabetes, heart attacks, etc.) to calculate statistics that are both stable and maintain confidentiality — but a city or township with a population of 15,000 does not. To overcome this problem, the cities and townships in the tri-county area were resorted into geographic groupings of similar municipalities with sufficient population sizes for reporting health statistics. For the purposes of this project, sub-county geographic areas were grouped using either, 1. population density and median home value, or 2. median home value only. Both these characteristics were calculated using data from the U.S. Census Bureau. While not the only characteristics of sub-county geographic areas, we found population density and median home value to be accurate risk markers that describe the lived experience of the majority of the population. Public health professionals who provide home-based health services validated these groupings empirically.

URBAN GROUPS

The City of Lansing, the City of East Lansing, and Lansing Charter Township were separated into urban groups based on existing municipal boundaries.

SUBURBAN AND RURAL GROUPS

(MEDIAN HOME VALUE AND POPULATION DENSITY)

The remaining areas of the capital area were divided into their individual cities and townships. Using the population density of each municipality (calculated as person per square mile) and its median home value, the cities and township were sorted and grouped into four groups:

- Farms & Fields are townships with a population density less than 419 people per square mile and median home values less than or equal to \$167,000 (2010 USD).
- Countryside Suburbs are townships with a population density less than 419 people per square mile and median home values of more than \$167,000 (2010 USD).
- Small Cities are cities (and one township) outside the regional urban center with high population density of 1,000-2,500 people per square mile.
- Inner Suburbs are townships that are immediately adjacent to the urban areas, with population density of 419-999 people per square mile. These communities have a mix of urban, suburban, and rural characteristics due to their location in between the tri-county regional urban center and rural communities.

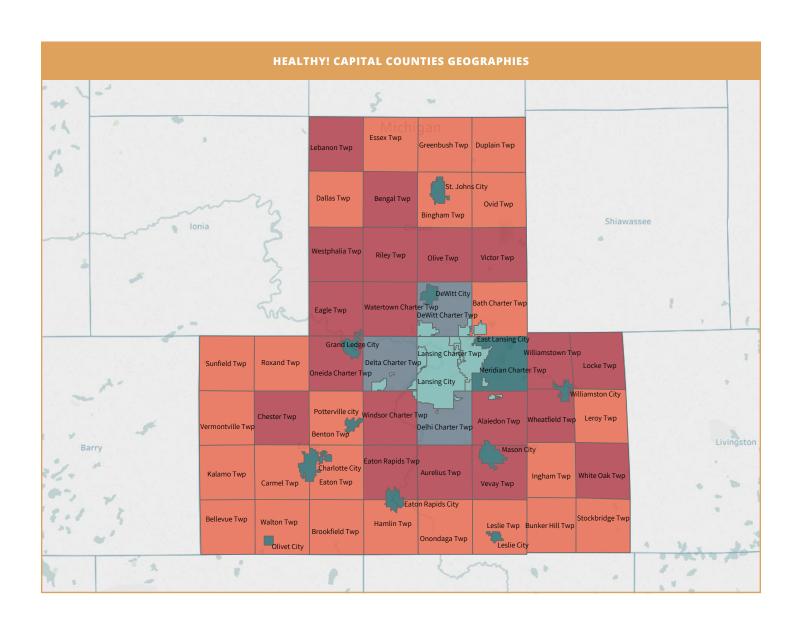
UNDERSTANDING THE MAPS

The maps displayed in this report are visual representations of the rates across each of the geographic area groups and are not interpretable as "the rate" for a particular location. For example, the rate of adults aged 18-64 without health insurance in the "Small Cities" area is 9.9%. This means that across the group of municipalities that make up the "Small Cities" group, the overall rate is 9.9%. Does this mean that the rate of adults without health insurance in Charlotte. or Mason, or St. Johns is 9.9%? Absolutely not. The rate in the municipalities making up the groups may vary — and the specific rate for a specific location cannot be found by consulting the map. Data is available by municipality for the American Community Survey — however, most data are not reportable to the municipal or census tract level, which is why the data are grouped by the geographic areas when possible.

CITATIONS

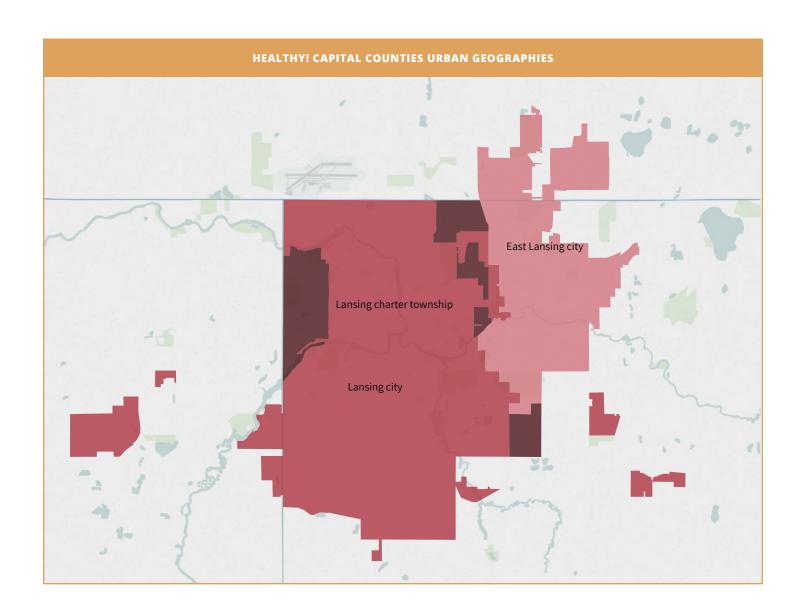
Throughout the report, specific books and journal reports are cited with publication information. Websites are cited with web addresses. However, we also often consulted sources such as the County Health Rankings or the Michigan Department of Health and Human Services to explain background information about an indicator. These are noted with CHR and MDHHS, respectively.

GROUP NAME	POPULATION DENSITY	MEDIAN HOME VALUE
Farms & Fields	< 419 persons/square mile	< \$167,000 (2010 USD)
Countryside Suburbs	< 419 persons/square mile	> \$167,000 (2010 USD)
Small Cities	1000-2500 persons/square mile	
Inner Suburbs	419-999 persons/square mile	

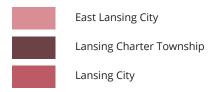


H!CC TRI-COUNTY GEOGRAPHIES





H!CC TRI-COUNTY GEOGRAPHIES



How does health happen?

Health can seem like a very fragile thing — one minute you have it, the next minute it is gone. Some people look to their genetics to explain their ill health; others their behaviors; and some feel that their neighborhood affects their health. In truth, they are all correct. As our knowledge of health evolves, we are realizing that a person's health is based on the interaction between their genes, their behaviors, their environment and experiences. Some of these factors, i.e. our genes, can't be changed, while others, such as behavior, can.

This report is concerned with the changeable aspects of health, and therefore does not address genetics or heritable diseases. While personal responsibility plays a role in each person's individual health, it's important to also consider other factors of social and collective responsibility to improve health. To put it another way, the choices people make depend on the choices they have. This report, using information about health outcomes, behaviors, environmental, and societal factors, is designed to reveal the patterns of ill health across populations or groups of people in the tri-county area.

Some of what influences health outcomes are health behaviors, or ways of living which protect from or contribute to health problems. These behaviors are what people usually think of as causing ill health, things like smoking, drinking, or not having a primary care doctor. Also included are things that reflect someone's physical or mental condition, such as obesity or poor mental health — these are often linked to poor health outcomes.

Over the past 30 years, researchers have found that social, economic, and environmental factors (the social determinants of health) predict which groups are more likely to have poor health outcomes and poor health behaviors. These can be thought of as characteristics that can either constrain (hurt) or support (help) healthy living. These factors examine

concepts like lack of access to healthy foods, educational achievement, and exposure to childhood poverty. These disadvantages often pile up on each other to make healthy living more challenging for some populations than for others.

The final level of health includes those things which affect how different groups are exposed to social, economic, and environmental factors. These opportunity measures are those which examine evidence of structural power and wealth inequities — factors which predict which groups will be challenged with poor social, economic, and environmental conditions. Understanding opportunity measures is a key aspect of a health equity perspective. The opportunity measure presented in this report has been shown to result in poor health outcomes. To put it bluntly, there is increasing evidence that income inequality is making us sick.



2018 Indicators

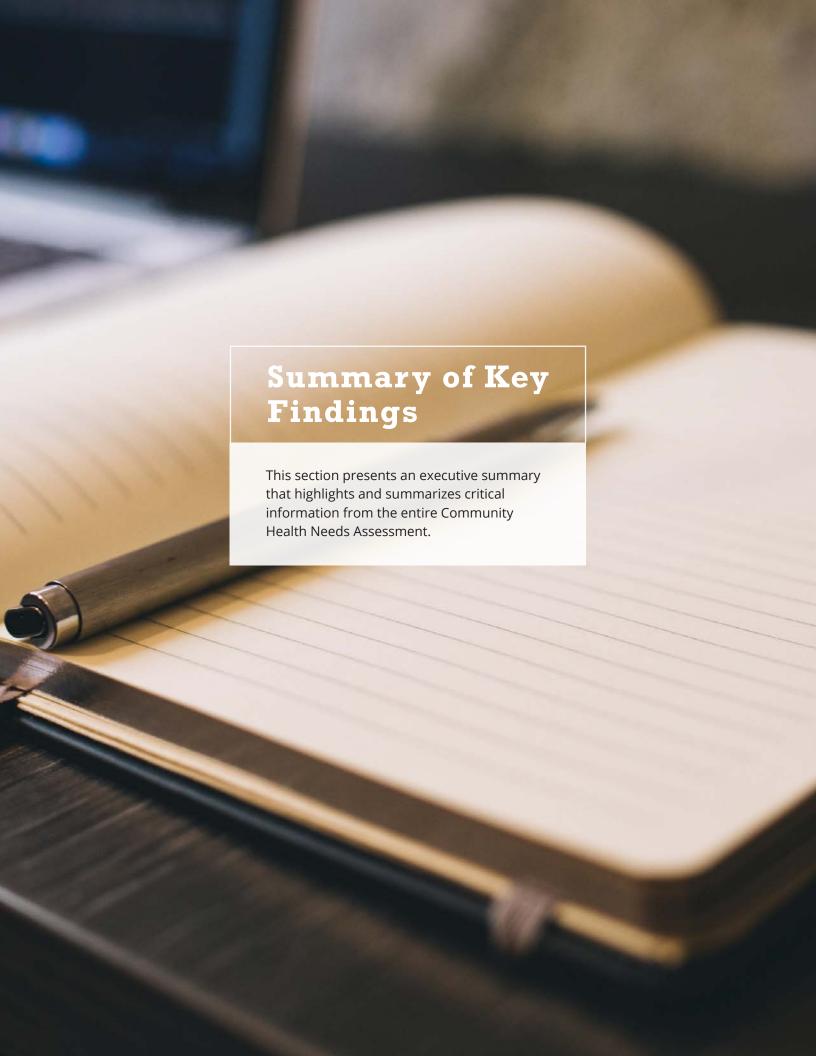


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DOMAIN	INDICATOR GROUP	INDICATOR	MEASURES	SOURCE
OPPORTUNITY MEASURES	Income	Income Distribution	Gini coefficient of income inequality	ACS
SOCIAL, ECONOMIC,	Social & Economic Factors	Income	Percent of households below ALICE threshold	United Way
& ENVIRONMENTAL FACTORS		Education	Percent of adults ≥ 25 years old with a Bachelor's degree or higher	ACS
		Social Connection & Social Capital	Percent of adolescents who know adults in the neighborhood they could talk to about something important	MiPHY
		Community Safety	Rate of violent crimes	FBI/U.S. DOJ
		Affordable Housing	Percent of households who spend more than 30% of their income on housing	ACS
		Quality of Primary Care	Rate of ambulatory-care sensitive (ACS) or preventable hospitalization	MDHHS
	Environmental Factors	Environmental Quality (Indoor)	Rate of elevated blood lead levels among children < 6 years old	MDHHS
		Environmental Quality (Outdoor)	Projected number of extreme heat days	NEPHTN
		Built Environment	Percent of the population living in a food desert	USDA
BEHAVIORS,	Health Behaviors & Physical Condition	Obesity	Percent of adults who are obese	BRFS
STRESS, & PHYSICAL			Percent of adolescents who are obese	MiPHY
CONDITION		Tobacco Use	Percent of adults who currently smoke	BRFS
			Percent of adolescents who smoked cigarettes during the past 30 days	MiPHY
		Alcohol Use	Percent of adults who binge drank during the past 30 days	BRFS
			Percent of adolescents who binge drank during the past 30 days	MiPHY
		Substance Abuse	Per resident rate of opioid prescriptions filled	CDC
			Percent of adolescents who took any painkillers not prescribed to them during the past 30 days	MiPHY
		Physical Activity	Percent of adults who participated in leisure time physical activity	BRFS
			Percent of adolescents who were physically active for \geq 60 minutes per day on five or more of the past seven days	MiPHY
		Nutrition	Percent of adults who consume ≥ 5 servings of fruits and vegetables per day	BRFS
			Percent of adolescents who consume ≥ 5 servings of fruits and vegetables per day	MiPHY
	Clinical Care	Access to Care	Percent of adults with no primary care provider	BRFS
			Percent of adults 18-64 years old with no health insurance	ACS
		Communicable Disease Prevention	Percent of non-medical immunization waivers granted	MCIR
	Stress	Mental Health	Percent of adults with poor mental health	BRFS
			Percent of adolescents with symptoms of depression in past year	MiPHY
HEALTH	Health Outcome Illness (Morbidity)	Child Health	Rate of preventable asthma hospitalization among youths < 18 years old	MDHHS
OUTCOMES		Chronic Disease	Rate of preventable diabetes hospitalization	MDHHS
		Communicable Disease	Rate of chlamydia cases	MDHHS
		Adult Health	Rate of preventable congestive heart failure hospitalization among adults ≥ 65 years old	MDHHS
	Deaths (Mortality)	Overall Mortality	Life expectancy	MDHHS/ACS
		Maternal & Child Health	Rate of infant mortality	MDHHS
		Chronic Disease	Rate of deaths due to cardiovascular disease	MDHHS
		Safety Policies and Practices	Rate of deaths due to accidental injury	MDHHS

ASC: American Community Survey, conducted by the U.S. Census Bureau BRFS: Behavorial Risk Factor Survey, conducted by local health departments CDC: Centers for Disease Control and Prevention MCIR: Michigan Care Improvement Registry MDHHS: Michigan Department of Health and Human Services MiPHY: Michigan Profile for Healthy Youth Survey

MSP: Michigan State Police NEPHTN: National Environmental Public Health Tracking Network USDA: United States Department of Agriculture



Findings

The goal of this document is to synthesize all of the data from the report to arrive at a set of major Community Health Assessment findings. Given the length of the Community Health Profile and Health Needs Assessment Report, it is impossible to include all of the concepts, data, and needs discussed within. This document aims to provide a summary of findings only.

OPPORTUNITY MEASURES

(P. 22-26)

Opportunity measures do not impact health directly. They typically influence the physical, economic, and social environment of a community (the social determinants of health which, in turn, influence health behaviors and outcomes). Opportunity measures are represented in this report by income inequality, which is the level at which income is distributed spatially among a given community. High levels of income inequality are associated with a variety of adverse outcomes, such as higher crime, low levels of representative democracy, poor economic growth, and poor health. While those who are in poor health and have low income are disproportionally affected by income inequality, the health of other members of society is also adversely impacted by income inequality.

FINDINGS

- Income inequality was similar throughout the majority of the tri-county area. Lansing Charter Township and Farms and Fields were exceptions, as more income equity (incomes are more similar) existed in those areas.
- Among counties in the region, Ingham had the highest level of income inequality. Eaton County had the lowest level of income inequality.
- The city of East Lansing had the highest level of income inequality in the region, while Farms and Fields had the lowest.

SOCIAL, ECONOMIC, AND ENVIRONMENTAL FACTORS

(P. 27-52)

The indicators and measures in the 'Social, Economic and Environmental Factors' section are indicators and measures of the social determinants of health (SDoH). SDoH are factors that are not controllable by an individual, but affect the individual's environment and thus provide the context in which health behaviors, either harmful or helpful, and health outcomes arise. Examples of SDoH or 'Social, Economic, and Environmental Factors' are income, education, affordable housing, and built environment.

FINDINGS

- Among the county and sub-county geographic groups, there were wide differences in the rates of household income, affordable housing, educational achievement, and the percentage of people living in a 'food desert'.
- Ingham County had the highest violent crime rate, with a rate more twice as high as Eaton County and approximately 6 times that of Clinton County. The rate of violent crime increased in all three counties between 2014 and 2016.
- Urban areas had the highest rates of low household income, people living in unaffordable housing, and people living in a 'food desert'.
- The percentage of households living in unaffordable housing decreased across all county and sub-county geographies.
 However, over 40% of households in the City of East Lansing still spend more than one-third of their income on housing.
- The Farms and Fields sub-county geographic group had the lowest percent of adults with a bachelor's degree or higher.
- Less than half of adolescents in the tri-county area knew adults in their neighborhood that they could talk to about something important.
- The rates of ambulatory care sensitive hospitalizations for all counties were lower than Michigan's rate.

BEHAVIORS, STRESS, AND PHYSICAL CONDITION

(P. 53-98)

Behaviors, Stress, and Physical Conditions are different factors that contribute to the way people live which can protect from or contribute to certain health outcomes. Good behaviors, lack of stress, and good physical conditions can lead to good health, and vice versa. Examples of 'Behaviors, Stress and Physical Conditions' are obesity, tobacco and alcohol use, access to care, and mental health.

FINDINGS

- The tri-county area fared worse than the state of Michigan on a few indicators, including adult obesity, adult smoking, and adolescent mental health.
- Adult obesity increased at a significant rate in all three counties; for the tricounty area, it rose from 23.9% in 2008-2010 to 33.6% in 2014-2016.
- At the county level, there were sizable differences for a few measures:
 - Adult smoking prevalence ranged from 15.6% for Clinton County to 26.6% for Eaton County.
 - The rate of opioid prescriptions varied greatly, from 382 per 1,000 persons for Clinton County to 952 per 1,000 for Eaton County. Michigan's rate was 840.
 - The percentage of adolescents who achieved the recommended level of physical activity ranged from 49.9% for Ingham County to 59.3% for Clinton County.
 - The percentage of adults who reported not having a personal doctor or health care provider ranged from 11.4% for Clinton County to 22.3% for Eaton County.
- There was a significant decline in the prevalence of recent smoking among adolescents from 2013-2014 to 2017-2018. The prevalence ranged from 2.5% for Ingham County to 5.0% for Eaton County, which was much lower than the state rate of 10.5%.

- The percentage of adults 18-64 years with no health insurance has declined or remained steady in all counties and sub-county geographies. However, sub-county geographic differences were present, with prevalence ranging from 6.0% for the Countryside Suburbs to 14.7% for the City of Lansing.
- The percentage of tri-county adolescents who reported poor mental health (symptoms of depression) increased from 32.8% to 39.8% during 2013-2014 and 2017-2018.

HEALTH OUTCOMES

(P. 99-119)

Health Outcomes are the end results from the combination of opportunity measures, SDoH, behaviors, stress, and physical conditions. These are often measured in quality of life (illness/morbidity) or quantity of life (deaths/mortality). Example indicators of 'Health Outcomes' are Child/Adult Health, Life Expectancy, Chronic Disease, and Accidental Injury.

FINDINGS

- Adult preventable hospitalizations due to diabetes were lower for all three counties than for Michigan; however, Ingham County's rate was higher than Clinton or Eaton counties'.
- Preventable asthma hospitalizations among children declined significantly in Eaton County and Ingham County.
 Clinton County data was not available.
- The tri-county area rate of chlamydia cases was higher than Michigan's; Ingham County had the highest rate, which was double the rate of Clinton County. The rate of chlamydia cases increased across all three counties from 2014 to 2016.
- Life expectancy in the region was nearly equivalent to that of the state, with Clinton County having a slightly higher life expectancy than the other two counties. For sub-county geographic groups, the longest life expectancy was in the Small Cities (87.8 years), while the shortest life expectancy was in Urban areas (76.5 years).

- Infant mortality rates were similar across the three counties, but for Ingham County, the mortality rate for Black infants was double that for White infants. The infant mortality rate for Clinton County has more than doubled between 2011-2013 and 2013-2015.
- The rate of cardiovascular disease deaths ranged dramatically, from 99.0 deaths per 100,000 persons for the Small Cities to 328.9 per 100,000 for Lansing Charter Township.
- Accidental injury death rates varied significantly, with Small Cities having the lowest rate (25.4 deaths per 100,000) and the City of Lansing having the highest rate (53.6 per 100,000). Eaton County was the only county that exceeded Michigan's rate.

HEALTH INEQUITY BY RACE/ETHNICITY

Beyond the differences by geographic area, where possible, measures were analyzed by racial and ethnic groups. An estimated 8.5% of the population of the region identifies themselves as Black or African American, and an additional 6.5% identify themselves as Hispanic or Latino, of any race. While additional racial and ethnic disparities were identified, particularly noteworthy or consistent findings included:

- Hispanic adults were less likely to have a bachelor's degree across all geographies.
- Black and Hispanic adolescents in all counties were less likely to have a trusted adult that they could talk to.
- Hispanic adolescents, and to a lesser extent white adolescents, had higher rates of binge drinking across all three counties.
- Hispanic adolescents had higher rates of prescription painkiller use in all counties.
- Across all three counties, Hispanic adolescents had higher rates of depression.
- White adolescents had less daily consumption of fruits and vegetables in all counties.
- In general, Black and Hispanic adults and adolescents were less likely to achieve the recommended level of physical activity.
- Obesity rates were higher for Black and Hispanic adolescents across the tricounty region.
- Adult obesity rates were higher for minorities (for Blacks in the tri-county area, Eaton County, and Ingham County; for Hispanics in Clinton County).

FOCUS GROUP FINDINGS

We conducted focus groups with persons who were uninsured or underinsured, low-income, utilizing social services such as WIC, housing services, or food banks/pantries, Hispanic, in recovery, or disabled. The following issues were commonly identified by the participants:

- Affording health care and health insurance
- Accessing mental health services
- The influence of law, government, and politics to impact health and health determinants
- Gun violence and unsafe neighborhoods/ parks as health barriers
- Unhealthy food options in schools
- Improving access to community resources and strengthening community bonds

YOUTH PHOTOVOICE FINDINGS

Youth Photovoice groups were conducted to include local youth in the Healthy! Capital Counties project and to provide a voice for youth to explore issues and concerns they have observed. The groups, which consisted of students from Grand Ledge and Eaton Rapids (Eaton County), J.W. Sexton and Eastern (Ingham County), and St. Johns and Ovid-Elsie (Clinton County) schools, met to answer the questions: "What issues related to health do you and/or your peers face?" and "What things in the community would help you to be healthier?".

The general themes that emerged from Youth Photovoice sessions were:

- Mental well-being
- Social settings
- Nutrition
- Being active/getting outside
- Healthy communities
- Substance use
- Schoolwork
- Negative effects of technology

When challenged to think about issues related to health that they or their peers face, students from all three groups mentioned anxiety, depression, drugs and alcohol, smoking, physical activity, bullying, and poor eating habits/poor nutrition. When looking at community aspects that would help them to be healthier, students from all groups discussed sports teams/ clubs (inside and outside of school), more opportunities for exercise (i.e. lower cost or free), healthier fast food options, affordable healthy food, promotion of healthy food, and additional support for mental health problems.

The Eaton County students were the only group that talked about diversity and inclusivity. Student from Ingham County talked about the importance of schoolwork. The Clinton County students mentioned the importance of self-value and doing things that make you happy.

HOW DID WE ARRIVE AT THESE FINDINGS?

The aforementioned findings were drafted by project staff to summarize the 2018 Community Health Profile and Health Needs Assessment Document.

For the purposes of this report, a comparison means that for each measure, the different geographies within the Capital Area were compared to each other, and, if available, to the tri-county area as a whole and to the state of Michigan for one point in time. When a significant negative (or worse) difference was found for a particular geographic area, this was noted as an area of concern on the table. As an example, Ingham County, the Urban sub-county geographic area, and the

City of East Lansing all had higher (worse) levels of income inequality than other geographies in the tri-county area.

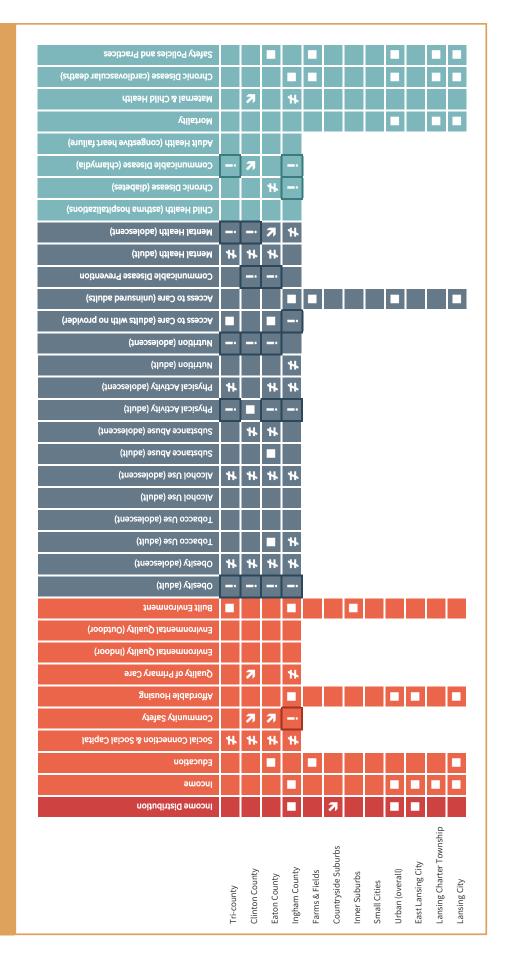
Disparity refers to a noticeable difference between specific groups for a particular measure for one point in time within the same geographic area; these groups could be different racial, ethnic, gender, or age groups. For instance, for the years 2013-2015, the infant death rate for Black infants in Ingham County was twice as high as the infant death rate for White infants. Not all measures had available data for group breakouts, and some measures with breakouts required suppression of data for certain geographies due to small sample sizes.

For this summary chart, trend refers to data points for one geographic area that

were moving in a negative direction for at least three points in time (all in the same direction). By using at least three data points, consistency in the direction of the trend can be confirmed. An example is the infant death rate for Clinton County, which increased from 2011-2013 to 2012-2014 and again from 2012-2014 to 2013-2015.

For any one particular measure, if a geographic area had at least two out of three concerns for comparison, disparity, and trend, then it received a "2 or more" rating and may indicate an area of significant concern. One example is adult physical activity for Eaton County, which had a lower rate than Michigan and had racial disparities.

INDICATORS OF CONCERN FOR EACH GEOGRAPHIC AREA



Comparison

Disparity

Trend: Data for this indicator were trending in a negative direction (at least three data points in the same direction).

Comparision: In comparison to statewide or Tri-county data, a significant negative difference was found.

Disparity: The data indicated racial, ethnic, gender, or age disparities within a geographic area.

2 or more: The data met the criteria for two or more of the above indicators (disparity, comparison, trend).

2 or more

Trend



Opportunity Measures





Income Distribution

MEASURE

Gini coefficient for income inequality

This measure ranges from 0.0 to 1.0. When the index is at 0, total income is shared equally between all families; when it is at 1.0, one family owns all income and all others have none. Here, income is defined as new revenues and economic resources received by individuals and families during the course of a year.

DATA SOURCE

American Community Survey

YEARS 2009-2016

REASON FOR MEASURE

In general, this measure is used to examine the extent of inequality, and the number itself does not imply value — neither 0 or 1 would be "ideal". However, places with high income inequality (Gini coefficients ranging from 0.5 and above) such as countries in southern Africa and many South American countries, have generally poorer health outcomes than places with relatively low income inequality (Gini coefficients less than 0.35), such as Europe, Australia, Canada, and Scandinavia.

At the neighborhood level, spatial income inequality is neither intrinsically bad nor good. There is not much income inequality in neighborhoods consisting of new high-priced houses; nor is there much in neighborhoods consisting of low-rent private or public housing. However, across a region or community, high levels of income inequality may affect health outcomes.

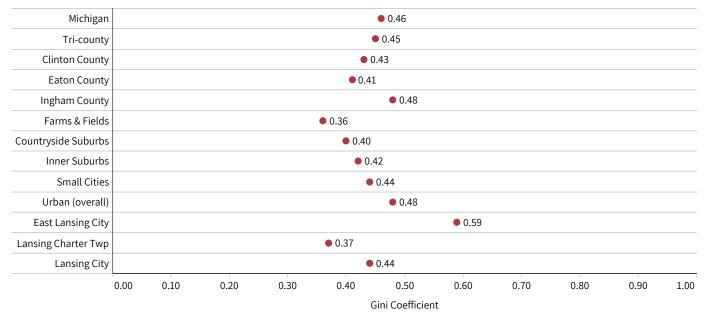
SPEAKING OF HEALTH

Focus Group Participants

"The cost of everything is rising, but yet people's wages and income are not rising to make up for the increased cost. So, just based on that factor alone, I don't think that the kids today are going to have healthier lives."

GINI COEFFICIENT FOR INCOME INEQUALITY, 2016

Income inequality is similar throughout the majority of the tri-county area, ranging from 0.40 to 0.44 for most geographic areas. However, there are some exceptions, as Lansing Charter Township and Farms & Fields have more income equity within their respective areas. Meanwhile, there are larger variations in household incomes for the urban area, Ingham County, and East Lansing. The unusually high number for East Lansing, compared to the rest of the region, is due in large part to the presence of students attending Michigan State University.



Source:

American Community Survey 2016 5-year Estimate, U.S. Census

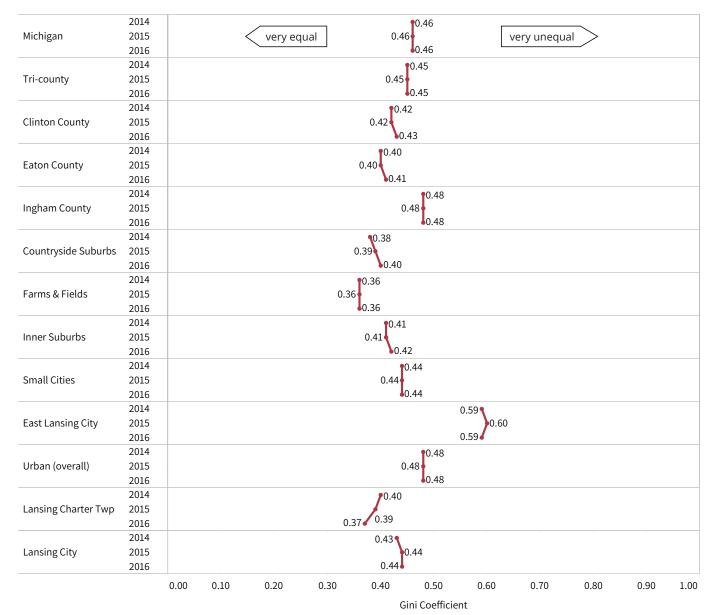
Income Distribution

Income inequality may have negative consequences for the poor. The movement of high-income earners away from the low income earners, for example, may leave low income earners with relatively few jobs or reduce the extent to which the middle class and the rich confer positive effects on the poor, such as tax revenue,

charitable and cultural investment, and business investment. Diversity in incomes among neighbors can enhance the social environment by improving distribution of role models, and providing positive social networking opportunities.

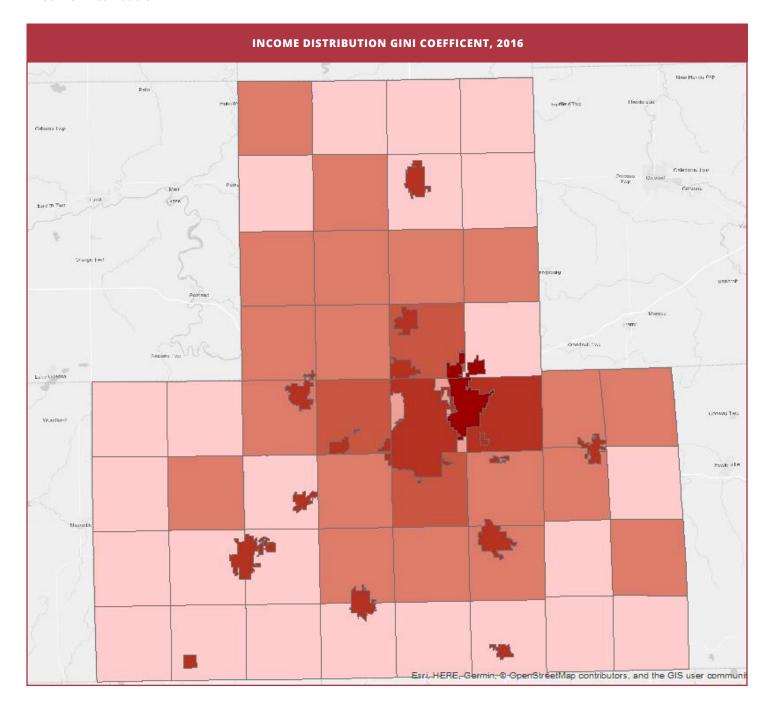
TREND IN GINI COEFFICIENT FOR INCOME INEQUALITY, 2014-2016

Income inequity is typically stable in our region. Over the previous three years, many areas did not experience a change in income inequity at all. Two exceptions are the Countryside Suburbs, which saw an increase in income inequity, and Lansing Charter Township, which saw a decrease in income inequity.

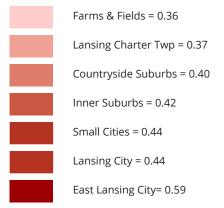


Source: American Community Survey 2016 5-year Estimate, U.S. Census American Community Survey 2015 5-year Estimate, U.S. Census American Community Survey 2014 5-year Estimate, U.S. Census

Income Distribution



GINI COEFFICIENT



Social, Economic, & Environmental Factors





Income

MEASURE

Percent of households below the ALICE Threshold

DATA SOURCE

2017 Michigan United Way ALICE Report

YEARS 2010-2015

REASON FOR MEASURE

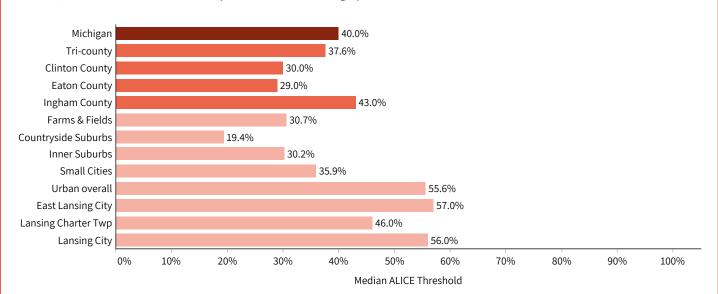
ALICE stands for Asset Limited, Income Constrained, and Employed. ALICE households have incomes above the Federal Poverty Level, but below the basic cost of living for their area. The basic cost of living includes necessities like housing, childcare, food, healthcare, and transportation. It does not include savings, entertainment, dining out, or leisure activities. ALICE households may appear to be middle-class and have

members who have a college education and are steadily employed. However, because they are making just enough to meet their expenses, they are at risk of financial difficulties and poverty if they experience an unforeseen financial expense (e.g. a major car repair). Calculating the percent of households that are below the ALICE Threshold is an attempt to more accurately capture the proportion of households that are at risk of financial ruin or are already impoverished.

What usually surprises many people about the ALICE Threshold is learning the basic cost of living. For example, in Clinton County in 2015, the household survival budget (includes childcare, taxes, and healthcare, but no luxuries or savings) was \$55,080 annually (\$4,590 monthly) for a family of four including an infant and a preschooler. In Ingham County, that same family of four would have to make \$56,256 a year (\$4,688 monthly) to meet their basic expenses. Without savings or an adequate social safety net, this family, who may not appear impoverished, could be at high risk of becoming financially unstable as a result of unexpected expenses.

PERCENTAGE OF HOUSEHOLDS BELOW ALICE THRESHOLD*, 2015

In many areas in our region, about one-third of households are either impoverished or at risk of financial instability because their household income is below the ALICE Threshold. In the urban areas, more than half of households are either impoverished or at risk of becoming impoverished.



*Note: ALICE is an acronym that stands for Asset Limited, Income Constrained, and Employed. It is comprised of households with income above the Federal Poverty Level, but below the basic cost of living. The <u>ALICE Threshold</u> is the average income that a household needs to afford the basic necessities defined by the Household Survival Budget for each county in Michigan.

(Unless otherwise noted in this report, households earning less than the ALICE Threshold include both ALICE and households below the federal poverty level.)

Source: 2017 Michigan United Way ALICE Report, the United Ways of Michigan

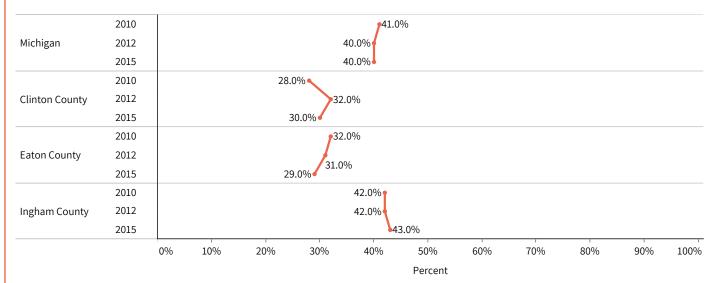
SPEAKING OF HEALTH

Focus Group Participants

"[Having to 'penny pinch' is] causing problems in my marriage. Because we can't do anything, we can't go anywhere, we can't save anything. We're living in a shitty apartment, that we really can't afford, and we can't leave! So, the only thing that we can do is try to work as much as possible, even though me and my husband, we've already missed so much time. In fact, because of FMLA, he missed 495 hours last year."

TREND IN PERCENTAGE OF HOUSEHOLDS BELOW ALICE THRESHOLD*, 2010-2015

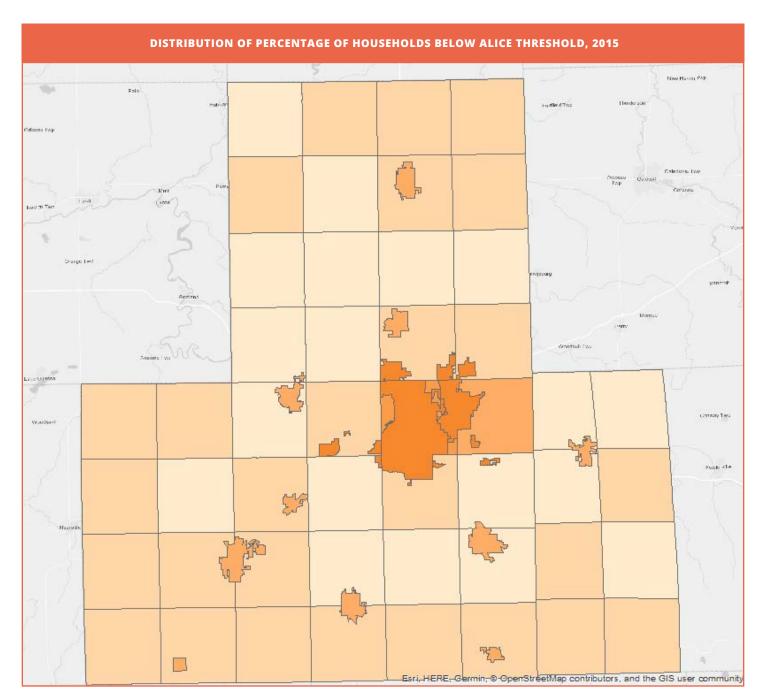
In Michigan and in Ingham County, the percentage of households with incomes below the ALICE Threshold has been relatively stable over the reporting period. In Eaton County, however, there has been a decrease in the number of households that are at risk of financial ruin between 2010 and 2015. The percentage of Clinton County households with incomes below the ALICE Threshold during 2015 was less than during 2012, but more than during 2010.



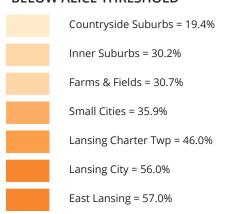
^{*}Note: ALICE is an acronym that stands for Asset Limited, Income Constrained, and Employed. It is comprised of households with income above the Federal Poverty Level, but below the basic cost of living. The ALICE Threshold is the average income that a household needs to afford the basic necessities defined by the Household Survival Budget for each county in Michigan.

(Unless otherwise noted in this report, households earning less than the ALICE Threshold include both ALICE and households below the federal poverty level.)

Source: 2017 Michigan United Way ALICE Report, the United Ways of Michigan



PERCENTAGE OF HOUSEHOLDS BELOW ALICE THRESHOLD





Education

MEASURE

The percent of adults 25 years or older who have a Bachelor's degree or higher

DATA SOURCE

American Community Survey

YEARS 2009-2016

REASON FOR MEASURE

The relationship between higher education and improved health outcomes is well known, with years of formal education correlating strongly with improved work and economic opportunities, reduced psychosocial stress, and healthier lifestyles. In other words, persons with more education, in general, have healthier lives than those with less education. CHR

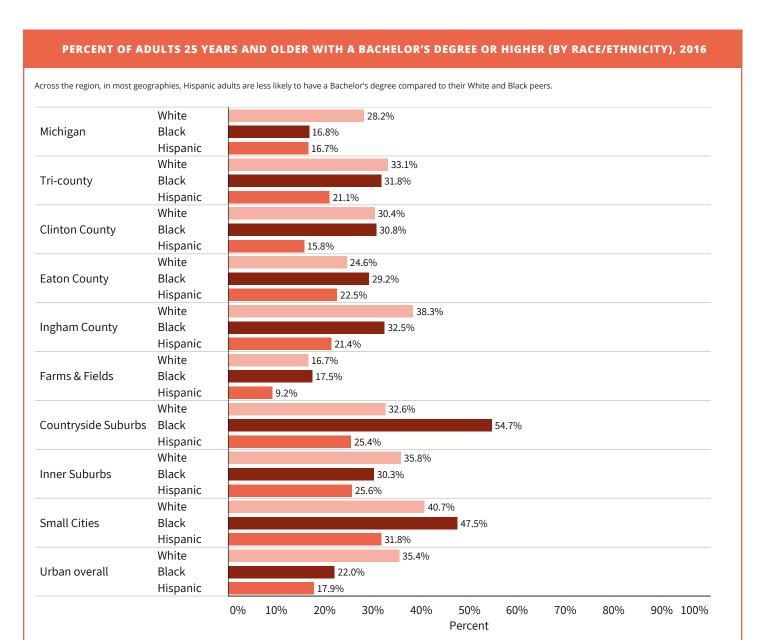
SPEAKING OF HEALTH

Focus Group Participants

"The only thing I can say is, I hope and pray that she graduates college, and gets a good job, where she can just [cook organic] there'll be food."

PERCENT OF ADULTS 25 YEARS AND OLDER WITH A BACHELOR'S DEGREE OR HIGHER, 2016 Approximately one in three adults in the Capital Area have a bachelor's degree or higher. Most areas within the three counties have proportions ranging from approximately 25% to 40%. Outliers in the region include the Farms & Fields area (where a little less than one in five adults has bachelor's degree or higher) and the City of East Lansing (where, because of the university community, almost three-quarters of adults have bachelor's degree or higher). Michigan 33.3% Tri-county 30.7% Clinton County **Eaton County** 25.2% **Ingham County** 37.7% Farms & Fields 16.8% Countryside Suburbs 33.0% Inner Suburbs 35.7% **Small Cities** 43.2% Urban overall 33.0% East Lansing City 71.8% Lansing Charter Twp 31.4% 25.4% Lansing City 0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100% Percent Source: 2016 American Community Survey 5-year Estimate

TREND IN PERCENT OF ADULTS 25 YEARS AND OLDER WITH A BACHELOR'S DEGREE OR HIGHER, 2014-2016 In most areas, the educational attainment of adults 25 years old or older has either been stable or increased between 2014 and 2016. 2014 26.4% Michigan 2015 26.9% 27.4% 2016 2014 32.1% 32.8% Tri-county 2015 2016 33.3% 2014 28.7% Clinton County 2015 29.7% 30.7% 2016 2014 **Eaton County** 2015 24.7% 25.2% 2016 2014 36.5% 2015 37.2% Ingham County 2016 37.7% 2014 116.4% Farms & Fields 16.3% 2015 2016 16.8% 30.6% 32.1% 2014 Countryside Suburbs 2015 2016 33.0% 2014 33.8% Inner Suburbs 2015 34.4% \35.7% 2016 2014 41.3% **Small Cities** 2015 42.3% 43.2% 2016 2014 Urban overall 2015 33.0% 2016 2014 69.8% East Lansing City 2015 70.1% 71.8% 2016 2014 P32.2% 31.3% Lansing Charter Twp 2015 2016 2014 2015 25.7% Lansing city 25.4% 2016 10% 15% 20% 25% 30% 35% 40% 45% 50% 55% 75% 90% 95% 10 0% 5% 60% 65% 70% 80% 85% Percent 2014 American Community Survey 5-year Estimate 2015 American Community Survey 5-year Estimate 2016 American Community Survey 5-year Estimate

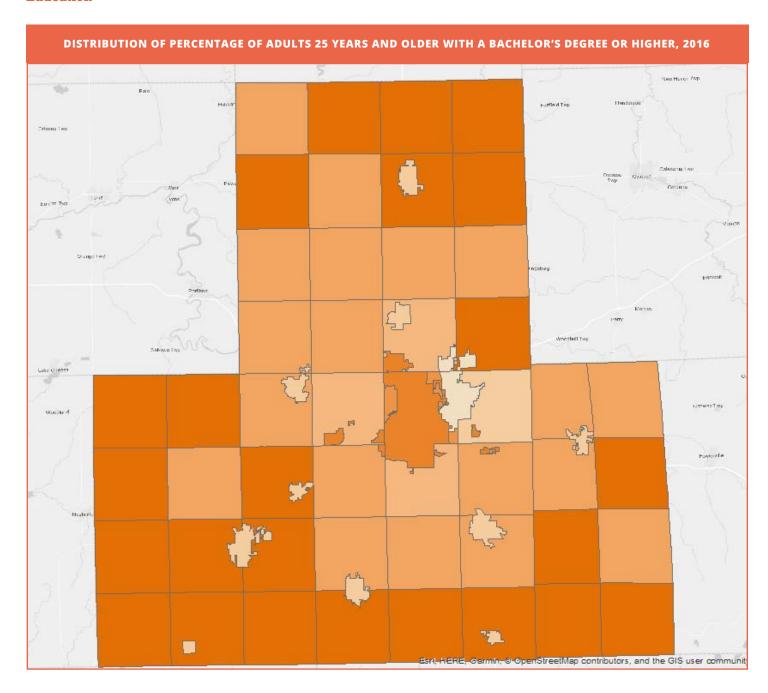


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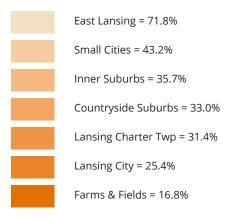
2016 American Community Survey 5-year Estimate

Data was not available for East Lansing City, Lansing Charter Township, or Lansing City.

Education



PERCENTAGE OF ADULTS 25 YEARS AND OLDER WITH A BACHELOR'S DEGREE OR HIGHER





Social Connection & Social Capital

MEASURE

Percent of adolescents (9th and 11th grade students) that reported knowing an adult in their neighborhood they could talk to about something important.

DATA SOURCE

Michigan Profile for Healthy Youth Survey (MiPHY)

YEARS 2013-2014, 2015-2016, 2017-2018

REASON FOR MEASURE

The network involved in the socialemotional development of children is wide and encompasses family, peers, and non-family adults. A growing body of

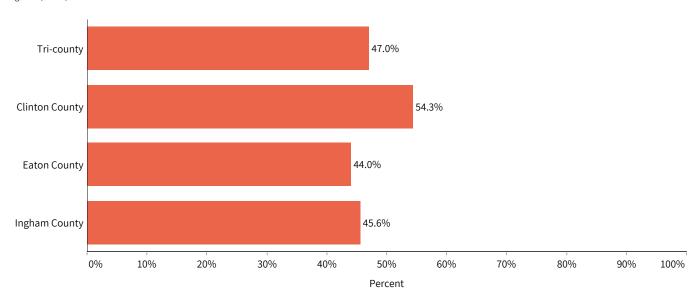
evidence suggests that non-parent adults have a large influence, either positive or negative, in adolescent development. Adolescents whose social network includes a non-parent adult mentor who is involved in illegal activity have an increased probability of becoming involved in illegal activity. Non-parent adults who are positive and supportive can contribute to an adolescent's selfesteem, problem-solving behavior, and overall resilience. Childhood resilience is an important component in developing adults who are capable and equipped to handle life's challenges, which in turn, contributes to a community's well-being.

Sub-county level geographic area group breakouts are not available for this indicator.

Statistics for this measure were not available for the state of Michigan, as this question was not asked on the Michigan Youth Risk Behavior Survey.

PERCENT OF ADOLESCENTS WHO KNOW ADULTS IN THE NEIGHBORHOOD THEY COULD TALK TO ABOUT SOMETHING IMPORTANT, BY GEOGRAPHY, 2017-2018

Just under half of adolescents in the Capital Area indicated that they had a non-parent adult who they could talk to about important things. Within individual counties, Clinton County had the highest proportion of adolescents (54.3%) who reported having a non-parent adult they could speak to, compared to Eaton (44.0%) or Ingham (45.6%) counties.



Note: Statistics for the state of Michigan were not available for this measure because an equivalent question was not asked in the Youth Risk Behavior Survey (YRBS)

Source:

Michigan Profile for Healthy Youth (MiPHY)

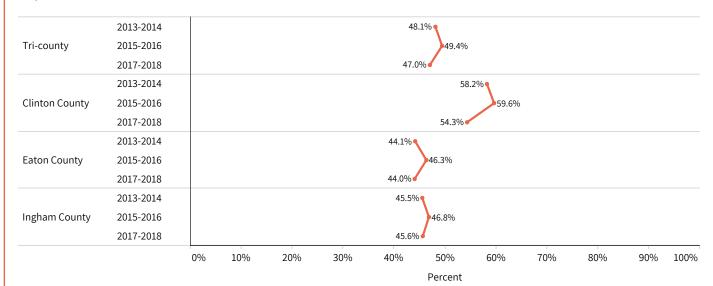
SPEAKING OF HEALTH

Focus Group Participants

"Health is having an advocate.
[You have to] have someone to teach you the ropes."

TREND IN THE PERCENT OF ADOLESCENTS WHO KNOW ADULTS IN THE NEIGHBORHOOD THEY COULD TALK TO ABOUT SOMETHING IMPORTANT, BY GEOGRAPHY, 2013-2018

The trend of adolescents having a non-parent adult that they can speak to was fairly steady for the tri-county area and Eaton and Ingham counties. There was a slight decrease for Clinton County between 2013-2014 and 2017-2018.



Note:

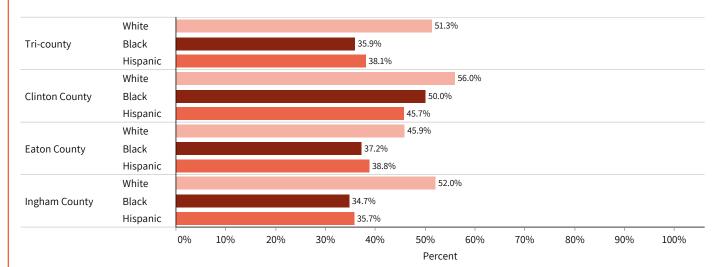
Statistics for the state of Michigan were not available for this measure because an equivalent question was not asked in the Youth Risk Behavior Survey.

Source

Michigan Profile for Healthy Youth (MiPHY)

PERCENT OF ADOLESCENTS WHO KNOW ADULTS IN THE NEIGHBORHOOD THEY COULD TALK TO ABOUT SOMETHING IMPORTANT (BY RACE/ETHNICITY), 2017-2018

The proportion of adolescents who indicated having an adult in the neighborhood or non-parent adult that they feel they can speak to varied by race/ethnicity. In the tricounty area and within the individual counties, more White adolescents reported having a non-parent adult they can speak to compared to their Black or Hispanic peers.



Notes: Statistics for the state of Michigan were not available for this measure because an equivalent question was not asked in the Youth Risk Behavior Survey (YRBS)

Source:

Michigan Profile for Healthy Youth (MiPHY)



Community Safety

MEASURE

The rate of violent crimes per 100,000 people

Violent crimes are defined as offenses that involve face-to-face confrontation between the victim and the perpetrator, including homicide, forcible rape, robbery, and aggravated assault.

DATA SOURCE

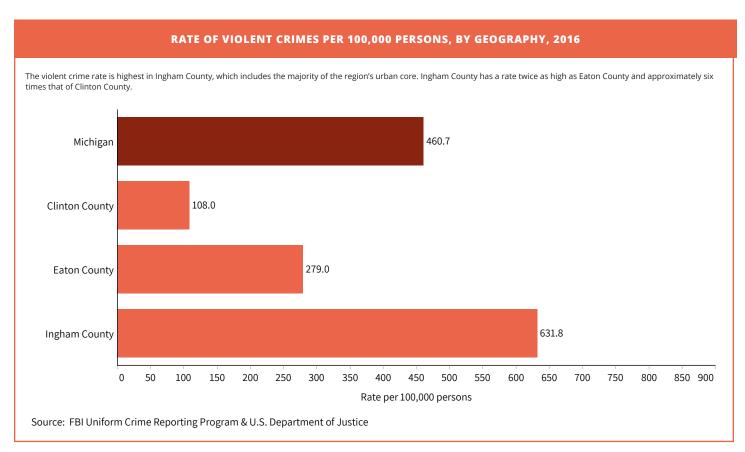
FBI Uniform Crime Reporting Program & U.S. Department of Justice

YEARS 2014-2016

REASON FOR MEASURE

High levels of violent crime compromise physical safety and psychological wellbeing. Crime rates can also deter residents from pursuing healthy behaviors, such as exercising out-of-doors. Additionally, some evidence indicates that increased stress levels may contribute to obesity, even after controlling for diet and physical activity levels.

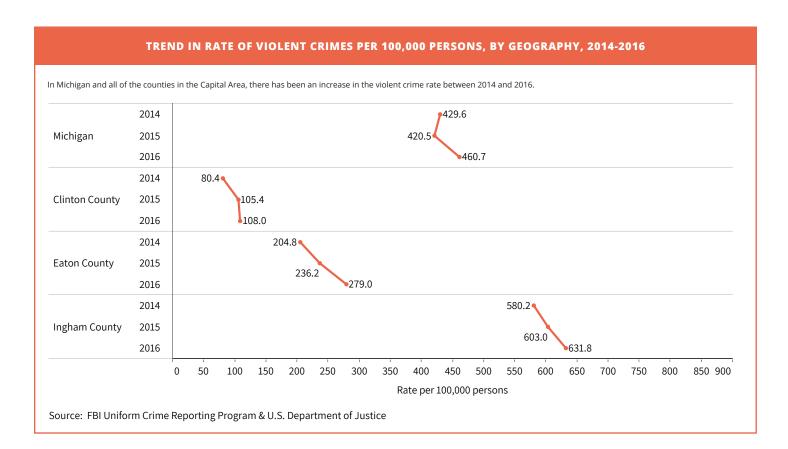
Sub-county level geographic area group breakouts are not available for this indicator.



SPEAKING OF HEALTH

Focus Group Participants

"We have parks where I live—I live on the east side, but I guess I live in the ghetto side. We have a lot of drugs and prostituting and stuff where I live. So, the park is nowhere to go and hang out because the cars will go by and beep at you thinking you're prostituting in the park."





Affordable Housing

MEASURE

The percent of households that pay 30 percent or more of their household income on housing costs

DATA SOURCE

American Community Survey

YEARS 2010-2016

REASON FOR MEASURE

Affordable housing may improve health outcomes by freeing up family resources for nutritious food and health care expenditures. Quality housing can reduce exposure to mental health stressors, infectious disease, allergens, neurotoxins, and other dangers. Families who can only find affordable housing in very high poverty

areas may be prone to greater psychological distress and exposure to violent or traumatic events. Stable, affordable housing may improve health outcomes for individuals with chronic illnesses and disabilities and seniors by providing a stable and efficient platform for the ongoing delivery of health care and other necessary services.

Source: http://www.nhc.org/media/documents/HousingandHealth1.pdf

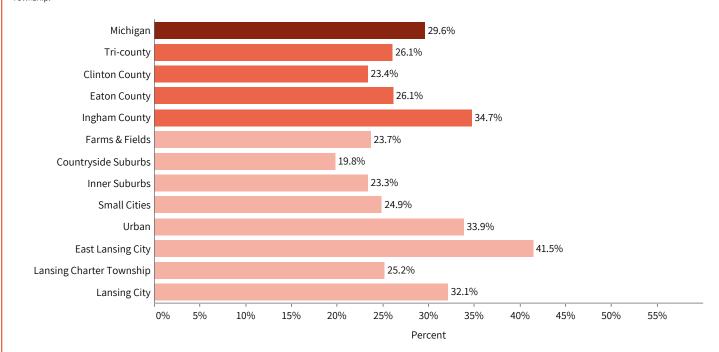
SPEAKING OF HEALTH

Focus Group Participants

"Sometimes the situation of the person, if you want to live here or there, it's not your choice. The choice depends on your income. It depends on whether work is close or not, what the cost is. Even if some places aren't safe, [it depends on your] limits of income. Or someplace isn't healthy. Therefore, [where you live] is not the choice of the person, it is dependent on his situation."

PERCENT OF HOUSEHOLDS SPENDING MORE THAN 30% OF THEIR INCOME ON HOUSING COSTS, 2016

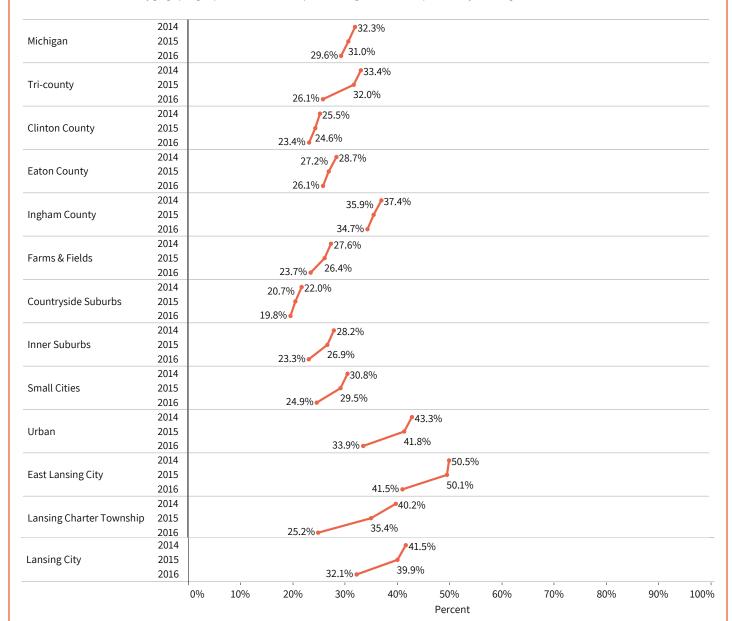
Approximately one-third of households in the state of Michigan, and just over one-quarter in the tri-county area, spend more than 30 percent of their income on housing. Within the region, the percentage of households in unaffordable housing is highest in the urban areas, especially in the City of East Lansing, where 41.5% of households spend more than a third of their income on housing. The percent of households who are spending 30 percent or greater on housing has declined over time, especially for Lansing, East Lansing, and Lansing Charter Township.



Source: U.S. Census Bureau, 2012-2016 American Community Survey 5-Year Estimates

TREND IN PERCENT OF HOUSEHOLDS SPENDING MORE THAN 30% OF THEIR INCOME ON HOUSING COSTS, 2014-2016

Between 2014 and 2016, there is been a decline in the proportion of persons spending 30% or more of their income on housing costs in Michigan, the tri-county area, the individual counties, and across the subcounty geographic groups. The decline was steepest in Lansing Charter Township and the city of Lansing.

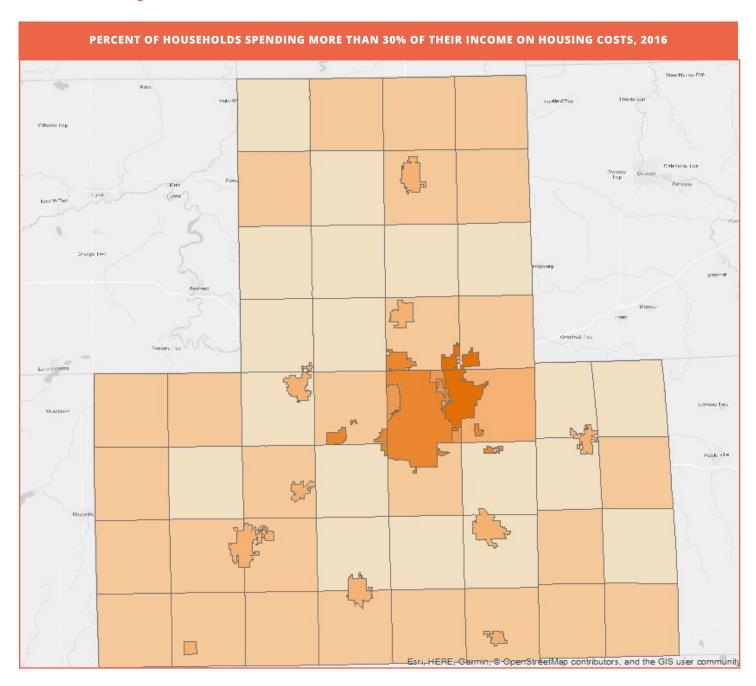


Source: U.S. Census Bureau, 2010-2014 American Community Survey 5-Year Estimates

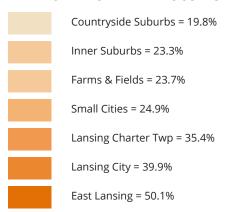
U.S. Census Bureau, 2011-2015 American Community Survey 5-Year Estimates

U.S. Census Bureau, 2012-2016 American Community Survey 5-Year Estimates

Affordable Housing



PERCENT OF HOUSEHOLDS WITH UNAFFORDABLE HOUSING





Quality of Primary Care

MEASURE

The number of Ambulatory Care Sensitive (ACS) hospitalizations per 10,000 people per year

Ambulatory Care Sensitive hospitalizations are hospitalizations for conditions such as asthma, diabetes, or dehydration were timely and elective ambulatory care can decrease hospitalizations by preventing the onset of an illness or condition, controlling an acute episode of an illness, or managing a chronic disease or condition. Ambulatory care is care provided in a primary care setting, such as a doctor's office, rather than a hospital.

DATA SOURCE

Michigan Resident Inpatient Files created by the Division for Vital Records and Health Statistics, Michigan Department of Health & Human Services, using data from the Michigan Inpatient Database obtained with permission from the Michigan Health & Hospital Association Service Corporation.

YEARS 2013, 2014, and 2016 (2015 data not available at time of publication)

REASON FOR MEASURE

ACS conditions are illnesses that can often be managed effectively on an outpatient basis and generally do not result in hospitalization if managed properly. High rates of ACS hospitalizations in a community are an indicator of a lack of (or failure of) prevention efforts, a primary care resource shortage, poor performance of primary health care delivery systems, or other factors that create barriers to obtaining timely and elective ambulatory care.

ACS hospitalization rates are not available at the sub-county level.

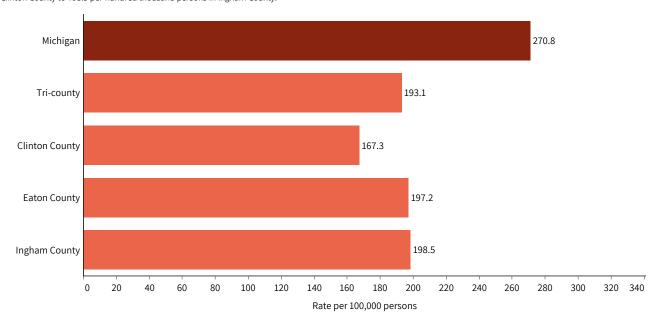
SPEAKING OF HEALTH

Focus Group Participants

"I told the doctor I had pain symptoms, and I felt as if it were a baby [inside me]. It would move. And I told the doctor what I felt. And the doctor said, 'Take these pills, they're good for you, for the pain' Because, since I had three babies, [the doctor said that was the problem]. And it wasn't that. It was a tumor. He never checked my stomach; he never sent me to do an ultrasound or anything."

RATE OF AMBULATORY CARE SENSITIVE HOSPITALIZATIONS, 2016

The tri-county area has a lower ACS hospitalization rate than the ACS hospitalization rate for Michigan. The ACS hospitalization rate ranges from 167.3 per hundred thousand persons in Clinton County to 198.5 per hundred thousand persons in Ingham County.

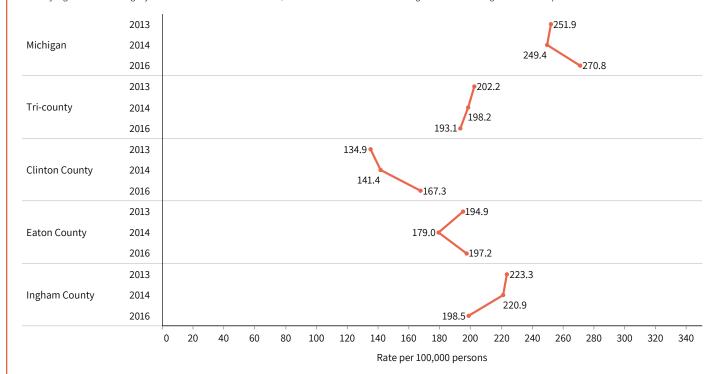


Footnote: Sub-county statistics are not available for this measure.

Source: Michigan Resident Inpatient Files created by the Division for Vital Records and Health Statistics, Michigan Department of Health & Human Services, using data from the Michigan Inpatient Database obtained with permission from the Michigan Health & Hospital Association Service Corporation (MHASC).

TREND IN RATE OF AMBULATORY CARE SENSITIVE HOSPITALIZATIONS, 2013-2016

In Ingham County, ACS hospitalizations declined between 2013 and 2016. However, in Clinton County, the trend is increasing, and Eaton County's rate was fairly stable. The trend for the tri-county region as a whole slightly decreased between 2013 and 2016, while the rate for the state of Michigan increased during the same time period.

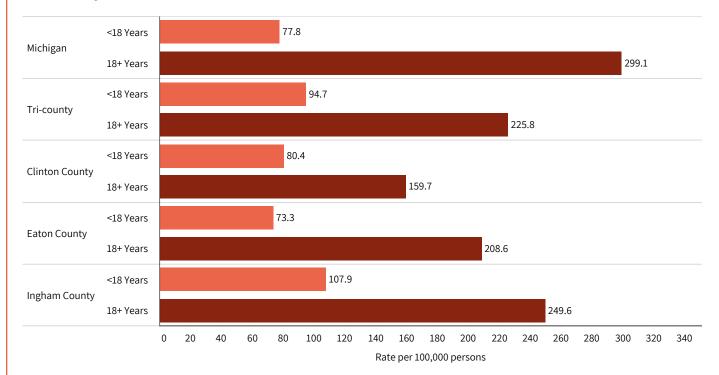


Notes: Sub-county statistics are not available for this measure.

Source: Michigan Resident Inpatient Files created by the Division for Vital Records and Health Statistics, Michigan Department of Health & Human Services, using data from the Michigan Inpatient Database obtained with permission from the Michigan Health & Hospital Association Service Corporation (MHASC).

RATE OF AMBULATORY CARE SENSITIVE HOSPITALIZATIONS, BY AGE GROUP, 2016

ACS conditions are more likely to affect adults than children under the age of 18. Consequently, ACS hospitalizations are more prevalent among adults. When stratified by age, children under 18 years old in the tri-county area have a slightly higher rate of ACS hospitalizations than for the state of Michigan overall. Individually, both Clinton County and Ingham County have ACS hospitalization rates for children that are higher than the state rate, while Eaton County's rate is slightly lower. All counties in the Capital Area have adult ACS hospitalization rates that are lower than Michigan's adult rate.



Footnote: Sub-county statistics are not available for this measure.

Source: Michigan Resident Inpatient Files created by the Division for Vital Records and Health Statistics, Michigan Department of Health & Human Services, using data from the Michigan Inpatient Database obtained with permission from the Michigan Health & Hospital Association Service Corporation (MHASC).



Environmental Quality - Indoor

MEASURE

The percentage of children less than six years of age with elevated blood lead levels (EBLL)

This percentage is calculated by dividing the number of children less than six years of age who have an EBLL ≥ 5ug/dL (highest venous or capillary blood lead level) by the number of children less than six years of age who had their blood tested for lead.

DATA SOURCE

Childhood Lead Poisoning and Prevention Program, Michigan Department of Health and Human Services

YEARS 2015-2017

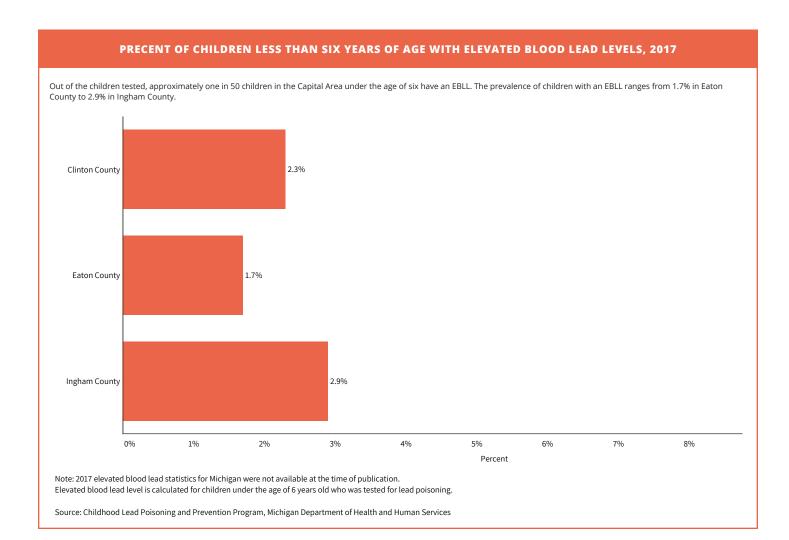
REASON FOR MEASURE

Lead exposure among children continues to be an important public health problem. At highest risk are children living in older housing that may still contain lead-based paint. The adverse health effects of lead exposure in children are numerous and well documented, including cognitive impairment, low bone density, and poor childhood growth and development.

SPEAKING OF HEALTH

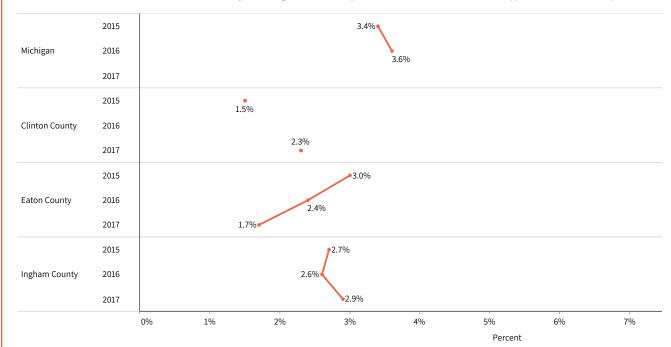
Focus Group Participants

"In subsidized housing, it always seems like there's a lot of smoking, which is an issue if you don't smoke and you have a lot of health problems already."



TREND IN PRECENT OF CHILDREN LESS THAN SIX YEARS OF AGE WITH ELEVATED BLOOD LEAD LEVELS, 2015-2017

In Eaton County, the percentage of children with an EBLL has declined slightly from 2015 to 2017; meanwhile, the trend is essentially flat in Ingham County. Additional information is needed to determine the direction of trends in Clinton County and Michigan, as some data points were either not available or were suppressed due to small sample size.



Note: 2017 elevated blood lead statistics for Michigan was not available at the time of publication. Elevated blood lead level is calculated for children under the age of 6 years old who was tested for lead poisoning.

Source: Childhood Lead Poisoning and Prevention Program, Michigan Department of Health and Human Services Notes: 2017 elevated blood lead statistics for Michigan were not available at the time of publication. Percent for Clinton County in 2016 suppressed due to insufficient sample size.

Source: Childhood Lead Poisoning and Prevention Program, Michigan Department of Health and Human Services



Environmental Quality - Outdoor

MEASURE

Change in extreme heat days

This was calculated using the following formula: Change in extreme heat days = (Projected number of days during the years 2020-2025 with temperatures above 90°F) - (Projected number of days during the years 2010-2015 with temperatures above 90°F).

The Intergovernmental Panel on Climate Change (IPCC) developed four scenarios based on economic development, economic growth, technological change, and population growth. These scenarios are used to describe the different inputs that could affect climate change. The low emission and high mission scenarios represent the best and worst case scenarios of the four, respectively. These scenarios may predict different outcomes as the data

they are based on changes, and they offer projections only.

DATA SOURCE

National Environmental Public Health Tracking Network

YEARS 2010-2015 and 2020-2025

REASON FOR MEASURE

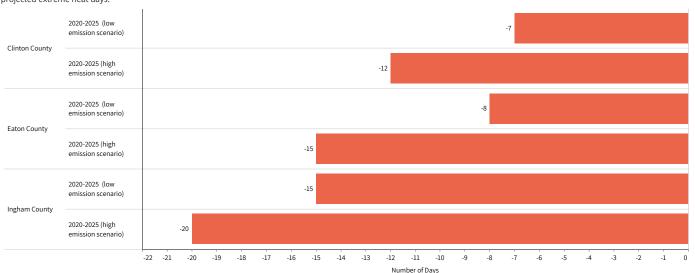
In most of the United States, an extreme heat day is a day of high heat and humidity with temperatures above 90 degrees Fahrenheit. On an extreme heat day, evaporation is slowed, and the body must work harder to maintain a normal temperature. Heat-related illnesses (i.e. heat exhaustion or heat stroke) could occur quickly, without warning, and affect anyone. Older adults, children, and sick or overweight individuals are particularly

vulnerable to heat-related illnesses. Extreme heat days have gained notoriety recently because of 1) school and other facility closures due to the inability of aging cooling systems, if one exists, to keep up with the increased demand, and 2) blackouts, when the electrical grid becomes temporarily overwhelmed.

Sub-county level geographic area group breakouts are not available for this indicator.

THE DIFFERENCE IN THE NUMBER OF EXTREME HEAT DAYS BETWEEN '2010-2015' AND '2020-2025'

The difference in the number of extreme heat days experienced during 2010-2015 and 2020-2025 for both for the low emissions and the high emissions scenarios are illustrated below. The intervals between data points in the low emissions scenario are shorter than those in the high emissions scenario, indicating that more emissions will increase the difference in projected extreme heat days.



Notes: Extreme heat day = Day with a high above 90° F

Change in extreme heat days = (Projected number of days between 2020-2025 with temperatures above 90°F) - (Projected number of days between 2010-2015 with temperatures above 90°F)

Low-/high- emissions scenario: the Intergovernmental Panel on Climate Change (IPCC) developed four scenarios to describe future climate outcomes based on different inputs (i.e. economic development, per capita economic growth, technological change, and population growth). The low emissions scenario and high emissions scenarios represent the low- and high-end possibilities, respectively.

 $Source: National \ Environmental \ Public \ Health \ Tracking \ Network, Centers \ for \ Disease \ Control \ and \ Prevention \ Preve$

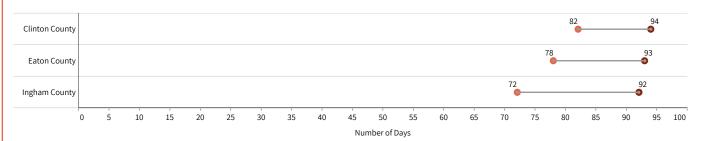
SPEAKING OF HEALTH

Focus Group Participants

"In my neighborhood, there are a lot of people who have little vegetable gardens in their gardens. So, last year, we began to plant chard, and kale in our little garden. ... And what makes it difficult is that some people go out to smoke. And we're in the garden, in a place that is clean and for relaxing, you're smelling the smoke."

NUMBER OF EXTREME HEAT DAYS IN '2010-2015' AND '2020-2025' (HIGH EMISSION SCENARIO)

During 2010 to 2015, there were over 90 extreme heat days in all three counties. Projections for 2020-2025 show the number of extreme heat days ranging from 72 days to 87 days, with none of the projections exceeding the historic number of extreme heat days.



Notes: Extreme heat day = Day with a high above 90°F

 $Change in extreme heat days = (Projected number of days between 2020-2025 with temperatures above 90^\circ F) - (Projected number of days between 2010-2015 with temperatures above 90^\circ F) - (Projected number of days between 2010-2015 with temperatures above 90^\circ F) - (Projected number of days between 2010-2015 with temperatures above 90^\circ F) - (Projected number of days between 2010-2015 with temperatures above 90^\circ F) - (Projected number of days between 2010-2015 with temperatures above 90^\circ F) - (Projected number of days between 2010-2015 with temperatures above 90^\circ F) - (Projected number of days between 2010-2015 with temperatures above 90^\circ F) - (Projected number of days between 2010-2015 with temperatures above 90^\circ F) - (Projected number of days between 2010-2015 with temperatures above 90^\circ F) - (Projected number of days between 2010-2015 with temperatures above 90^\circ F) - (Projected number of days between 2010-2015 with temperatures above 90^\circ F) - (Projected number of days between 2010-2015 with temperatures above 90^\circ F) - (Projected number of days between 2010-2015 with temperatures above 90^\circ F) - (Projected number of days between 2010-2015 with temperatures above 90^\circ F) - (Projected number of days between 2010-2015 with temperatures above 90^\circ F) - (Projected number of days between 2010-2015 with temperatures above 90^\circ F) - (Projected number of days between 2010-2015 with temperatures above 90^\circ F) - (Projected number of days between 2010-2015 with temperatures above 90^\circ F) - (Projected number of days between 2010-2015 with temperatures above 90^\circ F) - (Projected number of days between 2010-2015 with temperatures above 90^\circ F) - (Projected number of days between 2010-2015 with temperatures above 90^\circ F) - (Projected number of days between 2010-2015 with temperatures above 90^\circ F) - (Projected number of days between 2010-2015 with temperatures above 90^\circ F) - (Projected number of days between 2010-2015 with temperatures above 90^\circ F) - (Projected number of days between 2010-2015 with temperatures ab$

Low-/high- emissions scenario: the Intergovernmental Panel on Climate Change (IPCC) developed four scenarios to describe future climate outcomes based on different inputs (i.e. economic development, per capita economic growth, technological change, and population growth). The low emissions scenario and high emissions scenarios represent the low- and high-end possibilities, respectively.

TIME



2010-2015 (historic)



2020-2025 (future projection)



Built Environment

MEASURE

The percent of the population that lives in a USDA-defined 'food desert'

A USDA 'food desert' is a census tract that is low-income (poverty >20 percent or median income <80 percent of statewide median income) and where a substantial number or share of people have low access to food, defined as living more than one mile (urban) or more than 10 miles (rural) away from a grocery store or supermarket.

DATA SOURCE

United States Department of Agriculture (USDA)

YEARS 2010, 2015

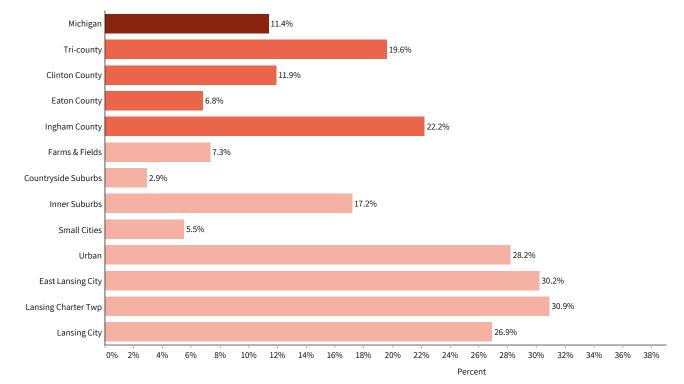
REASON FOR MEASURE

The majority of studies that have examined the relationship between store access and dietary intake find that better access to a supermarket or large grocery store is associated with eating healthier food. Better access to a supermarket is associated with a reduced risk of obesity, and better access to convenience stores is associated with an increased risk of obesity. Recent research suggests that lack of access to specific nutritious foods may be less important than relatively easy access to all other foods.

'Food swamps' may better explain increases in body mass index (BMI) and obesity than "food deserts." Increasing access to specific foods like fruits and vegetables, whole grains, and low-fat milk alone may not affect the obesity problem, as most stores that carry these nutritious foods at low prices also carry the less healthy foods.

PERCENT OF THE POPULATION THAT LIVES IN A USDA-DEFINED 'FOOD DESERT', 2015

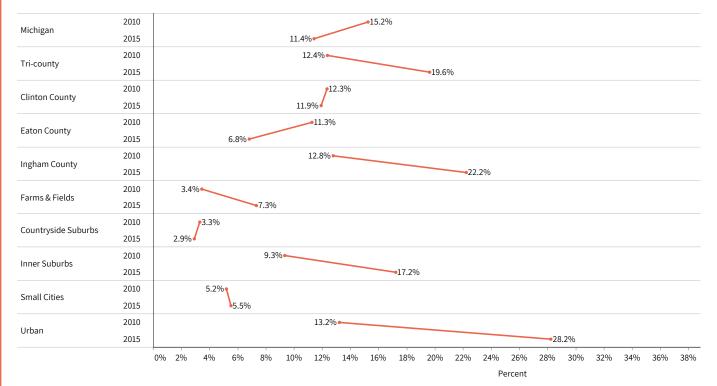
Nearly one in five persons in the tri-county region lived in an area that the USDA would define as being a 'food desert' in 2015; this was significantly higher than the corresponding population for the state of Michigan. The proportion of persons who lived in a 'food desert' was highest among the municipalities that make up the region's urban core, which ranged from 26.9% in the City of Lansing to 30.9% in Lansing Charter Township. The 'Countryside Suburbs' had the lowest percentage of their population living in a 'food desert'.



Source: United States Department of Agriculture, Economic Research Service, Food Access Research Atlas

PERCENT OF THE POPULATION THAT LIVES IN A USDA-DEFINED 'FOOD DESERT', 2010 AND 2015

A proper trend cannot be drawn with only two points, but comparisons can still be made between the two available data points for the geographies presented. In the state of Michigan, the percent of the population who lived in an area defined as a 'food desert' declined between 2010 and 2015, but in the Capital Area, it increased. This increase in the Capital Area was driven primarily by Ingham County, who had increases in the prevalence of 'food desert' in its urban area. There have also been increases in the proportion of persons living in a 'food desert' in the 'Inner Suburbs' and 'Farms and Fields' areas.



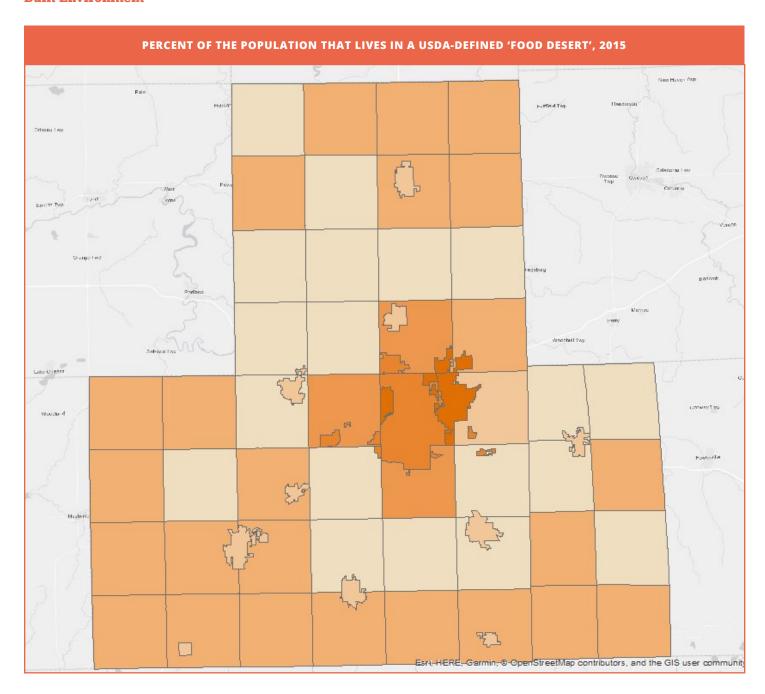
Notes: 2010 data not available for East Lansing City, Lansing Charter Township, and Lansing City.

Source: United States Department of Agriculture, Economic Research Service, Food Access Research Atlas

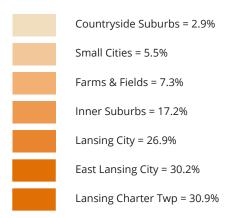
SPEAKING OF HEALTH

Focus Group Participants

"They made a path some years ago, to walk on. So, it has helped me in that aspect because I go out to walk more because it goes up to the river."



POPULATION LIVING IN A FOOD DESERT



Behaviors, Stress, & Physical Condition





Obesity - Adults

MEASURE

Adult obesity prevalence represents the percentage of the adult population (age 18 and older) with a body mass index (BMI) greater than or equal to 30 kg/m².

BMI is calculated from the individual's selfreported height and weight. BMI is defined as weight in kg divided by height in meters, squared.

DATA SOURCES

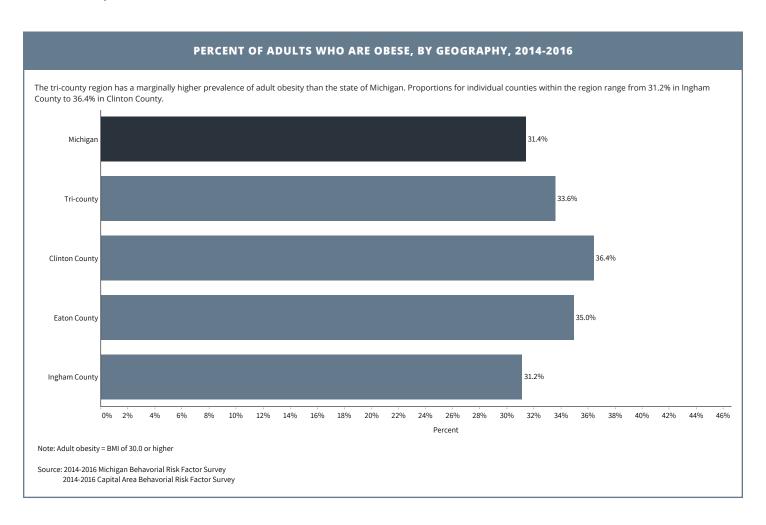
- Michigan Behavioral Risk Factor Surveillance System
- Capital Area Behavioral Risk Factor Survey

YEARS 2008-2010, 2011-2013, 2014-2016

REASON FOR MEASURE

Obesity is often the result of an overall energy imbalance due to poor diet and limited physical activity. Obesity increases the risk for health conditions such as coronary heart disease, type 2 diabetes, cancer, hypertension, dyslipidemia, stroke, liver and gallbladder disease, sleep apnea and respiratory problems, and osteoarthritis.

Sub-county level geographic area group breakouts are not available for this indicator.



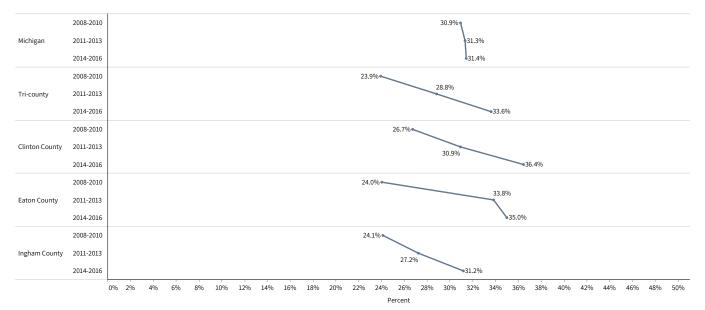
SPEAKING OF HEALTH

Focus Group Participants

"I feel ashamed when I go to the doctor, and they pretty much just lay on me, 'Well, if you didn't weigh this much, if you did this, if you did that—.' Part of the problem, not that I need food stamps to eat healthy. ... But, it is hard for someone who has state insurance, whose income is above the poverty line [to afford healthy foods]. So, you don't get assistance, and when your doctor lays into you about being large, and different things like this, like, well, what do you want me to do?"

TREND IN PERCENT OF ADULTS WHO ARE OBESE, BY GEOGRAPHY, 2008-2016

According to the Michigan BRFS, obesity in adults statewide has plateaued. This is not the experience of the Capital Area region, nor the individual counties in the region. Locally, the percentage of adults who are obese has increased by 9.7% from 2008-2010 to 2014-2016.



Note: Adult obesity = BMI of 30.0 or higher

Source: 2008-2010, 2011-2013, and 2014-2016 Michigan Behavorial Risk Factor Survey 2008-2010, 2011-2013, and 2014-2016 Capital Area Behavorial Risk Factor Survey

PERCENT OF ADULTS WHO ARE OBESE, BY GEOGRAPHY, 2014-2016 (BY RACE/ETHNICITY) Looking at obesity by race/ethnicity, obesity disproportionately affects minority adults, compared to their White peers. In Clinton County, over half of Hispanic adults are obese. In Eaton and Ingham counties, obesity is highest among Black adults. 30.8% White Michigan Black 38.4% 32.7% White Tri-county Black 35.7% Hispanic 34.7% White Clinton County Hispanic 34.8% White Eaton County 49.7% Black 30.9% 43.0% Ingham County Black Hispanic 28.4% 15% Percent Note: Adult obesity = BMI of 30.0 or higher Statistics for Black adults in Clinton County and Hispanic adults in Eaton County were supressed due to small sample size. Source: 2014-2016 Michigan Behavorial Risk Factor Survey

2014-2016 Capital Area Behavorial Risk Factor Survey



Obesity - Adolescents

MEASURE

Adolescent obesity prevalence represents the percentage of 9th and 11th grade students who are obese (at or above the 95th percentile for BMI by age and sex)

BMI is calculated from the individual's self-reported height and weight. BMI is defined as weight in kg divided by height in meters, squared.

DATA SOURCES

- Michigan Youth Risk Behavior Survey (MI YRBS)
- Michigan Profile for Healthy Youth (MiPHY)

YEARS

MI YRBS: 2010-2011, 2012-2013, and 2014-2015,

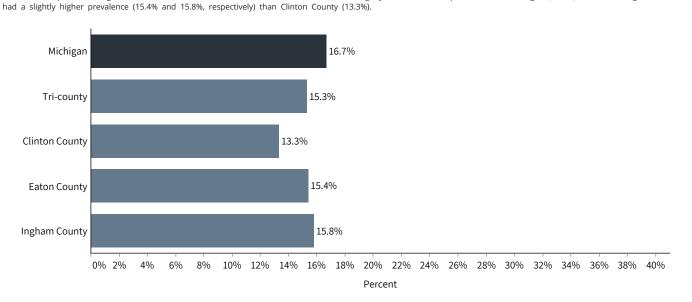
MiPHY: 2011-2012, 2013-2014, and 2015-2016

REASON FOR MEASURE

Some of the immediate health effects of obese youth are that they are more likely to have risk factors for cardiovascular disease, such as high cholesterol or high blood pressure. In a populationbased sample of 5- to 17-year-olds, 70% of obese youth had at least one risk factor for cardiovascular disease. Obese adolescents are more likely to have pre-diabetes, a condition in which blood glucose levels indicate a high risk for development of diabetes. Children and adolescents who are obese are at greater risk for bone and joint problems, sleep apnea, and social and psychological problems, such as stigmatization and poor self-esteem. Potential long-term health effects for obese children and adolescents include a high probability of adult obesity, heart disease, type 2

diabetes, stroke, several types of cancer, and osteoarthritis. One study showed that children who became obese as early as age two were more likely to be obese as adults. Being overweight or obese is associated with increased risk for many types of cancer, including cancer of the breast, colon, endometrium, esophagus, kidney, pancreas, gallbladder, thyroid, ovary, cervix, and prostate, as well as multiple myeloma and Hodgkin's lymphoma.

PERCENT OF ADOLESCENTS WHO ARE OBESE, 2017-2018 Across the Capital Area region, 15.3% of adolescents were considered obese, which was slightly lower than the prevalence for Michigan (16.7%). Eaton and Ingham counties



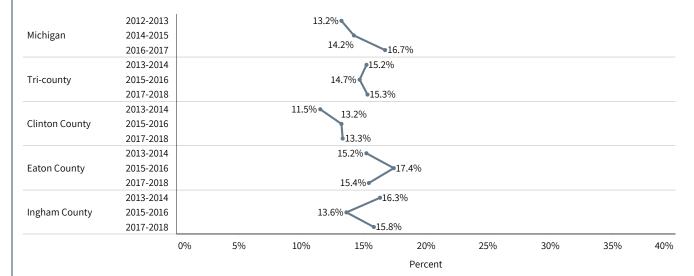
Note: The Michigan Youth Risk Behavior Survey (Michigan YRBS) and the Michigan Profile for Healthy Youth (MiPHY) are administered on alternate academic years.

Source:

Michigan Profile for Healthy Youth (MiPHY)
Michigan Youth Risk Behavior Survey (MI YRBS)

TREND IN PERCENT OF ADOLESCENTS WHO ARE OBESE, 2013-2018

The trend for adolescent obesity is mixed across the various geographies. For Michigan and Clinton County, adolescent obesity increased from 2013-2014 to 2017-2018 (2012-2013 to 2016-2017 for Michigan). The trend for the Capital Area region is relatively flat, due, in part, to the small decline in obesity in Ingham County during this time frame.



Note: The Michigan Youth Risk Behavior Survey (Michigan YRBS) and the Michigan Profile for Healthy Youth (MiPHY) are administered on alternate academic years.

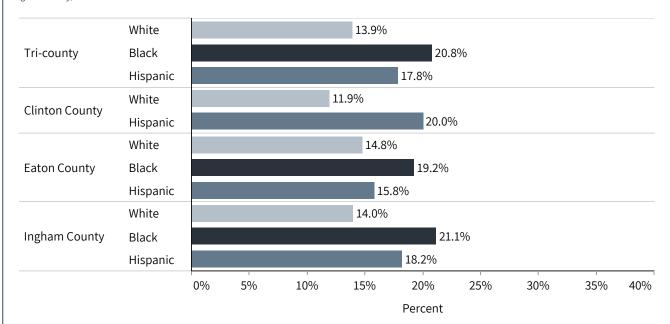
Source:

Michigan Profile for Healthy Youth (MiPHY)

Michigan Youth Risk Behavior Survey (MI YRBS)

PERCENT OF ADOLESCENTS WHO ARE OBESE, 2017-2018 (BY RACE/ETHNICITY)

When looking at obesity between racial/ethnic groups in the state and the region, more Black adolescents were obese compared to their White and Hispanic peers. In the region and in Ingham County, one in five Black adolescents were obese.



Note: Statistics for statewide racial/ethnic groups were not available at the time of publication. Statistics for Black adolescents for the Clinton County were suppressed due to small sample sizes.

Source:

Michigan Profile for Healthy Youth (MiPHY)

Michigan Youth Risk Behavior Survey (MI YRBS)



Tobacco Use - Adults

MEASURE

Adult smoking prevalence represents the estimated percentage of the adult population that currently smokes every day or "most days" and has smoked at least 100 cigarettes in their lifetime

DATA SOURCES

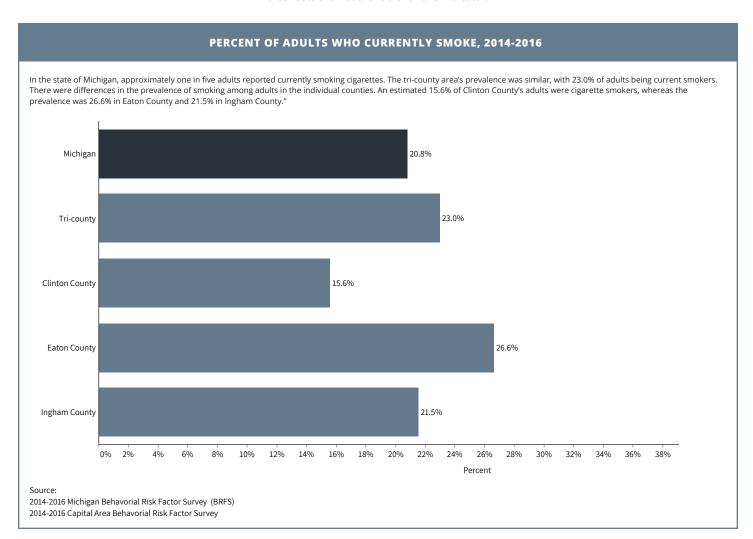
- Michigan Behavioral Risk Factor Surveillance System
- Capital Area Behavioral Risk Factor Surveillance System

YEARS 2008-2016

REASON FOR MEASURE

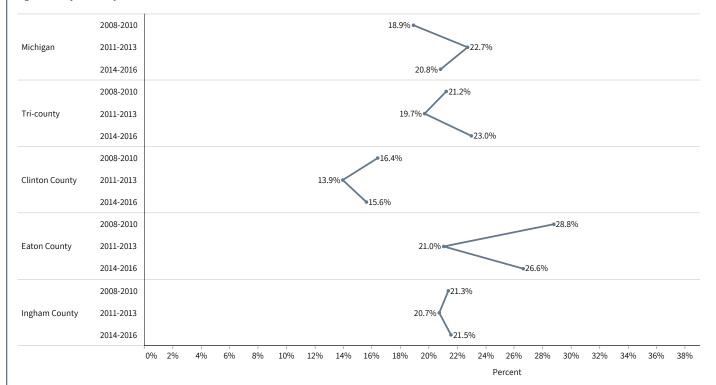
Each year, approximately 443,000 premature deaths occur in the United States primarily due to smoking. Cigarette smoking is identified as a cause in multiple diseases, including various cancers, cardiovascular disease, respiratory conditions, low birth weight, and other adverse health outcomes. Measuring the prevalence of tobacco use in the population can alert communities to potential adverse health outcomes and can be valuable for assessing the need for cessation programs or the electiveness of existing programs. CHR

Sub-county level geographic area group breakouts are not available for this indicator.



TREND IN PERCENT OF ADULTS WHO CURRENTLY SMOKE, 2008-2016

In the state of Michigan, there was a slight increase in the prevalence of current cigarette smokers between 2008-2010 and 2014-2016. During this same time period, the tri-county area also saw a slight increase in the prevalence of smokers. Clinton and Eaton counties had a slight decrease in the percentage of adults who were current smokers, while the percentage for Ingham County was steady.



Source:

2008-2010, 2011-2013, and 2014-2016 Michigan Behavioral Risk Factor Surveys

2008-2010, 2011-2013, and 2014-2016 Capital Area Behavioral Risk Factor Survey

Michigan

Tri-county

PERCENT OF ADULTS WHO CURRENTLY SMOKE, 2014-2016 (BY RACE/ETHNICITY) When stratified by race and ethnicity, information about cigarette smoking prevalence could not be reported for Clinton County's or Eaton County's racial/ethnic minority populations because of small sample sizes. In the state of Michigan, racial/ethnic minorities had a slightly higher proportion of smokers in their population compared to White adults. In Ingham County, the opposite occurred, with more smokers among White adults. White 19.8% Black Hispanic 23.4% White 23.2% Clinton County White 15.3% 26.4% Eaton County White White 23.1%

15.8%

18%

20%

16%

21.7%

22%

26%

Percent

28%

30%

32%

34%

36%

38%

Note: Statistics for Black and Hispanic adults in Clinton and Eaton counties are not reported due to insufficient sample size.

10%

12%

14%

Ingham

County

2014, 2015, and 2016 Michigan Behavioral Risk Factor Survey (BRFS)

2014-2016 Capital Area Behavioral Risk Factor Survey

Black

Hispanic



Tobacco Use - Adolescents

MEASURE

Adolescent smoking prevalence represents the percent of 9th and 11th grade students in who smoked cigarettes during the past 30 days

DATA SOURCES

- Michigan Youth Risk Behavior Survey (MI YRBS)
- Michigan Profile for Healthy Youth Survey (MiPHY)

YEARS

MI YRBS: 2012-2013, 2014-2015,

2016-2017

MiPHY: 2013-2014, 2015-2016, 2017-2018

REASON FOR MEASURE

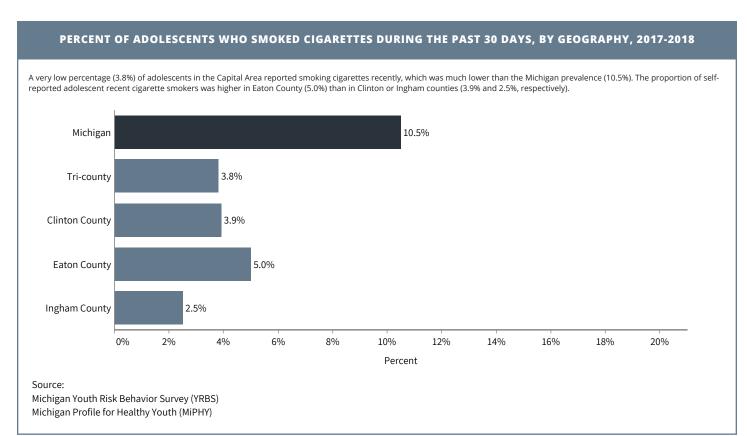
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Sub-county level geographic area group breakouts are not available for this indicator.

SPEAKING OF HEALTH

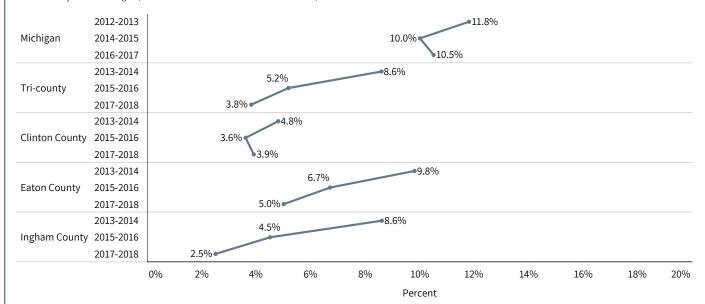
Focus Group Participants

"I think that the vaping has gotten really popular with the younger kids. I think that needs to be addressed."



TREND IN PERCENT OF ADOLESCENTS WHO SMOKED CIGARETTES DURING THE PAST 30 DAYS, BY GEOGRAPHY, 2013-2018

In Eaton and Ingham counties, there was a significant decline in the prevalence of recent smoking among adolescents from 2013-2014 to 2017-2018. Smaller decreases were observed for Clinton County and for Michigan (statewide data is from 2012-2013 to 2016-2017).



Note: The Michigan Youth Risk Behavior Survey (Michigan YRBS) and the Michigan Profile for Healthy Youth (MiPHY) are administered on alternate academic years.

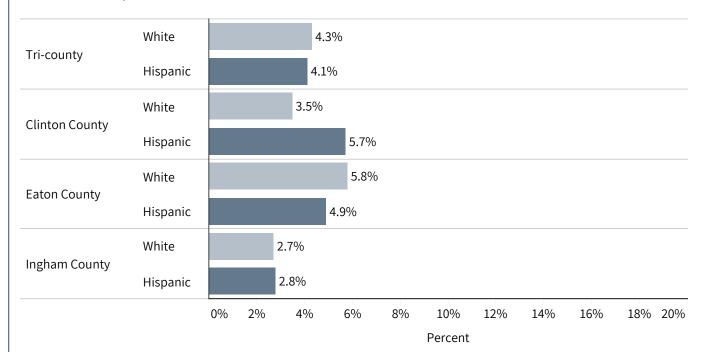
Source:

Michigan Youth Risk Behavior Survey (YRBS)

Michigan Profile for Healthy Youth (MiPHY)

PERCENT OF ADOLESCENTS WHO SMOKED CIGARETTES DURING THE PAST 30 DAYS, BY GEOGRAPHY, 2017-2018 (BY RACE/ETHNICITY)

The prevalence of recent cigarette smoking was higher among Hispanic adolescents, as compared to their White peers, in Clinton County, while the prevalence was higher among White adolescents for Eaton County. There was no statistically significant difference between ethnic groups for Ingham County. Statistics for Black adolescents in the tri-county area could not be calculated due to small sample sizes.



Note: Statistics for Black adolecents are supressed due to small sample size.

The Michigan Youth Risk Behavior Survey (Michigan YRBS) and the Michigan Profile for Healthy Youth (MiPHY) are administered on alternate academic years.

Source:

Michigan Youth Risk Behavior Survey (YRBS)

Michigan Profile for Healthy Youth (MiPHY)



Alcohol Use - Adults

MEASURE

Binge drinking is defined as consuming more than four (women) or five (men) alcoholic beverages on a single occasion within the past 30 days

DATA SOURCES

- Michigan Behavioral Risk Factor Surveillance System
- Capital Area Behavioral Risk Factor Surveillance System

YEARS 2008-2016

REASON FOR MEASURE

Binge drinking is a risk factor for a number of adverse health outcomes, such as alcohol poisoning, hypertension, acute myocardial infarction, sexually-transmitted infections, unintended pregnancy, fetal alcohol syndrome, sudden infant death syndrome, suicide, interpersonal violence, and motor vehicle crashes.

Sub-county level geographic area group breakouts are not available for this indicator.

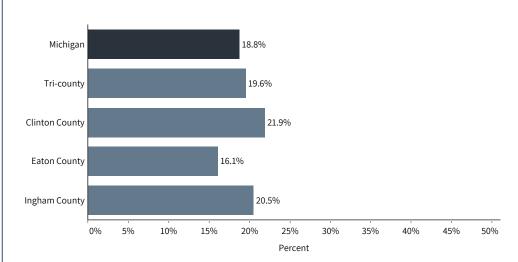
SPEAKING OF HEALTH

Focus Group Participants

"I know alcoholism's a big thing in this community. We got more liquor stores and more bars and more places to buy liquor than we have anything else. And many, many people utilize it to the point of sickness."

PERCENT OF ADULTS WHO REPORTED BINGE DRINKING IN THE LAST 30 DAYS, 2014-2016

Approximately one in five adults in Michigan and the tri-county region engaged in recent binge drinking. During the reporting period, Clinton and Ingham counties had the highest binge drinking prevalence among adults (21.9% and 20.5%, respectively). Eaton County had the lowest proportion (16.1%) in the region.



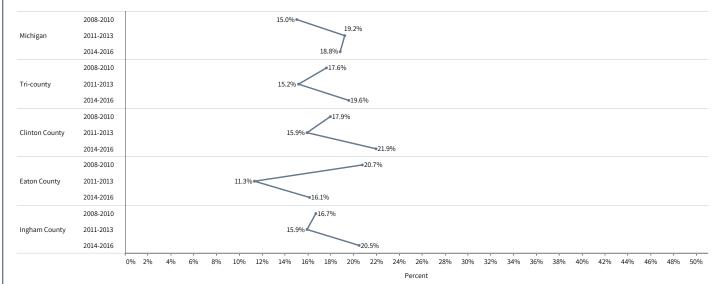
Notes: Binge drinking is defined as five or more drinks (for men) or 4 or more drinks (for women) per occasion (usually a few hours) on at least one occasion in the past 30 days.

Source:

2008-2010, 2011-2013, and 2014-2016 Michigan Behavioral Risk Factor Survey 2008-2010, 2011-2013, and 2014-2016 Capital Area Behavioral Risk Factor Survey

TREND IN PERCENT OF ADULTS WHO REPORTED BINGE DRINKING IN THE LAST 30 DAYS, 2008-2016

Clinton, Eaton, and Ingham counties all experienced an increase in adult binge drinking from 2011-2013 to 2014-2016, with Clinton and Ingham counties surpassing the percentage of binge drinking reported during 2008-2010. The trend for the tri-counties was opposite that seen for the state overall, which experienced an increase from 2010 to 2013, followed by a decrease in 2016.



Notes: Binge drinking is defined as five or more drinks (for men) or 4 or more drinks (for women) per occasion (usually a few hours) on at least one occasion in the past 30 days.

Source

2008-2010, 2011-2013, and 2014-2016 Michigan Behavioral Risk Factor Survey

2008-2010, 2011-2013, and 2014-2016 Capital Area Behavioral Risk Factor Survey



Alcohol Use - Adolescents

MEASURE

Adolescent binge drinking prevalence represents the percentage of 9th and 11th grade students who had five or more drinks of alcohol in a row, that is, within a couple of hours, during the past 30 days (binge)

DATA SOURCES

- Michigan Youth Risk Behavior Survey (MI YRBS)
- Michigan Profile for Healthy Youth Survey (MiPHY)

YEARS

MI YRBS: 2016-2017 (data for prior years not

MiPHY: 2013-2014, 2015-2016, 2017-2018

REASON FOR MEASURE

Binge drinking is a risk factor for a number of adverse health outcomes, such as alcohol poisoning, hypertension, acute myocardial infarction, sexually transmitted infections, unintended pregnancy, fetal alcohol syndrome, sudden infant death syndrome, suicide, interpersonal violence, and motor vehicle crashes.

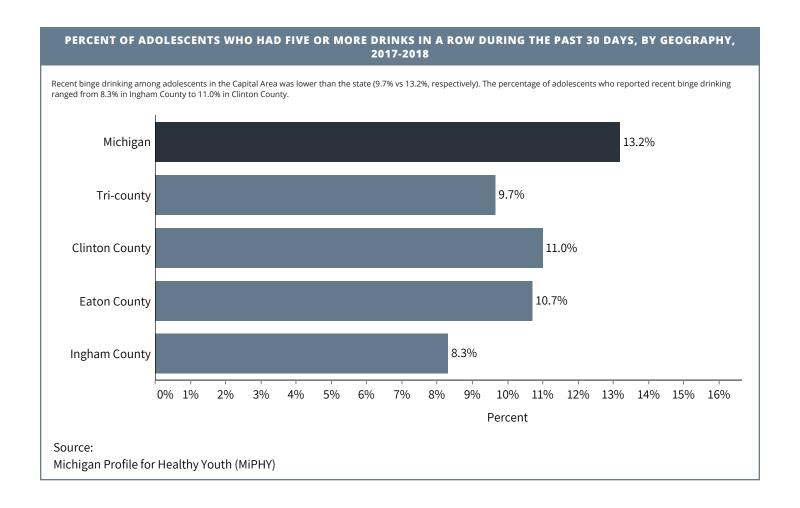
Sub-county level geographic area group breakouts are not available for this indicator.

SPEAKING OF HEALTH

Focus Group Participants

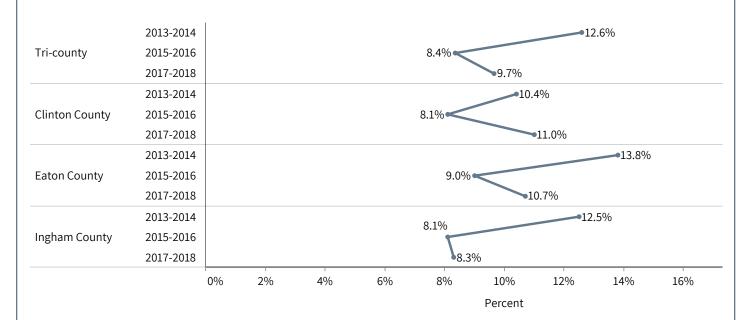
"And sometimes with older people when I'd see them drinking, I would throw away what they had and I'd add water. That's what I would do with a man who was always drinking ... I'd tell my grandmother

– I'd ask my grandmother
permission before – and she'd tell me, 'Do it because, he's going to die soon if he continues drinking."



TREND IN PERCENT OF ADOLESCENTS WHO HAD FIVE OR MORE DRINKS IN A ROW DURING THE PAST 30 DAYS, BY GEOGRAPHY, 2013-2018

In Eaton and Ingham counties, binge drinking among adolescents within the past 30 days declined between 2013-2014 and 2017-2018. In Clinton County, the prevalence of adolescent binge drinking increased slightly over the same time period.



Note: Statistics from the Michigan Youth Risk Behavior Survey (YRBS) was excluded because there was only one data point available.

Source:

Michigan Profile for Healthy Youth (MiPHY)

PERCENT OF ADOLESCENTS WHO HAD FIVE OR MORE DRINKS IN A ROW DURING THE PAST 30 DAYS, BY GEOGRAPHY, 2017-2018 (BY RACE/ETHNICITY) In each individual county, Hispanic adolescents had the highest proportion of adolescents with recent binge drinking, followed by White adolescents and Black adolescents. White 10.1% Tri-county Black 4.2% 11.8% Hispanic White 10.7% 5.9% Clinton County Black Hispanic 14.0% White 11.4% **Eaton County** Black 2.2% 13.3% Hispanic White 8.7% **Ingham County** Black 4.3%

10.1%

11%

12%

13%

14%

15%

10%

Source:

Michigan Profile for Healthy Youth (MiPHY)

Hispanic

0% 1%

2%

3%

4%

5%

6%

7%

8%

Min. Percent

9%



Substance Abuse - Adults

MEASURE

The rate of opioid prescriptions that were filled per 1,000 persons

DATA SOURCEPolicy Map

YEARS 2014-2016

REASON FOR MEASURE

Prescription opioids have legitimate and beneficial uses for the treatment of chronic and acute pain. Most people who take them do not usually become dependent, but for some, normal use of opioids can lead to dependence, which can then lead to abuse. For many opioid users, addiction starts with prescription opioids; these can be their own or someone else's. A high rate of filled opioid

prescriptions (i.e. those prescriptions that were physically dispensed) can be a sign of abuse. A study by the Centers for Disease Control and Prevention found that areas with high rates of filled opioid prescriptions tended to have more White residents and higher rates of poverty and unemployment.

Sub-county level geographic area group breakouts are not available for this indicator.

717.0

750

800

850

900

700

In Michigan, the rate of opioids prescriptions filled in 2016 was 840 prescriptions filled per 1,000 persons. In the tri-county region, the rate of prescriptions filled varied drastically between individual counties. For example, in Clinton County, the rate was 382 per thousand persons in the county, but in Eaton County, it was 952 prescriptions per thousand persons (nearly enough for every resident to have a prescription). Michigan Clinton County 382.0

Note: CDC prescription data comes from the QuintilesIMS Transactional Data Warehouse, which is based on a sample of approximately 59,000 retail (non-hospital) pharmacies that dispense roughly 88% of all retail prescriptions in the U.S. Opioid prescription rates are calculated using population estimates from the Population Estimates Program, U.S. Census Bureau.

450

500

Rate per 1,000 people

550

600

650

Tri-county statistics were not able to be calculated using this data source.

100

150

200

250

300

350

400

Source: Policy Map

Ingham County

0

50

1000

950

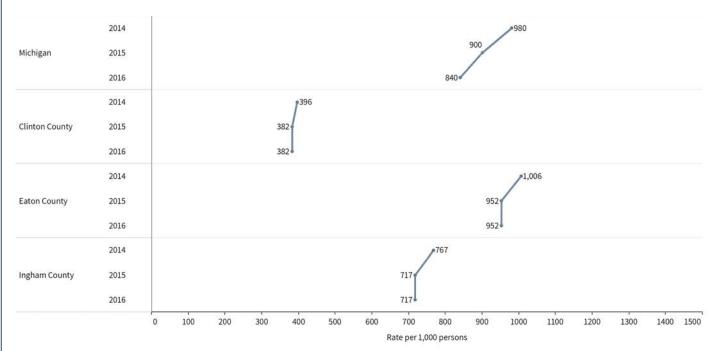
SPEAKING OF HEALTH

Focus Group Participants

"We have lived like 48 years in that neighborhood. And on this side, on my right, I have drug addicts. On this side, I have drug addicts. Up the street, I have drug addicts."

TREND IN RATE OF OPIOID PRESCRIPTIONS FILLER PER 1,000 PERSONS, 2014-2016

In Michigan and the counties in the Capital Area, there was a decline in the rate of opioid prescriptions filled between 2014 and 2016. The most drastic decrease was observed for the state, for which the number of opioid prescriptions dispensed by 140 per 1,000 persons in three years.



Note: CDC prescription data comes from the QuintilesIMS Transactional Data Warehouse, which is based on a sample of approximately 59,000 retail (non-hospital) pharmacies that dispense roughly 88% of all retail prescriptions in the U.S. Opioid prescription rates are calculated using population estimates from the Population Estimates Program, U.S. Census Bureau.

Tri-county statistics were not able to be calculated using this data source.

Source: Policy Map



Substance Abuse - Adolescents

MEASURE

Percent of adolescents in 9th and 11th grades who took painkillers, such as OxyContin, Codeine, Vicodin, or Percocet, during the past 30 days

DATA SOURCE

Michigan Profile for Healthy Youth Survey (MiPHY)

YEARS 2013-2014, 2015-2016, 2017-2018

REASON FOR MEASURE

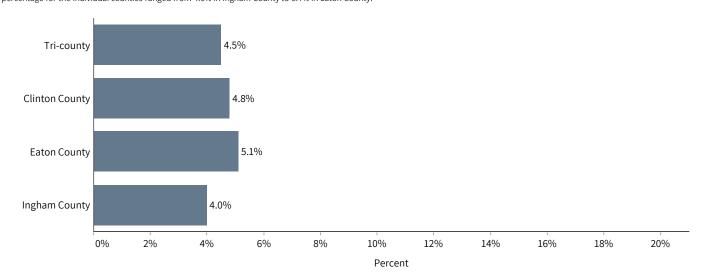
In light of the ongoing opioid epidemic, it is important to remember how the addiction starts in individual people. For many people, opioid addiction starts with either a prescribed medication they receive and then become dependent on, or by experimenting with pills prescribed to others that are found in the home. This particular indicator is measuring such experimentation; this information can be used to inform policies and interventions to alter prescribing

practices or home storage practices of potentially habit-forming prescription drugs.

Notes: No information is available at the state level, as no statistics about prescription drug misuse was available from the Michigan Youth Risk Behavior Survey. Sub-county level geographic area group breakouts are not available for this indicator.

PERCENT OF ADOLESCENTS WHO TOOK PAINKILLERS SUCH AS OXYCONTIN, CODEINE, VICODIN, OR PERCOCET WITHOUT A DOCTOR'S PRESCRIPTION DURING THE PAST 30 DAYS, BY GEOGRAPHY, 2017-2018

Among adolescents in the tri-county area, 4.5%, or about 1 in 22 adolescents, reported that they had taken a prescription that was not prescribed to them in the past 30 days. The percentage for the individual counties ranged from 4.0% in Ingham County to 5.1% in Eaton County.



Note:

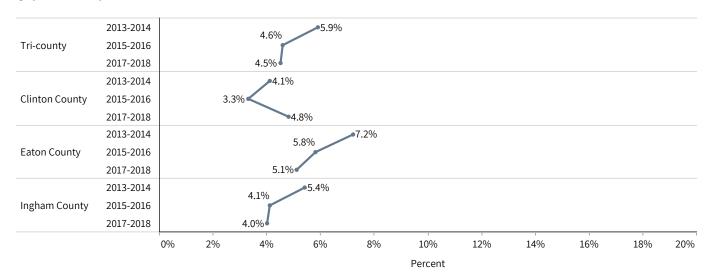
Michigan statistics were not included, as an equivalent question was not asked in the Michigan Youth Risk Behavior Survey (YRBS)

Source

Michigan Profile for Healthy Youth (MiPHY)

TREND IN PERCENT OF ADOLESCENTS WHO TOOK PAINKILLERS SUCH AS OXYCONTIN, CODEINE, VICODIN, OR PERCOCET WITHOUT A DOCTOR'S PRESCRIPTION DURING THE PAST 30 DAYS, BY GEOGRAPHY, 2013-2018

Misuse of prescription painkillers by 9th and 11th graders decreased from 2013-2014 to 2017-2018 in Eaton and Ingham counties and for the tri-county area as a whole, but increased slightly in Clinton County.



Note:

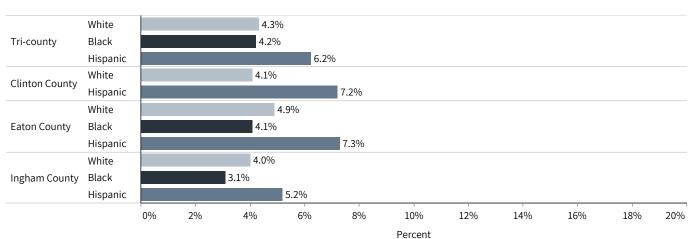
Michigan statistics were not included as an equivalent question was not asked in the Michigan Youth Risk Behavior Survey (YRBS)

Source:

Michigan Profile for Healthy Youth (MiPHY)



Based on available data, experimentation with prescription drugs, including painkillers, was highest among Hispanic adolescents for all geographies, followed by White adolescents.



Note:

Michigan statistics were not included as an equivalent question was not asked in the Michigan Youth Risk Behavior Survey (YRBS) Statistics for Black adolescents in Clinton County were suppressed due to small sample size.

Source:

Michigan Profile for Healthy Youth (MiPHY)



Physical Activity - Adults

MEASURE

The percent of adults engaging in no leisure time physical activity

DATA SOURCES

- Michigan Behavioral Risk Factor Surveillance System (MI BRFS)
- Capital Area Behavioral Risk Factor Surveillance System (Capital Area BRFS)

YEARS 2008-2010, 2011-2013, 2014-2016

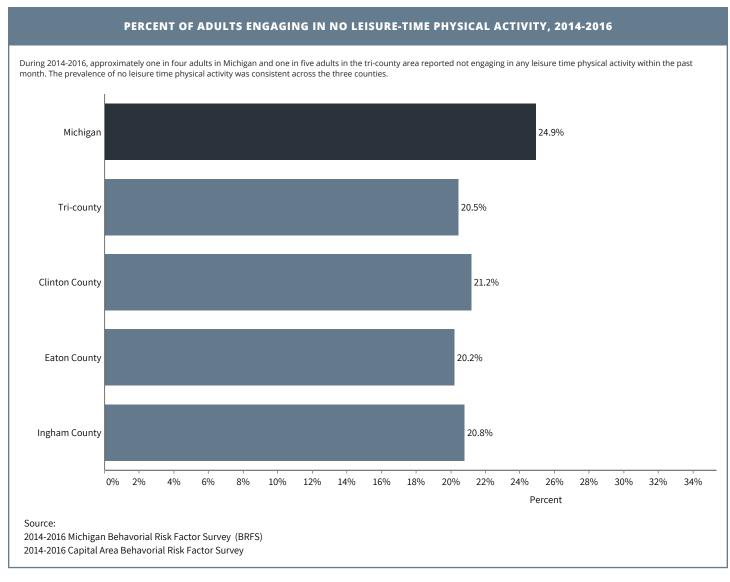
REASON FOR MEASURE

Physical activity is any movement produced by the contraction of skeletal muscle that increases energy expenditure above normal levels; therefore, it is not simply exercise. The benefits of physical activity are numerous. Physically active persons have:

- 20-35% lower risk for cardiovascular disease, coronary artery disease, and stroke;
- 0-40% lower risk for type 2 diabetes and metabolic syndrome;
- 30% lower risk for colon cancer:
- 20% lower risk for breast cancer; and
- 0-30% lower risk for depression, distress/ well-being, and dementia.

The questions for physical activity, both in the MI BRFS and the Capital Area BRFS, have changed over time to reflect revisions

to the physical activity recommendation. Consequently, comparing the percentage of adults getting the recommended amount of physical activity has become increasingly difficult, since local and state statistics may not be comparable, and older statistics may not be comparable with current statistics. However, the question about leisure time physical activity itself has not changed over time.



SPEAKING OF HEALTH

Focus Group Participants

"We ride bikes a lot too ...
Yesterday [one of my kids] needed a pair of baseball shoes because baseball is starting up. So, instead of driving the cars in to town—we live out in the country toward Dewitt—we rode our bikes to Dunham's and got his shoes and rode our bikes back. And we all had our helmets on."

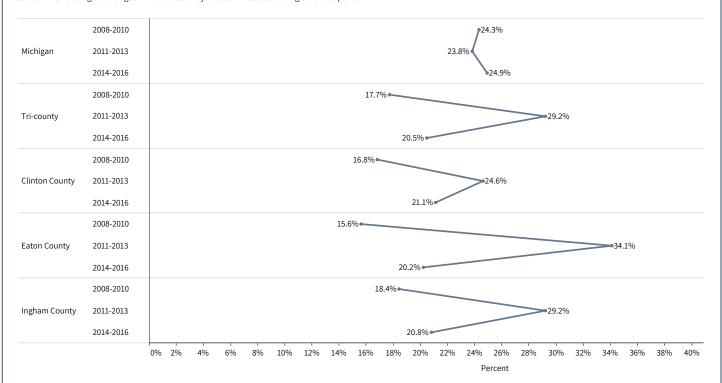
NOTES ABOUT MEASURE

In 2010, the methodology of the Capital Area BRFS was changed to incorporate cell phones, as well as landline, telephones. Extreme caution should be used when using the statistics for trends.

Sub-county level geographic area group breakouts are not available for this indicator.

TREND IN PERCENT OF ADULTS ENGAGING IN NO LEISURE-TIME PHYSICAL ACTIVITY, 2008-2016

The trend for Michigan adults who reported no leisure time physical activity was steady from 2008-2010 to 2014-2016; however, there were observable increases in the percentage of persons not experiencing leisure time physical activity in the Capital Area. Statistics for the 2011-2013 survey were unusually high for the Capital Area counties, which may have been the result of methodological changes in how the survey was administered during that time period.

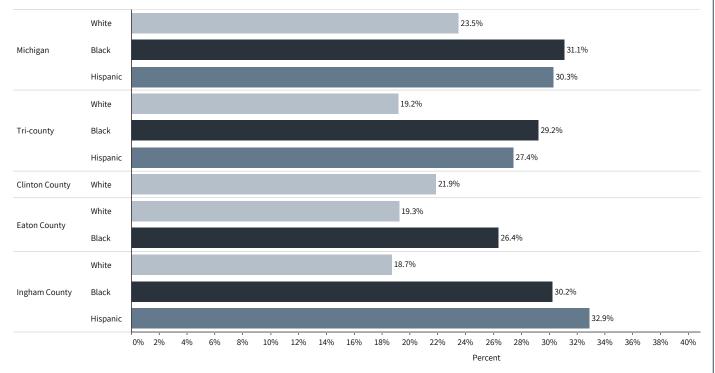


Source:

2008-2010, 2011-2013, and 2014-2016 Michigan Behavorial Risk Factor Surveys (BRFS) 2008-2010, 2011-2013, and 2014-2016 Capital Area Behavorial Risk Factor Survey

PERCENT OF ADULTS ENGAGING IN NO LEISURE-TIME PHYSICAL ACTIVITY, 2014-2016 (BY RACE/ETHNICITY)

When stratified by race and ethnicity, the prevalence of adults not engaging in any leisure time physical activity was higher amongst racial/ethnic minorities than for White adults, both in Michigan and in the Capital Area. Differences between racial/ethnic groups were especially prominent for Ingham County, with 11.5% more Black adults and 14.2% more Hispanic adults reporting no leisure time physical activity than White adults.



Notes: Percents for Black and Hispanic adults in Clinton County and Hispanic adults in Eaton County were suppressed due to inadaquate sample sizes.

Source:

2014-2016 Michigan Behavorial Risk Factor Survey (BRFS)

2014-2016 Capital Area Behavorial Risk Factor Survey



Physical Activity - Adolescents

MEASURE

Percent of adolescents in 9th and 11th grades engaging in the recommended level of physical activity. Recommended physical activity is defined as being physically active for a total of at least 60 minutes per day on five or more of the past seven days

DATA SOURCES

- Michigan Youth Risk Behavior Survey (MI YRBS)
- Michigan Profile for Healthy Youth Survey (MiPHY)

YEARS

MI YRBS: 2012-2013, 2014-2015, 2016-2017 MiPHY: 2013-2014, 2015-2016, 2017-2018

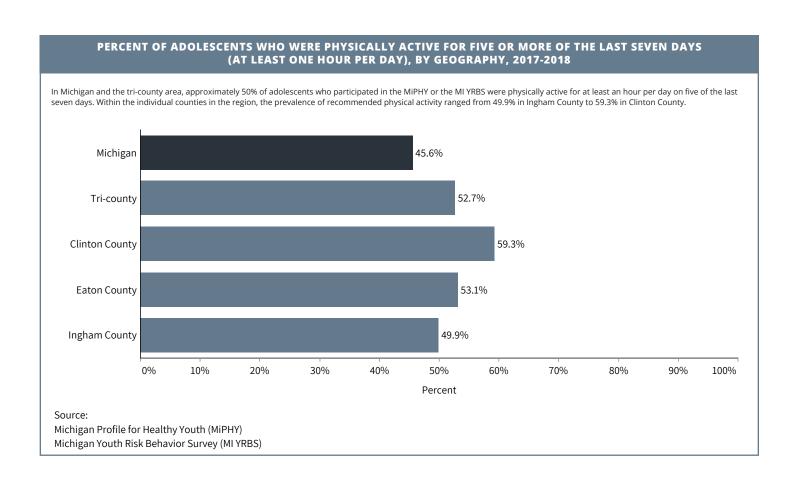
REASON FOR MEASURE

As important as physical activity is for adults, it is even more important for children and adolescents because they are still developing. Appropriate practice of physical activity assists young people to:

- Develop healthy musculoskeletal tissues (i.e. bones, muscles and joints),
- Develop a healthy cardiovascular system (i.e. heart and lungs),
- Develop neuromuscular awareness (i.e. coordination and movement control), and
- · Maintain a healthy body weight.

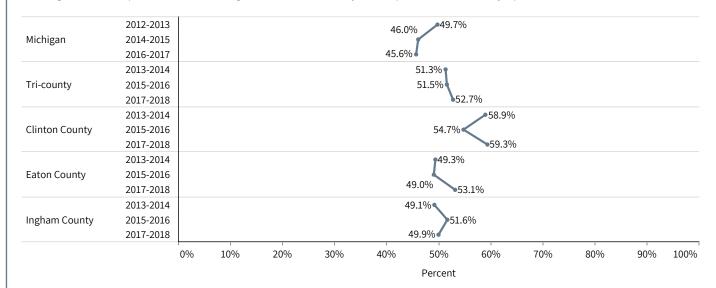
Physical activity has also been associated with psychological benefits in adolescents by improving their control over symptoms of anxiety and depression. Similarly, participation in physical activity can assist in adolescent's social development by providing opportunities for self-expression, building self-confidence, social interaction, and integration. It has also been suggested that physically active young people more readily adopt other healthy behaviors (e.g. avoidance of tobacco, alcohol and drug use) and demonstrate higher academic performance at school.

Sub-county level geographic area group breakouts are not available for this indicator.



TREND IN PERCENT OF ADOLESCENTS WHO WERE PHYSICALLY ACTIVE FOR FIVE OR MORE OF THE LAST SEVEN DAYS (AT LEAST ONE HOUR PER DAY), BY GEOGRAPHY, 2013-2018

The trend in the percentage of Michigan adolescents who engaged in the recommended amount of physical activity decreased slightly since 2012-2013, but in the tri-county area, there was a marginal increase. The prevalence for Clinton and Ingham counties remained steady, while the prevalence for Eaton County improved from 2013-2014 to 2017-2018.



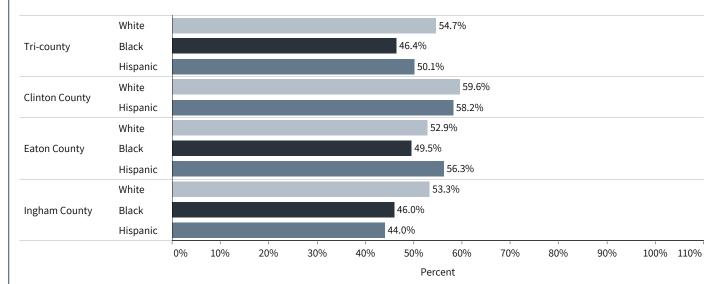
Source:

Michigan Profile for Healthy Youth (MiPHY)

Michigan Youth Risk Behavior Survey (MI YRBS)

PERCENT OF ADOLESCENTS WHO WERE PHYSICALLY ACTIVE FOR FIVE OR MORE OF THE LAST SEVEN DAYS (AT LEAST ONE HOUR PER DAY), BY GEOGRAPHY, 2017-2018 (BY RACE/ETHNICITY)

In Michigan and in Eaton County, the prevalence of adolescents who were physically active for at least one hour on five or more days in the past seven days was higher among racial/ethnic minorities than it was for White adolescents. The opposite was observed in Clinton and Ingham counties, with more White adolescents engaging in the recommended level of physical activity then their peers.



Note: Information for Black adolescents in Clinton County was suppressed due to small sample size.

Source:

Michigan Profile for Healthy Youth (MiPHY) Michigan Youth Risk Behavior Survey (MI YRBS)



Nutrition - Adults

MEASURE

Percentage of adults who consume ≥5 servings (or times) of fruits and vegetables per day

DATA SOURCES

- Michigan Behavioral Risk Factor Surveillance System
- Capital Area Behavioral Risk Factor Surveillance System

YEARS 2013-2015 MI BRFSS 2011-2016 Capital Area BRFSS

REASON FOR MEASURE

Most adults consume a diet heavy in carbohydrates and fats but have limited (both in amount and in type) fruit and vegetable consumption. Fruits and vegetables provide numerous nutrients and fiber. A plant-based diet is associated with decreased risk for chronic diseases, like cancer, diabetes, and obesity. Consuming a variety of fruits and vegetables is necessary to obtain the whole spectrum of nutrients necessary for optimum health.

NOTES ABOUT MEASURE

Nutrition statistics from the MI BRFS are not comparable to nutrition statistics in the Capital Area BRFS because the questions were worded differently in both survey instruments. The Capital Area BRFS asked about the number of servings of fruits and vegetable consumed, while the MI BRFS asked about the number of times various fruits and vegetables were eaten.

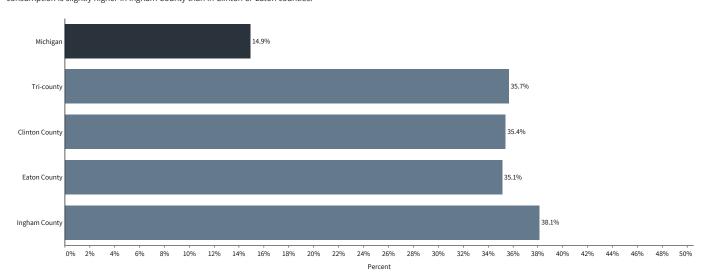
- In 2010, the questions about nutrition in the Capital Area BRFS changed.
 Consequently, nutrition statistics from generated 2008-2010 differ from those in the 2011-2013 and 2014-2016 surveys.
 2008-2010 data is not presented in this report, and it is not recommended that they be used for trends.
- In 2011, the methodology of the Capital Area BRFS was changed to incorporate cell phones as well as landline telephones. Extreme caution should be used when using the statistics for trends.

Sub-county level geographic area group breakouts are not available for this indicator.

PERCENT OF ADULTS WHO CONSUME AN ADEQUATE AMOUNT OF FRUITS AND VEGETABLES DAILY, 2014-2016

The nutrition question asked on the Michigan BRFS survey is worded differently than the corresponding questions asked in the Capital Area BRFS. The statistics are not equivalent, thus no comparison should be made between the state estimate and that of the Capital Area.

In the Capital Area, just over one-third of adults consume at least five or more servings of fruits and vegetables daily. Among the individual counties, adequate fruit and vegetable consumption is slightly higher in Ingham County than in Clinton or Eaton counties.



Notes: Adequate fruit and vegetable consumption = consuming 5 or more serving of fruits and vegetables per day.

Questions about fruit and vegetable consumption are asked every other year on the Michigan Behavorial Risk Factor Survey, consequently the reporting period for the state statistic is 2015.

Nutrition statistics from the MI BRFS are not comparable to nutrition statistics from the Capital Area BRFS because the questions were worded differently in both survey instruments." For trends chart: "In 2011, the methodology of the Capital Area BRFS was changed to incorporate cell phones as well as landline telephones. Extreme caution should be used when using the statistics for trends.

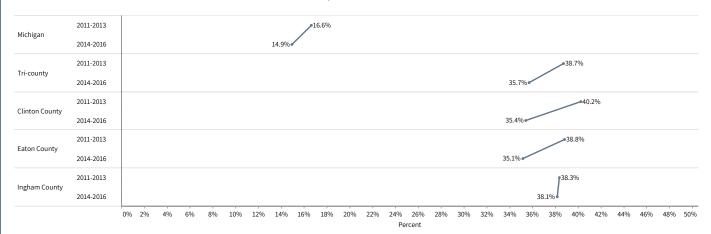
Source

2015 Michigan Behavorial Risk Factor Survey (BRFS)

2014-2016 Capital Area Behavorial Risk Factor Survey

TREND IN PERCENT OF ADULTS WHO CONSUME AN ADEQUATE AMOUNT OF FRUITS AND VEGETABLES DAILY, 2011-2016

In the tri-county area, there has been a decline in the number of adults reporting adequate amount of fruits and vegetables from 2011-2013 to 2014-2016. Since it is not recommended that the 2008-2010 statistics be combined with those from 2011-2013 and 2014-2016, more data is needed to determine whether the observed decline is a trend.



Notes: Adequate fruit and vegetable consumption = consuming 5 or more serving of fruits and vegetables per day.

Questions about fruit and vegetable consumption are asked every other year on the Michigan Behavorial Risk Factor Survey, consequently the reporting period for the state statistic 2015.

Nutrition statistics from the MI BRFS are not comparable to nutrition statistics from the Capital Area BRFS because the questions were worded differently in both survey instruments.

 $2011, the \, methodology \, of \, the \, Capital \, Area \, BRFS \, was \, changed \, to \, incorporate \, cell \, phones \, as \, well \, as \, landline \, telephones. \, Extreme \, caution \, should \, be \, used \, when \, using \, the \, statistics for \, trends.$

Statistics for Black and Hispanic adults in Eaton and Clinton counties were supressed due to insufficient sample size.

Source:

2013 and 2015 Michigan Behavorial Risk Factor Survey (BRFS)

2014-2016 Capital Area Behavorial Risk Factor Survey

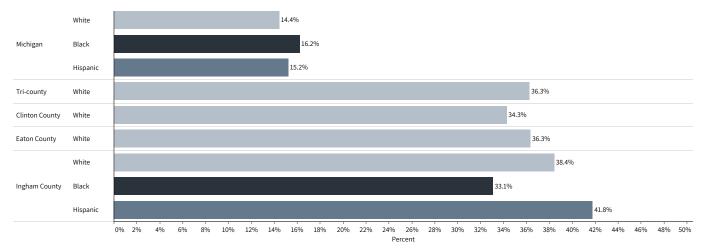
SPEAKING OF HEALTH

Focus Group Participants

"I would say I feel more healthy now [than I used to]. When I was growing up, we had a big family. ... We didn't really get the proper nutrition stuff. They didn't teach about how to eat nutritious back when we were growing up. So, I'm still learning every day how to eat better. I'm getting better at it."

PERCENT OF ADULTS WHO CONSUME AN ADEQUATE AMOUNT OF FRUITS AND VEGETABLES DAILY, 2014-2016 (BY RACE/ETHNICITY)

In the Capital Area, more Hispanic adults consumed the recommended amount of fruits and vegetables than their White and Black peers. Findings were similar for Ingham County; statistics for Black and Hispanic adults in Clinton and Eaton counties could not be calculated due to small sample sizes.



Notes: A dequate fruit and vegetable consumption = consuming 5 or more serving of fruits and vegetables per day.

Questions about fruit and vegetable consumption are asked every other year on the Michigan Behavorial Risk Factor Survey, consequently the reporting period for the state statistic is 2015.

Nutrition statistics from the MI BRFS are not comparable to nutrition statistics from the Capital Area BRFS because the questions were worded differently in both survey instruments.

Statistics for Black and Hispanic adults in Eaton and Clinton counties were supressed due to insufficient sample size.

2015 Michigan Behavorial Risk Factor Survey (BRFS) 2014-2016 Capital Area Behavorial Risk Factor Survey



Nutrition - Adolescents

MEASURE

Percentage of 9th and 11th grade students who ate five or more servings of fruits and vegetables per day during the past seven days

DATA SOURCE

Michigan Profile for Healthy Youth Survey (MiPHY)

YEARS 2013-2014, 2015-2016, 2017-2018

REASON FOR MEASURE

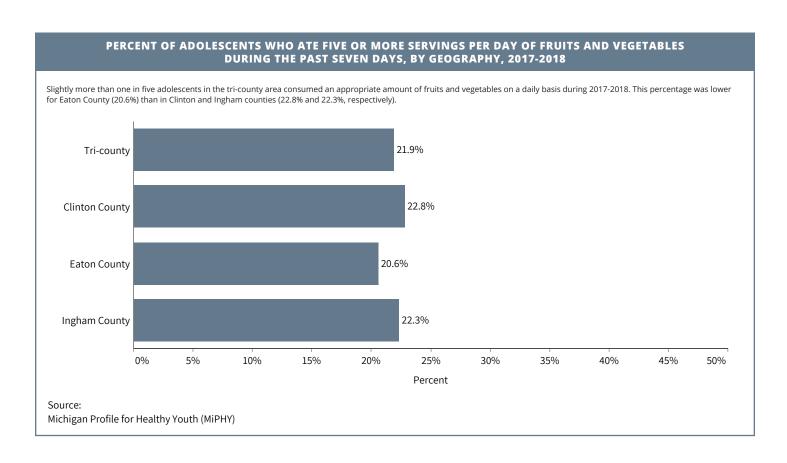
Consuming a variety of nutrients is important for proper growth and development. More importantly, epidemiological evidence suggest that adolescence is a key period for the

development of lifelong nutritional habits. Adequate nutritional intake by children sets the stage for maintaining good health later in life.

NOTES ABOUT MEASURE

Statistics on fruit and vegetable consumption cannot be compared between Michigan and individual counties, as different questions were asked on the MiPHY survey (for individual counties) and the Michigan Youth Risk Behavior Survey (statewide).

Sub-county level geographic area group breakouts are not available for this indicator.



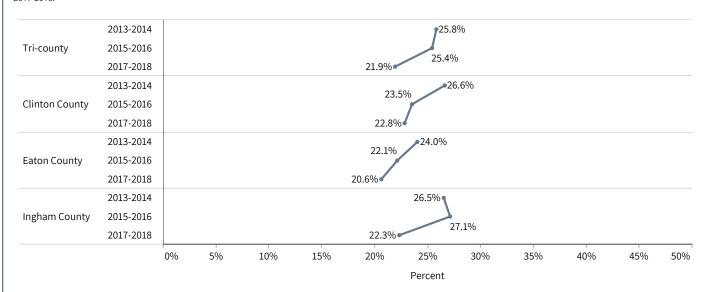
SPEAKING OF HEALTH

Focus Group Participants

"I know my kids are pretty healthyThey love their vegetables. They eat very well, their kids eat very well, and now my great grandchildren ... they eat avocados, they eat bananas, these kids are teaching their children to eat good foods, not garbage."

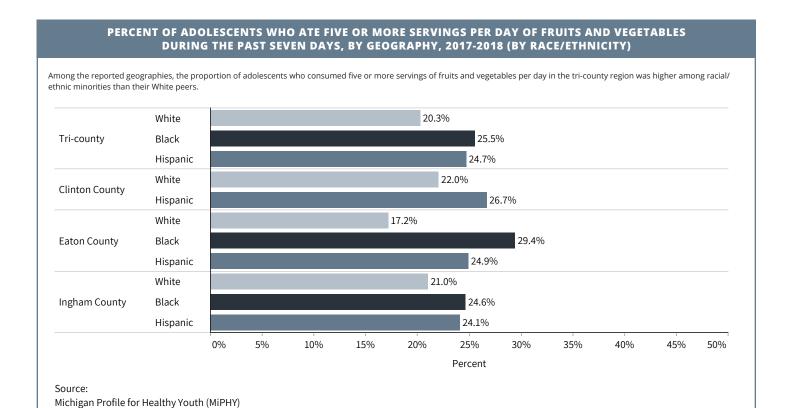
TREND IN PERCENT OF ADOLESCENTS WHO ATE FIVE OR MORE SERVINGS PER DAY OF FRUITS AND VEGETABLES DURING THE PAST SEVEN DAYS, BY GEOGRAPHY, 2013-2018

Across all counties in the Capital Area, the proportion of adolescents who consumed the recommended daily amount of fruits and vegetables had a noticeable decline from 2013-2014 to 2017-2018.



Source:

Michigan Profile for Healthy Youth (MiPHY)





Access to Primary Care

MEASURE

The percent of adults who reported not having someone that they consider to be their personal doctor or primary care provider

DATA SOURCES

- Michigan Behavioral Risk Factor Surveillance System
- Capital Area Behavioral Risk Factor Surveillance System

YEARS 2008-2016

REASON FOR MEASURE

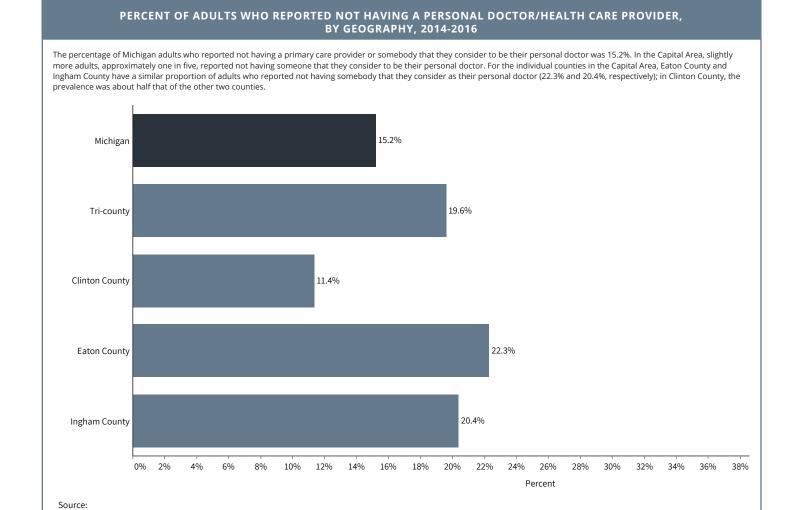
Having access to care requires not only having financial coverage but also access to providers. While high rates of specialist physicians has been shown to be associated with higher, and perhaps unnecessary, utilization, having sufficient availability of primary care physicians (i.e. a physician practicing in a primary care specialty such as general medicine, family medicine, internal medicine, pediatrics, or gynecology) is essential so that people can get preventive and primary care, and when needed, referrals to appropriate specialty care.

Sub-county level geographic area group breakouts are not available for this indicator.

SPEAKING OF HEALTH

Focus Group Participants

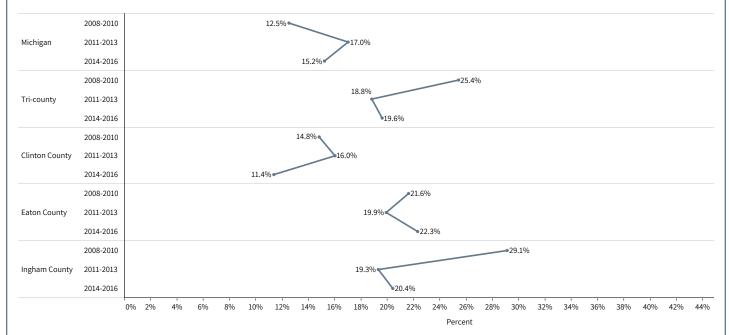
"But, if I try and change my doctor now, first, I'm locked into that doctor for the next year. Then, on top of that, if I do change my doctor, I still have to try and find a doctor that accepts my care, through Medicaid, that no one wants to take. I've had people tell me, 'No, we don't take that.""



2014- 2016 Michigan Behavorial Risk Factor Survey (BRFS) 2014-2016 Capital Area Behavorial Risk Factor Survey

TREND IN PERCENT OF ADULTS WHO REPORTED NOT HAVING A PERSONAL DOCTOR/HEALTH CARE PROVIDER, BY GEOGRAPHY, 2008-2016

In Michigan, the percentage of adults who reported not having a personal doctor or primary health provider increased slightly from 2008-2010 to 2014-2016. In the tri-county area, however, there has been an overall decrease in the percentage of adults reporting not having a primary care provider. Among individual counties, a decline was observed in Clinton and Ingham counties, while the trend was stable in Eaton County.



Notes: In 2010, the methodology of the Capital Area BRFS was changed to incorporate cell phoned as well as landline telephones. Extreme caution should be used when using the statistics for trends.

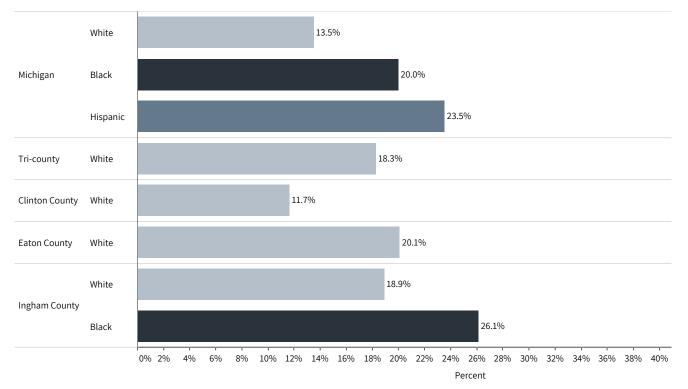
Source:

2008-2010, 2011-2013, and 2014-2016 Michigan Behavorial Risk Factor Surveys (BRFS)

2008-2010, 2011-2013, and 2014-2016 Capital Area Behavorial Risk Factor Survey

PERCENT OF ADULTS WHO REPORTED NOT HAVING A PERSONAL DOCTOR/HEALTH CARE PROVIDER, BY GEOGRAPHY, 2014-2016 (BY RACE/ETHNICITY)

When stratified by race and ethnicity, both in the Capital Area and in the state, racial and ethnic minorities, particularly Hispanic adults, are more likely to report not having a primary care provider.



Note: Statistics for Black and Hispanic adults in Clinton and Eaton counties are not reported due to insufficient sample sizes.

Source:

2014-2016 Michigan Behavorial Risk Factor Survey (BRFS)

2014-2016 Capital Area Behavorial Risk Factor Survey



Access to Health Insurance

MEASURE

Percentage of adults 18-64 years old without health insurance

DATA SOURCE

American Community Survey

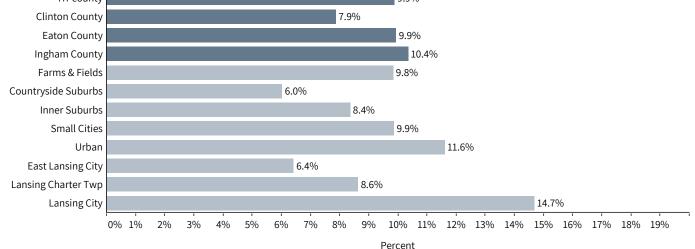
YEARS 2010-2016

REASON FOR MEASURE

Health insurance coverage helps patients gain entry into the health care system. Lack of adequate coverage makes it difficult for people to get the health care they need and, when they do get care, burdens them with large medical bills. Uninsured people are more likely to have poor health status; less likely to receive medical care; more likely to be diagnosed later; and more likely to die prematurely. The Patient Protection and Affordable Care Act (ACA), a comprehensive law passed in 2010, provided new strategies to reduce the number of uninsured and to improve the organization and delivery of health care.

Despite the increased access to health insurance resulting from the implementation of the ACA, there are still adults with no health insurance. Overall, the proportion of adults 18-64 years old without health insurance is lower in the Capital Area than for the state, but that is not true for certain areas within the tri-county region. Urban areas in general, and specifically the City of Lansing, have a slightly higher proportion of adults with no health insurance than the state. Michigan Tri-county 9.9% Clinton County 7.9%

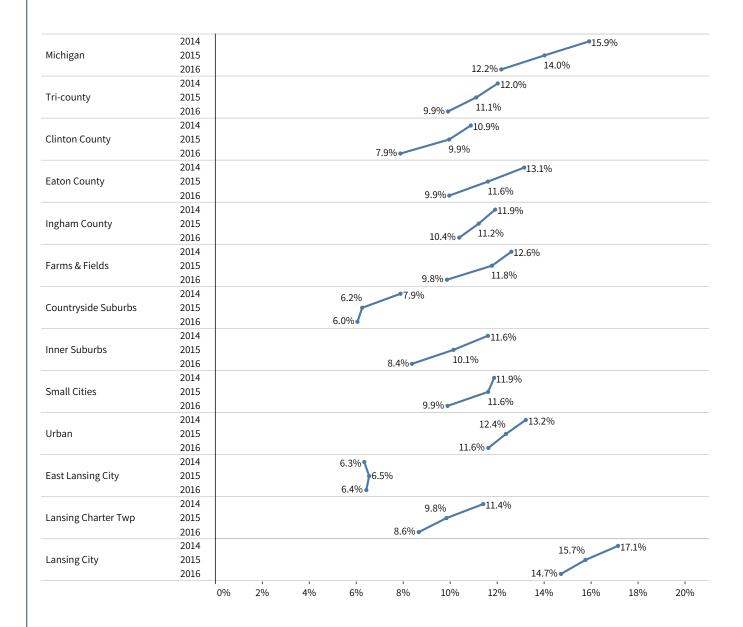
PERCENT OF ADULTS 18 TO 64 YEARS OLD WITH NO HEALTH INSURANCE, 2016



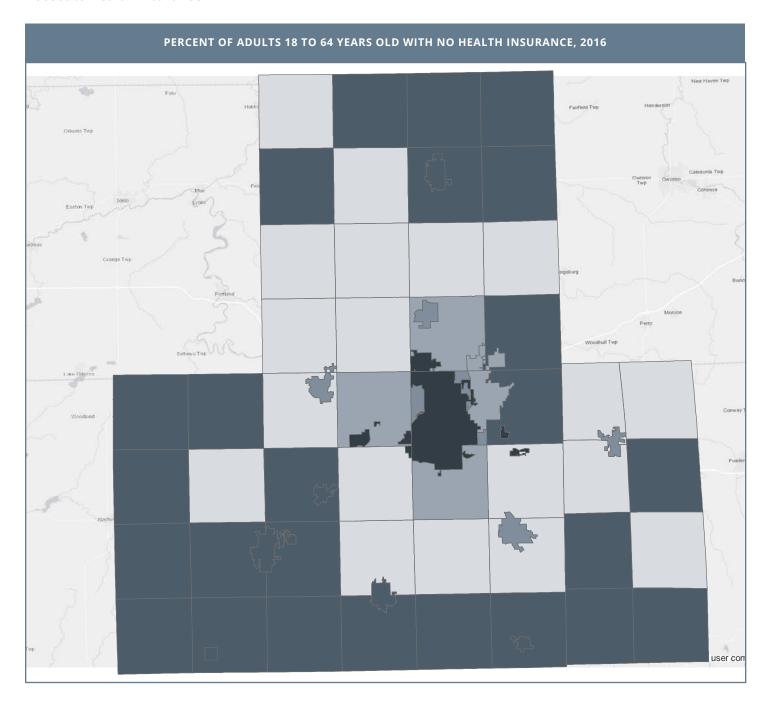
Source: 2016 American Community Survey 5-year Estimate

TREND IN PERCENT OF ADULTS 18 TO 64 YEARS OLD WITH NO HEALTH INSURANCE, 2014-2016

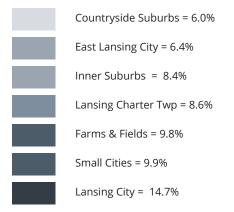
Based on the 2014-2016 five-year estimates from the American Community Survey, the percentage of adults 18-64 years old without health insurance has decreased in all geographic areas within the tri-county area; the exception to this is the City of East Lansing, for which the percentage has remained steady. Decreases of two percentage points or greater were noted for Clinton County, Eaton County, the Inner Suburbs, and Lansing Charter Township.



Source: 2014 American Community Survey 5-year Estimate 2015 American Community Survey 5-year Estimate 2016 American Community Survey 5-year Estimate



UNINSURED ADULTS 18 TO 64 YEARS OLD





Communicable Disease Prevention - Immunizations

MEASURE

Rate of non-medical immunization waivers claimed for schoolchildren.

Waiver data is assessed for kindergarteners, 7th graders, and any new students entering a school district

DATA SOURCE

Michigan Care Improvement Registry

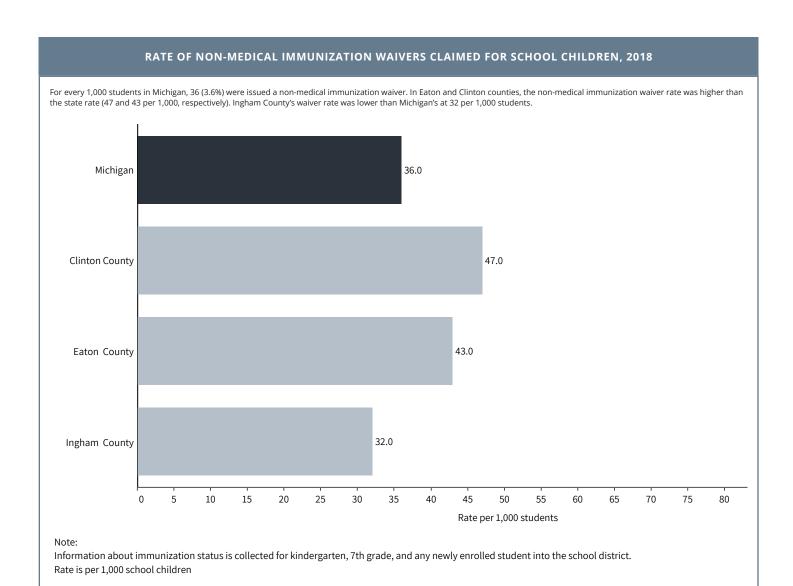
YEARS 2016 (running percent from June 2015-June 2016), 2017 (running percent from June 2016-June 2017), 2018 (running percent from June 2017-June 2018)

REASON FOR MEASURE

Many infectious diseases thought to be eliminated from this country, e.g. pertussis, mumps, measles, have reemerged in recent years. Outbreaks related to these and other vaccine-preventable diseases threaten the lives and well-being of the most vulnerable populations: children under age one, those who are too young to be vaccinated, and children and adults who are immune-suppressed due to other medical conditions. For this reason, it is important that contacts of these people be vaccinated. However, parents in many states may opt out of vaccinating their children by seeking legal

exemptions to public school immunization requirements. Fear over certain vaccine components and perceived risk of side effects or complications result in some parents opting to forego vaccination for their children. This puts unvaccinated children and adults at risk, because it increases the number of unvaccinated people they are exposed to and facilitates disease spread.

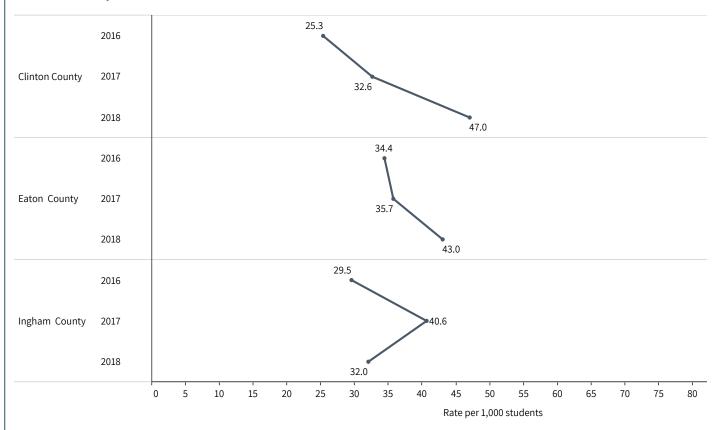
Sub-county level geographic area group breakouts are not available for this indicator.



Source. Michigan Care Improvement Registry (MCIR)

TREND IN RATE OF NON-MEDICAL IMMUNIZATION WAIVERS CLAIMED FOR SCHOOL CHILDREN, 2016-2018

For both Clinton and Eaton counties, the rate of immunization waivers claimed increased between 2016 and 2018. The trend for Ingham County is less clear, as there was an increase from 2016 to 2017, followed by a decrease in 2018.



Note:

Information about immunization status is collected for kindergarten, 7th grade, and any newly enrolled student into the school district. Rate is per 1,000 school children

Source. Michigan Care Improvement Registry (MCIR)

SPEAKING OF HEALTH

Focus Group Participants

"But it's not just [that feeling unhealthy] affects your family; it affects everybody, because people that are sick go to the grocery store, or they go to work, because they have to. So, they're exposing people to all these different things when they should be at home taking care of themselves. But some people can't take – half of you have to function. So, what do you do?"



Mental Health - Adults

MEASURE

Percentage of adults with poor mental health

See notes below for definitions of this measure.

DATA SOURCES

- Michigan Behavioral Risk Factor Survey (MI-BRFS)
- Capital Area Behavioral Risk Factor Survey (Capital Area BRFS)

YEARS 2008-2016

REASON FOR MEASURE

Overall health depends on both physical and mental well-being. Measuring the number of days when people report that their mental health was not good, i.e., poor mental health days, represents an important facet of health-related quality of life.^{CHR}

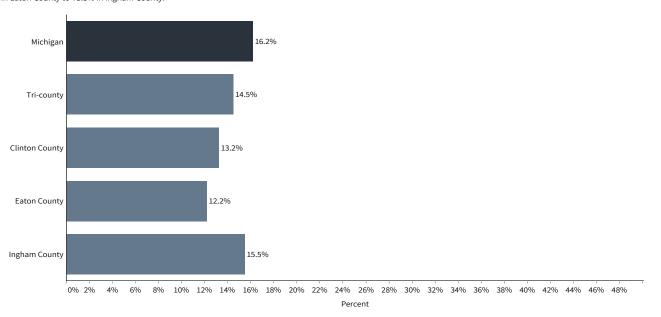
NOTES ABOUT MEASURE

Mental health statistics from the MI-BRFS may not be directly comparable to those from the Capital Area BRFS, because the questions for mental health were different in both survey instruments. The MI-BRFS question reads "Now thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good?", whereas in the Capital Area BRFS, the question was "During the past 30 days, for about how many days did a mental health condition or emotional problem keep you from doing your work or other usual activities?"

Sub-county level geographic area group breakouts are not available for this indicator.

PERCENT OF ADULTS WHO EXPERIENCED POOR MENTAL HEALTH, BY GEOGRAPHY, 2014-2016

The number of adults experiencing poor mental health is approximately equivalent in the Capital Area and the state of Michigan. In the Capital Area, 14.5% of adults were categorized as experiencing poor mental health, while in Michigan, the prevalence was 16.2%. For the individual counties, the prevalence of poor mental health was similar, but not the same, ranging from 12.2% in Eaton County to 15.5% in Ingham County.



Note:

Poor mental health is defined as reporting 14 or more days, out of the previous 30, in which a person's mental health was not good, which includes stress, depression, and problems with emotions.

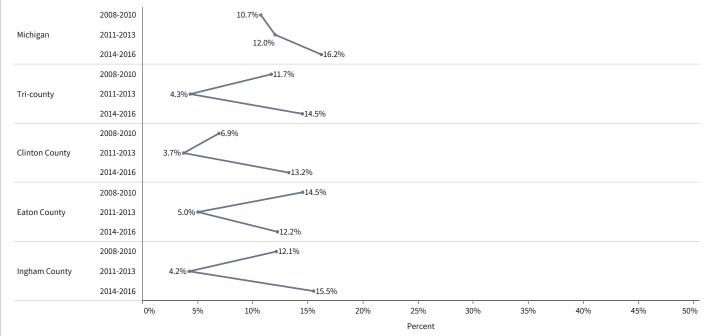
Source

2014, 2015, and 2016 Michigan Behavorial Risk Factor Survey

2014-2016 Capital Area Behavorial Risk Factor Survey

TREND IN PERCENT OF ADULTS WHO EXPERIENCED POOR MENTAL HEALTH, BY GEOGRAPHY, 2008-2016

Excluding statistics from the 2011-2013 Capital Area BRFS, there is an increase in the number of adults experiencing poor mental health both in the Capital Area and in the state. Within the counties in the Capital Area, poor mental health increased in Clinton and Ingham counties, while Eaton County had a slight decline in the percentage of adults who reported experiencing poor mental health.



Note:

Poor mental health is defined as reporting 14 or more days, out of the previous 30, in which a person's mental health was not good, which includes stress, depression, and problems with emotions.

Source:

 $2008-2016\ Michigan\ Behavioral\ Risk\ Factor\ Surveys\ and\ 2008-2010,\ 2011-2013,\ 2014-2016\ Capital\ Area\ Behavioral\ Risk\ Factor\ Surveys\ Surveys\ Area\ Behavioral\ Risk\ Factor\ Surveys\ Area\ Risk\ Factor\ Surveys\ Area\ Risk\ Risk$

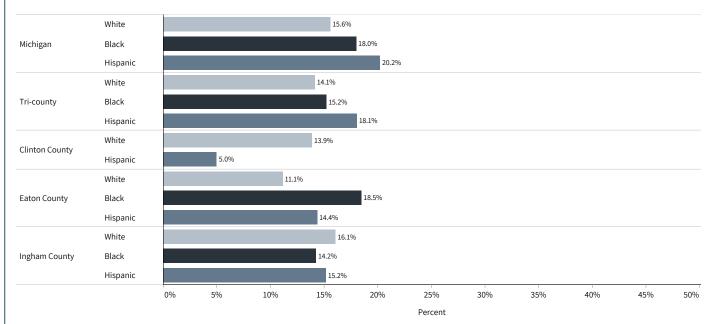
SPEAKING OF HEALTH

Focus Group Participants

"Without Community Mental
Health, I can't find [a psychiatrist]
because everybody's booked. My
primary care doctor right now,
thank god, is doing my psychiatric
meds for me even though he says,
'I don't like doing them, but I know
how hard it is right now.' He has
15 patients, he told me, that are
trying to get in to a psychiatrist
who can't because Community
Mental Health is turning them all
down, because they said they're
too high functioning."

PERCENT OF ADULTS WHO EXPERIENCED POOR MENTAL HEALTH, BY GEOGRAPHY, 2014-2016 (BY RACE/ETHNICITY)

Some dissimilarities in poor mental health were seen among different racial/ethnic groups. In the state of Michigan, the proportion of adults experiencing poor mental health ranged from 15.6% among White adults to 20.2% among Hispanic adults. In the tri-county area, the prevalence of adults experiencing poor mental health was slightly less but had a similar distribution among racial/ethnic groups, from 14.1% among White adults to 18.1% among Hispanic adults. In Clinton and Ingham counties, White adults had the highest prevalence of poor mental health, while Black adults had the highest prevalence in Eaton County.



Note:

Poor mental health is defined as reporting 14 or more days, out of the previous 30, in which a person's mental health was not good, which includes stress, depression, and problems with emotions.

Statistics for Black adults in Clinton County was supressed due to small sample size

Source:

2014, 2015, and 2016 Michigan Behavorial Risk Factor Survey 2014-2016 Capital Area Behavorial Risk Factor Survey

SPEAKING OF HEALTH

Focus Group Participants

"Medicaid limits you in terms of the number of visits that you have per year. When you're dealing with issues of mental health, that usually is not something that can be resolved in 20 visits."



Mental Health - Adolescents

MEASURE

Adolescents with symptoms of depression, as measured by the percentage of 9th and 11th grade students who felt so sad or hopeless almost every day for two weeks or more in a row that they stopped doing some usual activities during the past 12 months

DATA SOURCES

- Michigan Youth Risk Behavior Survey (MI YRBS)
- Michigan Profile for Healthy Youth Survey (MiPHY)

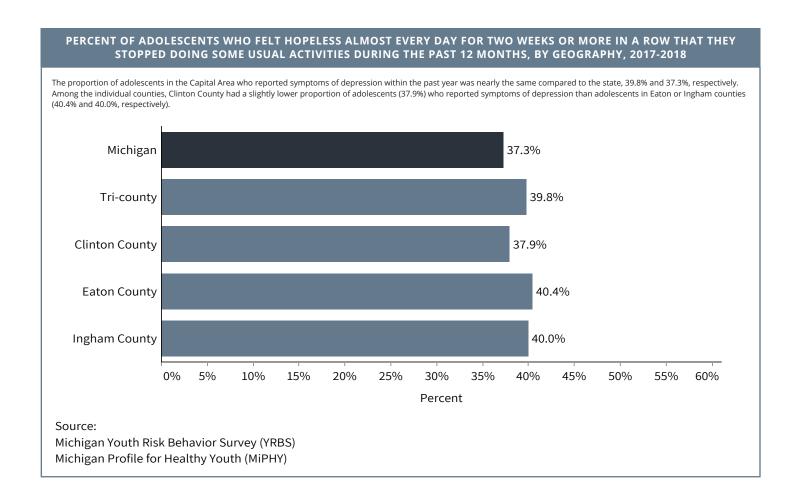
YEARS

MI YRBS: 2012-2013, 2014-2015, 2016-2017 MiPHY: 2013-2014, 2015-2016, 2017-2018

REASON FOR MEASURE

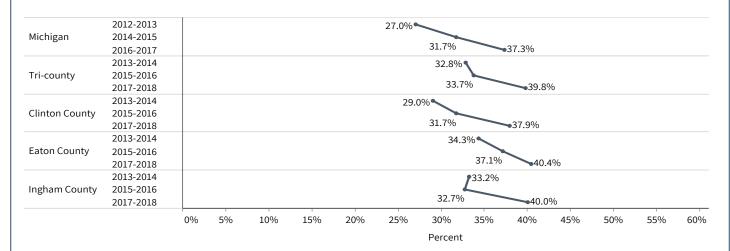
Overall health depends on both physical and mental well-being. Measuring the number of days when people report feeling depressed represents an important facet of health-related quality of life. CHR

Sub-county level geographic area group breakouts are not available for this indicator.



TREND IN PERCENT OF ADOLESCENTS WHO FELT HOPELESS ALMOST EVERY DAY FOR TWO WEEKS OR MORE IN A ROW THAT THEY STOPPED DOING SOME USUAL ACTIVITIES DURING THE PAST 12 MONTHS, BY GEOGRAPHY, 2013-2018

The proportion of adolescents who reported symptoms of depression consistently increased in all geographies between 2013-2014 and 2017-2018 (2012-2013 to 2016-2017 for statewide data). For the tri-county area as a whole, the percentage of adolescents with symptoms of depression increased by seven percentage points over four years.

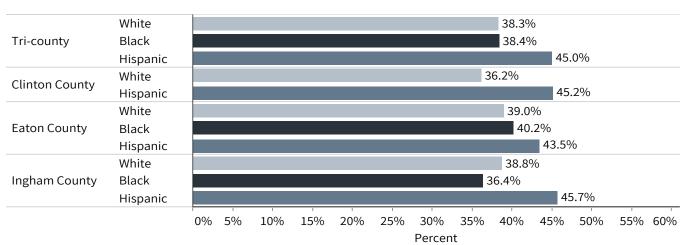


Source:

Michigan Youth Risk Behavior Survey (YRBS)
Michigan Profile for Healthy Youth (MiPHY)

PERCENT OF ADOLESCENTS WHO FELT HOPELESS ALMOST EVERY DAY FOR TWO WEEKS OR MORE IN A ROW THAT THEY STOPPED DOING SOME USUAL ACTIVITIES DURING THE PAST 12 MONTHS, BY GEOGRAPHY, 2017-2018 (BY RACE/ETHNICITY)

In all geographies, the proportion of Hispanic adolescents who reported symptoms of depression was consistently higher than White or Black adolescents.



Note: Statistics for Black adolescents in Clinton County were supressed due to insufficient sample size

Source:

Michigan Youth Risk Behavior Survey (YRBS)

Michigan Profile for Healthy Youth (MiPHY)

Health Outcomes





MEASURE

The rate of age-specific, asthma-related preventable hospitalizations per 10,000 persons among children 18 years old or younger

DATA SOURCES

Michigan Resident Inpatient Files (via Michigan Department of Health and Human Services)

YEARS 2010-2016

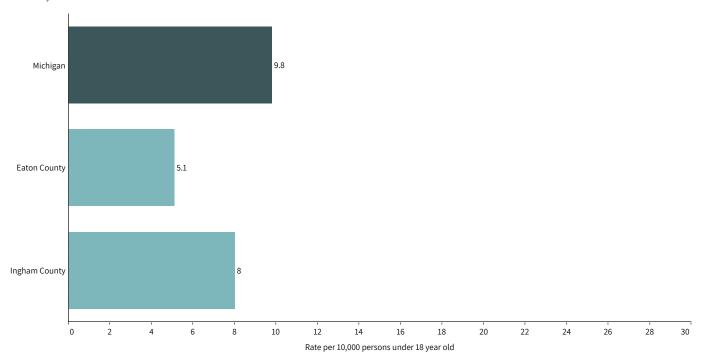
REASON FOR MEASURE

Asthma is an inflammation of the airways. The inflammation of asthma is chronic, which means it is always present and never goes away. Many factors can influence the prevalence of asthma and lead to asthma attacks. A majority of these factors are due to the environment, such as dust, pollen, and proximity to highways. Asthma attacks can include wheezing, breathlessness, chest tightness, and coughing.

Sub-county level geographic area group breakouts are not available for this indicator.

PREVENTABLE HOSPITALIZATION RATE DUE TO ASTHMA PER 10,000 PATIENTS UNDER 18 YEARS OF AGE, 2016

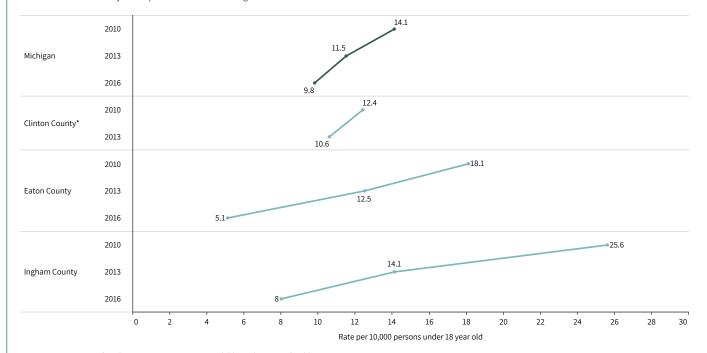
Both Ingham and Eaton counties experienced less than 10 asthma-related preventable hospitalizations per 10,000 among children in 2016, which was less than the rate for Michigan. Clinton County data was not available for 2016.



Note: 2016 statistics for Clinton County were not available at the time of publication, thus tri-county statistics could not be calculated.

TREND IN PREVENTABLE HOSPITALIZATION RATE DUE TO ASTHMA PER 10,000 PATIENTS UNDER 18 YEARS OF AGE. 2010-2016

Michigan, Eaton County, and Ingham County experienced significant declines in preventable asthma hospitalizations among children between 2010 and 2016. More data is necessary to determine if Clinton County also experienced a decline during the same time.



Notes: 2016 statistics for Clinton County were not available at the time of publication.

Source: Michigan Resident Inpatient Files created by the Division for Vital Records and Health Statistics, Michigan Department of Health & Human Services, using data from the Michigan Inpatient Database obtained with permission from the Michigan Health & Hospital Association Service Corporation (MHASC).

SPEAKING OF HEALTH

Focus Group Participants

"My son was sick last week. And we have a huge deduction on our Medicaid. I can't even take him to the doctor. But we make too much to get the real Medicaid. And we don't make enough to get it through the work. ... And so last week when my son was sick, the lot of, okay, we're going do this Nyquil thing, or we're going do this. And hopefully it's not an infection, and if it is, where are we going to get the money? Just simple stuff. And I just feel like we shouldn't have to worry about that nowadays. ... He's only 9. He should get insurance. It's not by my fault that he doesn't."



Chronic Disease - Diabetes

MEASURE

Age-specific preventable hospitalization rate per 10,000 persons related to diabetes among adults

DATA SOURCE

Michigan Resident Inpatient Files (via MDHHS)

YEARS 2010-2016

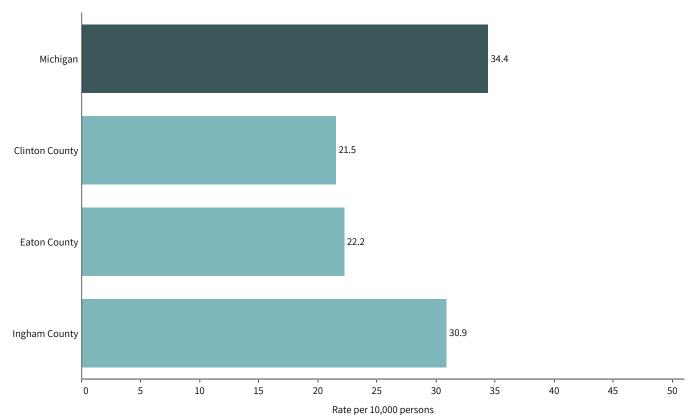
REASON FOR MEASURE

As rates of overweight and obese individuals increase, diabetes also continues to become more prevalent in the U.S. Diabetes presents as one of three types: Type 1, Type 2 and gestational diabetes. Diabetes is a chronic disease and is a large cause of morbidity and mortality in the U.S. Complications from diabetes can include stroke, kidney failure, nerve damage, blindness and lower limb amputations.

Sub-county level geographic area group breakouts are not available for this indicator.

PREVENTABLE HOSPITALIZATION RATE DUE TO DIABETES PER 10,000 ADULTS, 2016

The rate of preventable hospitalizations related to diabetes in adults was lower in each of the counties in the Capital Area compared to the rate for Michigan, especially for Clinton and Eaton counties.



Notes: Sub-county statistics are not available for this measure. 2014 was the latest year for certain stratifications.

SPEAKING OF HEALTH

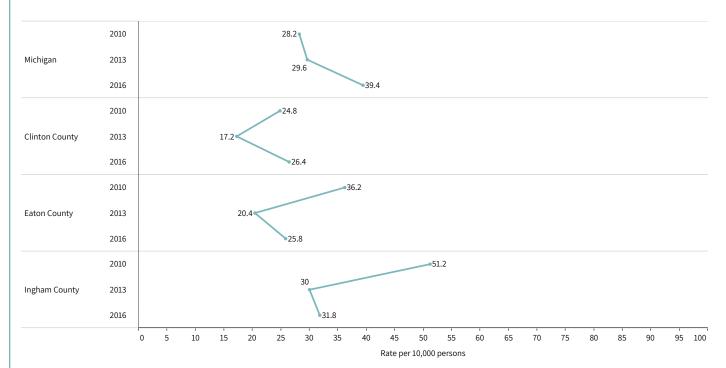
Focus Group Participants

"I have anemia and diabetes... There are times when I'm just exhausted."

"That disease will kill you quick.
First they start on your toes then
they take your knees and they
take your legs and then you're
dead. I've seen a couple of my
family members die from that stuff
and it's nothing nice but it's all
preventable because of
their diet."

TREND IN PREVENTABLE HOSPITALIZATION RATE DUE TO DIABETES PER 10,000 ADULTS, 2010-2016

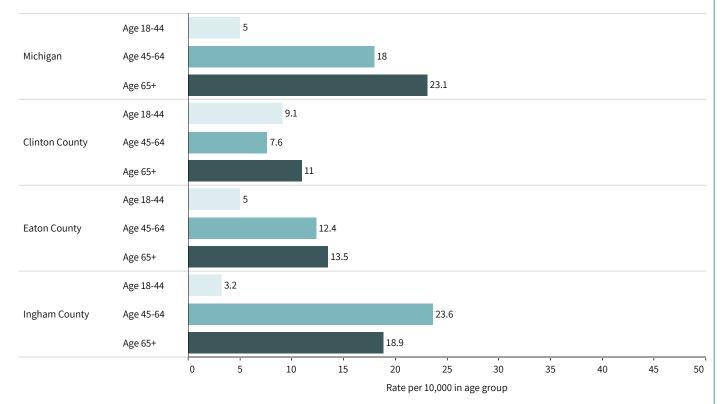
In Michigan adults, preventable hospitalizations due to diabetes increased between 2010 and 2016. Over the same time, all three individual counties experienced a decrease, followed by an increase, in their hospitalization rate. Two of the counties, Clinton and Ingham, had an overall decline in their hospitalization rate, while Clinton County's rate increased slightly.



Notes: Sub-county statistics are not available for this measure. \\

PREVENTABLE HOSPITALIZATION RATE DUE TO DIABETES PER 10,000 ADULTS, BY AGE GROUP, 2016

In the state of Michigan, as age increases, so does the prevalence of preventable hospitalizations in adults due to diabetes. Not all of the counties in the tri-county region, particularly Clinton and Ingham counties, follow this pattern. Of particular concern is the high rate of diabetes-related preventable hospitalizations in Clinton County adults 18-44 years of age compared to counterparts in other counties.



Notes: Sub-county statistics are not available for this measure.



Communicable Disease

MEASURE

Rata of chlamydia cases per 100,000 persons

DATA SOURCE

Michigan Sexually Transmitted Diseases Database, STD & HIV Prevention Section, Bureau of Epidemiology, Michigan Department of Health and Human Services

YEARS 2010-2016

REASON FOR MEASURE

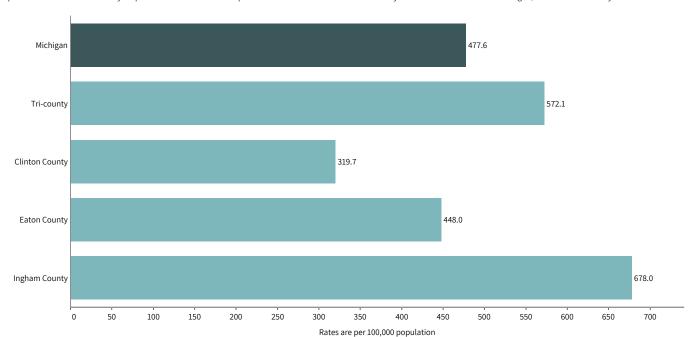
Chlamydia is a common sexually transmitted infection caused by the bacterium Chlamydia trachomatis. Chlamydia is of public health significance because of the impacts of untreated disease on reproductive outcomes, transmission of other sexually acquired infections, and the costs to health systems. The costs of treating subfertility due to chlamydia are high, as tubal surgery and in-vitro fertilization are expensive. The costs of treating the

complications of undiagnosed C. trachomatis infection, including pelvic inflammatory disease and tubal infertility, are high both in psychosocial and financial terms. Additionally, as with other inflammatory sexually transmissible infections, chlamydia facilitates the transmission of HIV infection in both males and females.

Sub-county level geographic area group breakouts are not available for this indicator.

RATE OF CHLAMYDIA CASES PER 100,000 PERSONS, BY GEOGRAPHY, 2016

The rate of chlamydia in the tri-county region was higher than the rate for Michigan by almost 100 cases per 100,000 population. This high rate was driven by Ingham County, which experienced 678 cases of chlamydia per one hundred thousand persons in 2016. The rate for Eaton County was similar to the rate for Michigan, while Clinton County's rate was lower.



Note

STD cases: Outpatient clinics, hospitals, doctors offices and other health facilities report STD cases to the Michigan Department of Health & Human Services. Cases include Michigan residents and reports of out-of-state testing for Michigan residents.

Source: Michigan Sexually Transmitted Diseases Database, STD & HIV Prevention Section, Bureau of Epidemiology, Michigan Department of Health & Human Services; Table prepared by the Division for Vital Records and Health Statistics, Michigan Department of Health & Human Services.

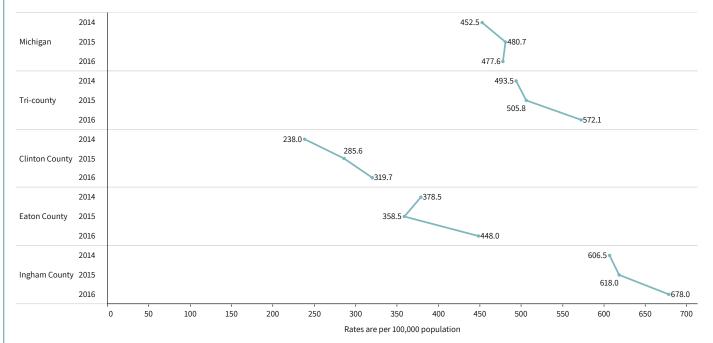
SPEAKING OF HEALTH

Focus Group Participants

"One more thing that needs to be said in the higher grades, middle school/high school. I think there needs to be a better sex education. You get it in fifth grade ... And then I think you get it again in eighth grade maybe But after that you're done."

TREND IN RATE OF CHLAMYDIA CASES PER 100,000 PERSONS, BY GEOGRAPHY, 2014-2016

Between 2014 and 2016, there was a modest increase in the statewide rate of chlamydia per hundred thousand persons. In the Capital Area, there were steep increases in the rate of chlamydia cases for the tri-county area and each county.



Note:

STD cases: Outpatient clinics, hospitals, doctors offices and other health facilities report STD cases to the Michigan Department of Health & Human Services. Cases include Michigan residents and reports of out-of-state testing for Michigan residents.

Source: Michigan Sexually Transmitted Diseases Database, STD & HIV Prevention Section, Bureau of Epidemiology, Michigan Department of Health & Human Services; Table prepared by the Division for Vital Records and Health Statistics, Michigan Department of Health & Human Services.



Adult Health

MEASURE

Age-specific preventable hospitalization rate per 10,000 persons related to congestive heart failure among adults 65 years old or older

DATA SOURCE

Michigan Resident Inpatient Files (via MDHHS)

YEAR 2016

REASON FOR MEASURE

Congestive heart failure (CHF) is a chronic long-term condition in which the heart becomes increasingly incapable of pumping efficiently and therefore distributing a sufficient amount of blood throughout the body. It is primarily associated with high

blood pressure (hypertension) and/or heart attacks, but it is also associated with a variety of chronic diseases. CHF is associated with disability and poor quality of life among older adults. CHF is also an ambulatory care sensitive condition, meaning that, if properly managed, acute episodes and hospitalization should be rare.

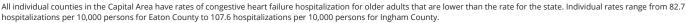
Sub-county level geographic area group breakouts are not available for this indicator.

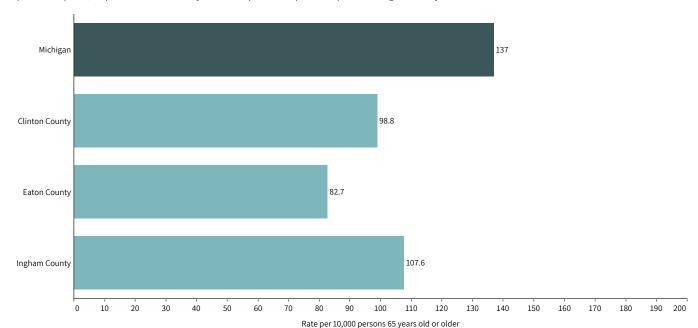
SPEAKING OF HEALTH

Focus Group Participants

"I think when you're younger, you don't really think a lot about your health like that, because you're in the invulnerable mode where nothing can stop you. I mean, you don't feel any aches and pains; I don't walk up the stairs like, 'Wow, what?' I think as I get older, I know my body more. I pick up on cues like immediately. So, and the brain factors, like I know exactly when something is off, whereas when I was younger, it might have gone a little bit longer before I realized, 'Oh my god."









Overall Mortality

MEASURE

Life expectancy (in years)

DATA SOURCES

- Death Certificate Registry, Michigan
 Department of Health & Human Services
- Census Annual Estimates of the Resident Population
- American Community Survey

YEARS 2013-2015

REASON FOR MEASURE

Life expectancy refers to the number of years a person is expected to live, based on the statistical average. The life expectancy for a particular person or population group depends on several variables, such as

their lifestyle, access to healthcare, diet, economical status, and relevant mortality and morbidity data.

NOTES ABOUT MEASURE

Since life expectancy is calculated based on averages, an individual person may live for many years more or less than expected. In addition, life expectancy cannot speak to the quality of the years lived. Our estimates for life expectancy for the state of Michigan are close, but not identical, to what is calculated by MDHHS, because different methodologies were used. The state of Michigan traditionally uses Greville's method, while Healthy! Capital Counties used Chiang's method, which is more appropriate for small areas.

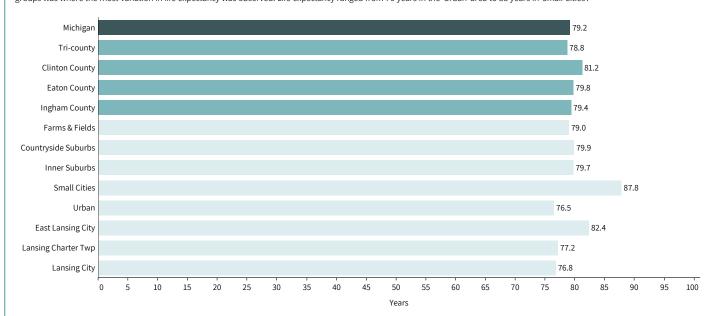
SPEAKING OF HEALTH

Focus Group Participants

"But I'm thinking going forward
- even statistically speaking and
even the census has demonstrated
this but the life ages for both men
and women have decreased. And
I think that is the trend going
forward if we don't change our
eating habits. And it's ... also
pollutants and garbage..."

LIFE EXPECTANCY, BY GEOGRAPHY, 2015

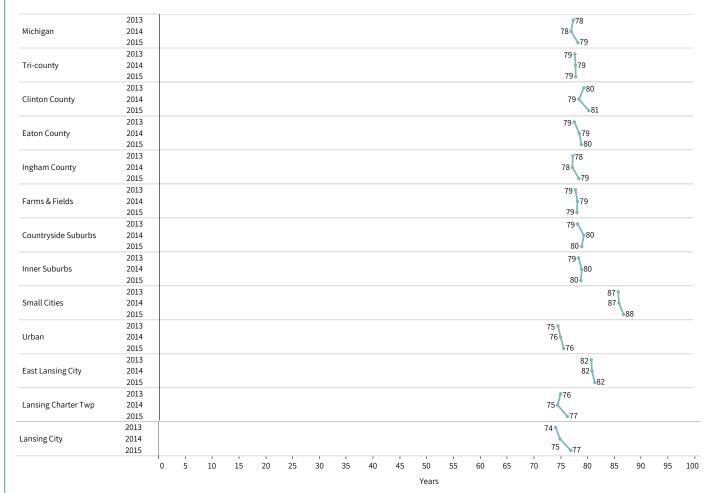
The statewide life expectancy was 79 years, same as the tri-county region. Clinton and Eaton counties had negligibly higher life expectancies of 80 and 81. Among the smaller geographic groups was where the most variation in life expectancy was observed. Life expectancy ranged from 76 years in the 'Urban' area to 88 years in 'Small Cities'.



Source: 2015 Geocoded Michigan Death Certificate Registry. Division for Vital Records & Health Statistics, Michigan Department of Health & Human Services; Population Estimate (latest update 9/2014), National Center for Health Statistics, U.S. Census Populations With Bridged Race Categories .
2015 American Community Survey 5-year Estimate

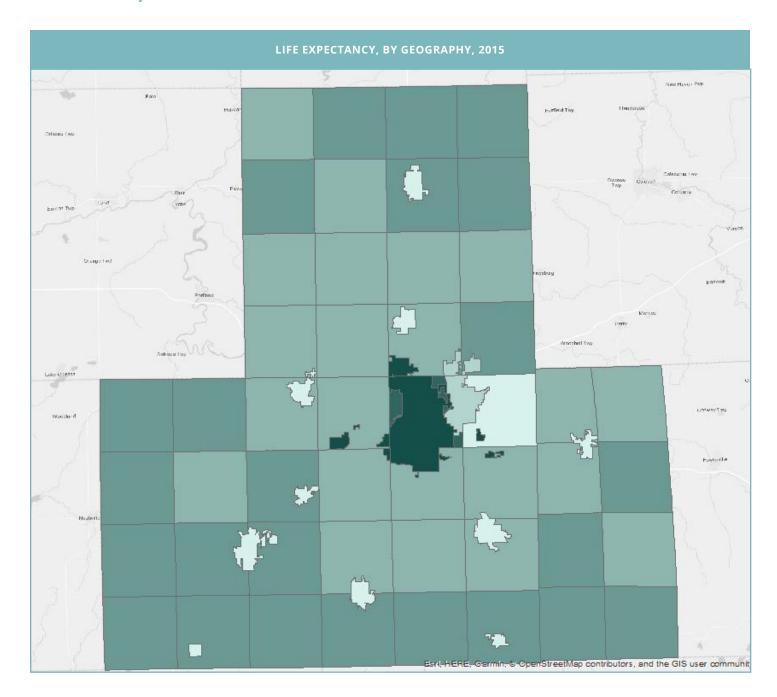
TREND IN LIFE EXPECTANCY, BY GEOGRAPHY, 2013-2015

There was not a lot of variability in life expectancy in the geographies shown over the three year period. For all geographies, the trend was either flat or slightly increased. The City of Lansing had the largest increase, three years, from 2013 to 2015.



Source: 2015 Geocoded Michigan Death Certificate Registry. Division for Vital Records & Health Statistics, Michigan Department of Health & Human Services; Population Estimate (latest update 9/2014), National Center for Health Statistics, U.S. Census Populations With Bridged Race Categories .
2015 American Community Survey 5-year Estimate

Overall Mortality



LIFE EXPECTANCY





Maternal & Child Health

MEASURE

The number of live born infants who die before their first birthday, per every 1000 live births, over three years

Deaths are assigned to the to the county of residence of the infant at the time of death or county of residence for the mother if the infant did not leave the hospital.

DATA SOURCES

- Michigan Department of Health & Human Services Resident Birth File
- Michigan Department of Health & Human Services Resident Linked Birth and Death File

YEARS 2011-2013, 2012-2014, 2013-2015

REASON FOR MEASURE

Infant mortality rates are an important

indicator of the health of a community, as they are associated with maternal health, quality of and access to medical care, socioeconomic conditions, public health practices, and power and wealth inequities. Black infants consistently fare worse compared to White infants, even when comparing mothers with similar income and educational levels. Prevention of preterm birth is critical to lowering the overall infant mortality rate and reducing racial/ ethnic disparities in infant mortality. Infant mortality rates are highest among infants born to mothers who are adolescents. unmarried, smokers, have lower educational levels, had a fourth or higher order birth, and those who did not obtain adequate prenatal care. Substantial racial/ethnic disparities in income and access to health care may also contribute to differences in infant mortality.

Sub-county level geographic area group breakouts are not available for this indicator.

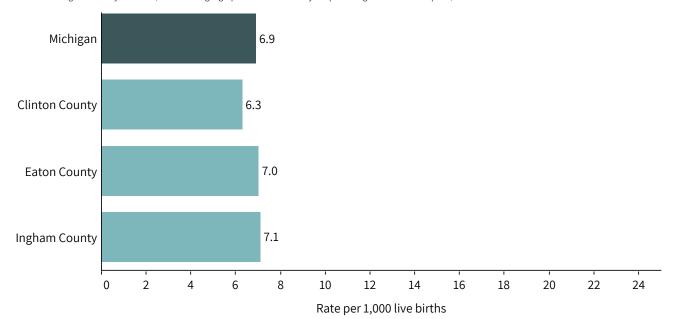
SPEAKING OF HEALTH

Focus Group Participants

"After I had my daughter, I got diagnosed with postpartum depression, and I already had depression and anxiety already, so it was just horrible. I just felt really down, and it's hard to explain how I felt...I ended up going to the hospital to get in to a mental facility, and they weren't able to even get me in to one because they said that my insurance wouldn't cover it."

THREE-YEAR INFANT DEATH RATES, BY GEOGRAPHY, 2013-2015

Infant mortality rates for the state of Michigan and the three counties in the Capital Area were nearly even, ranging from 6.3 deaths per 1,000 live births in Clinton County to 7.1 deaths per 1,000 live births in Ingham County. However, none of the geographies met the Healthy People 2020 goal of 5.0 deaths per 1,000 live births.

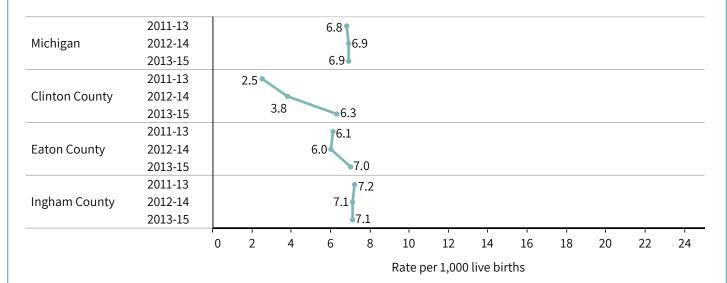


Notes: Rates are per 1,000 live births. Sub-county statistics are not available for this measure

Source: 2013-2015 Geocoded Michigan Linked Birth-Death Certificate Registries; 2013-2015 Geocoded Michigan Birth Certificate Registries. Division for Vital Records & Health Statistics, Michigan Department of Health & Human Services

TREND IN THREE-YEAR INFANT DEATH RATES. BY GEOGRAPHY, 2011-2015

For both the state of Michigan and Ingham County, the trend in the rate of infant deaths was steady over the past three years; meanwhile, Clinton and Eaton counties experienced increases in their infant mortality rates. It should be kept in mind that in situations for which there are a small number of deaths, a small change (± 1 or 2 deaths), can result in large changes in incidence rates.

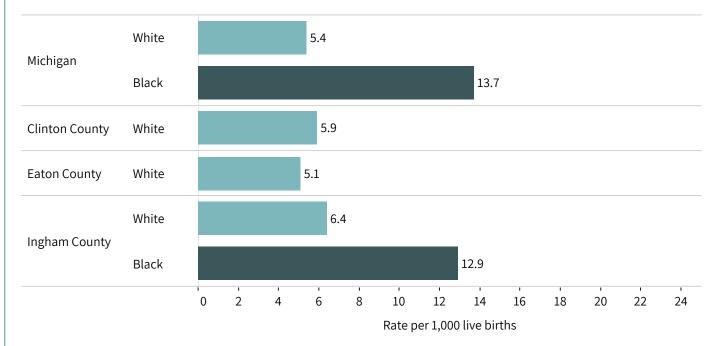


Notes: Rates are per 1,000 live births. Sub-county statistics are not available for this measure

Source: 2011-2015 Geocoded Michigan Linked Birth-Death Certificate Registries; 2011-2015 Geocoded Michigan Birth Certificate Registries. Division for Vital Records & Health Statistics, Michigan Department of Health & Human Services

THREE-YEAR INFANT DEATH RATES. BY GEOGRAPHY, 2013-2015 (BY RACE/ETHNICITY)

The problem of infant mortality in the state and the tri-county region becomes apparent when analyzing rates for the various racial/ethnic groups. Both at the state and county levels, Black infants died before their first birthday at rate much higher than their peers. For Michigan, there was nearly a threefold difference in the death rate between Black and White infants. In Ingham County, the difference was twofold. Statistics could not be reported for Clinton or Eaton counties, because each had too few infant deaths for reliable and confidential statistics to be calculated.



Notes: Rates are per 1,000 live births. Sub-county statistics are not available for this measure

Source: 2013-2015 Geocoded Michigan Linked Birth-Death Certificate Registries; 2013-2015 Geocoded Michigan Birth Certificate Registries. Division for Vital Records & Health Statistics, Michigan Department of Health & Human Services



Chronic Disease - Cardiovascular

MEASURE

The age-adjusted death rate due to diseases of the heart per 100,000 residents

DATA SOURCE

Michigan Department of Health & Human Services Resident Death File

YEARS 2013-2015

REASON FOR MEASURE

Cardiovascular disease is the largest cause of death in Michigan. Cardiovascular disease includes diseases of the heart and blood vessels in the body. Examples of such diseases are coronary heart disease, heart failure, sudden cardiac death, and

hypertensive heart disease. Cardiovascular disease is an important indicator to track due to the risk of chronic morbidity and mortality that accompany it. Cardiovascular disease is often linked to other factors

that can influence health; low education, low income, and low socioeconomic status have all been associated with increased cardiovascular disease and cardiac arrests.

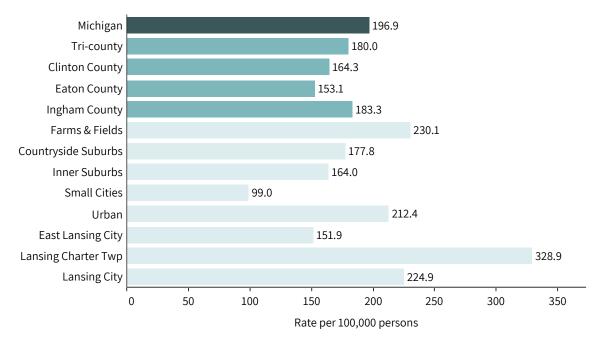
SPEAKING OF HEALTH

Focus Group Participants

"Especially in ... people of colors, because of the fact that we have so many people who have diabetes, who have high blood pressure, a lot of times we are predisposed to having those kinds of illnesses that, again, if you catch people early on before they get to the point of actually having a full-blown illness, perhaps educating them beforehand will help to prevent them from getting to the point that they actually have the diabetes or high blood pressure."

AGE-ADJUSTED MORTALITY RATES DUE TO CARDIOVASCULAR DISEASE, BY GEOGRAPHY, 2015

The Capital Area and the state of Michigan have similar rates of death due to cardiovascular disease. The number of deaths in the tri-county area related to cardiovascular disease was primarily driven by Ingham County's rate, which was 183.3 deaths per 100,000 persons compared to 180.0 deaths per 100,000 persons in the region. Deaths due to cardiovascular disease were especially high for Lansing Charter Township, at 328.9 deaths per 100,000 persons.



Notes: Data displayed are by the underlying cause of death which is the condition giving rise to the chain of events leading to death. Causes of death are classified in accordance with the Tenth Revision of the International Classifications of Diseases (ICD-10), a coding structure developed by the World Health Organization.

Source: 2015 Geocoded Michigan Death Certificate Registry. Division for Vital Records & Health Statistics, Michigan Department of Health & Human Services; Population Estimate (latest update 9/2014), National Center for Health Statistics, U.S. Census Populations With Bridged Race Categories.

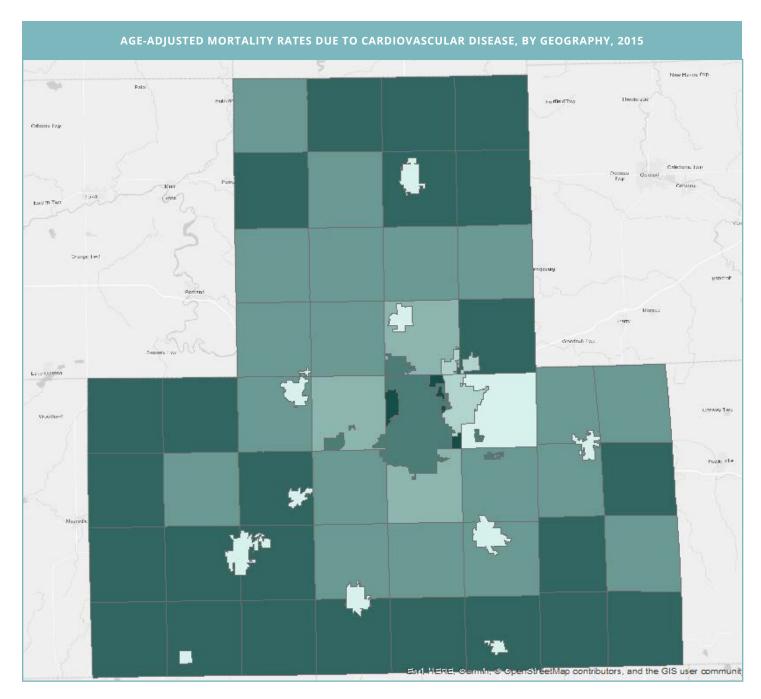
TREND IN AGE-ADJUSTED MORTALITY RATES DUE TO CARDIOVASCULAR DISEASE, BY GEOGRAPHY, 2013-2015

Among all the geographies for which trends could be assessed, there has been a decline in the age-adjusted rate of death due to cardiovascular disease, with the exception of 'Farms and Fields', which experienced a small increase between 2013 and 2015. In some areas, for example the state of Michigan, the decline is very modest, whereas in Eaton County, the decline was relatively steep. Trends cannot be analyzed for the City of East Lansing and Lansing Charter Township, as these geographies did not have enough years of data for this indicator.

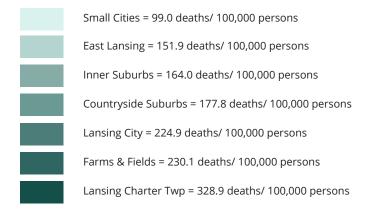
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Landing City	2014	224.9
Lansing City	2013 2014	267.5
A STATE OF THE STA		and a subtain I
ansing Charter Twp	2014 2015	273.1 328.9
	2015	2010 (200) p
East Lansing City	2014	130.1
Fact Lauriu - Cita	2015	212.4
Urban	2014	185.3
Urban	MCCOMMUNICAL CONTRACTOR OF THE PERSON OF THE	245.6
	2013	
Small Cities	2014	99.0
Small Cities	2013 2014	107.6
	2015	
Inner Suburbs	2014	192.7
Innor Cuburba	2013	181.2
	2015	
Countryside Suburbs	G-023-5-000	177.8
Countryside Suburbs	2013 2014	169.0
	765000070000	TO THE REPORT OF
ratins & Fields	2014	211.3
Farms & Fields	2013	217.5
	2013	- 1/1/2/2009/99/90/
ingilalii Coulity	2014	183.3
Ingham County	2013	182.7
	2013	DOMESTICAL STATE OF THE STATE O
Laton County	2014	153.1
Eaton County	2013	163.8 199.6
	2013	
Clinton County	2014 2015	174.7
Clinton County	2013	173.9
	2015	50-000-000-000-000-000-000-000-000-000-
Tri-county	2014	180.0
Tri county	2013	185.9 200.9
	2015	
Michigan	2014	196.9
Michigan	2013	199.7

Notes: 2013 statistics for East Lansing city and Lansing Charter Township were not available at the time of publication. Data displayed are by the underlying cause of death which is the condition giving rise to the chain of events leading to death. Causes of death are classified in accordance with the Tenth Revision of the International Classifications of Diseases (ICD-10), a coding structure developed by the World Health Organization.

Source: 2015 Geocoded Michigan Death Certificate Registry. Division for Vital Records & Health Statistics, Michigan Department of Health & Human Services; Population Estimate (latest update 9/2014), National Center for Health Statistics, U.S. Census Populations With Bridged Race Categories.



CARDIOVASCULAR DISEASE DEATH RATE





Safety Policies & Practices – Unintentional Injury

MEASURE

The age-adjusted death rate due to unintentional (accidental) injury per 10,000 persons

Unintentional injury deaths (sometimes called accidental injury) include transportation accidents, burns, suffocation, drowning, falls, exposure, accidental poisonings and drug overdoses, and other unintentional injuries. It does not include homicide or suicide deaths.

DATA SOURCE

Michigan Department of Health & Human Services Resident Death File

YEARS 2013-2015

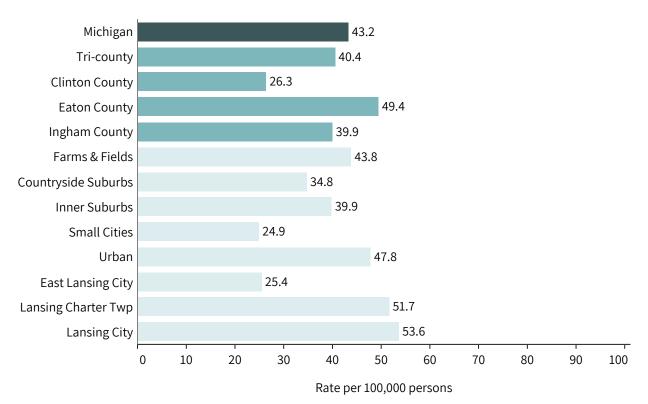
REASON FOR MEASURE

Deaths due to accidents are often the largest cause of death for children and young adults. Poor socioeconomic environments can lead to increased deaths from accidental injury. Deaths due to accidental injury can

be reduced through policy efforts to reduce hazards, as well as individual and family safety precautions.

AGE-ADJUSTED MORTALITY RATES DUE TO UNINTENTIONAL INJURY, BY GEOGRAPHY, 2015

The rate of deaths due to unintentional injuries in 2015 was nearly equivalent between Michigan, the tri-county area, and Ingham County. Clinton County, 'Small Cities', and East Lansing had the lowest rates of age-adjusted death due to unintentional injury, while the rates were nearly twice that for the City of Lansing, Lansing Charter Township, Eaton County, and the 'Urban' area.

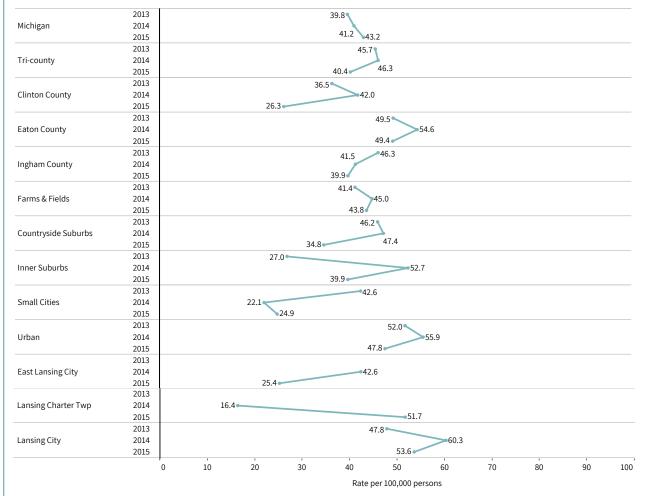


Notes: Data displayed are by the underlying cause of death which is the condition giving rise to the chain of events leading to death. Causes of death are classified in accordance with the Tenth Revision of the International Classifications of Diseases (ICD-10), a coding structure developed by the World Health Organization.

Source: 2015 Geocoded Michigan Death Certificate Registry. Division for Vital Records & Health Statistics, Michigan Department of Health & Human Services; Population Estimate (latest update 9/2014), National Center for Health Statistics, U.S. Census Populations With Bridged Race Categories.

TREND IN AGE-ADJUSTED MORTALITY RATES DUE TO UNINTENTIONAL INJURY, BY GEOGRAPHY, 2013-2015

Between 2013 and 2015, the rate of deaths due to unintentional injuries in Michigan has increased; however, in the tri-county area, the rate decreased during that same time. Declines in the death rate of unintentional injuries were also observed in Clinton County, Ingham County, 'Countryside Suburbs,' 'Small Cities', and the 'Urban' area. Rates for Eaton County and 'Farms and Fields' were fairly stable, while an increase was seen for the City of Lansing. There was not enough information available for Lansing Charter Township and the City of East Lansing to determine a trend.



Notes: 2013 statistics for East Lansing City and Lansing Charter Township were not available at the time of publication.

Data displayed are by the underlying cause of death which is the condition giving rise to the chain of events leading to death. Causes of death are classified in accordance with the Tenth Revision of the International Classifications of Diseases (ICD-10), a coding structure developed by the World Health Organization.

Source: 2013-2015 Geocoded Michigan Death Certificate Registry. Division for Vital Records & Health Statistics, Michigan Department of Health & Human Services; Population Estimate (latest update 9/2014), National Center for Health Statistics, U.S. Census Populations With Bridged Race Categories.



UNINTENTIONAL INJURY DEATH RATE

Small Cities = 24.9 deaths/ 100,000 persons

East Lansing = 25.4 deaths/ 100,000 persons

Countryside Suburbs = 34.8 deaths/ 100,000 persons

Inner Suburbs = 39.9 deaths/ 100,000 persons

Farms & Fields = 43.8 deaths/ 100,000 persons

Lansing Twp = 51.7 deaths/ 100,000 persons

Lansing City = 53.6 deaths/ 100,000 persons

SPEAKING OF HEALTH

Focus Group Participants

"I'm seeing that Americans [have telephones and games], and they don't exercise; they're sitting all the time on technology. And there have even been many accidents, and many people killing people because they're driving and they're on the phone. And that's something that's inevitable.

That's what's affecting health a lot, too."

Indicators by Geography This section presents data by geographic group, with all of the data on available indicators for a given area presented together.



POPULATION	ESTIMATE
Population in 2000	447,728
Population in 2010	463,602
Population in 2015 (estimate)	468,737
AGE GROUP	ESTIMATE
Under 5 years old	5.6%
5-17 years old	15.7%
18-24 years old	15,7%
25-64 years old	50.0%
65-74 years old	7.5%
75+ years old	5.5%
RACE/ETHNICITY	ESTIMATE
White, non-Hispanic/Latino	81.2%
Black/African American	8.5%
Hispanic/Latino	6.5%
American Indian/Alaskan Native	0.4%
Asian	4.1%
Pacific Islander	0.0%
Other	1.5%
Multi-racial	4.3%

Tri-County Region

(Clinton, Eaton, and Ingham counties)

LANGUAGE	ESTIMATE
Only English	91.3%
Language other than English	9.5%
SCHOOL ENROLLMENT	ESTIMATE
Pre-school	2,3%
Kindergarten	5,2%
Grade 1 - 4 (Elementary school)	24.8%
Grade 5 - 8 (Middle school)	25.2%
Grade 9 - 12 (High school)	9.8%
College, undergraduate	19.1%
Graduate/professional school	13.7%
HOUSING	ESTIMATE
Occupied housing units	182,907
Owner-occupied housing	64.5%
Renter-occupied housing	35.5%
EMPLOYMENT	ESTIMATE
In the labor force	241,003
Unemployment rate	8.3%
Private, for-profit wage/salary worker	64.0%
Private, not-for-profit wage/salary worker	11.7%
Local government	6.1%
State government	11.9%
Federal government	1.2%
Self-employment	5.2%

OPPORTUNITY MEASURES	GROUP ESTIMATE	COMPARISION TO THE STATE	TREND
Gini coefficient of income inequality	0.45	16	\rightarrow

SOCIAL, ECONOMIC, & ENVIRONMENTAL FACTORS	GROUP ESTIMATE	COMPARISION TO THE STATE	TREND
% of households below ALICE threshold	37.6%	16	NA
% of adults 25 years old or older with a Bachelor's degree or higher	33.3%	16	~
% of adolescents who know adults in the neighborhood they could talk to about something important	47.0%	NA	~
Rate of violent crimes	data not available for this geography		ngraphy
% of households who spend more than 30% of income on housing	26.1%	16	~
Rate of Ambulatory-Care Sensitive Hospitalizations (Preventable)	193.1	16	∽
% of children < 6 years of age with elevated blood lead level	data not available for this geography		ngraphy
Projected number of future extreme heat days	data not available for this geography		ngraphy
% of the population that lives in a USDA-defined 'food desert'	19.6%	71	~

BEHAVIORS, STRESS, & PHYSICAL CONDITIONS	GROUP ESTIMATE	COMPARISION TO THE STATE	TREND
% of the adults who are obese	33.6%	4 1	~
% of adolescents who are obese	15.3%	ı	~
% of adults who currently smoke	23.0%	4 1	~
% of adolescents who smoked cigarettes during the past 30 days	3.8%	16	~
% of adults who binge drank during the past 30 days	19.6%	41	~
% of adolescents who binge drank during the past 30 days	9.7%	16	~
Rate of the number of opioid prescriptions filled per person	data n	ot available for this geog	graphy
% of adolescents who took painkillers without a doctor's prescription during the past 30 days	4.5%	NA	~
% of adults engaging in no leisure time physical activity	20.5%	16	~
% of adolescents who were physically active for a total of at least 60 minutes per day on five or more of the past seven days	52.7%	16	~*
% of adults who consume ≥ 5 servings of fruits and vegetables per day	35.7%	16	~
% of adolescents who ate five or more servings per day of fruits and vegetables during the past seven days	21.9%	NA	₩.
% of adults with no primary care provider	19.6%	9 1	~
% of adults 18-64 years old without health insurance	9.9%	16	^
Rate of non-medical immunization waivers granted for schoolchildren	data not available for this geography		graphy
% of adults with poor mental health	14.5%	16	~
% of adolescents with symptoms of depression in past year	39.8%	9 1	~

HEALTH OUTCOMES	GROUP ESTIMATE	COMPARISION TO THE STATE	TREND
Rate of preventable asthma hospitalizations among youth < 18 years	data not available for this geography		ography
Rate of preventable diabetes hospitalizations	data not available for this geography		ography
Rate of chlamydia cases	572.1	71	~
Rate of preventable congestive heart failure hospitalization among adults ≥ 65 years old	data not available for this geography		
Life expectancy	78.8	71	→
Rate of infant mortality	data not available for this geography		ography
Rate of deaths due to cardiovascular disease	180.0	16	~
Rate of deaths due to accidental injury	40.4	16	~~

Clinton County



POPULATION	ESTIMATE
Population in 2000	67,753
Population in 2010	74,235
Population in 2015 (estimate)	76,905
AGE GROUP	ESTIMATE
Under 5 years old	5.5%
5-17 years old	18.0%
18-24 years old	9.7%
25-64 years old	52.1%
65-74 years old	8.6%
75+ years old	6.2%
RACE/ETHNICITY	ESTIMATE
White, non-Hispanic/Latino	93.6%
Black/African American	1.6%
Hispanic/Latino	4.3%
American Indian/Alaskan Native	0.1%
Asian	1.4%
Pacific Islander	0.0%
Other	0.6%
Multi-racial	2.7%

LANGUAGE	ESTIMATE
Only English	95.3%
Language other than English	4.7%
SCHOOL ENROLLMENT	ESTIMATE
Pre-school	4.6%
Kindergarten	5.1%
Grade 1 - 4 (Elementary school)	19.7%
Grade 5 - 8 (Middle school)	19.3%
Grade 9 - 12 (High school)	20.1%
College, undergraduate	25.0%
Graduate/professional school	6.2%
HOUSING	ESTIMATE
Occupied housing units	28,857
Owner-occupied housing	80.1%
Renter-occupied housing	19.9%
EMPLOYMENT	ESTIMATE
In the labor force	61,195
Unemployment rate	6.5%
Private, for-profit wage/salary worker	65.8%
Private, not-for-profit wage/salary worker	9.3%
Local government	7.0%
State government	10.2%
Federal government	1.2%
Self-employment	6.4%

OPPORTUNITY MEASURES	GROUP ESTIMATE	COMPARISION TO THE STATE	TREND
Gini coefficient of income inequality	0.43	16	~

SOCIAL, ECONOMIC, & ENVIRONMENTAL FACTORS	GROUP ESTIMATE	COMPARISION TO THE STATE	TREND
% of households below ALICE threshold	30.0%	16	∨ ₂
% of adults 25 years old or older with a Bachelor's degree or higher	30.7%	16	~
% of adolescents who know adults in the neighborhood they could talk to about something important	54.3%	NA	~
Rate of violent crimes	108.0	16	~
% of households who spend more than 30% of income on housing	23.4%	16	~~
Rate of Ambulatory-Care Sensitive Hospitalizations (Preventable)	167.3	16	~
% of children < 6 years of age with elevated blood lead level	2.3%	16	~
Projected number of future extreme heat days	-12.0	NA	₩.
% of the population that lives in a USDA-defined 'food desert'	11.9%	9 1	^

BEHAVIORS, STRESS, & PHYSICAL CONDITIONS	GROUP ESTIMATE	COMPARISION TO THE STATE	TREND
% of the adults who are obese	36.4%	9 1	~*
% of adolescents who are obese	13.3%	16	→
% of adults who currently smoke	15.6%	16	→
% of adolescents who smoked cigarettes during the past 30 days	3.9%	16	~
% of adults who binge drank during the past 30 days	21.9%	9 1	~
% of adolescents who binge drank during the past 30 days	11.0%	16	~
Rate of the number of opioid prescriptions filled per person	382.0	16	\
% of adolescents who took painkillers without a doctor's prescription during the past 30 days	4.8%	NA	~
% of adults engaging in no leisure time physical activity	21.2%	16	~
% of adolescents who were physically active for a total of at least 60 minutes per day on five or more of the past seven days	59.3%	16	→
% of adults who consume ≥ 5 servings of fruits and vegetables per day	35.4%	16	~
% of adolescents who ate five or more servings per day of fruits and vegetables during the past seven days	22.8%	NA	~
% of adults with no primary care provider	11.4%	16	₩.
% of adults 18-64 years old without health insurance	7.9%	16	>>
Rate of non-medical immunization waivers granted for schoolchildren	47.0	9 1	~
% of adults with poor mental health	13.2%	16	~
% of adolescents with symptoms of depression in past year	37.9%	71	~*
HEALTH OUTCOMES	GROUP ESTIMATE	COMPARISION TO THE STATE	TREND
Rate of preventable asthma hospitalizations among youth < 18 years	10.6*	16	₩.
Rate of preventable diabetes hospitalizations	21.5	16	~
Rate of chlamydia cases	319.7	16	~
Rate of preventable congestive heart failure hospitalization among adults ≥ 65 years old	98.8	16	NA
Life expectancy	81.2	16	~
Rate of infant mortality	6.3	16	~

^{* 2013} data

Rate of deaths due to accidental injury

Rate of deaths due to cardiovascular disease

16

ı

~,

164.3

26.3

Eaton County



POPULATION	ESTIMATE
Population in 2000	103,655
Population in 2010	108,002
Population in 2015 (estimate)	108,341
AGE GROUP	ESTIMATE
Under 5 years old	5.5%
5-17 years old	16.7%
18-24 years old	8.9%
25-64 years old	53.0%
65-74 years old	9.2%
75+ years old	6.5%
RACE/ETHNICITY	ESTIMATE
White, non-Hispanic/Latino	87.1%
Black/African American	6.4%
Hispanic/Latino	5.1%
American Indian/Alaskan Native	0.4%
Asian	2.0%
Pacific Islander	0.0%
Other	1.4%
Multi-racial	2.6%

LANGUAGE	ESTIMATE
Only English	93.5%
Language other than English	6.5%
SCHOOL ENROLLMENT	ESTIMATE
Pre-school	5.5%
Kindergarten	5.2%
Grade 1 - 4 (Elementary school)	19.2%
Grade 5 - 8 (Middle school)	20.9%
Grade 9 - 12 (High school)	22.5%
College, undergraduate	22.2%
Graduate/professional school	4.4%
HOUSING	ESTIMATE
Occupied housing units	43,632
Owner-occupied housing	71.2%
Renter-occupied housing	28.8%
EMPLOYMENT	ESTIMATE
In the labor force	87,504
Unemployment rate	7.8%
Private, for-profit wage/salary worker	66.7%
Private, not-for-profit wage/salary worker	10.4%
Local government	6.1%
State government	10.3%
Federal government	1.4%
Self-employment	5.0%

OPPORTUNITY MEASURES	GROUP ESTIMATE	COMPARISION TO THE STATE	TREND
Gini coefficient of income inequality	0.41	16	~

SOCIAL, ECONOMIC, & ENVIRONMENTAL FACTORS	GROUP ESTIMATE	COMPARISION TO THE STATE	TREND
% of households below ALICE threshold	29.0%	16	>>
% of adults 25 years old or older with a Bachelor's degree or higher	25.2%	9 1	~
% of adolescents who know adults in the neighborhood they could talk to about something important	44.0%	NA	~
Rate of violent crimes	279.0	16	~
% of households who spend more than 30% of income on housing	26.1%	16	^
Rate of Ambulatory-Care Sensitive Hospitalizations (Preventable)	197.2	16	~
% of children < 6 years of age with elevated blood lead level	1.7%	16	~
Projected number of future extreme heat days	-15.0	NA	~
% of the population that lives in a USDA-defined 'food desert'	6.8%	16	~

BEHAVIORS, STRESS, & PHYSICAL CONDITIONS	GROUP ESTIMATE	COMPARISION TO THE STATE	TREND
% of the adults who are obese	35.0%	71	~
% of adolescents who are obese	15.4%	16	>>
% of adults who currently smoke	26.6%	9 1	~
% of adolescents who smoked cigarettes during the past 30 days	5.0%	16	~
% of adults who binge drank during the past 30 days	16.1%	16	~
% of adolescents who binge drank during the past 30 days	10.7%	16	~
Rate of the number of opioid prescriptions filled per person	952.0	41	~
% of adolescents who took painkillers without a doctor's prescription during the past 30 days	5.1%	NA	~
% of adults engaging in no leisure time physical activity	20.2%	16	~
% of adolescents who were physically active for a total of at least 60 minutes per day on five or more of the past seven days	53.1%	16	~
% of adults who consume ≥ 5 servings of fruits and vegetables per day	35.1%	16	~
% of adolescents who ate five or more servings per day of fruits and vegetables during the past seven days	20.6%	NA	~
% of adults with no primary care provider	22.3%	9 1	~
% of adults 18-64 years old without health insurance	9.9%	16	~
Rate of non-medical immunization waivers granted for schoolchildren	43.0	9 1	~
% of adults with poor mental health	12.2%	16	~
% of adolescents with symptoms of depression in past year	40.4%	9 1	~

HEALTH OUTCOMES	GROUP ESTIMATE	COMPARISION TO THE STATE	TREND
Rate of preventable asthma hospitalizations among youth < 18 years	5.1	16	~
Rate of preventable diabetes hospitalizations	22.2	16	~
Rate of chlamydia cases	448.0	16	~
Rate of preventable congestive heart failure hospitalization among adults ≥ 65 years old	82.7	16	NA
Life expectancy	79.8	16	~
Rate of infant mortality	7.0	4 1	~
Rate of deaths due to cardiovascular disease	153.1	16	~
Rate of deaths due to accidental injury	49.4	41	~

Ingham County



POPULATION	ESTIMATE
Population in 2000	279,320
Population in 2010	281,365
Population in 2015 (estimate)	283,491
AGE GROUP	ESTIMATE
Under 5 years old	5.6%
5-17 years old	14.8%
18-24 years old	19.9%
25-64 years old	48.2%
65-74 years old	6.6%
75+ years old	4.9%
RACE/ETHNICITY	ESTIMATE
White, non-Hispanic/Latino	75.5%
Black/African American	11.2%
Hispanic/Latino	7.5%
American Indian/Alaskan Native	0.4%
Asian	5.7%
Pacific Islander	0.0%
Other	1.8%
Multi-racial	5.4%

LANGUAGE	ESTIMATE
Only English	88.1%
Language other than English	11.9%
SCHOOL ENROLLMENT	ESTIMATE
Pre-school	4.0%
Kindergarten	3.4%
Grade 1 - 4 (Elementary school)	12.5%
Grade 5 - 8 (Middle school)	12.5%
Grade 9 - 12 (High school)	12.6%
College, undergraduate	45.3%
Graduate/professional school	9.6%
HOUSING	ESTIMATE
Occupied housing units	110,418
Owner-occupied housing	57.8%
Renter-occupied housing	42.2%
EMPLOYMENT	ESTIMATE
In the labor force	146,383
Unemployment rate	9.0%
Private, for-profit wage/salary worker	62.3%
Private, not-for-profit wage/salary worker	12.8%
Local government	5.8%
State government	12.9%
Federal government	1.2%
Self-employment	5.0%

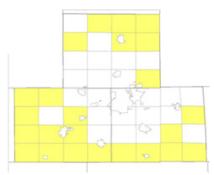
OPPORTUNITY MEASURES	GROUP ESTIMATE	COMPARISION TO THE STATE	TREND
Gini coefficient of income inequality	0.48	41	→

SOCIAL, ECONOMIC, & ENVIRONMENTAL FACTORS	GROUP ESTIMATE	COMPARISION TO THE STATE	TREND
% of households below ALICE threshold	43.0%	4 1	~
% of adults 25 years old or older with a Bachelor's degree or higher	37.7%	ı	~
% of adolescents who know adults in the neighborhood they could talk to about something important	45.6%	NA	→
Rate of violent crimes	631.8	9 1	~
% of households who spend more than 30% of income on housing	34.7%	71	^
Rate of Ambulatory-Care Sensitive Hospitalizations (Preventable)	198.5	16	~
% of children < 6 years of age with elevated blood lead level	2.9%	16	~
Projected number of future extreme heat days	-20.0	NA	\
% of the population that lives in a USDA-defined 'food desert'	22.2%	9 1	~

BEHAVIORS, STRESS, & PHYSICAL CONDITIONS	GROUP ESTIMATE	COMPARISION TO THE STATE	TREND
% of the adults who are obese	31.2%	16	~
% of adolescents who are obese	15.8%	16	~
% of adults who currently smoke	21.5%	4 1	~
% of adolescents who smoked cigarettes during the past 30 days	2.5%	16	~
% of adults who binge drank during the past 30 days	20.5%	41	~
% of adolescents who binge drank during the past 30 days	8.3%	16	~
Rate of the number of opioid prescriptions filled per person	717.0	16	^
% of adolescents who took painkillers without a doctor's prescription during the past 30 days	4.0%	NA	~
% of adults engaging in no leisure time physical activity	20.8%	ı	~
% of adolescents who were physically active for a total of at least 60 minutes per day on five or more of the past seven days	49.9%	16	>>
% of adults who consume ≥ 5 servings of fruits and vegetables per day	38.1%	ı	→
% of adolescents who ate five or more servings per day of fruits and vegetables during the past seven days	22.3%	NA	~
% of adults with no primary care provider	20.4%	41	~
% of adults 18-64 years old without health insurance	10.4%	16	~
Rate of non-medical immunization waivers granted for schoolchildren	32.0	16	~
% of adults with poor mental health	15.5%	16	~
% of adolescents with symptoms of depression in past year	40.0%	41	~

HEALTH OUTCOMES	GROUP ESTIMATE	COMPARISION TO THE STATE	TREND
Rate of preventable asthma hospitalizations among youth < 18 years	8.0	16	~~
Rate of preventable diabetes hospitalizations	30.9	16	~
Rate of chlamydia cases	678.0	9 1	~
Rate of preventable congestive heart failure hospitalization among adults ≥ 65 years old	107.6	16	NA
Life expectancy	79.4	64	~
Rate of infant mortality	7.1	9 1	\rightarrow
Rate of deaths due to cardiovascular disease	183.3	16	~-
Rate of deaths due to accidental injury	39.9	16	~~

Farms & Fields



POPULATION	ESTIMATE
Population in 2000	58,333
Population in 2010	60,473
Population in 2015 (estimate)	60,709
AGE GROUP	ESTIMATE
Under 5 years old	5.4%
5-17 years old	18.1%
18-24 years old	7.7%
25-64 years old	53.1%
65-74 years old	4.8%
75+ years old	5.5%
RACE/ETHNICITY	ESTIMATE
White, non-Hispanic/Latino	93.9%
Black/African American	0.4%
Hispanic/Latino	3.2%
American Indian/Alaskan Native	0.3%
Asian	0.3%
Pacific Islander	
Other	
Multi-racial	1.9%

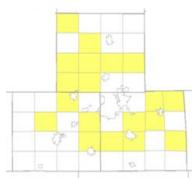
LANGUAGE	ESTIMATE
Only English	96.0%
Language other than English	2.9%
SCHOOL ENROLLMENT	ESTIMATE
Pre-school	6.1%
Kindergarten	5.0%
Grade 1 - 4 (Elementary school)	22.3%
Grade 5 - 8 (Middle school)	45.3%
Grade 9 - 12 (High school)	24.8%
College, undergraduate	18.8%
Graduate/professional school	1.4%
HOUSING	ESTIMATE
Occupied housing units	27,062
Owner-occupied housing	86.8%
Renter-occupied housing	13.1%
EMPLOYMENT	ESTIMATE
In the labor force	36,003
Unemployment rate	4.9%
Private, for-profit wage/salary worker	68.7%
Private, not-for-profit wage/salary worker	8.1%
Local government	7.2%
State government	8.0%
Federal government	1.5%
Self-employment	6.3%

OPPORTUNITY MEASURES	GROUP ESTIMATE	COMPARISION TO THE STATE	TREND
Gini coefficient of income inequality	0.36	9 1	→

SOCIAL, ECONOMIC, & ENVIRONMENTAL FACTORS	GROUP ESTIMATE	COMPARISION TO THE STATE	TREND	
% of households below ALICE threshold	30.7%	16	NA	
% of adults 25 years old or older with a Bachelor's degree or higher	16.8%	71	~	
% of adolescents who know adults in the neighborhood they could talk to about something important	data not available for this geography			
Rate of violent crimes	data no	data not available for this geography		
% of households who spend more than 30% of income on housing	23.7%	16	~	
Rate of Ambulatory-Care Sensitive Hospitalizations (Preventable)	data no	data not available for this geography		
% of children < 6 years of age with elevated blood lead level	data no	data not available for this geography		
Projected number of future extreme heat days	data not available for this geography			
% of the population that lives in a USDA-defined 'food desert'	7.3%	16	~	

BEHAVIORS, STRESS, & PHYSICAL CONDITIONS	GROUP ESTIMATE	COMPARISION TO THE STATE	TREND	
% of the adults who are obese	data no	t available for this ge	ography	
% of adolescents who are obese	data no	data not available for this geography		
% of adults who currently smoke	data no	t available for this ge	ography	
% of adolescents who smoked cigarettes during the past 30 days	data no	t available for this ge	ography	
% of adults who binge drank during the past 30 days	data no	t available for this ge	ography	
% of adolescents who binge drank during the past 30 days	data no	t available for this ge	ography	
Rate of the number of opioid prescriptions filled per person	data not available for this geography			
% of adolescents who took painkillers without a doctor's prescription during the past 30 days	data not available for this geography			
% of adults engaging in no leisure time physical activity	data not available for this geography			
% of adolescents who were physically active for a total of at least 60 minutes per day on five or more of the past seven days	data not available for this geography		ography	
% of adults who consume ≥ 5 servings of fruits and vegetables per day	data not available for this geography			
% of adolescents who ate five or more servings per day of fruits and vegetables during the past seven days	data not available for this geography			
% of adults with no primary care provider	data not available for this geography			
% of adults 18-64 years old without health insurance	9.8%	16	~	
Rate of non-medical immunization waivers granted for schoolchildren	data not available for this geography			
% of adults with poor mental health	data not available for this geography			
% of adolescents with symptoms of depression in past year	data not available for this geography			

HEALTH OUTCOMES	GROUP ESTIMATE	COMPARISION TO THE STATE	TREND
Rate of preventable asthma hospitalizations among youth < 18 years	data no	t available for this g	eography
Rate of preventable diabetes hospitalizations	data no	t available for this g	eography
Rate of chlamydia cases	data not available for this geography		
Rate of preventable congestive heart failure hospitalization among adults ≥ 65 years old	data not available for this geography		
Life expectancy	79.0		→
Rate of infant mortality	data not available for this geography		
Rate of deaths due to cardiovascular disease	230.1	7 1	~
Rate of deaths due to accidental injury	43.8		~



POPULATION	ESTIMATE
Population in 2000	NA
Population in 2010	67,082
Population in 2015 (estimate)	69,277
AGE GROUP	ESTIMATE
Under 5 years old	5.1%
5-17 years old	17.1%
18-24 years old	9.5%
25-64 years old	52.9%
65-74 years old	9.8%
75+ years old	5.7%
RACE/ETHNICITY	ESTIMATE
White, non-Hispanic/Latino	94.2%
Black/ African American	1.8%
Hispanic/Latino	3.9%
American Indian/Alaskan Native	0.2%
Asian	1.0%
Pacific Islander	
Other	0.7%
Multi-racial	2.3%

Countryside Suburbs

LANGUAGE	ESTIMATE
Only English	95.1%
Language other than English	4.9%
SCHOOL ENROLLMENT	ESTIMATE
Pre-school	3.9%
Kindergarten	4.9%
Grade 1 - 4 (Elementary school)	18.5%
Grade 5 - 8 (Middle school)	19.7%
Grade 9 - 12 (High school)	21.0%
College, undergraduate	27.0%
Graduate/professional school	5.0%
HOUSING	ESTIMATE
Occupied housing units	21,359
Owner-occupied housing	88.1%
Renter-occupied housing	11.9%
EMPLOYMENT	ESTIMATE
In the labor force	29,620
Unemployment rate	36.4%
Private, for-profit wage/salary worker	64.4%
Private, not-for-profit wage/salary worker	9.7%
Local government	6.7%
State government	11.0%
Federal government	1.0%
Self-employment	7.1%

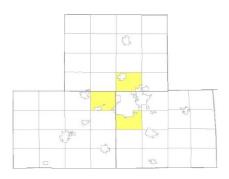
OPPORTUNITY MEASURES	GROUP ESTIMATE	COMPARISION TO THE STATE	TREND
Gini coefficient of income inequality	0.40	16	~

SOCIAL, ECONOMIC, & ENVIRONMENTAL FACTORS	GROUP ESTIMATE	COMPARISION TO THE STATE	TREND
% of households below ALICE threshold	19.4%	16	NA
% of adults 25 years old or older with a Bachelor's degree or higher	33.0%	16	~
% of adolescents who know adults in the neighborhood they could talk to about something important	data not available for this geography		
Rate of violent crimes	data not available for this geography		
% of households who spend more than 30% of income on housing	19.8%	16	~
Rate of Ambulatory-Care Sensitive Hospitalizations (Preventable)	data not available for this geography		
% of children < 6 years of age with elevated blood lead level	data not available for this geography		
Projected number of future extreme heat days	data not available for this geography		
% of the population that lives in a USDA-defined 'food desert'	2.9%	16	∨ ₂

BEHAVIORS, STRESS, & PHYSICAL CONDITIONS	GROUP ESTIMATE	COMPARISION TO THE STATE	TREND	
% of the adults who are obese	data no	t available for this ged	ography	
% of adolescents who are obese	data no	data not available for this geography		
% of adults who currently smoke	data no	t available for this ged	ography	
% of adolescents who smoked cigarettes during the past 30 days	data no	t available for this ged	ography	
% of adults who binge drank during the past 30 days	data no	t available for this ged	ography	
% of adolescents who binge drank during the past 30 days	data no	t available for this ged	ography	
Rate of the number of opioid prescriptions filled per person	data not available for this geography			
% of adolescents who took painkillers without a doctor's prescription during the past 30 days	data not available for this geography			
% of adults engaging in no leisure time physical activity	data not available for this geography			
% of adolescents who were physically active for a total of at least 60 minutes per day on five or more of the past seven days	data not available for this geography			
% of adults who consume ≥ 5 servings of fruits and vegetables per day	data no	t available for this ged	ography	
% of adolescents who ate five or more servings per day of fruits and vegetables during the past seven days	data not available for this geography			
% of adults with no primary care provider	data not available for this geography			
% of adults 18-64 years old without health insurance	6.0%	16	^	
Rate of non-medical immunization waivers granted for schoolchildren	data not available for this geography			
% of adults with poor mental health	data not available for this geography			
% of adolescents with symptoms of depression in past year	data not available for this geography			

HEALTH OUTCOMES	GROUP ESTIMATE	COMPARISION TO THE STATE	TREND
Rate of preventable asthma hospitalizations among youth < 18 years	data no	t available for this ge	eography
Rate of preventable diabetes hospitalizations	data no	t available for this ge	eography
Rate of chlamydia cases	data not available for this geography		
Rate of preventable congestive heart failure hospitalization among adults ≥ 65 years old	data not available for this geography		
Life expectancy	79.9	16	~
Rate of infant mortality	data not available for this geography		
Rate of deaths due to cardiovascular disease	177.8	16	~
Rate of deaths due to accidental injury	34.8	16	>>

Inner Suburbs



POPULATION	ESTIMATE
Population in 2000	64,394
Population in 2010	72,606
Population in 2015 (estimate)	73,613
AGE GROUP	ESTIMATE
Under 5 years old	4.8%
5-17 years old	17.3%
18-24 years old	7.8%
25-64 years old	55.1%
65-74 years old	8.5%
75+ years old	6.7%
RACE/ETHNICITY	ESTIMATE
White, non-Hispanic/Latino	78.6%
Black/ African American	8.1%
Hispanic/Latino	5.9%
American Indian/Alaskan Native	0.4%
Asian	4.0%
Pacific Islander	
Other	0.2%
Multi-racial	2.8%

LANGUAGE	ESTIMATE
Only English	90.6%
Language other than English	9.4%
SCHOOL ENROLLMENT	ESTIMATE
Pre-school	5.1%
Kindergarten	5.4%
Grade 1 - 4 (Elementary school)	17.2%
Grade 5 - 8 (Middle school)	23.7%
Grade 9 - 12 (High school)	20.3%
College, undergraduate	5.9%
Graduate/professional school	22.4%
HOUSING	ESTIMATE
Occupied housing units	30,704
Owner-occupied housing	68.8%
Renter-occupied housing	31.2%
EMPLOYMENT	ESTIMATE
In the labor force	39,480
Unemployment rate	7.6%
Private, for-profit wage/salary worker	61.1%
Private, not-for-profit wage/salary worker	3.1%
Local government	13.1%
State government	5.6%
Federal government	11.7%
Self-employment	4.1%

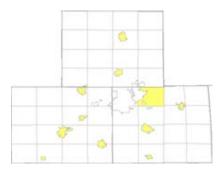
OPPORTUNITY MEASURES	GROUP ESTIMATE	COMPARISION TO THE STATE	TREND
Gini coefficient of income inequality	0.42	16	~

SOCIAL, ECONOMIC, & ENVIRONMENTAL FACTORS	GROUP ESTIMATE	COMPARISION TO THE STATE	TREND
% of households below ALICE threshold	30.2%	16	NA
% of adults 25 years old or older with a Bachelor's degree or higher	35.7%	ı	~
% of adolescents who know adults in the neighborhood they could talk to about something important	data not available for this geography		
Rate of violent crimes	data not available for this geography		
% of households who spend more than 30% of income on housing	23.3%	16	~
Rate of Ambulatory-Care Sensitive Hospitalizations (Preventable)	data not available for this geography		
% of children < 6 years of age with elevated blood lead level	data not available for this geography		
Projected number of future extreme heat days	data not available for this geography		
% of the population that lives in a USDA-defined 'food desert'	17.2%	9 1	~

BEHAVIORS, STRESS, & PHYSICAL CONDITIONS	GROUP ESTIMATE	COMPARISION TO THE STATE	TREND	
% of the adults who are obese	data no	t available for this ged	ography	
% of adolescents who are obese	data not available for this geography			
% of adults who currently smoke	data no	t available for this ged	ography	
% of adolescents who smoked cigarettes during the past 30 days	data no	t available for this ged	ography	
% of adults who binge drank during the past 30 days	data no	t available for this ged	ography	
% of adolescents who binge drank during the past 30 days	data no	t available for this ged	ography	
Rate of the number of opioid prescriptions filled per person	data no	data not available for this geography		
% of adolescents who took painkillers without a doctor's prescription during the past 30 days	data not available for this geography			
% of adults engaging in no leisure time physical activity	data not available for this geography			
% of adolescents who were physically active for a total of at least 60 minutes per day on five or more of the past seven days	data not available for this geography			
% of adults who consume ≥ 5 servings of fruits and vegetables per day	data no	t available for this ged	ography	
% of adolescents who ate five or more servings per day of fruits and vegetables during the past seven days	data not available for this geography			
% of adults with no primary care provider	data not available for this geography			
% of adults 18-64 years old without health insurance	8.4%	16	~	
Rate of non-medical immunization waivers granted for schoolchildren	data not available for this geography			
% of adults with poor mental health	data not available for this geography			
% of adolescents with symptoms of depression in past year	data not available for this geography			

HEALTH OUTCOMES	GROUP ESTIMATE	COMPARISION TO THE STATE	TREND
Rate of preventable asthma hospitalizations among youth < 18 years	data no	t available for this ge	eography
Rate of preventable diabetes hospitalizations	data no	t available for this ge	eography
Rate of chlamydia cases	data not available for this geography		
Rate of preventable congestive heart failure hospitalization among adults ≥ 65 years old	data not available for this geography		
Life expectancy	79.7	16	~
Rate of infant mortality	data not available for this geography		
Rate of deaths due to cardiovascular disease	164.0	16	~
Rate of deaths due to accidental injury	39.9	9 1	~

Small Cities



POPULATION	ESTIMATE
Population in 2000	88,960
Population in 2010	92,359
Population in 2015 (estimate)	93,868
AGE GROUP	ESTIMATE
Under 5 years old	5.7%
5-17 years old	6.0%
18-24 years old	6.8%
25-64 years old	55.1%
65-74 years old	8.0%
75+ years old	6.7%
RACE/ETHNICITY	ESTIMATE
White, non-Hispanic/Latino	87.7%
Black/African American	2.4%
Hispanic/Latino	1.0%
American Indian/Alaskan Native	0.4%
Asian	5.6%
Pacific Islander	
Other	0.9%
Multi-racial	3.0%

LANGUAGE	ESTIMATE
Only English	90.4%
Language other than English	9.6%
SCHOOL ENROLLMENT	ESTIMATE
Pre-school	11.5%
Kindergarten	9.7%
Grade 1 - 4 (Elementary school)	37.0%
Grade 5 - 8 (Middle school)	38.2%
Grade 9 - 12 (High school)	39.4%
College, undergraduate	53.6%
Graduate/professional school	21.0%
HOUSING	ESTIMATE
Occupied housing units	39,012
Owner-occupied housing	61.7%
Renter-occupied housing	38.3%
EMPLOYMENT	ESTIMATE
In the labor force	49,190
Unemployment rate	4.4%
Private, for-profit wage/salary worker	63.0%
Private, not-for-profit wage/salary worker	11.5%
Local government	6.5%
State government	12.2%
Federal government	1.3%
Self-employment	5.6%

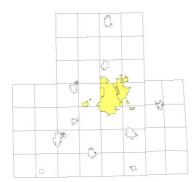
OPPORTUNITY MEASURES	GROUP ESTIMATE	COMPARISION TO THE STATE	TREND
Gini coefficient of income inequality	0.44	16	\rightarrow

SOCIAL, ECONOMIC, & ENVIRONMENTAL FACTORS	GROUP ESTIMATE	COMPARISION TO THE STATE	TREND
% of households below ALICE threshold	35.9%	16	NA
% of adults 25 years old or older with a Bachelor's degree or higher	43.2%	16	~
% of adolescents who know adults in the neighborhood they could talk to about	data not available for this geography		
something important			
Rate of violent crimes	data not available for this geography		
% of households who spend more than 30% of income on housing	24.9%	16	~
Rate of Ambulatory-Care Sensitive Hospitalizations (Preventable)	data not available for this geography		
% of children < 6 years of age with elevated blood lead level	data not available for this geography		
Projected number of future extreme heat days	data not available for this geography		
% of the population that lives in a USDA-defined 'food desert'	5.5%	16	→

BEHAVIORS, STRESS, & PHYSICAL CONDITIONS	GROUP ESTIMATE	COMPARISION TO THE STATE	TREND
% of the adults who are obese	data no	t available for this ge	ography
% of adolescents who are obese	data not available for this geography		
% of adults who currently smoke	data no	t available for this ge	ography
% of adolescents who smoked cigarettes during the past 30 days	data no	t available for this ge	ography
% of adults who binge drank during the past 30 days	data no	t available for this ge	ography
% of adolescents who binge drank during the past 30 days	data no	t available for this ge	ography
Rate of the number of opioid prescriptions filled per person	data no	t available for this ge	ography
% of adolescents who took painkillers without a doctor's prescription during the past 30 days	data no	t available for this ge	ography
% of adults engaging in no leisure time physical activity	data not available for this geography		
% of adolescents who were physically active for a total of at least 60 minutes per day on five or more of the past seven days	data not available for this geography		
% of adults who consume ≥ 5 servings of fruits and vegetables per day	data no	t available for this ge	ography
% of adolescents who ate five or more servings per day of fruits and vegetables during the past seven days	data not available for this geography		
% of adults with no primary care provider	data not available for this geography		
% of adults 18-64 years old without health insurance	9.9%	16	∨ ₂
Rate of non-medical immunization waivers granted for schoolchildren	data not available for this geography		
% of adults with poor mental health	data not available for this geography		
% of adolescents with symptoms of depression in past year	data not available for this geography		

HEALTH OUTCOMES	GROUP ESTIMATE	COMPARISION TO THE STATE	TREND
Rate of preventable asthma hospitalizations among youth < 18 years	data no	t available for this ge	eography
Rate of preventable diabetes hospitalizations	data no	t available for this ge	eography
Rate of chlamydia cases	data not available for this geography		
Rate of preventable congestive heart failure hospitalization among adults ≥ 65 years old	data not available for this geography		
Life expectancy	87.8	16	~
Rate of infant mortality	data not available for this geography		
Rate of deaths due to cardiovascular disease	99.0	16	>>
Rate of deaths due to accidental injury	24.9	16	>>

Urban Area



POPULATION	ESTIMATE
Population in 2000	171,004
Population in 2010	172,065
Population in 2015 (estimate)	171,270
AGE GROUP	ESTIMATE
Under 5 years old	5.9%
5-17 years old	13.0%
18-24 years old	27.1%
25-64 years old	44.3%
65-74 years old	5.4%
75+ years old	4.3%
RACE/ETHNICITY	ESTIMATE
White, non-Hispanic/Latino	66.0%
Black/African American	17.5%
Hispanic/Latino	10.0%
American Indian/Alaskan Native	0.4%
Asian	6.1%
Pacific Islander	2.6%
Other	7.3%
Multi-racial	7.3%

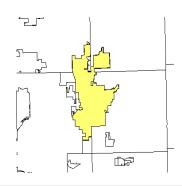
LANGUAGE	ESTIMATE
Only English	86.1%
Language other than English	13.9%
SCHOOL ENROLLMENT	ESTIMATE
Pre-school	3.4%
Kindergarten	2.9%
Grade 1 - 4 (Elementary school)	9.9%
Grade 5 - 8 (Middle school)	9.2%
Grade 9 - 12 (High school)	9.5%
College, undergraduate	55.1%
Graduate/professional school	10.0%
HOUSING	ESTIMATE
Occupied housing units	66,012
Owner-occupied housing	47.2%
Renter-occupied housing	52.8%
EMPLOYMENT	ESTIMATE
In the labor force	87,764
Unemployment rate	6.8%
Private, for-profit wage/salary worker	62.1%
Private, not-for-profit wage/salary worker	14.1%
Local government	5.3%
State government	13.0%
Federal government	1.1%
Self-employment	4.4%

OPPORTUNITY MEASURES	GROUP ESTIMATE	COMPARISION TO THE STATE	TREND
Gini coefficient of income inequality	0.48	9 1	\rightarrow

SOCIAL, ECONOMIC, & ENVIRONMENTAL FACTORS	GROUP ESTIMATE	COMPARISION TO THE STATE	TREND
% of households below ALICE threshold	55.6%	9 1	NA
% of adults 25 years old or older with a Bachelor's degree or higher	33.0%	16	\rightarrow
% of adolescents who know adults in the neighborhood they could talk to about something important	data not available for this geography		
Rate of violent crimes	data not available for this geography		
% of households who spend more than 30% of income on housing	33.9%	9 1	\
Rate of Ambulatory-Care Sensitive Hospitalizations (Preventable)	data not available for this geography		
% of children < 6 years of age with elevated blood lead level	data not available for this geography		
Projected number of future extreme heat days	data not available for this geography		
% of the population that lives in a USDA-defined 'food desert'	28.2%	4 1	~

BEHAVIORS, STRESS, & PHYSICAL CONDITIONS	GROUP ESTIMATE	COMPARISION TO THE STATE	TREND	
% of the adults who are obese	data no	t available for this ge	ography	
% of adolescents who are obese	data no	data not available for this geography		
% of adults who currently smoke	data no	t available for this ge	ography	
% of adolescents who smoked cigarettes during the past 30 days	data no	t available for this ge	ography	
% of adults who binge drank during the past 30 days	data no	t available for this ge	ography	
% of adolescents who binge drank during the past 30 days	data no	t available for this ge	ography	
Rate of the number of opioid prescriptions filled per person	data not available for this geography			
% of adolescents who took painkillers without a doctor's prescription during the past 30 days	data no	t available for this ge	ography	
% of adults engaging in no leisure time physical activity	data not available for this geography			
% of adolescents who were physically active for a total of at least 60 minutes per day on five or more of the past seven days	data not available for this geography			
% of adults who consume ≥ 5 servings of fruits and vegetables per day	data no	t available for this ge	ography	
% of adolescents who ate five or more servings per day of fruits and vegetables during the past seven days	data not available for this geography			
% of adults with no primary care provider	data not available for this geography			
% of adults 18-64 years old without health insurance	11.6%	16	~	
Rate of non-medical immunization waivers granted for schoolchildren	data not available for this geography			
% of adults with poor mental health	data not available for this geography			
% of adolescents with symptoms of depression in past year	data not available for this geography			

HEALTH OUTCOMES	GROUP ESTIMATE	COMPARISION TO THE STATE	TREND
Rate of preventable asthma hospitalizations among youth < 18 years	data no	ot available for this ge	eography
Rate of preventable diabetes hospitalizations	data no	nt available for this ge	eography
Rate of chlamydia cases	data not available for this geography		
Rate of preventable congestive heart failure hospitalization among adults ≥ 65 years old	data not available for this geography		
Life expectancy	76.5	9 1	~
Rate of infant mortality	data not available for this geography		
Rate of deaths due to cardiovascular disease	212.4	9 1	~
Rate of deaths due to accidental injury	47.8	9 1	~~



POPULATION	ESTIMATE
Population in 2000	46,525
Population in 2010	48,220
Population in 2015 (estimate)	48,669
AGE GROUP	ESTIMATE
Under 5 years old	2.3%
5-17 years old	5.7%
18-24 years old	61.9%
25-64 years old	23.3%
65-74 years old	3.3%
75+ years old	3.7%
RACE/ETHNICITY	ESTIMATE
White, non-Hispanic/Latino	76.1%
Black/African American	7.7%
Hispanic/Latino	4.2%
American Indian/Alaskan Native	0.3%
Asian	11.4%
Pacific Islander	0.0%
Other	0.6%
Multi-racial	3.8%

City of East Lansing

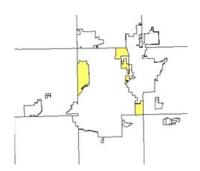
LANGUAGE	ESTIMATE
Only English	82.7%
Language other than English	17.3%
SCHOOL ENROLLMENT	ESTIMATE
Pre-school	0.9%
Kindergarten	0.9%
Grade 1 - 4 (Elementary school)	2.3%
Grade 5 - 8 (Middle school)	2.1%
Grade 9 - 12 (High school)	1.8%
College, undergraduate	81.9%
Graduate/professional school	10.0%
HOUSING	ESTIMATE
Occupied housing units	13,927
Owner-occupied housing	34.4%
Renter-occupied housing	65.6%
EMPLOYMENT	ESTIMATE
In the labor force	45,303
Unemployment rate	9.6%
Private, for-profit wage/salary worker	53.6%
Private, not-for-profit wage/salary worker	15.2%
Local government	4.6%
State government	22.6%
Federal government	1.3%
Self-employment	2.7%

OPPORTUNITY MEASURES	GROUP ESTIMATE	COMPARISION TO THE STATE	TREND
Gini coefficient of income inequality	0.59	7 1	\rightarrow

SOCIAL, ECONOMIC, & ENVIRONMENTAL FACTORS	GROUP ESTIMATE	COMPARISION TO THE STATE	TREND
% of households below ALICE threshold	57%	41	NA
% of adults 25 years old or older with a Bachelor's degree or higher	71.8%	16	~
% of adolescents who know adults in the neighborhood they could talk to about something important	data not available for this geography		
Rate of violent crimes	data not available for this geography		
% of households who spend more than 30% of income on housing	41.5%	41	~~
Rate of Ambulatory-Care Sensitive Hospitalizations (Preventable)	data not available for this geography		
% of children < 6 years of age with elevated blood lead level	data not available for this geography		
Projected number of future extreme heat days	data not available for this geography		
% of the population that lives in a USDA-defined 'food desert'	30.2%	41	NA

BEHAVIORS, STRESS, & PHYSICAL CONDITIONS	GROUP ESTIMATE	COMPARISION TO THE STATE	TREND	
% of the adults who are obese	data no	t available for this ge	ography	
% of adolescents who are obese	data no	data not available for this geography		
% of adults who currently smoke	data no	t available for this ge	ography	
% of adolescents who smoked cigarettes during the past 30 days	data no	t available for this ge	ography	
% of adults who binge drank during the past 30 days	data no	t available for this ge	ography	
% of adolescents who binge drank during the past 30 days	data no	t available for this ge	ography	
Rate of the number of opioid prescriptions filled per person	data not available for this geography			
% of adolescents who took painkillers without a doctor's prescription during the past 30 days	data no	t available for this ged	ography	
% of adults engaging in no leisure time physical activity	data not available for this geography			
% of adolescents who were physically active for a total of at least 60 minutes per day on five or more of the past seven days	data not available for this geography		ography	
% of adults who consume ≥ 5 servings of fruits and vegetables per day	data no	t available for this ged	ography	
% of adolescents who ate five or more servings per day of fruits and vegetables during the past seven days	data not available for this geography			
% of adults with no primary care provider	data not available for this geography			
% of adults 18-64 years old without health insurance	6.4%	16	→	
Rate of non-medical immunization waivers granted for schoolchildren	data not available for this geography			
% of adults with poor mental health	data not available for this geography			
% of adolescents with symptoms of depression in past year	data not available for this geography			

HEALTH OUTCOMES	GROUP ESTIMATE	COMPARISION TO THE STATE	TREND
Rate of preventable asthma hospitalizations among youth < 18 years	data no	t available for this ge	eography
Rate of preventable diabetes hospitalizations	data no	t available for this ge	eography
Rate of chlamydia cases	data not available for this geography		
Rate of preventable congestive heart failure hospitalization among adults ≥ 65 years old	data not available for this geography		
Life expectancy	82.4	16	→
Rate of infant mortality	data not available for this geography		
Rate of deaths due to cardiovascular disease	151.9	16	~
Rate of deaths due to accidental injury	25.4	16	~~



POPULATION	ESTIMATE
Population in 2000	8,458
Population in 2010	8,126
Population in 2015 (estimate)	8,116
AGE GROUP	ESTIMATE
Under 5 years old	7.3%
5-17 years old	14.4%
18-24 years old	17.9%
25-64 years old	51.0%
65-74 years old	6.8%
75+ years old	4.0%
RACE/ETHNICITY	ESTIMATE
White, non-Hispanic/Latino	70.9%
Black/African American	17.0%
Hispanic/Latino	13.2%
American Indian/Alaskan Native	0.1%
Asian	1.6%
Pacific Islander	
Other	3.7%
Multi-racial	6.8%

Lansing Charter Township

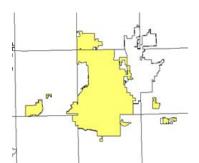
LANGUAGE	ESTIMATE
Only English	83.4%
Language other than English	9.3%
SCHOOL ENROLLMENT	ESTIMATE
Pre-school	7.2%
Kindergarten	4.2%
Grade 1 - 4 (Elementary school)	19.7%
Grade 5 - 8 (Middle school)	11.2%
Grade 9 - 12 (High school)	16.4%
College, undergraduate	35.3%
Graduate/professional school	6.0%
HOUSING	ESTIMATE
Occupied housing units	3,671
Owner-occupied housing	48.1%
Renter-occupied housing	51.9%
EMPLOYMENT	ESTIMATE
In the labor force	4,880
Unemployment rate	9.9%
Private, for-profit wage/salary worker	65.7%
Private, not-for-profit wage/salary worker	13.2%
Local government	6.4%
State government	11.4%
Federal government	1.3%
Self-employment	1.9%

OPPORTUNITY MEASURES	GROUP ESTIMATE	COMPARISION TO THE STATE	TREND
Gini coefficient of income inequality	0.37	ı	~

SOCIAL, ECONOMIC, & ENVIRONMENTAL FACTORS	GROUP ESTIMATE	COMPARISION TO THE STATE	TREND
% of households below ALICE threshold	46%	4 1	NA
% of adults 25 years old or older with a Bachelor's degree or higher	31.4%	16	→
% of adolescents who know adults in the neighborhood they could talk to about something important	data not available for this geography		
Rate of violent crimes	data not available for this geography		
% of households who spend more than 30% of income on housing	25.2%	16	~
Rate of Ambulatory-Care Sensitive Hospitalizations (Preventable)	data not available for this geography		
% of children < 6 years of age with elevated blood lead level	data not available for this geography		
Projected number of future extreme heat days	data not available for this geography		
% of the population that lives in a USDA-defined 'food desert'	30.9%	41	NA

BEHAVIORS, STRESS, & PHYSICAL CONDITIONS	GROUP ESTIMATE	COMPARISION TO THE STATE	TREND	
% of the adults who are obese	data no	t available for this ged	ography	
% of adolescents who are obese	data not available for this geography			
% of adults who currently smoke	data no	t available for this ged	ography	
% of adolescents who smoked cigarettes during the past 30 days	data no	t available for this ged	ography	
% of adults who binge drank during the past 30 days	data no	t available for this ged	ography	
% of adolescents who binge drank during the past 30 days	data no	t available for this ged	ography	
Rate of the number of opioid prescriptions filled per person	data not available for this geography			
% of adolescents who took painkillers without a doctor's prescription during the past 30 days	data not available for this geography			
% of adults engaging in no leisure time physical activity	data not available for this geography			
% of adolescents who were physically active for a total of at least 60 minutes per day on five or more of the past seven days	data not available for this geography		ography	
% of adults who consume ≥ 5 servings of fruits and vegetables per day	data no	data not available for this geography		
% of adolescents who ate five or more servings per day of fruits and vegetables during the past seven days	data not available for this geography			
% of adults with no primary care provider	data not available for this geography			
% of adults 18-64 years old without health insurance	8.6%	16	~	
Rate of non-medical immunization waivers granted for schoolchildren	data not available for this geography			
% of adults with poor mental health	data not available for this geography			
% of adolescents with symptoms of depression in past year	data not available for this geography			

HEALTH OUTCOMES	GROUP ESTIMATE	COMPARISION TO THE STATE	TREND	
Rate of preventable asthma hospitalizations among youth < 18 years	data no	t available for this ge	eography	
Rate of preventable diabetes hospitalizations	data no	data not available for this geography		
Rate of chlamydia cases	data not available for this geography			
Rate of preventable congestive heart failure hospitalization among adults ≥ 65	data not available for this geography			
Life expectancy	77.2	9 1	~	
Rate of infant mortality	data not available for this geography			
Rate of deaths due to cardiovascular disease	328.9	9 1	~	
Rate of deaths due to accidental injury	51.7	41	~	



1 1	
POPULATION	ESTIMATE
Population in 2000	119,128
Population in 2010	114,297
Population in 2015 (estimate)	109,757
AGE GROUP	ESTIMATE
Under 5 years old	7.3%
5-17 years old	16.1%
18-24 years old	13.2%
25-64 years old	52.9%
65-74 years old	6.1%
75+ years old	4.6%
RACE/ETHNICITY	ESTIMATE
White, non-Hispanic/Latino	56.6%
Black/African American	20.6%
Hispanic/Latino	12.3%
American Indian/Alaskan Native	0.5%
Asian	4.3%
Pacific Islander	
Other	3.3%
Multi-racial	8.9%

City of Lansing

LANGUAGE	ESTIMATE
Only English	80.7%
Language other than English	12.0%
SCHOOL ENROLLMENT	ESTIMATE
Pre-school	5.7%
Kindergarten	4.9%
Grade 1 - 4 (Elementary school)	16.9%
Grade 5 - 8 (Middle school)	16.5%
Grade 9 - 12 (High school)	16.8%
College, undergraduate	28.5%
Graduate/professional school	10.6%
HOUSING	ESTIMATE
Occupied housing units	46,291
Owner-occupied housing	51.2%
Renter-occupied housing	48.8%
EMPLOYMENT	ESTIMATE
In the labor force	86,634
Unemployment rate	11.7%
Private, for-profit wage/salary worker	64.9%
Private, not-for-profit wage/salary worker	12.9%
Local government	5.3%
State government	10.6%
Federal government	1.0%
Self-employment	5.3%

OPPORTUNITY MEASURES	GROUP ESTIMATE	COMPARISION TO THE STATE	TREND
Gini coefficient of income inequality	0.44	16	\rightarrow

SOCIAL, ECONOMIC, & ENVIRONMENTAL FACTORS	GROUP ESTIMATE	COMPARISION TO THE STATE	TREND
% of households below ALICE threshold	56%	41	NA
% of adults 25 years old or older with a Bachelor's degree or higher	25.4%	9 1	\rightarrow
% of adolescents who know adults in the neighborhood they could talk to about something important	data not available for this geography		
Rate of violent crimes	data not available for this geography		
% of households who spend more than 30% of income on housing	32.1%	7'	~~
Rate of Ambulatory-Care Sensitive Hospitalizations (Preventable)	data not available for this geography		
% of children < 6 years of age with elevated blood lead level	data not available for this geography		
Projected number of future extreme heat days	data not available for this geography		
% of the population that lives in a USDA-defined 'food desert'	26.9%	7'	NA

BEHAVIORS, STRESS, & PHYSICAL CONDITIONS	GROUP ESTIMATE	COMPARISION TO THE STATE	TREND	
% of the adults who are obese	data no	t available for this ge	ography	
% of adolescents who are obese	data no	data not available for this geography		
% of adults who currently smoke	data no	t available for this ge	ography	
% of adolescents who smoked cigarettes during the past 30 days	data no	t available for this ge	ography	
% of adults who binge drank during the past 30 days	data no	t available for this ge	ography	
% of adolescents who binge drank during the past 30 days	data no	t available for this ge	ography	
Rate of the number of opioid prescriptions filled per person	data not available for this geography			
% of adolescents who took painkillers without a doctor's prescription during the past 30 days	data not available for this geography		ography	
% of adults engaging in no leisure time physical activity	data not available for this geography			
% of adolescents who were physically active for a total of at least 60 minutes per day on five or more of the past seven days	data not available for this geography		ography	
% of adults who consume ≥ 5 servings of fruits and vegetables per day	data no	t available for this ge	ography	
% of adolescents who ate five or more servings per day of fruits and vegetables during the past seven days	data not available for this geography			
% of adults with no primary care provider	data not available for this geography			
% of adults 18-64 years old without health insurance	14.7%	9 1	^	
Rate of non-medical immunization waivers granted for schoolchildren	data not available for this geography			
% of adults with poor mental health	data not available for this geography			
% of adolescents with symptoms of depression in past year	data not available for this geography			

HEALTH OUTCOMES	GROUP ESTIMATE	COMPARISION TO THE STATE	TREND
Rate of preventable asthma hospitalizations among youth < 18 years	data no	t available for this ge	eography
Rate of preventable diabetes hospitalizations	data no	t available for this ge	eography
Rate of chlamydia cases	data not available for this geography		
Rate of preventable congestive heart failure hospitalization among adults ≥ 65 years old	data not available for this geography		
Life expectancy	76.8	9 1	~
Rate of infant mortality	data not available for this geography		
Rate of deaths due to cardiovascular disease	224.9	9 1	>>
Rate of deaths due to accidental injury	53.6	9 1	~



Focus Groups

Participant Demographics

56 TOTAL PARTICIPANTS
PARTICIPANTS REPORTING CHRONIC DISEASE: 35 (62.5%)

When presented alongside quantitative (numerical) data, qualitative data enriches information by revealing the thoughts and beliefs of community members by using their own words. Qualitative data is especially beneficial when gaining the perspective of traditionally vulnerable groups, who are often underrepresented when using quantitative survey methodology.

Six focus groups were conducted over several months. An emphasis was placed on hearing from participants representing groups that experience greater health disparities, have greater health needs, or are traditionally hard-to-survey.

These included:

- Individuals who are uninsured or utilize Medicaid
- Individuals with low or no income
- Individuals experiencing homelessness
- Individuals from racial, ethnic, and linguistic minority groups
- Individuals with health conditions
- Individuals with special needs

Focus groups were conducted in each of the three counties: Eaton Rapids (Union Street Center) in Eaton County; St. Johns (Clinton County District Courthouse) and Lansing (Peckham) in Clinton County; and Lansing (Cristo Rey Church, Allen Neighborhood Center, and Greater Lansing Housing Coalition) in Ingham County. They ranged in size from 5 to 12 participants. The format of the group was informal discussion—the facilitator asked questions revolving around certain topics, and participants were able to join the conversation as desired. All focus group participants were compensated a \$25 gift card for Meijer or Walmart and were entered into a raffle for one \$75 Visa gift card per group. Many thanks to the many organizations and individuals who assisted us in coordinating and recruiting for these focus groups.

AGE	# PARTICIPANTS
18-24	6
25-34	11
35-44	8
45-54	8
55-64	14
65-74	4
75+	4
No Response	1

EMPLOYMENT STATUS	# PARTICIPANTS
Not working, looking for work	10
Not working, not looking for work/ On disability	10
Working part-time	14
Working full-time	10
Stay at home parent/ Homemaker	3
Retired	9
No Response	3

RACE/ETHNICITY	# PARTICIPANTS
White or Caucasian (non-Hispanic/Latino)	24
Black or African American (non-Hispanic/Latino)	13
Hispanic/Latino (any race)	15
Native American	1
More than one race	2
No Response/Other	3

HOUSEHOLD INCOME	# PARTICIPANTS	
Less than \$20,000	29	
\$20,000-\$34,999	15	
\$35,000-\$49,999	4	
\$50,000-\$74,999	1	
\$75,000 or greater	1	
No Response	6	

Focus groups were recorded, and the data was analyzed by one individual. For analysis at the individual group level, participants' responses to each question were summarized; topics that popped up throughout the group were also noted and the discussion surrounding them summarized. Having read the discussion and using the summaries, the analyst noted themes of deeper meaning as applicable. For analysis among the groups, the analyst compared data for each question and topic. The main similarities and differences among the groups were noted, and topic themes and deeper themes were noted. Throughout this process, relevant quotations were pulled out to support themes.

Concept maps are also used as a data visualization method. The analyst developed these based on the data narrative and represent how various concepts and themes are related.

NOTE ABOUT SPANISH LANGUAGE FOCUS GROUP

While most of the focus groups were conducted in English, one of the focus groups was conducted in Spanish. The audio file was transcribed first into Spanish language text, then professionally translated into English. The English translation is what is quoted in this document.

HEALTH CARE COVERAGE	# PARTICIPANTS
Private Insurance	14
County/ Health Department Plan	5
Healthy Michigan	5
Military Health Plan	2
Medicaid	23
Medicare	10
Other	1
Uninsured	2
No Response	1

DISABILITY STATUS	# PARTICIPANTS
Mental Health Condition	16
Physical Disability	20
Sensory Impairment	4
Developmental Disability	5
Other	16
Caretaker for person with disability	10
In recovery from substance addiction	2
Used or currently use WIC	24
Used or currently use SNAP or food bank/pantry	40
No Response	7

HOUSING STATUS	# PARTICIPANTS
Permanent Housing	41
No Permanent Housing	2
Temporary Housing (shelter, transitional housing)	4
Staying with friend, relative, etc.	8
Prior homelessness	14
Prior use of housing services (local housing services, vouchers, shelters, etc.)	13
Other	1
No Response	2

1. Has there been a time recently when you or someone you know needed care but didn't get it (or had trouble getting it)? Did having insurance, no insurance, Medicaid at the time make a difference?

Many participants said that they have had trouble getting health care, for a wide variety of reasons that aren't necessarily limited to individuals with low income or with or without private insurance:

NOT ENOUGH LOCAL PROVIDERS PRACTICING A SPECIALTY

"There are certain, I guess, specialties, where the number of physicians that are practicing in this area, it's hard to find them. Then those that are practicing don't accept Medicaid at all. So, you end up being very limited."

LACK OF QUALITY CARE OR A LACK OF PROVIDERS WHO ARE ABLE TO DIAGNOSE WHAT'S WRONG:

"One of the things that I have had an awakening about is the quality of healthcare that's available in the Lansing area. I had an issue a couple of years ago, where my body, because of my medication, went into liver failure. I went from being perfectly fine to being on the liver transplant list, but doctors in Lansing could not diagnose that. They ended up sending me to Ann Arbor for evaluation. ... That was really disappointing to know that the quality of healthcare that I needed to have taken care of was not available here."

LEGISLATION THAT AFFECTS CARE (MENTIONED BY ONE PARTICIPANT)

"[Governor Snyder] just approved this step law, which means people that are going on biological therapy no longer have to go through the blasted step program where you have to fail a medication to be put on a different medication. I had to fail so many different medications before I could be put on another medication."

"It bugs me when legislators think they know what they're doing and they want to block people from using biologics. It's like okay, then why should people be able to do their own insulin shots at home if you're going to block us from taking our biologics at home?"

INSURANCE COMPANIES (INCLUDING MEDICAID) OR THE GOVERNMENT AFFECTING CARE

"It's really hard to get specialized services, because you have to have a referral, because you have Medicaid. Your doctor has to try everything he can before he sends you to the specialist."

"Health care is a business model controlled by the insurance company, and it pisses me off that a doctor can say I need something, and, yet, an insurance company can say, 'We're not covering that.' Then I've got to be stuck with even less than the generics sometimes."

Participants acknowledged that being low income and/or having Medicaid affects one's ability to get care and the quality of care. However, just having insurance doesn't guarantee affordability of care.

HEALTHCARE WITH MEDICAID

There is a lack of providers who accept Medicaid, especially in some localities. Mental health care, specialty care, and dental care were specifically mentioned as hard to find care for. Participants talked about how, once they find a provider that accepts Medicaid, the wait is typically very long before they can get in, and that it is difficult to change doctors when you are on Medicaid. Participants feel that they are discriminated against for being on Medicaid (or for being low-income). Medicaid coverage can also be inconsistent, and losing that coverage can affect health.

"I have a hard time finding dental care that takes Medicaid. And then if they do it's in Lansing, and I don't drive."

"It's just really stressful, when I see him in pain, and I know his blood sugar is 300, but we can't get in with his doctor for almost six months, because they're full, and there are no doctors in the area that will take his Medicaid that are accepting new patients."

"But, if I try and change my doctor now, first, I'm locked into that doctor for the next year. Then, on top of that, if I do change my doctor, I still have to try and find a doctor that accepts my care, through Medicaid, that no one wants to take. I've had people tell me, 'No, we don't take that. Thank god.""

"The problem that I have with Medicaid—it's a blessing to have some insurance; any insurance is better than none. But when you make a doctor appointment, it's like they put you on the back burner. But if you have a ton of money, they're like, 'Oh yes, yes sir, come in the next day.' If you got Medicaid, you might be waiting a whole month or two months to get some medical assistance."

"I don't know about you guys, but I feel like being low income sometimes affects—or they look at your insurance, I don't know if that's just me..."

"No, they do."

"They do."

"[I was on Medicaid, and] they get me on a good medication. ... I felt like I was 20 again. ... I went out and got a job. They took away my insurance right away, I couldn't afford [the medication], I lost [the medication], and I end up back sick again, end up back in the system again, got my Medicaid back. I went back on [the medication], and my body rejected it. It didn't work on me this time. So, then that means they had to go up the next tier."

HEALTHCARE WITH NON-MEDICAID INSURANCE

One participant said that with Medicare, they have no issues finding providers; another said they have no problems finding providers with their private insurance. One individual with insurance said they had trouble finding a doctor who accepts it. Participants had good experiences with Veterans Affairs healthcare. Participants with insurance mentioned issues with getting care because insurance coverage or quality varied, insurance didn't cover it, and/or because their deductible or co-insurance was too high to afford. One participant mentioned the large-hospital takeovers of independent offices and how that caused them to have to pay more to see the same doctor.

"And [Ingham Health Plan] only covers what they refer... I don't have everything I need."

"It used to be really good insurance, and they just don't cover near as much as they used to. So, sometimes [my mom] does real well after a medical encounter with the bill, and other times she gets stuck with a ridiculous amount of money. Of course, she's on a very fixed income. But, right now, her biggest issue is hearing aid—she has to wear a hearing aid in both ears—and her insurance will pay zero on that."

"It's always been a great experience [with Veterans Affairs health care]. You know, I've heard some horror stories about some of the things that have been going on in veterans hospitals elsewhere, but not here. I've always gotten very good treatment here, whether it be Battle Creek or Ann Arbor or Detroit or wherever."

"My insurance is different from my friend's. My friend, she goes for that insurance, maybe she's paying more for her insurance, and then she goes to the good doctors."

INSURANCE-INDEPENDENT ISSUES AFFECTING CARE

Participants indicated that regardless of whether one has Medicaid or private insurance, the medical system can be burdensome for persons with limited income. This includes costs of medication, office visits, and incidental expenses and having to see a doctor in order to get medication refills. However, participants did mention providers who are willing to help patients reduce costs. Not necessarily specific to low income persons is that, in general, navigating insurance is difficult, and getting care isn't always easy.

"We have a huge deduction on our Medicaid. I can't even take him to the doctor. ... And so last week when my son was sick, the lot of okay, we're going to do this Nyquil thing, or we're going to do this. And hopefully it's not an infection, and if it is, where are we going to get the money? ... And he's under 19 years old; he's only 9. He should get insurance. It's not by my fault that he doesn't."

"It's [the elderly] pay for their medication or they pay for their meals. It shouldn't be like that in this county. I also see it, because I work with adjudicated youth, I see it there, the lack of healthcare that they've had throughout Michigan, not just in our counties. I've seen it in the schools because I've been a substitute teacher. And how kids can't – and you'll be like, 'Why aren't you at home going to the doctor?' 'Can't afford it.' Kids know this. Something not right."

"With my medications, my doctor requires that I show up every month for an appointment to get my medications. I can't afford that, so finally, I was able to talk her into filling them over the phone."

"For me, it's even small things. I have to pay for parking. To go to my doctor. I understand, your hospital's growing, you have this great new center for cancer, and you're a great heart hospital. I have \$10 to last me two weeks, and you want me to give you two of my \$10 to go see my doctor? I'll ride the bus."

Are you able to get the preventive services that you need, like yearly physicals, well-child visits, dental care, etc.?

MEDICAID

Particularly in the Eaton rural group, participants discussed that it can be hard to find preventative care providers (e.g., dentists, ophthalmologists) that accept Medicaid, are taking new patients, and are nearby. However, one participant expressed that Medicaid enabled her to get preventative care services and keep up on doctor's visits. Another participant on Medicaid was very satisfied with her family doctor and eye doctor.

"Because I am on Medicaid, I do get preventative services pretty well and can keep up on all of my needed doctor visits. But I know ... that once I find a better job and make more, then I'm going to be cut from services, and I'm going to have to figure out a way of health care, probably for me and my children."

NON-MEDICAID

Some participants with insurance other than Medicaid mentioned issues with getting care they needed because insurance coverage varied, insurance didn't cover it, they couldn't find a provider who takes

their insurance, and/or because their deductible or co-insurance was too high to afford—including for preventive services, like mammograms. Dental care was an area that was mentioned by a few individuals with non-Medicaid insurance as being not covered.

"I'm being told I have high blood sugar, and the medications they want to give me are not covered [by Ingham Health Plan]. And also, especially, the mammogram they want to do on me isn't covered."

"I had to be on my husband's insurance for a while because of the co-pays and everything, and even my prescription that I've been on for five years I had to pay for. And the doctor said, 'You can't just get cut off of it; you can't just stop taking it.' Well, what am I supposed to do? If I can't afford it, I can't take it? So, it's more of like a health risk, like you're going to a doctor to get help for your health, but then they're causing you to not be able to get that."

"I pay to go to the dentist because I don't have insurance that pays for it." [insurance was private, from employer]

Another participant said that in the home where they live, the program pays for the majority of health services, including medical, dental, and mental health—they "have everything that [they] need."

Have you ever tried to access mental or behavioral health services? If so, what was your experience?

ACCESS TO CARE

Many participants expressed frustration at mental health services often being hard to access, whether because they are expensive, it's hard to find providers that accept Medicaid, there are language barriers, there aren't any nearby, or because people don't know how or don't have the resources to do so. Community Mental Health (CMH) was criticized, especially over their perceived tendency to only see people who are very low functioning or who express a desire to self-harm or harm someone else; their perceived use of medication that causes side effects or makes you sick or crazier was also mentioned.

"In this area, this is a mental health desert. Despite the fact that we have two medical schools right up the road at Michigan State, no one stays at Lansing. People come, get their education, and then leave. So, when you need a mental health provider, it's very hard to find one. First of all, there are not large numbers of providers in this area. Then, when you start looking at providers who are accepting new patients, the number gets even smaller and then of those that are accepting new patients, those that accept Medicare or accept Medicaid, it reduces the number even further."

"I even went to MSU psychiatry, but the co-pay is \$40. So, it's like, I need my mental health [to be] good for not just me but my daughter, and yet I didn't get that because of the money, the co-pay."

"[CMH] said because I'm high functioning, I'm too high functioning for them."

"[Psychiatrists are] all booked, and without Community Mental Health, I can't find one, because everybody's booked. My primary care doctor right now, thank god, is doing my psychiatric meds for me even though he says I don't like doing them. ... He has 15 patients he told me that are trying to get in to a psychiatrist who can't, because Community Mental Health is turning them all down because they said they're too high functioning."

"I have Community Mental Health, or maybe a private practice or two, that offers therapy and will accept my insurance, and then Community Mental Health gives you, 'Do you hear voices?' 'No.' 'Do you see things?' 'No.' 'Are you suicidal?' 'No.' 'Are you homicidal?' 'Do I need to be, to see the doctor? Because I can be.' I hate saying that to people, but it's the truth, you know what I mean, and I will do whatever I need to do to get help."

CULTURE CAN ALSO BE A BARRIER TO CARE

'I've found that we Mexicans don't want to ask for help because, why, if we're not crazy? I [had therapy and] was not crazy, but I needed to learn in order to help my son."

INADEQUACY OF CARE

Quantity and quality of care [though not necessarily from mental health specialists] were also criticized by some participants.

"Medicaid limits you in terms of the number of visits that you have per year. When you're

dealing with issues of mental health, that usually is not something that can be resolved in 20 visits. Which, if you happen to have medication to manage your condition, those visits are split between seeing a psychiatrist and seeing a therapist. ... The alternative is to use Community Mental health if you have Medicaid. If you don't have Medicaid, then you're pretty much on your own. But with Community Mental Health, again, you're allotted only a certain amount of time and then you're on your own again."

"I'm trying to do everything I can for [my daughter]. You know, she's on Medicaid. What I didn't like, that Bridges Crisis thing, they let the people walk out. Then all they do is call the cops. I'm like, 'Wait a minute. I'm limited to what I can do.' [They say,] 'Just let her go, let her go. We'll get the cops to get her.' What if you don't find her? Then then the person's dead! 50-50 chance of getting someone back into mental health. They're already not thinking correctly, and Community Mental Health makes situation worse."

"I went to the doctor here, in Clinton County... I've been to about three or four different ones because they just either can't figure out what's wrong with me or they don't want to prescribe me anything that they don't feel comfortable with." "All three of those doctors, they told me I was too young to be on any sort of anti-anxiety medication. Yeah, I see young people abusing things, but when I've been on a prescription for five years, I'm not going to be abusing it, but I guess they just think that I am because I'm so young. But if I need that mental help and I know that something's going to work because I've been on it, why won't they?" "I've had someone say, 'Get the fuck out. Go see a shrink."

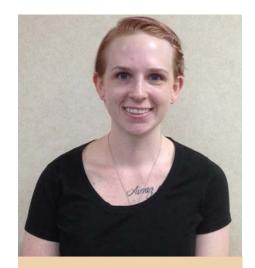
"I kind of felt like [the provider wasn't] really listening to what I was saying, and so I kind of sought it out on my own for a different counselor, therapist, psychologist, whatever you want to call it. And then I found someone that I feel that listens to me better."

Another participant spoke very positively about the State of Michigan and CMH and how they helped her and her son navigate and get mental health treatment.

"Any person can go [to CMH] to ask for help, and they give you information, and then, you integrate it to the appointments, or the psychiatrist doctor, or if it's just a therapist." Two participants discussed their attempts to access care when pregnant or postpartum. One individual has Medicaid coverage when she is pregnant, and she is able to see a counselor with no co-pay. Another participant has postpartum depression, and her insurance didn't cover inpatient treatment, and her copay for outpatient was too expensive, so she wasn't able to access care.

"They've always taken really good care of me pregnant-wise. My deductible is \$1,500 a month when I'm not pregnant, so it's like, don't really go to the doctor unless you absolutely have to. But as far as during being pregnant, I've been able to see a counselor. And I haven't had to have a co-pay or anything like that. ... So, I just try to, I guess, invest as much as I can while I have access to it, and then when the baby's born, I'm not sure how much that's going to change or what, but I guess I'll find out."

"I think that they need to have some type of program or some kind of something for [moms who aren't pregnant or have postpartum depression]"



"After I had my daughter, I got diagnosed with postpartum depression, and I already had depression and anxiety already, so it was just horrible. I just felt really down, and it's hard to explain how I felt...I ended up going to the hospital to get in to a mental facility, and they weren't able to even get me in to one because they said that my insurance wouldn't cover it." -Kaila W.

2. How do you feel about the relationship with your doctor or other health care provider? Do you feel that your health care provider listens to you? Do they make sure that you understand what they are telling you? Do they allow you to help make decisions regarding your medical care or treatment?

Participants have had both good and bad providers and good and bad relationships with their providers. One participant mentioned that having rapport is important, especially when you have a lot of health issues going on (which can be an issue with changing residents, etc.).

Good providers were associated with going above and beyond (e.g., willing to do "pep talk" appointments, telling them to call if needed), listening to patients (e.g., having time, feeling like your concerns are taken seriously, having the doctor prioritize your main symptom, having a relationship), complying with patients' requests and letting them make decisions about their care, not doing anything to make patients "second guess them," being on time, being respectful, and acting in a timely manner.

"[Veterans Affairs providers] are trained to establish immediate dialogue in a relationship with patients. ... They seem to cue in on my anxieties, my pains, and things to that effect. So, kudos to the VA certainly. They're doing a great job."

"When I went I told the doctor about my [hand circulation problem] but then I told him about my mother, she had poor circulation and they amputated her left leg. My brother had quadruple heart bypass. And so, I'll tell you what, he got me right in to a heart specialist to see if everything's pumping right and why this is happening. ... But he just listened and he got me right in to a specialist."

"I think it's somewhat confidence in which you feel the person from your country has more sympathy with you, so they listen to you. ... In my country ... I've always had the same doctor, and he's the one who knows my story, and has known me for many years. So, it's like a friend, an acquaintance, something like that."

"I kind of had to shop around for a good doctor because the first two we tried, it just felt like we were a number and they were shuffling us in and out. ... I found one that really listened, and she was good at explaining stuff to me in common language and not all the fancy doctor words. Once I found her, for my kids, I found out she was a family doctor. So, then I just moved to her too and now we just all see her because she's so great. But for a while it was hard to find someone that you could feel like they were listening to you and you could understand them, and you didn't feel rushed and just hurry up let's do your appointment and get you out. But it was worth it."

Bad providers were associated with prescribing medication inappropriately or offering expensive treatment or treatment that causes side effects, dismissing concerns that patients think are serious (which can lead to serious problems), talking to patients paternalistically (e.g., you need to do this or that), not listening, judging patients in ways that affect treatment, not being able to diagnose or treat a problem, and making decisions on treatment without really listening to the patient (or seeming like they don't).

"She didn't even know me from Adam to be calling me a drug addict. For the first time she'd ever seen me, I don't think she even read my chart or anything."

"And I'm like, 'Look, I have this, this, this, this and this going on.' 'Well, you're overwhelming me, and let's deal with this the next appointment.' I'm not waiting another four weeks!"

"The physical therapist [was] like, 'You know what? I think this might have actually been a misdiagnosis ... I think part of your muscular problem is that you have this damage to this area, that's never been treated, or looked at.' And, she looked through all of my medical records— nobody even bothered to look there. Even though that's where I'm saying the pain was." "All it took was somebody pressing their thumb in the right spot to help me. And no one would listen."

"Sometimes when you go to complain about something, [doctors] say, "No, no, this is not

related to this.' How can it be not related to this?' So they don't listen to you anymore ... about the complaint. They say, 'Don't interrupt me.' I talk about what happened to me so they know how to diagnose me, then [the doctor] doesn't give you enough time to listen to you. In addition to that, sometimes [the doctor] does something not related to your complaint. For example, you complain about pain in your hand, and [the doctor] sends you for something about the urine."

In terms of relationships with providers and getting care, participants spoke of needing to take an active role, including being their own advocate and working or having certain knowledge to get what they want from the relationship or in treatment. Culture was also mentioned as having the potential to effect relationships. Two participants felt that nurses/NPs/PAs are "better" than doctors—specifically that they listen, care, and are more engaged. One possible reason given regarding nurses is that they see fewer patients than doctors.

"Then, on the other hand, I've screwed up too with my doctor, where I had bouts of the pancreatitis that were not acute that I went to urgent care [for] ... But I never let my doctor know that, so all this time that [problem was getting worse]. If I'd let him know I was having these smaller attacks of it, he might've caught on then what was going on."

"I have a good rapport with [doctors] because they respect me because they know I know medical knowledge. I go in there, I treat them with respect though, I'm always on time for my appointments ... I discuss my stuff with them, I come prepared with questions, I don't take up a lot of their time. I understand they're busy but I come with intelligent questions for them and I try to make their time as valuable as my time."

"I have a good relationship with the providers that I see, but I think a lot of that falls up on me to be insistent about getting the answers that I need from the doctor. ... I do think that a lot of it falls on the individual to make sure that he or she gets what they themselves need from their doctor."

"I've got to be my own advocate, and if I don't, then my health is going to go downhill."

"[My doctor's] from India, and, culturally, he's just really different than what I was raised." "He's just very to the point, and when he's driving home a point ... 'You need to this!' And, I'm like, okay."

Several spoke of "firing" their bad providers or "letting them go," including for not listening. Having bad providers can affect how patients approach new providers or care.

"I had to have hand surgery a couple of months ago, and I went in to the doctor telling him, 'I'm going to watch every move you make, I don't trust doctors anymore. I'm going to be very vigilant, and be careful what you do, because I'm watching every move you make, because I've been hurt by too many doctors.""

"I just, I feel like I'm kind of lost now since I've been to three different [providers] here in St. Johns. And I've looked up some, but I kind of feel like I shouldn't even go because I've been let down these three times from these doctors. It's just like I'm kind of at a loss right now."

"I went through some really excruciating pain and bad times with one doctor. ... I fired a doctor, a cancer doctor, and hired another cancer doctor at a different hospital, different corporation, because my quality for life was very poor. She was using me for money; I did not need my medication she had me on."

Communication between providers also doesn't always happen.

"I've had a bad experience with [providers] exchanging information like they're supposed to, even when you request it. I said, 'I would like a copy of this sent to me and to my doctor.' I'll be lucky if I even get mine, my doctor seldom gets his. Like when you go to labs, like external labs and the blood test and all that. And then I'll see my doctor a few months later, he's the one who ordered them but he never got them."

Some participants mentioned that because they are overweight, their concerns are often put in the category of "it's because you're fat," even with problems that don't seem related to weight. They remarked that it's "like discrimination" or "size-ist," though

they did acknowledge that obesity can cause health problems. One example is that, when speaking about workplace accommodations for pain (e.g., standing desks), a participant said that doctors might not write a prescription if someone is overweight.

"You have to go to your doctor that takes four months to go see, that 'Hey, I'm getting a lot of lower back pain from my chair at work.' ... And, that's all they'll say: 'No, I'm not going to give you a prescription for that, because you're fat.""

"I feel like because I am obese, because I am a large person, I am automatically in the category of, 'It's because you're fat.' ... I don't have high cholesterol, I don't have high blood pressure, I have no pre-diabetic symptoms, I am perfectly healthy. My heart is good. ... But, every time the doctor sees me, 'You're obese. You need to lose weight.' Came here for an ear infection, which doesn't have anything to do



"I told the doctor I had pain symptoms, and I felt as if it were a baby [inside me]. It would move. And I told the doctor what I felt. And the doctor said, 'Take these pills, they're good for you, for the pain ... ' Because, since I had three babies, [the doctor said that was the problem]. And it wasn't that. It was a tumor. He never checked my stomach; he never sent me to do an ultrasound or anything."

with the rest of me, 'That's fat.' "I feel ashamed when I go to the doctor, and they pretty much just lay on me, 'Well, if you didn't weigh this much, if you did this, if you did that.""

"[Cheap, unhealthy food], or not eat, which one's healthier?" "That's kind of how my doctor makes me feel."

Participants also had a sense that time can dictate the provider visit. There was also comparisons made between American health care and health care in other countries—often the other countries' were seen as better for the factors being compared.

"I think that here [in America], because it's the government, there's a specific amount of time, let's say, five minutes, ten minutes, in which you'd be heard [at a healthcare visit, at] the most."



"It's just really stressful, when I see [my husband] in pain, and I know his blood sugar is 300, but we can't get in with his doctor for almost six months, because they're full, and there's no doctors in the area that will take his Medicaid that's accepting new patients. That's just really frustrating, you know?"
-Emily S.

3. What's your experience with chronic diseases? How do they change your life? How do you get treatment for your condition? What has been your experience been like trying to get it under control?

Changes/reductions in normal activities (and having to take medications) were the most talked-about changes that people had or chose to make in their lives due to having a chronic disease. Finances was and relationships were also mentioned as being impacted.

Participants' normal activities can also be impacted by chronic disease. When they don't feel healthy, their relationships can also be affected.

"The only thing that [my husband and I] can do is try to work as much as possible, even though me and my husband, we've already missed so much time. In fact, because of FMLA, he missed 495 hours last year."

"I used to be very involved in my church and I'm ... lucky if I go to church maybe what twice a month or even monthly? And I used to teach Sunday school, I can't do that anymore I used to go to festivals ..."

"The disease itself is life-altering because all of my life I was a working professional. I earned pretty well in everything. To go from 100 to zero in a matter of several months, it's a lifechanging experience."

"I'm taking a medication in which they forbid Vitamin K. And that's the green vegetables, onions, garlic, and many more. So, if I wished to lead a healthy life, I wouldn't be able to do it. It's very hard for me because I can't."

Chronic disease and feeling unhealthy can also affect finances and relationships (including having custody of children or children wanting to live with parents).

"My biggest obstacle right now is trying to maintain a job. I have a child support case in court tomorrow. ... With the disability of hoarding, and things, and I have ADD. So, it just, it makes it very difficult. I can't say that I've ever worked a 40-hour-a-week job, and I'm being court-ordered to pay this child support."

"It affects relationships, and ability to do just social things, and right now, my ability to drive is affected. I can still drive, I just can't drive long distances, right now."

"[When someone isn't feeling healthy,]
emotionally it'd be that the person ... would
be more isolated, wouldn't want to talk, would
stay away from the group. Or also, he could
think about other things ... like not wanting to
live ... feeling pain, fatigue, and a lot of stress."
... "The consequences of stress are very bad."

Medications were listed as very important to controlling many participants' conditions. A common problems with medication was that it can cause side effects or complications, especially if it's not being managed well. Not all conditions can be managed to the level the individual wants. Medication can sometimes be hard to get, especially with society's current drug problems. For conditions that relate to stress, such as high blood pressure, and to cope with emotions/ moods, participants also spoke of the power of pets.

"I take medicine for [my chronic condition]. I don't have a problem with it most of the time."

"Recently I was diagnosed with acute pancreatitis, and they say it was caused by my [medication]. ... When I got out of the hospital, I developed some type of breathing problem. But, I guess it was from too much fluids, where I was just lying there for 3 ½ days and they had me on IV and all that. And then being cut off from [medication] at the same time, which gets rid of excess fluid."

"Another doctor was the one that [saw that my medications conflicted] because when I went in, I didn't see my regular doctor. [He] took me off that medicine, and I was good. But you know I could have died over a doctor not checking my medicine."

"And the heart doctor came in and prescribed me [medication] to discharge me. But, they didn't give me instructions [and then I had a serious complication from an interaction]." "It's to the point where nobody will touch me, there's nothing they can do for me but just give me pain pills." "I've already accepted that if I can get my pain down to a five, I never go below a five, if I can get myself down to a five on a scale of 1 to 10, I'm happy. And most people look at me and go, what?"

"Why do [doctors] have to hear [it from specialists that they can't do anything for the condition] over and over again [before she can get pain pills]? They have to send me to certain places to get the same information back. It doesn't, it's just wasting tax payer's money."

"All three of those doctors, they told me I was too young to be on any sort of anti-anxiety medication also. Yeah, I see young people abusing things but when I've been on a prescription for five years. I don't think that I'm—I'm not going to be abusing it but I guess they just think that I am because I'm so young."

"Having animals is more healthy than people realize because it takes some of the stress away and you relax...You figure animals love you no matter what you do. They just love you period."

Sometimes conditions can be treated through only lifestyle changes.

"Before I was not having to take anything to control my sugar, and now I cannot get off the insulin because of this one drug I took." "My sugar was controlled by diet".

"I take a lot of medication four times a day, or three times a day. But, what I noticed, too, is that I didn't need those medications anymore, or vitamins, either, when I changed my eating habits."

"I'm not on medications now, I've been trying to manage it with exercise and food choices."

Participants discussed trouble explaining or having people understand disabilities, especially "hidden" ones.

"A lot of people don't understand [condition], because it's not that common and it affects everybody in a different way. So, it's hard to tell doctors, because I look normal, but then I wouldn't move, and it's like a whole different thing. ... So, it's kind of hard for me to explain to people so that they understand what's going on. So that's been a challenge."

"And, I heard [other participant] say earlier that he has hidden disabilities, as do I, also. So, you don't know what that means—so people look at you, and they don't think anything about that. But, they don't know the day to day struggles, just to get through each day."

"Every day is a matter of trying to take care of myself, but also trying to help other people understand what it is when I'm going through because when people look at me, they think that I look fine – I mean, I am fine, it is what it is, I have what I have, I'm not my illness, but still trying to get people to understand the things I experience as a person with [chronic disease]. It's difficult. It's very, very difficult."

Thinking back to the time before you or your family member developed the disease - what things, actions, or interventions might have prevented them from getting it in the first place?

Stress, environment, diet, and genetics were all named as contributing factors to getting chronic diseases. Participants said that while chronic diseases have a genetic component and some have unknown causes, lifestyle can play a role in helping to prevent many diseases—eating well and exercising were mentioned, and there was also a discussion about stress and the harm that it can cause. One participant said they would have tried a natural preventive treatment if they'd known.

"My dad has diabetes. ... I think that, for prevention, he should have had a better diet. And my father doesn't like vegetables, for example. He wants meat on everything. If the food is only vegetables, rice and vegetables, he says that isn't food because it has to have meat. So, to my dad, the main problem is his diet."

"... I think a lot of [my military experience] contributed to my stress and my high blood

pressure. But I think surviving the mean streets of [city] as a kid, or it could perhaps be even genetic, I don't know. So, with me it's just a multitude of different caveats or bullet point concerns that has contributed."

"I think that diet would have been different if [I'd been] able to do it for myself, because during the recession, my husband lost his job. ... So, we had to be on food stamps. Well, you've got to make so many food stamps try to last you as long as you can. Or if you've got to go to the food pantry, it's all carbs."

"I have a thyroid disease. Both my parents had hypertension. So, I purposefully growing up watched my salt intake. I didn't get [hypertension].

"I want to say everyday life – when you wake up, you know you've got to be able to pay a bill. It's coming. If it's not there, it's coming. And you try not to get stressed out. Every chance I get, I budget. I try to keep it under control because you aren't going to ever be stress free."

"I think lifestyle definitely has a huge impact, especially with me. ... [I]n your busy world and you're dealing with kids, work, whatever, things happen, you don't eat healthy as you could, not exercising All of those things build up and it's hard on your – I mean not just what you can physically see, but inside, clogging the arteries. Yeah, it definitely takes a toll."

"Hypertension and diabetes runs in my family on both sides. So, I had a genetic predisposition, which doesn't mean I had to have it, but I didn't become diabetic until I was almost 50. ... I do think maybe if I had continued to be more active at that time, I could have prolonged it or it may not have happened because at the time I was studying, I was fairly sedentary. ... I was eating whatever on the go, no concern about this was healthy. I think that contributed to it and maybe brought on the onset because I had a predisposition."

Education was mentioned as something that could help people make healthy changes.

"Classes like this one on education are very important, especially for our culture. ... And by sharing—depression is something that has occurred in my family, so being aware, seeing that people in my family have suffered through that, being conscious of being more active and that it's okay, and to look for help, or talk with someone. But, education, like this class is what makes it easier."



"I think when you're younger, you don't really think a lot about your health like that, because you're in the invulnerable mode where nothing can stop you. I mean, you don't feel any aches and pains; I don't walk up the stairs like, "Wow, what?" I think as I get older, I know my body more. I pick up on cues like immediately. So, and the brain factors, like I know exactly when something is off, whereas when I was younger, it might have gone a little bit longer before I realized, 'Oh my god."" -LaSandra



4. Sometimes the neighborhood / area people live in can help them to be healthy, or make it hard to be healthy.

Overall, being healthy might take a lot of personal effort—e.g., to find free/lowcost opportunities, to learn how to eat/ buy healthy food, to get to stores, to take the time to cook with fresh produce, etc. It also might require resources (time or money) or abilities (teach oneself about nutrition) that people might not have. Some changes that need to be made, like with the physical environment, may be out of participants' control.

What are the things around where you live that help you to be healthy?

Participants mostly thought of factors related to the physical environment, programs and resources, and community building/relationships when discussing what in the community helps them to be healthy.

PHYSICAL ENVIRONMENT

Many participants expressed that they enjoy walking and biking, so living near parks, trails, and areas where they are able to walk/ bike (like the river walk) help them to stay healthy (and nature also helps with stress management). Opportunities to access fresh fruits and vegetables (farmers markets, the mobile food pantry, personal and community gardens) were also appreciated.

"If you really want to look at [what helps people be healthy] in Eaton Rapids ... [It's] very outdoor oriented. You can always see people who are fishing, kayaking, swimming somewhere, riding bikes, walking, doing all that stuff."

"I'm really close to ... trails that go through the woods there, it's about two miles of trails. It's really beautiful. So, I walk. In the summertime I walk through there quite a bit. My mother lives like 2.2 miles away from me, and driving it takes 4 minutes, walking it takes 44." "I think one of the things I like most about this community is that in terms of things to do to help keep you fit, there is a variety that you

don't necessarily have to [pay] out of your pocket for because a lot of people are not able to do some of those things. But the river walk is there. It's for free."

"There is access to healthy food, especially in the spring and summer, where the community gardens are available there for anybody to take advantage of. They provide seeds. They provide tools. They provide plots if a person chooses to take advantage. But again, it takes a special person to seek that out and to try to take advantage of that.

"I think the farmer's market's coming to town helps people be healthy and connects us to those farm-fresh foods."

"But they just need to make sure that when they do a farmer's market, it's a legit farmer's market because they have one up there and people are selling stuff that is not food."

PROGRAMS AND RESOURCES

Participants appreciated programs that helped them to afford [especially healthy] food (including food distributions offered by various agencies, WIC, food stamps being accepted at farmers markets, Double Up Food Bucks, and nutrition education opportunities. Free and low-cost opportunities for physical activity, through programs and in the built environment, were also mentioned (e.g., Market Moves, Medicare Silver Sneakers, BCBS Winter Warm-Up, the river walk).

"I like [the food distribution] at Cristo Rey so well because it's all fresh fruit and veggies. You know, you can go to the other banks, and they'll give you boxes of mac n' cheese, boxes of stuffing—you know, things like that—and that stuff is not allowed in my house anymore. But that's great to get that fresh fruits and veggies like that."

"[The food distribution at Cristo Rey] gives you fruit and vegetables, some I've never seen before, and they actually explain to us how to prepare them, how to eat them. ... And so,

you get introduced to fruits and vegetables you've never eaten before in your life, which is a good thing because they're good for us. They give us recipes, and they even demo with the fresh vegetables there and they make a salad, and they have everybody taste ... It's a good program."

"Because I have Medicare and Silver Sneakers is a benefit, I get to go to the Y for free. I have a membership at Planet Fitness, and it's free. The fact that I can do that, it's more motivational than anything else because I don't have to try and budget or come out of my pocketbook gym fees and all of that."

"Something that kind of helps me stay healthy in my area is [certain neighborhood] also does their walking program during the spring and summer, where you go walk laps around Hunter Park, and when you walk—I think it's like 10 laps—10 or 5 laps, you get like \$5 to go spend at the farmers market."

COMMUNITY AND RELATIONSHIPS

Talking and bonding with others in the community and mutual respect were named as conducive to good health. Teen centers were mentioned as a place for kids to find community.

"Sometimes there are people there that are from a low income background. They have an understanding of what you go through to try to get health services, but they also have a background of what problems you're having. I think that's very important in ... getting an accurate report or an accurate diagnosis"

"I think the main thing is to learn to respect basic rules that help us to live in a society, and to be more empathetic. Because, I think we're losing that very much, in reality."

"If I have anything to do after school, or work, or whatever, I have that, and he has a sense of community [at the teen center]. ... A sense of community." "Yeah, that's important. A belonging."

What are the things around where you live that make it harder to be healthy?

Conditions affecting the physical environment, programs and resources, community and relationships, safety, housing, substances, and health care were all discussed.

PHYSICAL ENVIRONMENT

Some participants discussed a lack of safe places for physical activity (including unsafe sidewalks, no nearby parks, no nearby low-cost exercise options, and no indoor options (for when it's winter). Many discussed the food desert effect, where places to buy healthy, less expensive foods are harder to access (especially regarding distance and transportation) or fewer in number and places that don't have healthy food options and/or that are more expensive are closer or greater in number. Lastly, one group discussed the proliferation of vacant buildings in Lansing, which often have icy sidewalks.

"Our sidewalks are a mess. They're not safe to walk. If you have any ambulatory problems, they're not safe to walk them"

"I wish there were more parks available. I can compare, for instance, before I moved back to Lansing, I lived in Ann Arbor. In Ann Arbor, on every other street corner there's a park. They make a different use of their greenspace than we do. It's very hard to find a park without having to physically get in the car or get on the bus and go a ways to get to a park. It's really, really hard."

"It's like where you don't live close to a supermarket where you can get a variety of foods and at a good price, and some of them might go on sales off and on, versus the convenience stores, where they're going to eat you alive. You cannot shop in a convenience store and live like that for a whole month, from month to month."

"So many of our neighborhoods are really food deserts, because the big chain stores are on the outskirts. ... If you're anywhere in between and you don't have a vehicle, transportation access, you're left with Quality Dairy and some of the

mom-and-pop stores on the corners that don't necessarily have healthy food."

"Something that makes it difficult to be healthy is the two-hour walk to Family Fare for me.
So, I could just go to Family Dollar and grab stuff to eat. And everything there is in a box or in a can."

"[There are] six pizza places in this—" "Little town, yeah."

"I tink [vacant houses are] a lot of the problems with the East Side. There are a lot of vacant houses, houses that have been torn down. You can only do so many gardens. Some of the space, when she was talking about the parks, they should be using some of those spaces as a small park."

"A lot of our vacant buildings and homes and stuff are actually owned by the county because the land bank, but the land bank doesn't do anything with them. You end up with the sidewalks that don't get taken care of, because it's not an individual who the city can ticket. It's the county itself that owns the properties. There's a lot of work to be done."

PROGRAMS AND RESOURCES

A lack of affordable exercise programs, and that advertising for those that exist isn't always good, was mentioned. Even with assistance programs, some people still can't afford the food they need (healthy food is often more expensive), and some food assistance programs (e.g., Project FRESH) are limited to certain demographics and/or times of year or don't give out very healthy food. Farmers markets can be expensive, also, and are often only open for part of the year. A need for nutrition education—how to cook (healthily), what items in stores are healthy (without additives, etc.), and how to make healthy choices with the resources you have—was also mentioned.

"I think there's a real need for education. ... I think if more people ... were educated about how to [read labels] and the importance of doing it, then perhaps more people would do it. But it's very difficult to find the education you need in order to make the better choices. Having, I don't know, like an education class of, here are five stores that are local to you and here's a good 40-item list of things that don't have a ton of additives and they are affordable.

... Or even just teaching people how to make things themselves."

"It's like well [ALIVE is] not even comparable to the YMCA. That is way more expensive than YMCA, because YMCA helps with the lowincome slide. They'll put you on the sliding scale for your income and stuff. So, I was really hoping for the Y [in Eaton Rapids], and I don't want to drive all the way out to the one on Waverly here."

"Sometimes I don't eat real healthy. Sometimes, you don't have the money to be able to eat real healthy. So, I use the produce programs and stuff that they have. Every little bit helps out"

"I feel like that's another problem: the cheap food is the not-healthy food, and the more expensive it gets is the healthier."

"[It's cheaper to eat like crap,] especially when you can get ramen noodles, four for \$1. And buy a bag of chips and a can of chili, and if you spread this night out of this, the next night this. It is what it is. Too much money for state assistance, which is fine, whatever, I don't really want your assistance; I'd rather do it on my own. But, it is hard for someone who has state insurance, whose income is above the poverty line. So, you don't get assistance, and when your doctor lays into you about being large, and different things like this. Well, what do you want me to do? I just won't eat, I just won't eat. I go through this phase of, I'm just not eating today."

"You know, chips or not eat, which one's healthier?" That's kind of how my doctor makes me feel."

"If you've got to go to the food pantry, it's all carbs." It's not good for the development of your children."

SAFETY

In the non–Clinton County and non–Eaton rural groups, a lack of safety was identified. Participants said that nearby parks and neighborhoods were unsafe (due to drugs, liquor store/"drunks", prostitution, fast traffic, loose/vicious dogs, etc.).

"Well, we have parks where I live—I live on the east side—but I guess I live in the ghetto side. We have a lot of drugs and prostituting and stuff where I live. So, the park is nowhere to go and hang out because the cars will go by

and beep at you thinking you're prostituting in the park."

"The whole neighborhood called Animal Control. They tried to get the pitbull ... Animal Control told us, 'Find out who the neighbor is.' Are we supposed to be investigators or something? I don't care who owns the dog as long as the dog don't bite my head off or foot off. We've got to be safe. We've got little kids running around the neighborhood. We don't need nobody getting bit."

"We deal with the drunks all the time; they're walking down the street. We deal with the drug houses; we deal with the guns."

HOUSING

Participants noted difficulty in finding good, affordable housing. Section 8 is seen as hard to get and a very lengthy process. There is a lack of affordable housing options being built; there is a lack of houses for people that need them. Houses can be very close together, which is seen as a potential safety issue (fire, construction mishaps, etc.). Resources to help fix up the interior of houses or to make them handicap-accessible are needed. One participant mentioned that it's hard to find barrier-free subsided housing (especially without a lot of smoking). Participants noted that people can't always choose where they want to live—rather, their income or other situation dictates it—and that there are health disparities between the inner city and suburbs.

"They need to build more houses, and where all they're tearing these houses down, they need to build houses, because there's a lot of people out there that need places to live." "And they're making them into gardens, and it's crazy ... We need people there, not gardens."

'There's a lot of disparity when it comes to the neighborhoods. I think most people want to live in a vibrant neighborhood that's safe, that has activity, that has good neighbors, those kinds of things. I think everyone wants that. But there's very much a difference between the inner city and the suburbs. If you can afford to move to the suburbs, it's a wonderful thing. If you're in the city, you're stuck. There's not a lot you can do. So, that disparity, it shows not just in the neighborhood itself, but in the health of the people in the neighborhood. If you look around you and your neighbors are unhealthy, chances

are you're unhealthy too because everyone around you is like you."

"[You] shouldn't have to be homeless to be able to get [Section 8]. As long as the place that you're at accepts it, that should be good enough, you shouldn't have to be put on the [long waiting] list. And no wonder, because it's expensive. If you're on Social Security disability and you have to pay rent, \$600-something a month, that doesn't leave you much to live on."

SUBSTANCES

Substances weren't, overall, a large focus of any of the groups. However, there were some issues related to substances that can impact health.

"I don't think there is any [addiction treatment] in Eaton Rapids, but for the hospital if you OD or something. A lot of it's just swept underneath the rug, which leads back to the mental illness issues and everything else."

"And what makes [gardening] difficult is that some people go out to smoke. And we're in the garden, in a place that is clean and for relaxing; you're smelling the smoke."

"I know alcoholism's a big thing in this community. We have more liquor stores and more bars and more places to buy liquor than we have anything else. And many, many people utilize it to the point of sickness."

MISCELLANEOUS

One group discussed a lack of awareness, community, health care (for those with certain insurances, like Medicaid), and people and service providers who care. Another theme that emerged in one group in particular was that of community responsibility—some issues ("crappy" houses, gun violence) were seen as things that are the community's fault: some believed gun violence lately is kids' fault, although others remarked that the issue is complex (there was agreement in the group that adults need to safely secure their guns). Finally, one participant mentioned that speed of diagnosis can affect health.

"Part of the problem is awareness. Change starts in your own community, and it doesn't matter what kind of change. Drug use, mental illness, spousal abuse, being poor, illiterate, whatever it is, it all starts within your own community. ... There's just not enough awareness, I think."

"I think that's part of the problem, is you have a lack of community. And I don't just mean your neighborhood, I mean Sparrow working with McLaren doctors, to work with Community Mental Health, to work with DHS, to on down the line. And, I think that's a lot of the problem, and a lot of the stigma, because I have state insurance, because I have this, because I have this; you get put in these categories, you know, you're in a category. ... It shouldn't be like that, it should be, we're all the same." "It doesn't matter if you have McLaren, Medicaid, or Blue Cross/Blue Shield, or you're government insurance, because you're a government employee, or all those things shouldn't matter. We should all receive the same respect and treatment, no matter what."

"My grandfather passed away. ... I missed a [dentist] appointment. The man who raised me, who is basically my father, passed away, and because I forgot I had a dentist appointment, because I had this major life event ... I couldn't get dental services anymore. 'Oh, you missed an appointment; shame on you.""

"I understand there are few professionals who go into medicine or dental care to not make money, there are those who genuinely want to help people. But, there's not very many, and there are not a lot of opportunities, and there's a greater need than there are providers." "There are service providers that do care: they are stretched beyond thin, and then the people that are the ones that allow them to either provide a service, or provide additional services are like, 'No, don't worry about that; that's not important. [Person with tooth problems,] you don't need teeth! Don't worry, you'll be fine!"

"[People] don't care of their house; they're always in the streets, and they condemn the houses. That's why the other houses are getting knocked down—because the people that rent them don't take care of them, so they have to knock them down because they're not up to code, the landlord doesn't want to put all that money back in there."

"[Gun violence is the fault of] the kids and the adults, because the adults by law, if you have a gun you're supposed to keep it locked up.

"I know sometimes the hospitals, they have a hard time reading different symptoms or diagnosing your blood. You don't get immediate help. Sometimes you have to wait. That will cause problems."

5. Thinking about the future...Do you feel your children are likely to be healthier than you, less healthy than you, or the same?

Responses to this question seemed pretty split. Many participants said that this is dependent on changes that may or may not be made, but that there is the potential for children to be healthier.

LESS HEALTHY

Factors that participants took into consideration when predicting the probably-worse health of children in the future focused mainly on food. Technology, today's culture, and today's youth's motivation were also discussed.

FOOD

Issues surrounding the negative impact of food on health included the addition of additives and chemicals to, and environmental (growing) concerns around, food; the higher cost of healthy (e.g., organic) food; the presence of food deserts; schools' food and drink options; the modern desire for convenience (e.g., fast food), instant gratification, and unhealthy food; and youth not knowing how to cook.

"In today's world and generation, they didn't practice what the older generations did, and that was, everything was homemade, fresher ingredients. Whereas today you have far more additives and preservatives and this and that that really you can't even spell out anymore."

"I'm surprised at all of these young folks that don't know how to cook. What scares me is, if they don't know how to cook, even if they have access to healthy stuff, how are they going to prepare it?"

"When I went to elementary school, we had a regular cafeteria with good food in it. They didn't have the junk food like pizza and stuff like that, which I like. But, still, it didn't have all the junk food. We had real good, healthy food."

"But [pizza is] considered healthy because it has whole wheat crust. That's why they consider it healthy."

"I think pizza's on the menu once a week here at school."

"So many of our neighborhoods are really food deserts because the big chain stores are on the outskirts. ... If you're anywhere in between [the outskirts] and you don't have a vehicle, transportation access, you're left with Quality Dairy and some of the mom-and-pop stores on the corners that don't necessarily have healthy food."

TECHNOLOGY

In the Spanish-speaking group, technology was attributed as the cause of distracted driving and less exercise / a decrease in sports; no communication outside of technology was also seen as affecting youth's heath.

"I'd say that [children's health] will be a little worse. Before, we weren't allowed to be watching television so much. What they'd have us do is play sports. Right now, no child wants to do anything that was done before. Before, when I was a child, there were ropes to jump with, there were different things, play ball, there were many healthy games. Now, I sometimes, I even tell my children that we should play something like that. 'Mommy, that's not interesting.' How is it not interesting? It's interesting because it's a sport."

CULTURE/MOTIVATION

Today's culture of convenience and instant gratification, time demands, and youth's lack of motivation to work or do something with their life were given as additional factors contributing to poorer health.

"There are many young people ... not interested in doing anything normal for their lives. They don't care much. They do drugs, too. They smoke. The girls now, they get pregnant. Who takes care of the children?"

"The grandparents. And I blame welfare, too ... I'd say that well, they get pregnant the first time, okay, let's help with this baby. If you get pregnant again, we're not going to help you again. Maybe a little bit, but you have to work. And yes, they have to work, but they only work the hours they want to. Why? Because they get tired."

"We live in the time where everything is instant gratification. We microwave everything."

WAGE STAGNATION

"The cost of everything is rising but yet people's wages and income is not rising to make up for the increased cost. So, just based on that factor alone, I don't think that the kids today are going have healthier lives."

MORE HEALTHY

When considering that children will likely be healthier, participants mainly discussed food/nutrition.

FOOD

Food-related factors that lead to a promising outlook on whether youth will have better health are the already-existing good eating habits and enjoyment of fruits and vegetables that parents/grandparents see in their kids and more knowledge about how bad some additives, trans fats, etc., are.

"They're making a big deal out of what they take out of food, whereas when I was little, they were like, This is cheaper; let's put it in the food.' Well, now we've seen it doesn't benefit us and they're starting to advertise, 'Well, we don't have this in there.""

"[My kids] love their vegetables. They eat very well, their kids eat very well, and now my great-grandchildren ... they eat avocados, they eat bananas. These kids are teaching their children to eat good foods, not garbage." "So, I think my great-grandkids are going to eat better than anybody."

OTHER

Education (even in kids TV shows) for today's youth and parents and WIC were also factors that could contribute to healthier futures for children.

"I think the younger generations now, they have a lot more education and they're a lot more active, when they get off their video games and their computers." "Something else I do with my five-year-old, he likes watching Daniel Tiger's Neighborhood, and they always do a little song in every episode. One is, you have to try new foods that might taste good. He's always telling his sisters that. ... So, it's cute, and it sticks in his mind, and I love that it sticks in his mind."

"WIC has been a huge asset for me ... WIC is like, there are all the healthy foods that we can provide for you. And that helps. But they also do their counseling, and they'll teach me things, [like], even if you put a healthy meal in front of your kid, you know how to make them finish the whole thing."

NEUTRAL

Some participants considered the following factors as having the potential to make today's youth healthier than us.

TECHNOLOGY

Technology could be a health plus for youth (by giving them access to information, healthy apps, etc.)—but only if they use it to their advantage.

"All of us in here probably are computer literate some, and you can get on the computer and look for a recipe. Knowledge is no good if you don't use it to your benefit. You can have all the access you can, and if you don't make healthier choices, then you're still in the same boat."

FOOD

One participant said that if healthy food becomes cheaper and unhealthy food becomes less cheap, that will help the next generation be healthier.

"With the cheap stuff being not-so-great food ... if that changes as [my daughter] grows up, I feel like she'll be definitely healthier than me."

ROLE MODELS AND FAMILY

Parents having a healthy relationship and having strong family foundations and healthy habits and teaching them to their kids and grandparents getting positively involved in the family can lead to positive health outcomes.

"I'm hopeful that once we, as adults, become aware of the choices we're making, then we realize that our children and grandchildren are modeling what it is that we bring to the table. Perhaps that will change the way we do things

or we can change it to help them."

"Depending on the mom and dad, depending on the relationship between the two, is what the child's health depends on. If both parents have a balance with their food and everything, a moment for their phone, and have a schedule ready for everyone. So, it depends on that is how their child's health will be."

"The majority of older people are the ones who have to get a little more involved, like [grandparents] have to be a part of the family ... help their children to instill things in their grandchildren. Like, healthy food and having a schedule for everything, because technology has advanced a lot."

One participant mentioned that "We're trying to at least have something, good health, to learn. There are programs. We're trying to learn good things. Health or also, in school, there are classes on medicine, on how you should take care of yourself, and on all of those things."



"When I was small ... going to a restaurant was almost unheard of. It was all homemade food. And, boy, was it good and healthy because it didn't have all this other junk they put in food today. And, you know, people as a whole were healthier back in those days. They didn't seem to be having the health problems that people have today. ... We're losing something."

–John "Cubby" Davis



"I know my kids are pretty healthy They love their vegetables. They eat very well, their kids eat very well, and now my great grandchildren ... they eat avocados, they eat bananas, these kids are teaching their children to eat good foods, not garbage."

-Sue



"But I'm thinking going forward – even statistically speaking and even the census has demonstrated this but the life ages for both men and women have decreased. And I think that is the trend going forward if we don't change our eating habits. And it's ... also pollutants and garbage..."

-David

6. We are interested in making our community a healthier place for older adults to live. What things do you think are important for that to happen?

Increasing community center-type experiences/programs and improving care in nursing homes and rehabilitation centers were the two most-discussed ways to improve the health of seniors.

TRANSPORTATION

The improvement of public transit services came up in the Eaton rural and Clinton County groups. It was mentioned that Eatran isn't easy to get ahold of, and that it would be good if Clinton Transit had expanded service hours. One participant mentioned that getting to community centers isn't always easy.

"There are a lot of community centers and places to go exercise at, but if you're going to take an hour or more to get to a place and then go back home... That's what I've seen in the community a lot. A lot of people want to participate, but there's no way to reach these places."

"[Clinton Transit] is the only bus company in Clinton County, and a lot of low income, elderly, handicapped, mentally disabled, people depend on it, especially for doctor and medical appointments. And they're great at doing that, but if they could go later in the evening, past 5:30 pm or 6:00 pm, whatever it is. And then they're shut down completely on the weekends."

"Even if they stayed open till like 2pm on a Saturday and then were available for people who go to church—" "—church or a Saturday, maybe something recreational."

COMMUNITY AND SUPPORT

It was recognized that seniors need a community to support them, including advocates and good neighbors. Increasing community programs, the importance of (and perceived lack of current) common neighborliness, and improvements for safety and health were mentioned.

"I think one of the main things is just to be more neighborly. When I was growing up, we used to check on our neighbors, and if there were seniors around and if their family wasn't there, we'd check on them, 'How are you doing?', if they need anything. ... But that, I think, is one of the big issues, especially for seniors, because we need to care about them more, check in on them. ... That's what I don't see and I don't know how to encourage that or make that happen, because people are just set in their ways."

"I think they need [a strong] advocacy group, people that will advocate for them. Because when they don't ask for help, then they need to have someone to help them ask for help because they don't know where to go."

"A lot of the things that help the elderly are those community center-type experiences, because if you're over 63, and you're retired, your kids have moved out, and your family's gone cross country, or out of the country, you're alone. And, if your spouse dies, God forbid, because then you're truly alone."

SAFETY AND PHYSICAL HEALTH

Suggestions for improvements related to safety and physical health included financial support for making homes accessible and making the neighborhood environment safer. Suggestions to help ensure physical health included improving care in nursing homes and rehabilitation centers and ensuring quick responses when seniors need assistance (e.g., food assistance).

"[To make our community safer for older adults, it's important to] have resources to help build ramps, have resources to help modify houses."

"Let me walk through the neighborhood without getting chewed at by a dog."

"It's not safe for older people some places. I don't feel too unsafe in Lansing ... But walking in the neighborhood nowadays is so hard, and that's one of my biggest concerns ... too many people who don't care about their dogs."

"You know, [a nursing facility] only bathe[s] them twice a week. Like, mandatory, by law?"

MISCELLANEOUS

One participant pointed out that within the "senior"/"older adult" group, there are different groups (e.g., younger, often more affluent, two-person-family seniors; older, widowed seniors who live alone and might have trouble making ends meet), and that needs to be recognized and an effort made to reach the latter group. Education can also be a helpful tool in improving seniors' health. It was also recognized that seniors may not want to ask for help because they have pride or want to be independent.

"A lot of [one group of seniors] are individuals who get food stamps. They may have Section 8. They kind of are a forgotten part of the senior demographic who have a hard time making ends meet every month, who run out of food. ... How do you reach that group of seniors? Again, when you're dealing with that group, you run into some of the same problems that you do with people who have children. ... Nutrition-wise, what choices do you need to make in order to maximize your nutrition while maximizing the limited income that you have? How do you prepare foods? Those are all things you're faced with when you have children and you're on a limited income but you're also faced with when you're a senior on a limited income because perhaps now, you have health issues or mobility issues you don't have when you were 20, 30, 40, 50. There has to be the recognition that within that term senior, there's a spectrum of what senior means. ... it has to be a recognition and then a concerted effort to do an outreach to those people, I think."

"I have a mother who's 84 and she's proud. ...
She doesn't have a car, but she gets SpecTran,
and she will not ask me to pick her up. She
will not ask me to take her places. It's that
generation. Her generation – you can't do
anything for her. I try, but she just will not
accept. ... But as she gets older, I can see she's
getting more frail and more fragile. ... How do
you get them to see 'you need some help now.'?"

7. Some people have more opportunities than others. In an ideal world, what would need to change in order for everyone to have the opportunity to be healthy?

Participants across several groups suggested that health care, including mental health care, and access to health care need to be improved. Changes to community, programs, and resources and infrastructure were also mentioned.

ACCESS TO HEALTH CARE

Participants spoke about wanting more affordable and/or more equal insurance coverage (including universal health care) for everyone.

"I think right now we're kind of in an all-ornothing situation. There are people who have
absolutely no help whatsoever, and then there
are people who have full [health] coverage. So,
when you talk more about an equity situation,
maybe person B, who had nothing, is brought
up a level, that's still better than where they
were. It's a step in the right direction. It's not
in the direction of communism or socialism,
and they may not have everything that they
need and they may still have to say no to some
things or even supplement what they're getting."

"I just feel that health care should be a right, a basic right, and not a privilege to those who can afford it. It's kind of an insult to human dignity to look at it in other ways, I think."

"I know if we had access to that, where all of our citizens had [universal health care], we would be better off. But I doubt if this country is willing to move in that direction."

"I think a lot of the inequities in the system and the way medication is given, the way that medical care is provided, there are disparities in the system, and, unfortunately, it always comes down to the battles between the haves and the have-nots. ... Everyone can see what needs to be done, but in order for that to happen, someone has to be willing to give up something so everyone else can have. Unfortunately, in the world in which we live, no one wants to do that. ... The sad part of it is, as a society, everyone comes out better when there is equality all the way around."

IMPROVEMENTS TO AND NON-DISCRIMINATION IN HEALTH CARE

In many groups, participants mentioned that the care people receive or the accessibility of care is affected by their insurance, whether due to treatment constraints or discrimination, with Medicaid being most negatively impacted. A broader acceptance of different insurances was a desired change that was brought up. Two participants offered suggestions to improve care for persons with Medicaid, including requiring that a certain percentage of a provider's patients have Medicaid, requiring community service hours, or offering incentives (tax breaks, etc.) to providers. Another suggested changes to the healthcare system included more appointment hours. Needed improvements to mental health care, like it being more affordable, having more services, and providers being more understanding, were also discussed. One participant felt that doctors need to change how they interact with patients, such as admitting when they don't know something.

"I almost feel like, why aren't we making this a state law, that every doctor must offer at least 15 hours of community service a month, to practice in the state of Michigan?"

"Or, a certain percentage [of their practice] for Medicaid."

"I think with the Medicaid, because it's so limited to certain care, I think they should find a way to expand that. I think it's very limited, what you can go to and what you can get."

"And the discrimination is crazy, like she said, on what kind of insurance you have, because I notice the difference. I'm on Medicare and Medicaid now. And since I've been put on the Medicare as my primary, the difference in the treatment level that I got when I was in [the hospital] this time was a heck of a lot better than when I was just on the Medicaid prior."

"I think they should improve Community Mental Health. They need more, stretch out more help, more resources to help."

"I just think [mental health care] should be a lot cheaper, and that would make everybody in an ideal world – if everybody had their mental health in check, then everything would be okay."

"Everybody to have access to pretty much every kind of [health benefits: experimental drugs, medicines, testing, etc.]; not just the big athletes, not just the big stars on TV."

"Obviously, mental health care is something that's critical. Just turning people out into the streets is not solving the problems. People don't get better being turned out into the street, in the same way that people don't get better with their health if they don't have proper nutrition or have access to proper nutrition."

"I'm tired of doctors taking a guess. If you don't know something, just tell me, 'I don't know something.' Don't tell me, 'Try this, so I can kill you.' I want you to tell me the truth. This is my life. My life is in jeopardy. ... If he doesn't get this medication right ... then [my daughter's] back in the hospital."

COMMUNITY, PROGRAMS, AND RESOURCES

Enhancing a sense of community, making more community resources available and known, and greater community awareness and less stigma were discussed, especially in the Spanish-speaking and special needs groups. Ideas offered included communitybased programs where resources and efforts are pooled so that everyone benefits and more helping programs. The importance of extending a hand and reaching out to neighbors and other community members was emphasized. In the chronic disease group, improvements in access to healthy foods and nutrition also emerged as a desired change. These improvements could include increased affordability, having healthier food at schools and healthier Meals on Wheels (and ability to cater to

dietary restrictions/needs), and increased nutrition education. Education of health topics, like nutrition, was mentioned by several groups as a way to increase health.

"The country I'm from, the majority of the people cultivate everything healthfully ... Sometimes, they have community programs in which the community comes together to plant vegetables. And when the harvest comes, each person takes a little bit to their house, from the work they've done."

"It would be beautiful to ... have housing where ... single moms can live there, seniors can live there, and things like that, so that, I think of some of these great senior citizen men in the community, that are still able to be functioning people, could help a single mom with electrical, plumbing, handyman repairs, so that you're feeding into each other. Because a lot of these older people, their kids have moved away, their grandkids are gone. But, they would be a great mentor for single moms' kids, who need a break, and the kids could go hang out with this adopted grandma." "Something where [housing is] affordable."

"[There needs to be a] resource book. I know [Capital Area Community Services] does a book, but that's way out towards Vermontville. No one knows about it unless you've done services through CACS and gotten their commodities. They need to have a program where there's commodities out [near Eaton Rapids], more so CACS compared to just going to a food bank. And make it accessible for our seniors and for anybody who needs it that is on that line. And a resource book—pick up that book and be able to say, 'You know I can't pay my rent today. I've got denied from DHS. What's the next step?""

"With my friends, there was a woman that, I don't know if she doesn't have a house, or what. So, we thought that forming a little group and asking her ... if she needed medicine, or if she needed help, so that we could help her, since she doesn't communicate much with people. We can ask, we can talk to her and see if she needs help, or if she is sick. So, to me, that's like having a team to be able to help people like that."

"Something like [the YMCA] in the community would be great for the teens, because YMCA has a lot of the teen programs."

"[In an ideal world we could have that would help everyone to be healthy,] healthy food

would be less expensive, and the junkier food would be more expensive."

"If I had been taught that earlier, eating healthy,
I would have done better than eating what
I did before, but I wasn't taught that. That's
something they need to teach everybody."

INFRASTRUCTURE

Additions of physical infrastructure and related programming could also improve health.

"I think, if nothing else, like we said, the biggest struggle is exercise. I guess maybe having ... some kind of community center, or some kind of physical – yeah, there's [Gym], which is \$10 a month, but like these people are saying, if you're struggling to just pay your bills, that extra \$10 is either a meal or gas. [discussion] And, just some kind of community center where there's swimming pools ..., a sauna ..."

"We have all these empty schools, all over Lansing. Use them! There's a beautiful architecture that we could save, if we just opened them up to the public. Whether it's housing for the poor, or it's food kitchens, or it's community centers."

MISCELLANEOUS

The need for and loss of "old-school discipline" was discussed by a few participants in one group as something that has eroded and is needed to address some of the youth-related issues today (like drug use). One participant stated the need for parents to be trauma-informed and have their own supports. Another lamented that the drug issue has gotten so "out of control" that there's no easy answer to what we can do about it.

"I think there also needs to be a source of ... what can cause trauma. I don't think some parents are very knowledgeable on that in a kid's mind. And I also think that there should be more resources on when parents need a break. And reliable resources ... actual support groups to say, 'Hey, maybe you're struggling a little bit; let me help you.' And with no judgment, because I think a lot of parents feel judged nowadays."

"In answer to [what the community can do to address the drug issue], because today's society with laws and nuances, there's pot stores now for medical marijuana cards, things in community awareness campaigns perhaps,

law enforcement. There's no answer to that question. What can we do to impede or abate this issue? Really, it's gotten so much out of control. But there's access, like I said, to pot stores. What's next, I don't know. So, it's the world has changed."



"Health is having an advocate. [You have to] have someone to teach you the ropes." -DeCarlos S.



"We ride bikes a lot too ...
Yesterday [one of my kids]
needed a pair of baseball shoes
because baseball is starting up.
So, instead of driving the cars
in to town—we live out in the
country toward Dewitt—we
rode our bikes to Dunham's
and got his shoes and rode our
bikes back. And we all had our
helmets on."

-Brenda M

The following themes emerged across a variety of questions and among many of the focus groups. They represent additional dimensions to perceptions about health in our communities.

SCHOOLS

The most frequent reason for bringing up schools was to discuss the food they have for students. Participants recognize that some students rely on school meals and don't necessarily have another option (like bringing cold lunch or getting better meals at home), and that schools should be serving healthy meals. Many participants were very critical about the lack of nutritional quality in food served at schools.

"A lot of kids, the only square good meal they get a day is that school lunch."

"That school lunch, yep, or breakfast."

"I know some of those kids, the only meals they got were the breakfast they got at school, and the lunch they got at school."

"I think they need to take pop machines out of the schools as well, especially the high school. My son said there are kids that come into class every day with a 20-ounce of pop. And I don't think that's very healthy."

"The [chocolate milk at schools] is full of crazy crap ... it's got all the sugar in it. But that's supposed to be part of your healthy lunch because it meets federal criteria, which is questionable."

"[China and Japan have healthier] school lunches, it's pretty crazy. Even Europe has better food choices."

Some participants said that kids aren't being taught about nutrition or cooking today in general. Schools were mentioned as a good place where kids can be educated on health topics.

"Part of the problem is awareness. Change starts in your own community, and it doesn't matter what kind of change. Drug use, mental illness, spousal abuse, being poor, illiterate, whatever it is, it all starts within your own community." "I'm saying, that's where school comes in." One group agreed that the school system isn't great for kids' well-being—they have to get up early, do standardized testing (not seen as a good way to evaluate kids), and are overworked; there's no hands-on learning.

"They go to school way too early. All [school] is is testing. ... There's a Dr. Seuss saying, 'If you judge a fish by whether it can climb a tree, you're going to think it's stupid its whole life.' If you think my kid is stupid because of his test score, or this, that, or the other, no."

Issues of school safety were also briefly touched on, including the drug problem, lack of security, and school shootings.

"How can our kids be healthy in schools when there's so much danger? The school shootings and that really bother me."

LAW, GOVERNMENT, AND POLITICS

The potential for law, government, and politics—on local, state, and federal levels to impact health and health determinants was mentioned across groups. Federal government was said to affect health and conditions impacting health, for example, through the agencies like the FDA, federal school nutrition criteria, and requiring better nutrition labeling on foods. State laws, like Michigan's step law, can help determine what medication people can or cannot get. Locally, the enforcement of ordinances can affect health conditions. Laws dictating care in given in nursing homes were mentioned, as was the fact that judges can determine if people can receive disability. One participant said his care-seeking behavior will potentially change due to politics and legal deliberations.

"A lot of that, when people go out of the country [for health care] it's because they're getting treatment that's not FDA-approved. So, universally, it might be working in Europe or Mexico or Canada, but in the United States, the

FDA hasn't approved that medication. So, the doctors can't use it here, so you have to go where you can get it. You see that happening a lot."

"When it snows and ices, the sidewalks, you can't go through them. The neighbors, the homeowners, they don't shovel, and the city doesn't enforce the ordinance. ... I think that's one of the issues, is the sidewalks and the ice and making sure the neighbors have got a path. There are people that have got to bring their kids in strollers in the winter."

"Legally, you only have to feed your kids one square meal a day, because some people don't have it like that. But, think about it, our kids are up 14 hours out of the day. They're active; they're moving around. They need more nourishment."

"But I'm debating, maybe I should push to have this operation because of the political situation we have. That could go away overnight. And then I'll have no insurance, and I'll probably get stuck with [paying] \$100,000."

GUN VIOLENCE

Most of the groups mentioned gun violence, ranging from saying it's a barrier to health for today's youth, being worried about someone being violent in one's neighborhood, and in terms of who should be blamed for the gun violence, especially in youth.

"I think a lot of seniors become antisocial because there is a lot of crime that's getting worse and worse in the city. So, people try to separate themselves from crime ... They're scared to open the door. You don't know if somebody's going to have a .22 facing you if you open the door nowadays."

"What gets me [is] ... try to take a gun into airport. It's not going to happen; you're not getting get near. But yet, if they can do that for airports, why can't they do that for schools? How about thicker glass and heavy-duty doors

... metal detectors you have to go through. If that's what it takes, let's do it."

FINANCES AND ASSISTANCE PROGRAMS

Finances were seen as a determinant of health in terms of being able to afford health care or resources that can help people be healthy, like exercise, nutritious foods, home modifications, and living environment. It can be a limiting factor in seeking care and in making healthy choices.

In one group, the concepts of spending money on health care but not having anything left to live on and on whether it's worth it to pay to go to the doctor for preventative services if you can't afford to deal with any problems that are found.

"And then the question is, what if they find something [at a preventative care visit], and then it's just more tests and more tests? And then you're like, what are you supposed to do with that?

"What's the point of spending all of your money on maintaining your health, if you don't have much money left to live life? What's the quality of life there?"

"Trade-offs" in people with limited resources were mentioned in a few groups: going to the doctor vs. paying for rent, food, and/or utilities; using gas to get to work vs. using gas to go buy milk; buying medications vs. buying meals; and getting a job to earn money vs. needing benefits from state (which might be lost if income gets too high). One participant expressed a desire for a better transition or weaning off between having services and not having any.

"There's times you try to budget out your money, and you might fall short where you don't really have the gas. [You've] got gas to go to work. But you need to get that one gallon of milk. So, [do] you waste the gas to go get the milk, or do you just improvise ... because you live so far out somewhere?"

"Once I find a better job and make more, then I'm going be cut from services, and I'm going to have to figure out a way of healthcare and probably for me and my children. So, that's concerning to me. And that kind of puts people in a predicament where, do you better yourself and get cut [from] your services? ... I don't want to be on services my whole life. But I

wish there was a way, if you're trying to better yourself, that they wean you off services not just completely cut you off services."

"I went out and got a job. They took away my insurance right away, and I couldn't afford [my medication]. I lost [my medication], and I end up back sick again, end up back in the system again, got my Medicaid back..."

DISCRIMINATION

Several groups spoke about feeling discriminated against or treated differently because they were on Medicaid or because they were obese. One participant with Medicaid discussed feeling like she wasn't treated as well, which she realized when she got Medicare coverage. Others felt like people on Medicaid are deprioritized in terms of getting in to see a provider. Participants who were overweight often feel like they are treated different, that their problems are all blamed on them being overweight.

"But if you have a ton of money, they're like, 'Oh yes, yes sir, come in the next day.' If you have Medicaid, you might be waiting a whole month or two months to get some medical assistance."

"When I went in front of the judge for disability, he told me I was obese, overweight."

"Yeah, it's funny how that judge was a doctor, wasn't it?"

"I feel like because I am obese, because I am a large person, I am automatically in the category of, '[You're having whatever medical problem] because you're fat.""

"Yes."

"It's like discrimination. Because I'm a big person, because I was born and weighed almost 10 pounds, and my whole life, I've been a big person, I'm unhealthy because I'm large, and that's all my problem."

"And the discrimination is crazy, like she said, on what kind of insurance you have, because I notice the difference. I'm on Medicare and Medicaid now. And since I've been put on the Medicare as my primary, the difference in the treatment level that I got when I was in [hospital] this time was a heck of a lot better than when I was just on the Medicaid prior."

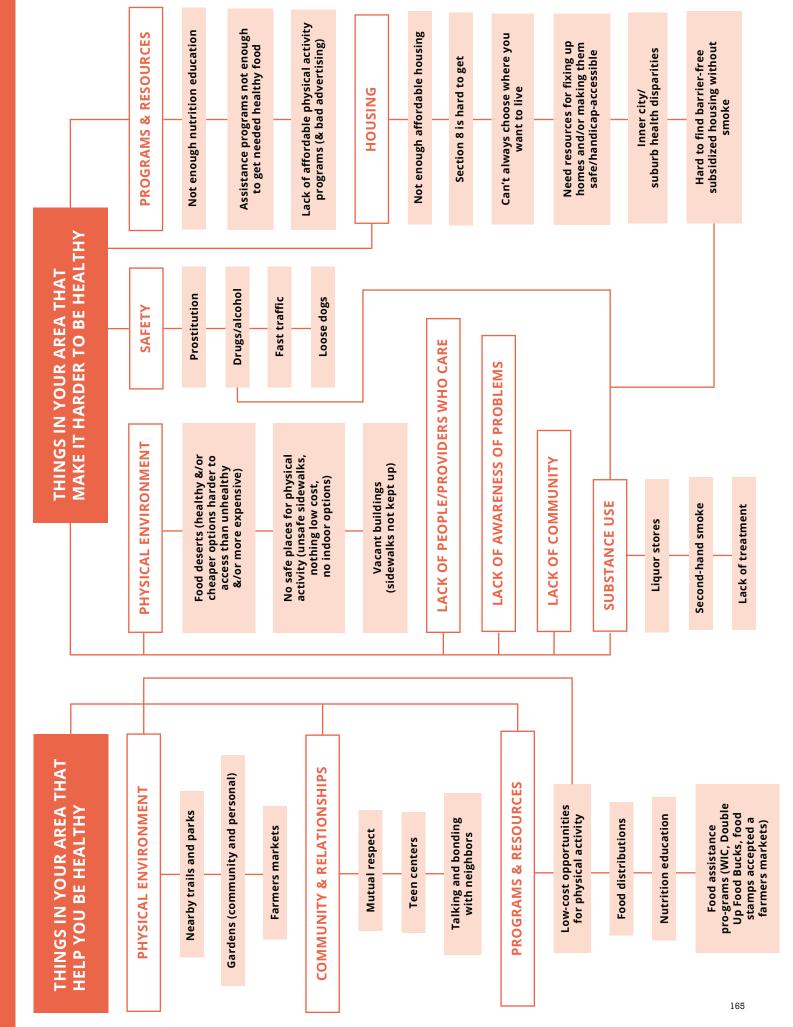
"It makes a difference."

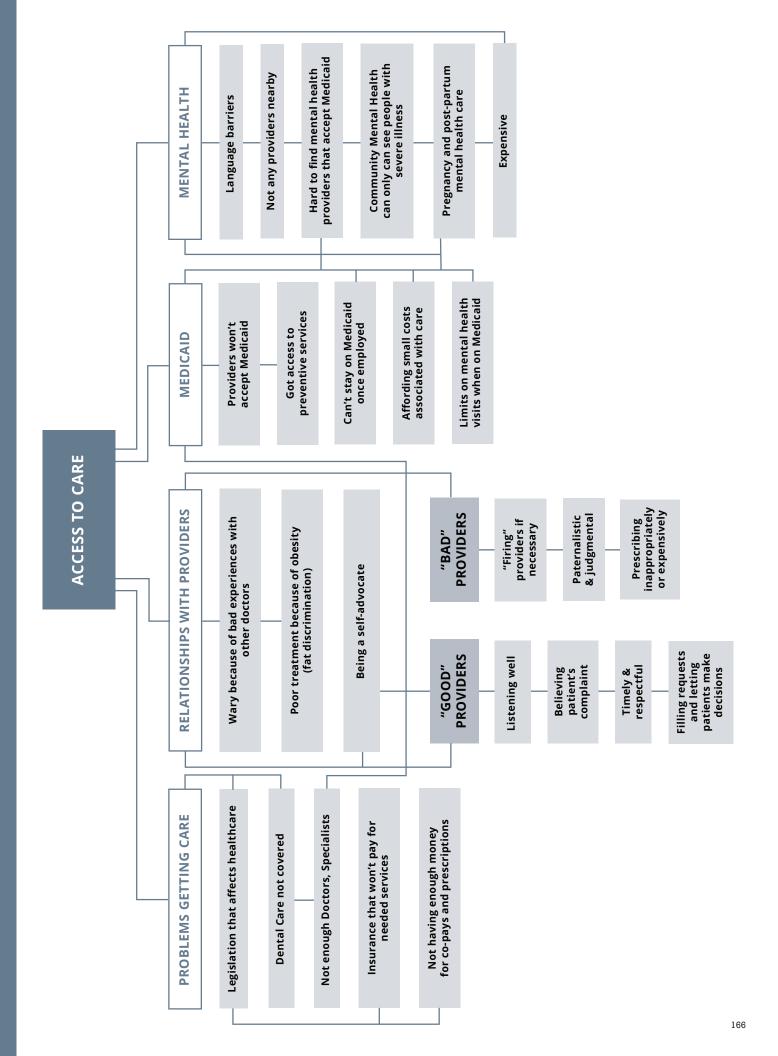


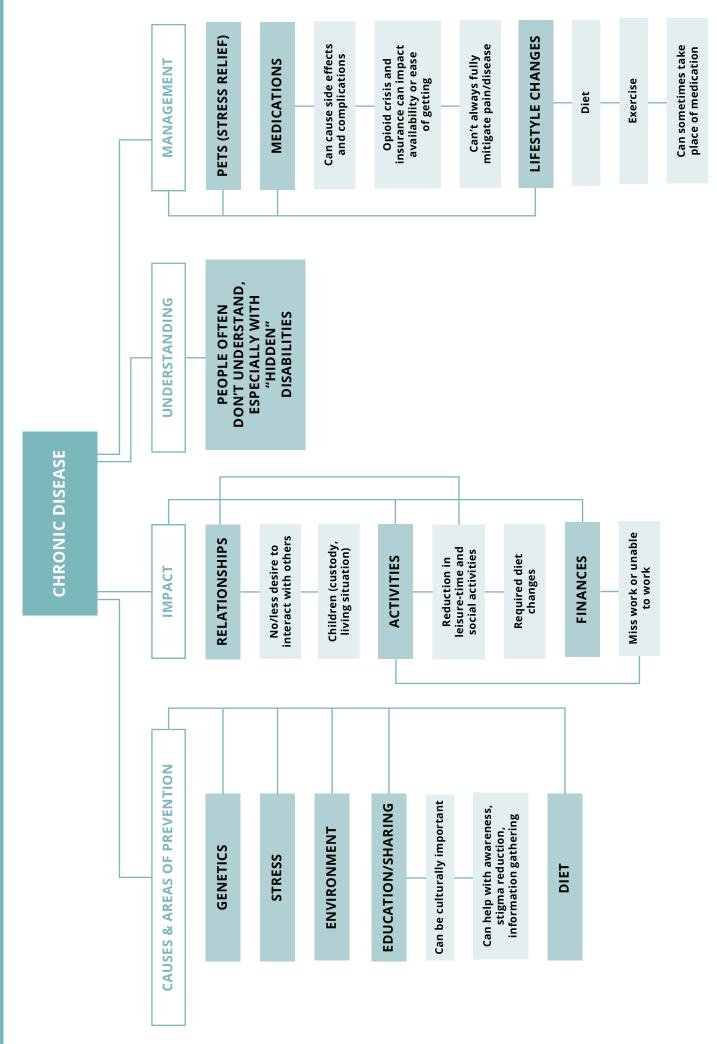
"And sometimes with older people when I'd see them drinking, I would throw away what they had and I'd add water. That's what I would do with a man who was always drinking ... I'd tell my grandmother – I'd ask my grandmother permission before – and she'd tell me, 'Do it because, he's going to die soon if he continues drinking."" –Sulma V.

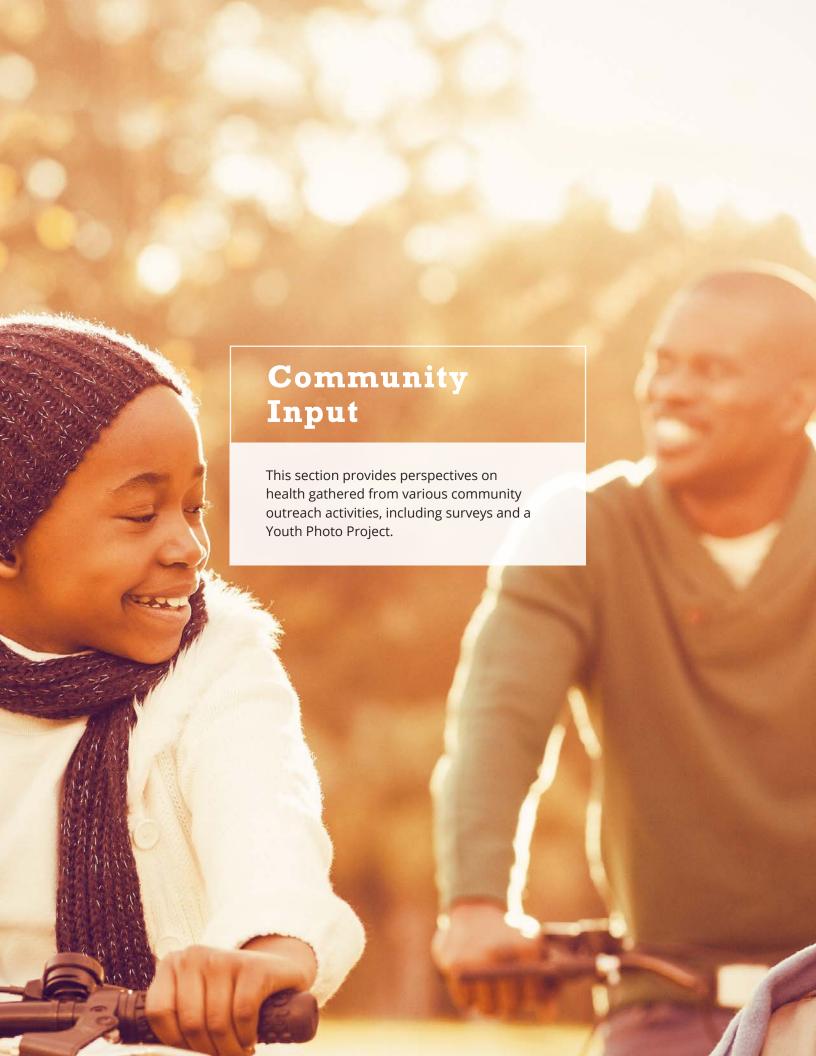


"One more thing that needs to be said in the higher grades, middle school/high school. I think there needs to be a better sex education. You get it in fifth grade, and then I think you get it again in eighth grade maybe... But after that you're done." – Alicia C.









Community Survey

It was important to the Healthy! Capital Counties Workgroup to provide an opportunity for anyone from the community to give their input about the health of the tricounty area. To facilitate this participation, an online survey was created that asked about the defining characteristics of a healthy community, the most important health problems in their county of residence and county of employment, access to health resources, social needs, and health care barriers.

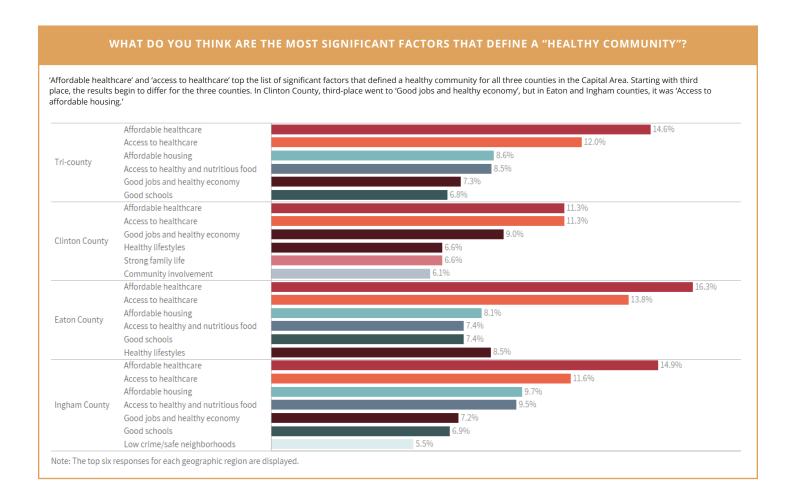
The community survey was available from May 1, 2018 to June 26, 2018 to people who lived or worked in the tri-county area. The 10-question survey asked participants about what they thought the characteristics of a healthy community were; what were the significant health problems in their

community; addressing social needs in health care; the barriers to healthcare; and their ability to access health and community resources. Participation was solicited via the following methods:

- Posting on the Healthy! Capital Counties website;
- Email invitation to the Healthy! Capital Counties list serve;
- Email and personal invitations to various partner agencies and coalitions within Clinton, Eaton, and Ingham counties;
- Facebook posts on health department and hospital partner websites;
- Boosted Facebook advertising within the tri-county area;
- Printed handouts at various coalition meetings, community events, and health department locations; and
- Press release

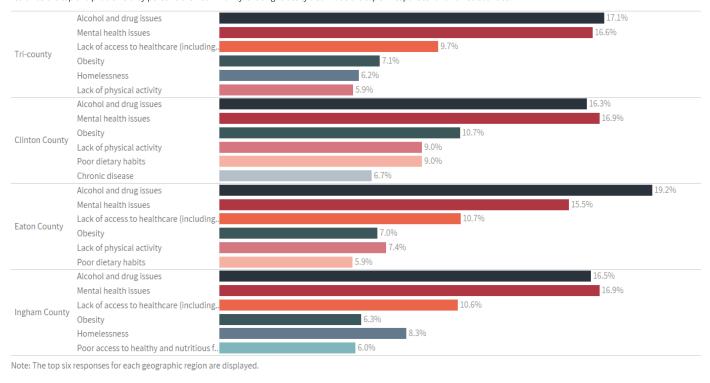
PARTICIPANT DEMOGRAPHICS

451 participants who lived or worked in Clinton, Eaton, and Ingham counties participated in the survey; other results were excluded from this analysis. 92.2% of respondents reported living in Clinton, Eaton, or Ingham counties; counties of residence for participants who only work in the tri-county area included Jackson, Shiawassee, Gratiot, and Ionia.



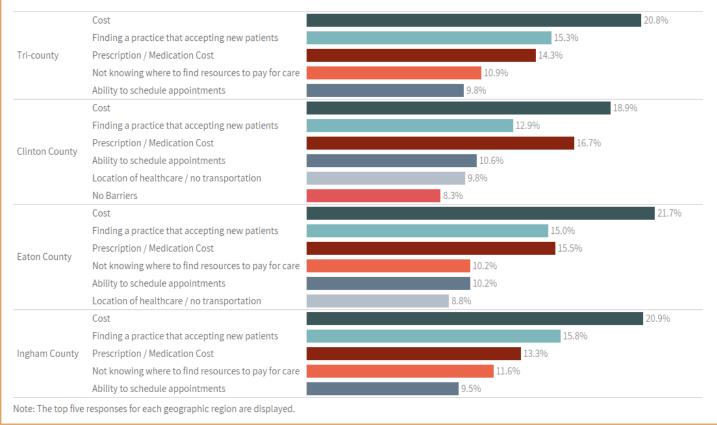
IN THE COUNTY YOU LIVE IN, WHAT DO YOU THINK ARE THE MOST SIGNIFICANT HEALTH PROBLEMS?

When considering the most significant health problems in the county in which they lived, participants in all three counties in the Capital Area listed 'Alcohol and drug issues' and 'mental health' as the top two problems they perceive their community is facing. Obesity also made the top six responses for all three counties.

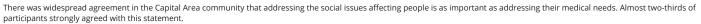


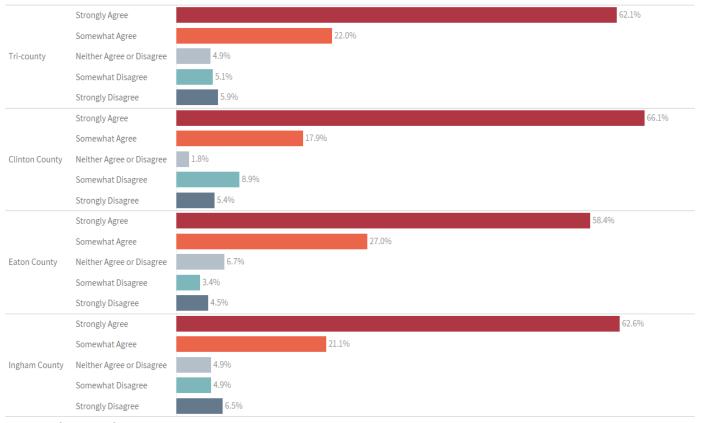
WHAT DO YOU FEEL ARE THE BARRIERS TO GETTING HEALTHCARE IN THE COMMUNITY IN WHICH YOU LIVE?

The most commonly identified hurdle to obtaining health care was the cost of care. The cost of medication and the inability to find a practice taking new patients were also commonly cited as a barrier to obtaining health care in the Capital Area.

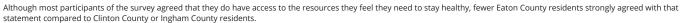


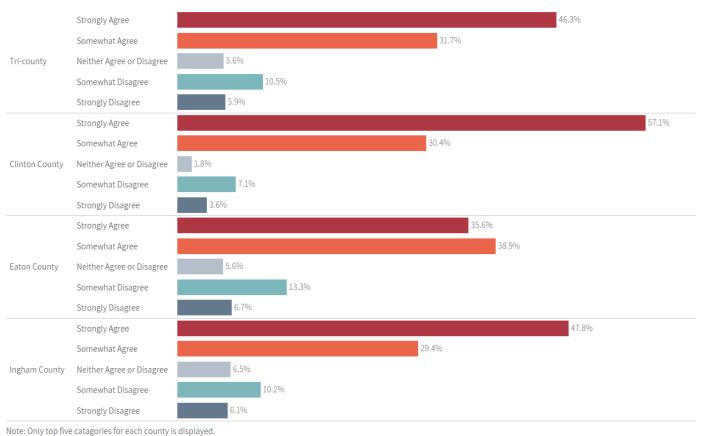
ADDRESSING SOCIAL NEEDS IS AS IMPORTANT AS ADDRESSING MEDICAL NEEDS



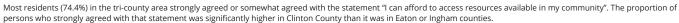


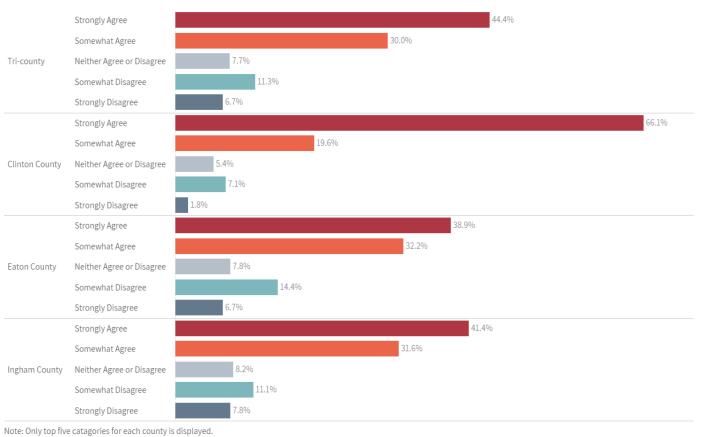












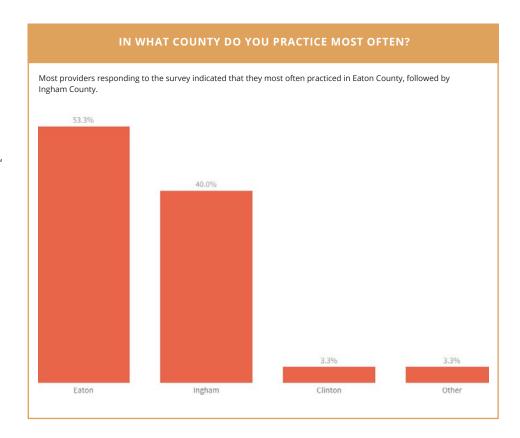
Provider Survey

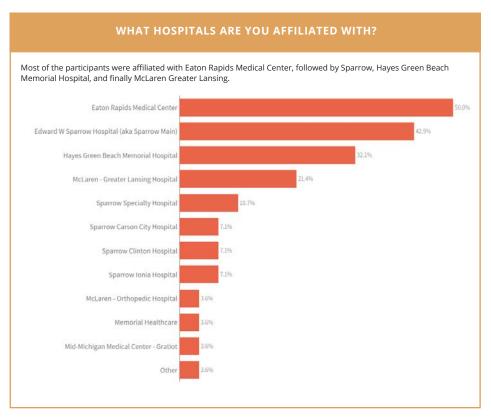
A specific effort was made to gain insight from local health care providers about the health of the community. Health care providers within the four hospital systems were encouraged to participate in an online survey that asked about the characteristics of a healthy community, the most important health problems in their county of employment, factors affecting patient health, referrals to other community resources, social needs of patents, and health care barriers.

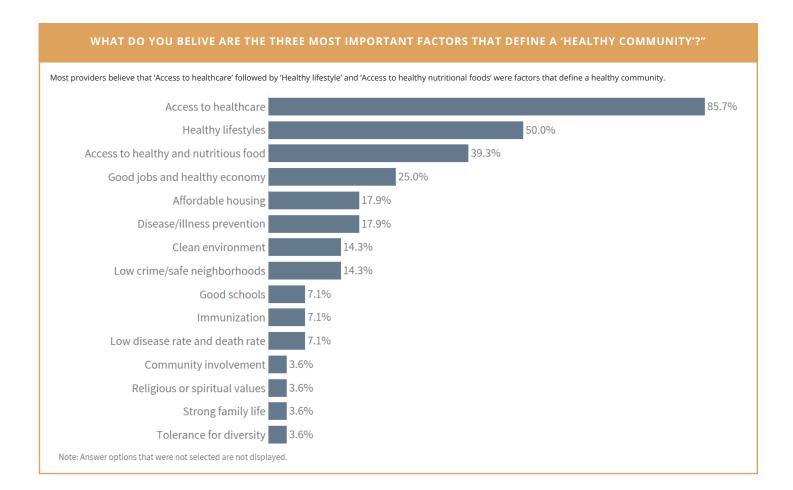
Health care providers were invited to complete the survey via communication from their hospital system. The provider survey was available from May 1, 2018 to June 29, 2018 and was open to providers working at Sparrow, McLaren Greater Lansing, Hayes-Green Beach Memorial Hospital, or Eaton Rapids Medical Center (ERMC). The seven-question survey asked providers about:

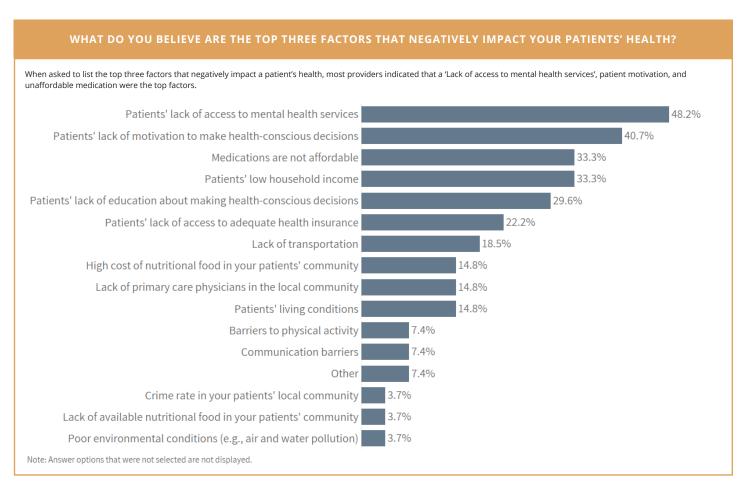
- characteristics of a health community;
- observed barriers keeping patients from progressing toward their health goals;
- observed barriers they see to patients accessing health care; and
- which community resources, if any, they refer their patients to.

Thirty providers responded to this survey. It is common for providers can be affiliated with multiple hospitals, but they were instructed to complete the survey only once. Half of the respondents were affiliated with ERMC; 42.3% were Sparrow affiliates; 32.1% with Hayes-Green Beach Memorial Hospital; and 21.4% with McLaren Greater Lansing.

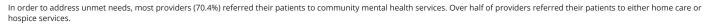


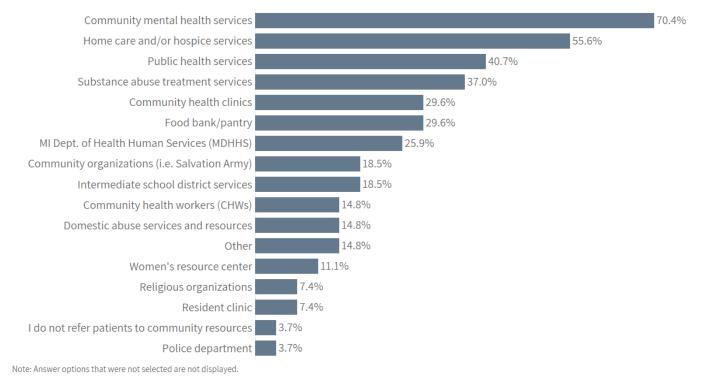






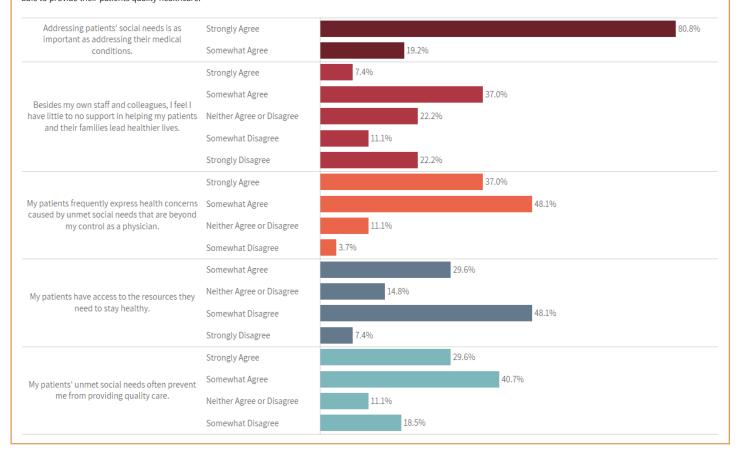
TO WHAT, IF ANY, COMMUNITY RESOURCES DO YOU ROUTINELY REFER PATIENTS TO HELP ADDRESS UNMET NEEDS?





INDICATE YOUR LEVEL OF AGREEMENT WITH THE FOLLOWING STATEMENTS:

Most physicians strongly agreed that addressing the patient's social needs is as important as addressing their medical condition; however, not all physicians strongly agreed that they have the support to help their patients lead a healthier life. Most doctors admitted that their patients express health concerns that are related to social needs that is not within their sphere of influence. When asked if their patients had access to the resources they needed to stay healthy, no physician reported that they strongly agreed with that statement; most somewhat disagreed or somewhat agreed with that statement. The majority of physicians strongly agreed or somewhat agreed that their patients' unmet social needs prevented them from being able to provide their patients quality healthcare.



Youth Photovoice

WHAT IS PHOTOVOICE?

Photovoice is a qualitative method used for community-based participatory research. It is a process by which people can identify, represent, and enhance their community through a specific photographic technique. Photovoice has three main goals: enable people to record and reflect their community's strengths and concerns, promote critical dialogue and knowledge about important issues through large and small group discussion of photographs, and influence policy makers. Photovoice has generally been used with marginalized groups that want their voices to be heard by those in power and is based on the notion that people are experts in their own lives and communities. Photovoice can be used to explore any issue that is of concern to a community.

WHAT WE DID

Photovoice groups met over the course of 3–4 sessions and learned about the method as a research tool. Students brainstormed during the photovoice sessions around two questions: "What issues related to health do you and/or your peers face?" and, "What things in the community would help you to be healthier?" In between sessions, students went out into their communities and took pictures related to the theme. Other sessions included information on photovoice history and goals, photography techniques, and the SHOWeD method of caption writing. Participants went over their pictures each week as a group and shared their captions.

STUDENT DEMOGRAPHICS

Participants were students from Grand Ledge and Eaton Rapids (the Eaton County group), J.W. Sexton and Eastern schools (Ingham County), and St. Johns and Ovid Elsie schools (Clinton County).

The Eaton County group had 9 participants (8 females, 1 male), Ingham County had 10 participants (9 females, 1 male), and Clinton County had 8 participants (all female).

ANALYSIS

PHOTO AND CAPTION THEMES

The SHOWeD method of caption writing, an analysis tool for participants, was used. Students answered these questions in their captions:

- What do you See here?
- What is really Happening?
- How does this relate to Our lives?
- Why does this problem or strength exist?
- What can we Do about it?

Based on the captions that students devised, group facilitators sorted the photos and captions into themes. These themes are:

- · Mental well-being
- Mental health and stress
- Self-value
- Self-determination and making positive choices
- Doing things that make you happy
- Social settings
- Bullying and kindness
- Peer pressure
- Diversity and inclusiveness
- Nutrition
- Being active / getting outside
- Healthy communities
- Substance use
- Schoolwork
- Negative effects of technology

A few observations about the themes appearing in the photos and captions include the following:

- Only the Ingham County group spoke about the importance of schoolwork.
- Only the Eaton County group spoke about diversity and inclusiveness.
- Only the Clinton County group spoke about doing things that make you happy, and they spoke most out of all the groups on self-value.

BRAINSTORMING THEMES

The three groups had both similarities and differences in their answers to the brainstorming questions asked before they started taking photos. (The themes that appear here are not necessarily the same as those that appear in the photos and captions).

"What issues related to health do you and/or your peers face?"

Students from all three schools mentioned the following topics:

- Anxiety
- Depression
- Drugs and alcohol
- Smoking
- Physical activity
- Bullying
- Poor eating habits and nutrition and unhealthy foods

For both Eaton and Clinton County teens, a large focus was placed on feeling stress and pressures (related to peer pressure, expectations, fitting in, money, the future, family, etc.), where nothing related to that topic was mentioned in the brainstorming phase by Ingham County teens. Two answers in the Ingham County groups involved the substance environment at school (cigarette smoking and students smelling like marijuana).

"What things in the community would help you to be healthier?"

Students from all three schools mentioned the following topics:

- Sports teams, sports clubs, and clubs that are outside of school and/or open for anyone
- More opportunities for exercise (especially low[er]-cost or free)
- Healthy fast food, affordable healthy food, and promotion of eating healthier food
- Support/help for mental health problems

All groups mentioned school-, community-, and mental health-related topics, along with topics related to mentoring, teachers, and career/college counseling. Clinton County focused most on school-related topics, and Eaton County focused most on community-related topics.



This is where people have little meetings and maybe relax and take mini breaks. Everyone has a room where they like to chill to help stress or anger management.

Make Your Own Chill Zone.

Bakari M., Eastern

This is a poster that says "beautiful." People don't always make you feel the best about yourself. A lot of the time they don't feel good about themselves. When someone tries to drag you down, make sure your character remains the same.

Tori B., Sexton



Life is all about perspective and how we view ourselves and how we think others value us. You can change things up on how you view life and yourself. Just looking straight on, all that is present is gray and gloomy, but the second you change how you see things, it can open you to a whole new world of bright pushing through the dark.

Catrina, St. Johns





Instead of suffering alone, let's open the door on mental disorders. Be more kind and understanding of people with mental disorders. Let's stop the stigma surrounding mental disorders.

Savannah M., Grand Ledge

This is a basketball hoop. It looks brand new, but it's been around for years. Nobody goes outside anymore; they just sit outside on their phones. Go outside and be the change.

Alexus M., Eaton Rapids

Help is much needed, so go seek help at your local health center.

Estabraq M. & Jona A., Eastern





There are healthy food options and unhealthy ones in my community. People should try to include both options in their daily meals. Eating a balanced diet is important and leads to a healthy life.

Sophia, St Johns





Change your mind, change your world. Go outside and explore your surroundings. Today is a new day.

Estabraq M. & Jona A., Eastern

It's ok to ask for help. Don't be ashamed to tell someone what you're struggling with. There are people who have been through the same thing or will understand and want to help.

Don't think you are alone.

Destinee G., Grand Ledge



This is a start of a nature trail. It's a long and challenging trail. A life with drugs and alcohol is limited. It can start with drinking and smoking as a teen. Stop giving kids access to drugs and alcohol.

Alexus M., Eaton Rapids





Cigarette smoke doesn't just affect the person holding the cigarette. Others may be harmed by the substance too. Always make sure you're aware of the people you're putting in danger.

Anonymous teen



These are some prescription meds. Every day a teen overdoses off prescription medicine; they start off taking it for something else, and addiction and abuse take over.

Tori B., Sexton



When you look at a refrigerator, you don't care what is on the outside, rather what is on the inside. Unfortunately, people judge and say hurtful things based on the look or outside of someone. They don't think twice about what is inside the person before they say these hurtful words. Be sure to taste your words before you spit them out.

Hannah, St. Johns



Headphone Are Problem Solvers. When something happens, all you have to do is turn on music and step away from the situation before you make a bad decision.

Bakari M., Eastern



This is a person's shoes. They are waiting. Teens in schools get bullied all the time. Sometimes bystanders can make a difference. If you see someone getting bullied, say something—it could help.

Tori B., Sexton



Life will give you many different choices. Choices that could make or break you. Think wisely and don't let them take control of your life. You are strong.

Keegan, St. Johns



Choose your own path. The happiness and freedom you get when you follow your own heart is a feeling you won't be able to replace. Make your future the one you want, and give it your all.

Hannah, St. Johns



There will be times in her life when she feels like this: completely alone. She might feel like she can't share her thoughts, opinions, or feelings. This happens every day. How can we as a community make people feel more welcome and less alone?

Destinee G., Grand Ledge

Black or white, shoes are shoes. It's the same thing with humans. Don't discriminate based on skin color.

Corbin O., Eaton Rapids



Do we encourage each other enough? Build each other up; don't tear each other down. Encourage someone today: the possibilities are endless.

Destinee G., Grand Ledge



Less Joking, More Work

Teachers give too much work, and students just play around in class and don't get it done, then they have to take it home for homework. A lot of people stay up all night to finish their homework, and they stress in the morning cause they got no sleep. We can focus on our schoolwork at school and maybe convince the teacher that the assignment flow is moving too fast.

Bakari M., Eastern



Flowers can all be different colors and grow in different areas, but when you look closely, all flowers need the same things to grow. Humans are just the same. We are all different colors, sizes, and shapes, but look closely and you'll find that we all need the same things to grow. All flowers are beautiful, just like us. Help each other grow and sprout instead of drying them out and taking away their sunlight.

Jessie R., Grand Ledge



Besides the obvious drug issue, this photo shows a community where teenagers lack positive ways to relieve stress and boredom. A healthy community provides places where its young adults can spend free time.

Sophia, St. Johns





As teens, we try to please everyone we can—our teachers, parents, peers—even if that means doing things we aren't proud of. Let's stop peer pressuring each other.

Erin C., Eaton Rapids

One of the biggest things I do to try to help our environment and community is not use single-use plastic but instead put my food in washable and reusable containers. Keeping our community clean can help us feel clean knowing we did something great for the place we love and live.

Catrina, St. Johns



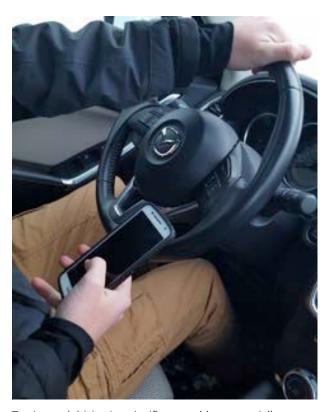
This is a picture of my polaroid camera. Taking pictures is something I've always enjoyed, and I make sure to give myself time to pursue this hobby. Find your hobbies and give yourself time to enjoy them.

Gretchen, St. Johns



This is someone on their phone. All the time teens—even adults—overuse their electronic devices. They have the option to get on so many different things, it's easier to stay on them longer. Try to stay off your phone for at least three hours. It will help your mental health.

Erin C., Eaton Rapids



Texting and driving is a significant problem, especially now when technology is so easily accessible. Using your phone while driving puts not only yourself but others at risk. Be considerate of people's lives.

Sophia, St. Johns



Asset Inventory & Mapping

This asset inventory was originally compiled by the 2012 Community Advisory Committee on March 1, 2012 as part of the 2012 H!CC Community Health Needs Assessment. The asset inventory was reviewed and updated in September 2015, including assets identified from Community Input Walls, and published in the 2015 H!CC Community Health Profile & Health Needs Assessment.

To move beyond simply listing an inventory of assets for the 2018 assessment, attendees of the February 8, 2018 Stakeholder Input Meeting were asked to review the asset inventory and vote on which asset categories (and individual assets within a category) would be most useful to the assessment process if they could be geographically mapped within the Capital Region. From this asset prioritization process, the Stakeholder Committee focused on health care system assets and food system assets as the initial asset mapping activities. Two asset maps have been included as products of this activity. Additional maps will be placed on the H!CC website as they are generated.

This inventory will be used as part of the community health improvement planning process to explore the breadth and depth of community assets and resources that may be mobilized to address community health needs.

WHAT IS AN ASSET?

An asset is anything that improves the quality of community life. It may be a person, group of people, place, or institution.

INDIVIDUAL ASSETS

Personal assets held by each person residing in the three counties. Often personal assets may be leveraged into citizen and institutional assets through effective community organizing.

CITIZEN ASSETS

Assets held by small groups of people united around a common purpose, often closely tied to place, age, common identity, etc. Grassroots associations, neighborhood associations, cultural organizations, faithbased organizations, parent organizations, youth organizations.

INSTITUTIONAL ASSETS

Assets held by institutions in the community. These are often well-established groups, employers, or governmental entities, and are both for-profit and not-for-profit organizations. Some institutions are comprised of groups of institutions — these are labeled 'organizational' assets.

2018 H!CC Asset Inventory

Asset categories and individual assets within categories ranked according to opportunity for mapping asset locations

PRIORITY VOTES	HEALTH CARE SYSTEM ASSETS
#1 (46 votes)	
27	Community Mental Health
22	Substance Abuse Treatment and Recovery Providers
20	Free Clinics
18	Mental Health Providers
13	Public Health Departments
11	Hospitals
7	Suggested: Chronic Ds. Management/Education
7	School Counselors/Psychologists
7	Community Health Centers
5	Nursing Homes
4	School/Parish Nurses
4	Dentists & Dental Clinics
3	Disease-based Support Groups
2	Pharmacies
1	Rehabilitation, Home Health & Hospice Providers
1	Private Physicians
1	Medical Schools
1	Eye & Ear Care Providers
1	College Student Health Centers
0	Urgent Care Centers
0	School-based/linked Health Centers
0	Physical and Occupational Therapists
0	Health Professions Schools
0	Emergency Medical Transportation
0	Alternative Medicine Providers
n/a	Health Insurance Plans (including Medicaid/Medicare)
n/a	County Health Plans

PRIORITY VOTES	EDUCATION ASSETS
#2 (35 votes)	
28	K-12 School Districts
16	Childcare and Preschool Providers (0-5)
8	Senior Centers
7	Public Libraries
7	Refugee Development Center
6	Tutoring/Mentoring Orgs
5	Vocational/Trade Schools
4	Colleges and Universities
4	Michigan Works!
4	Truancy Intervention
2	Community Centers
2	Infancy to Innovation Collaborative
2	Intermediate School Districts
2	MSU Extension Service
1	Suggested: Child Savings Accounts
0	Charter & Private Schools
0	Homeschool Organizations
0	Nature Centers
0	Virtual & Online Learning

PRIORITY VOTES	HOUSING ASSETS
#3 (27 votes)	
21	Homeless Prevention and Housing Organizations
17	Suggested: Affordable Housing
15	Aging In Place Efforts
13	Subsidized Housing Developments
7	Foster Care Homes (Adult/Child)
7	Weatherization, Home Improvement, Home Safety Programs
3	Suggested: Multi-generational Housing
2	Assisted Living Facilities
2	Rental Housing Landlords and Developments
1	Rehab Programs
0	Home-building Charities (Habitat)
0	Independent Living

PRIORITY VOTES	FOOD SYSTEM ASSETS				
#4 (26 votes)					
14	Food Pantry/Bank/Commodities				
13	Corner Stores with produce				
10	Community Supported Agriculture Farms				
7	Food Purchasing Programs (SNAP/WIC)				
7	School Lunch Program				
7	Suggested: Diabetes Prev. / Comm. Healthy Eating				
6	Home-delivered Meal Services (Meals On Wheels)				
5	Full-service Grocery Stores				
4	Community Gardens				
4	Farmer's Markets				
4	Suggested: Farm Land				
3	MSU Extension Service				
3	Suggested: Nutrition Education				
2	Congregate Meal Sites (summer kids/senior)				
2	Food Policy & System Groups				
2	Suggested: Food Hubs				
2	Suggested: Local Food Guides/Atlas				
1	Restaurants with healthy food choices				
1	Suggested: Healthy Checkout Aisles				
0	Double Up Food Bucks Program				
0	Garden Supply Centers				
0	Project Fresh (WIC/Seniors)				

PRIORITY VOTES	PUBLIC SAFETY ASSETS				
#5 (17 votes)					
6	Police and Fire departments				
4	Domestic Violence & Crisis Response Orgs				
3	Anti-bullying Organizations				
3	Law Enforcement Training Centers				
3	Local Public Health Departments				
3	Suggested: Prisoner Re-entry				
2	School Liaison Officers				
1	Emergency Operations Centers				
1	Environmental Protection Organizations				
1	Neighborhood Watch				
0	Emergency Preparedness Coalitions				
0	Jails				
0	National Guard				
0	Probation and Parole Officers				
0	State Police / Federal Agencies				
0	Suggested: Youth Diversion Programs				
0	Suggested: Cooling Centers				

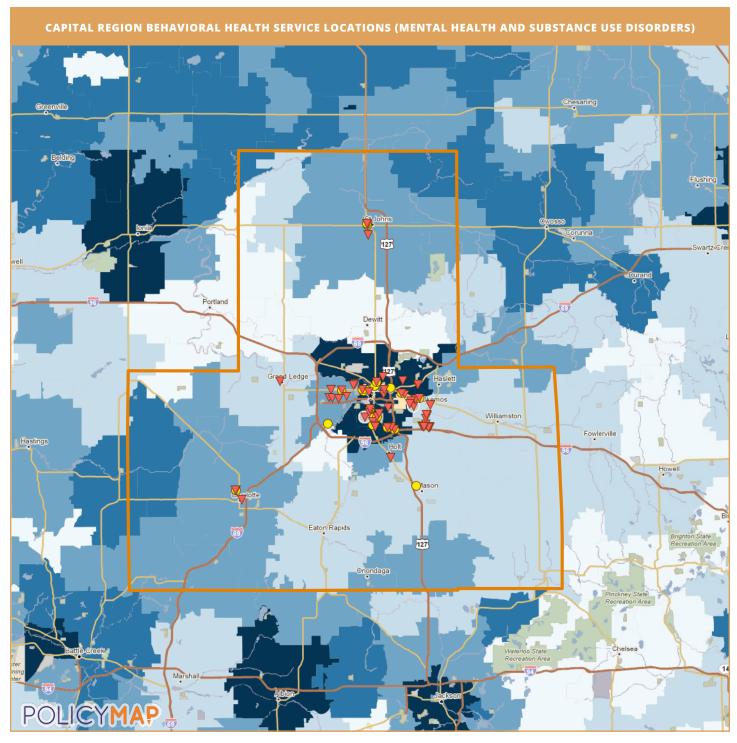
PRIORITY VOTES	RECREATIONAL ASSETS				
#6 (13 votes)					
9	Walking/biking trails & Sidewalks				
8	Parks and Public Recreation Programs				
3	Community Education Programs				
2	Suggested: Amusement Parks				
1	4H and County Fairs				
1	Canoe/Kayak Rental				
1	Community Centers				
1	School-based athletics				
1	YMCA & Non-profit Recreation and Fitness Orgs				
0	Bicycle Courses (BMX)				
0	Bicycling Clubs				
0	Community Dances				
0	Conservation Activities (Stream Clean)				
0	Golf Courses				
0	Horseback Riding/Stables				
0	'Lugnuts' Minor League Baseball Team				
0	Potter Park Zoo				
0	Private Membership Fitness Clubs				
0	Riverboat				
0	Swimming Locations				

PRIORITY VOTES	EMPLOYMENT ASSETS
#7 (13 votes)	
14	Unemployment and Job-placement Services
5	Suggested: College Alternatives
2	AmeriCorps/VISTA/Service Corps
2	Economic Development Departments
2	Public Employers (State of MI, local)
1	Farmers & Rural Employers
1	Labor Organizations
1	Peckham, Inc.
1	Small Employers
1	Volunteer Organizations
1	Suggested: Job Training
0	Chambers of Commerce
0	Business Associations
0	Major Employers
0	Vulnerable adult and seniors services
0	Rehabilitation Services
0	School Co-op & Internships
0	Self-Employed & Startups
0	Suggested: NPOs

PRIORITY VOTES	CULTURAL ASSETS
#8 (9 votes)	
9	Suggested: Cultural (faith-based/spiritual) Events
8	Suggested: Faith Communities
5	Public Spaces
4	Michigan State University
2	Performing Arts Organizations
1	Community Events and Festivals
1	Museums
0	Crafts and Enrichment Classes/Resources
0	Historical Organizations
0	Media Organizations
0	Nature Centers
0	Neighborhood Identities (i.e. Old Town)

PRIORITY VOTES	TRANSPORTATION ASSETS				
#9 (7 votes)					
13	Health & Senior Visit Transportation Providers				
5	Regional Transportation and Land Use Planning				
4	Bicycle Infrastructure				
3	Public Transportation Providers				
2	Suggested: Non-motorized Transportation				
1	Complete Streets Policies				
1	Long Distance Bus Services				
1	Trail System				
1	Train Service				
0	Airport				
0	Ambulances				
0	Mobility Managers				
0	Park n' Ride & Carpool Services				
0	Roads/Road Commissions				
0	Taxis				
0	Suggested: Fixed Route Bus Service				

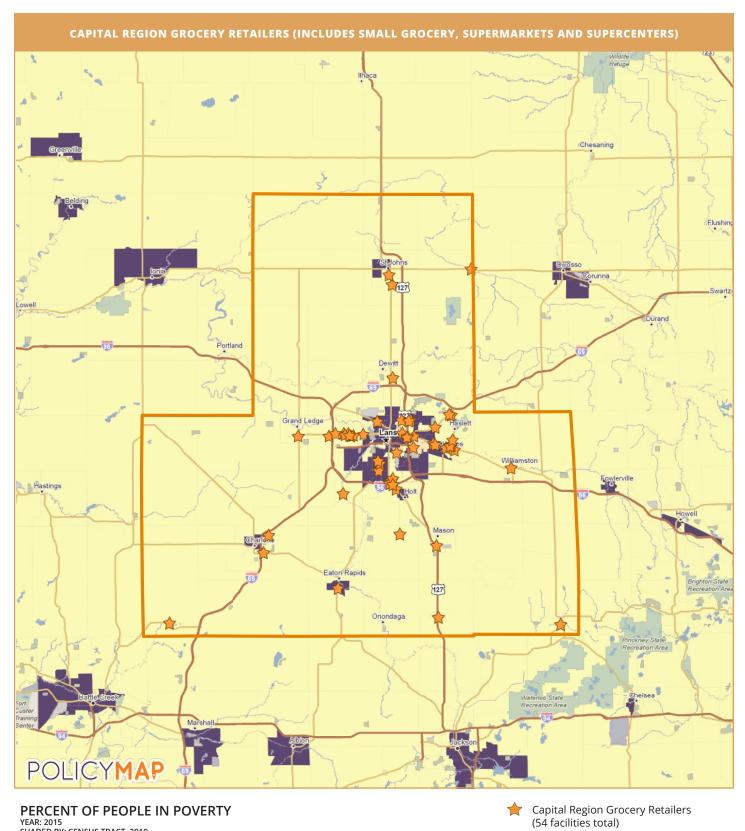
PRIORITY VOTES	ORGANIZATIONAL ASSETS					
#10 (3 votes)						
9	Human Services Collaboratives					
8	Multi-sector Coalitions (i.e. Substance Abuse Prevention, Great Start, etc.)					
5	Faith-based Organizations					
4	Suggested: 211 Directory					
2	Crisis Intervention					
2	Local Charities, Grant-makers, & Foundations					
2	Non-Governmental Orgs					
0	12-step Organizations (AA)					
0	Chambers of Commerce					
0	Economic Development (LEAP, Prima Civitas)					
0	Informal groups and meetings					
0	Service Orgs (Lions, Kiwanis)					



PERCENT OF PEOPLE IN POVERTY
YEAR: 2012-2016
SHADED BY: ZIP CODE TABULATION AREA, 2010 SOURCE: CENSUS

- Insufficient Data
 - 6.12% or less
- 6.13% 10.37%
- 10.38% 15.09%
- 15.10% 22.13%
 - 22.14% or more

- Capital Region Mental Health Services (58 facilities total)
- Capital Region Substance Use Treatment Centers (23 facilities total)



PERCENT OF PEOPLE IN POVERTY
YEAR: 2015
SHADED BY: CENSUS TRACT, 2010 SOURCE: USDA



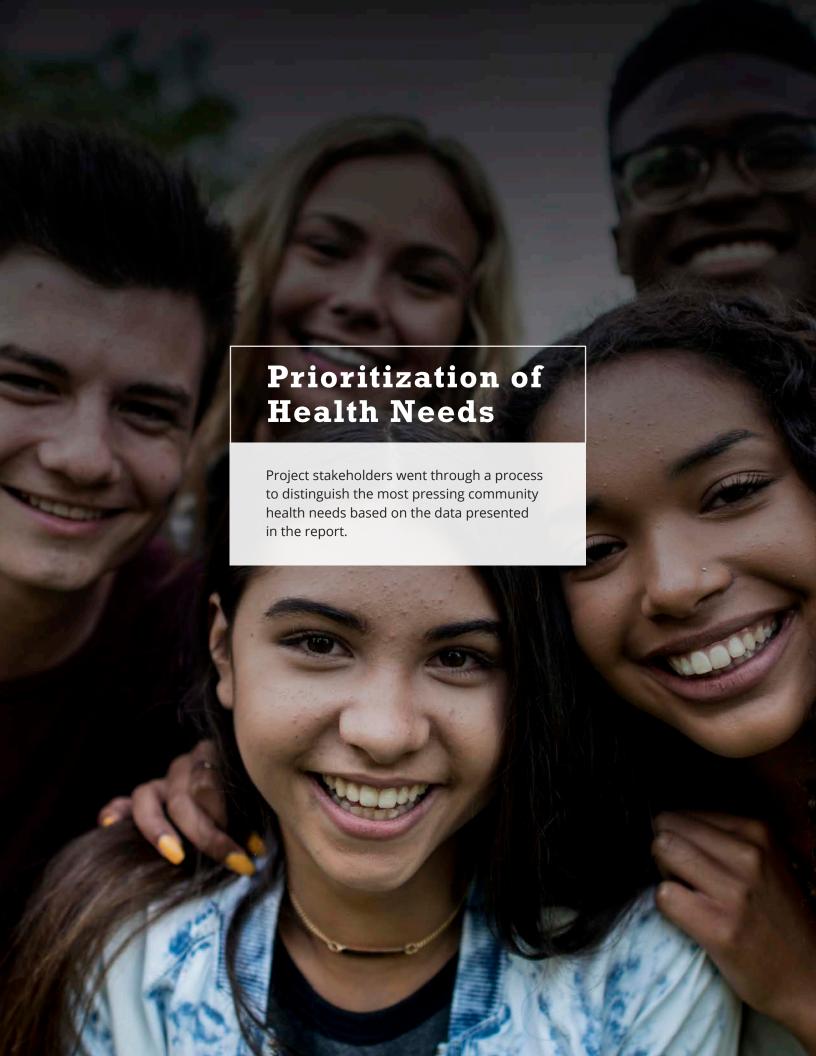
Insufficient Data



Low Income and Low Access



Not Low Income and Low Access



Setting a Shared Course

PRIORITIZATION METHODOLOGY

The 2018 Healthy! Capital Counties Community Health Profile and Health Needs Assessment produced a variety of data from numerous sources about the health issues in the tri-county area. The report was used to identify health issues to be prioritized. The project workgroup utilized the consensus criteria method, as outlined below:

- Identifying the criteria to be considered when evaluating the issues;
- Selecting weights for each criteria;
- Identifying the issues to be evaluated, based upon the community profile and health needs assessment report;
- Engaging stakeholders in selecting the most important issues for each criteria;
 and
- Applying the weights to the stakeholder feedback

IDENTIFYING THE CRITERIA

Based upon experience garnered from the methods used in the 2012 and 2015 prioritization events, the decision was made to use the same four criteria for evaluating the issues to be prioritized in 2018. Those criteria were:

- Seriousness: How much of an impact does this have on people's health?
- Control: How much control do we have to affect the health issue?
- Capacity: What is our ability, as a community, to address the health issue?
- Catalytic: How much does this issue affect other health issues?

SELECTING THE WEIGHTS OF THE CRITERIA

For the previous 2015 prioritization process, in order to identify a broad spectrum of priorities that reflected the constellation of factors that influence health and the spheres of influence for project partners, a two-tiered weighting system was developed. This system involved identifying two sets of weights to apply to the voting results, one that would highlight upstream factors and one that would highlight downstream factors. If there was a discrepancy between the outcomes of the two weighting methods, then the results of the two methods would be combined into one list of priorities. Based on past positive feedback from the workgroup and outside stakeholders, the same methodology was used for the 2018 prioritization process. Below are the weights agreed upon by the workgroup:

CRITERIA AND DEFINITION	UPSTREAM WEIGHTS	DOWNSTREAM WEIGHTS
Seriousness (how serious is the health issue)	4	4
Control (how much control do we have to affect the health issue)	2	3
Capacity (what is our ability, as a community, to act on a particular health issue)	1	2
Catalytic (how much does this issue affect other health issues)	3	1

ENGAGING STAKEHOLDERS IN SELECTING PRIORITIES

All project partners were encouraged to invite key stakeholders and community partners to the MEASURE MADNESS
Prioritization event, during which the health issues would be prioritized. The meeting was advertised on the Healthy! Capital Counties website, Facebook page, via email to the project email listserve, at local coalition meetings, and via project partner websites, Facebook pages, and other media. The meeting was held on November 5, 2018 and was attended by 53 participants representing a variety of local community partners, agencies, and coalitions.

At the event, project staff presented an overview of the Healthy! Capital Counties project to date, as well as highlights from the project's community profile and health needs assessment report.

To familiarize participants with the quantitative data in the report, as well as enabling them to practice the prioritization of data, an activity involving sports brackets was used. Each table was assigned 16 of the 35 quantitative measures, and participants worked in pairs to choose the most critical health measure from the 16 they were presented with. Participants were encouraged to analyze these measures through the lens of the four criteria (seriousness, control, capacity, and catalytic) that would later be used for prioritization.



In addition, an overview of other components of the report was presented, including the Youth Photovoice project, focus group findings, results from the community and health care provider surveys, and asset mapping. Attendees also participated in a Youth Photovoice activity, so that they could appreciate how local youth used photography and written captions to express their views on public health issues occurring in the community.

The list of the 17 issues to be prioritized was then provided, and participants were encouraged to review these and ask questions prior to the voting process. Staff were available throughout the process to provide clarification on the voting method. Instructions were provided prior to voting. Using different "sports ball" beads to represent each of the four criteria, participants were allotted three votes for each criteria (for a total of 12 votes).

PRIORITIZATION VOTING RESULTS

UPSTREAM WEIGHTING

As described previously, two sets of weights were applied to the votes received. The first set of weights, for which the catalytic criteria was highly weighted, produced the following scores. The top five priorities that emerged were:

- Behavioral Health
- Health Care Access and Quality
- Obesity
- Financial Stability and Economic Mobility
- Chronic Disease

	Seriousness	Control	Capacity	Catalytic	
	weight = 4	weight = 2	weight = 1	weight = 3	Weighted Score
Financial Stability and Economic Mobility	80	2	3	57	142
Affordable Housing	4	10	9	33	56
Education	48	12	7	15	82
Social Connection and Capital	20	14	12	24	70
Community Safety	8	16	11	0	35
Health Care Access and Quality	100	26	18	60	204
Environmental Quality	8	8	4	6	26
Built Environment	12	32	7	3	54
Obesity	64	16	10	57	147
Tobacco	28	20	13	18	79
Behavioral Health	116	20	15	75	226
Physical Activity	4	28	8	3	43
Nutrition	16	40	9	27	92
Communicable Diseases	12	28	5	6	51
Maternal and Child Health	16	22	9	24	71
Chronic Disease	72	10	11	33	126
Accidental Injury	4	2	2	33	41

DOWNSTREAM WEIGHTING

The second set of weights was based upon the catalytic criteria being set low. This approach produced a second set of scores, listed below. The top priorities from this set were:

- Behavioral Health
- Health Care Access and Quality
- Obesity
- Chronic Disease
- Financial Stability and Economic Stability

	Seriousness	Control	Capacity	Catalytic	
	weight = 4	weight = 3	weight = 2	weight = 1	Weighted Score
Financial Stability and Economic Mobility	80	3	6	19	108
Affordable Housing	4	15	18	11	48
Education	48	18	14	5	85
Social Connection and Capital	20	21	24	8	73
Community Safety	8	24	22	0	54
Health Care Access and Quality	100	39	36	20	195
Environmental Quality	8	12	8	2	30
Built Environment	12	48	14	1	75
Obesity	64	24	20	19	127
Tobacco	28	30	26	6	90
Behavioral Health	116	30	30	25	201
Physical Activity	4	42	16	1	63
Nutrition	16	60	18	9	103
Communicable Diseases	12	42	10	2	66
Maternal and Child Health	16	33	18	8	75
Chronic Disease	72	15	22	11	120
Accidental Injury	4	3	4	11	22

Since the top five health issues in both sets of scores were identical, with only a slightly different order, the consensus of the participants was to select those five health priorities for inclusion in the upcoming 2019-2021 Community Health Improvement Planning process.

FINAL LIST OF HEALTH PRIORITIES:

BEHAVIORAL HEALTH
HEALTH CARE ACCESS AND QUALITY
OBESITY

FINANCIAL STABILITY AND ECONOMIC MOBILITY

CHRONIC DISEASE

Thank You













